

ARTIFICIAL INTELLIGENCE AND DEMOCRATIC VALUES 2025

A comprehensive review of AI policies and practices worldwide



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Artificial Intelligence and

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Values

2025

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EXECUTIVE SUMMARY

Purpose and Scope

Artificial Intelligence and Democratic Values is the first global survey to assess progress toward trustworthy AI, based on detailed narrative reports, combined with a methodology that produces ratings and rankings for national AI policies and practices.

The **AIDV Index** has these objectives: (1) to document AI policies and practices, based on publicly available sources, (2) to establish a methodology for the evaluation of AI policies and practices, based on global norms, (3) to provide a basis for comparative evaluation, (4) to provide the basis for future evaluations, and (5) to ultimately encourage all countries to make real the promise of AI that is trustworthy, human-centric, and provides broad social benefit to all.

Artificial Intelligence and Democratic Values focuses on human rights, rule of law, and democratic governance metrics. Endorsement and implementation of the OECD/G20 AI Principles and the UNESCO Recommendation on the Ethics of Artificial Intelligence are among the primary metrics. Opportunities for the public to participate in the formation of national AI policy, adoption of the right to algorithmic transparency, and creation of independent agencies to address AI challenges are also among the metrics. Patents, publications, investment, and employment impacts are important metrics for the AI economy, but they are not considered here.

Artificial Intelligence and Democratic Values is published annually and will evolve as country practices change and new issues emerge.

The 2025 Edition

The 2025 edition of the report updates and expands the previous reports. To reflect some of the key discussions and developments in the AI policy landscape, our efforts to enhance usability, and our expansion as an organization, we have also made the following changes for *Artificial Intelligence and Democratic Values* 2025.

- We highlighted key actions taken in 2024 at the start of each country report.
- We changed the metric concerning signing the UNESCO Recommendation on the Ethics of AI to signing the Council of Europe international AI Treaty. We added a section on the Council of Europe AI Treaty to all country reports.
- We introduced a section on the Environmental Impact of AI to weigh policies on the resource demands of AI systems and efforts to mitigate environmental impacts more broadly.

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- The scores for country reports previously published were reviewed and revised based on developments during the past year concerning AI policies and practices.
- The number of researchers participating in the project has grown significantly. Nearly 500 CAIDP Research Group members representing more than 90 countries contributed updates from 2024. This brings our total contributors well above 1000 researchers representing 120 countries.

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Editor-in-Chief: April Yoder (2025), Karine Caunes (2024), Marc Rotenberg (2021–2023)

Assistant Editors: Merve Hickok, Grace Thomson

AIDV Graphics: Alireza Saebi, Christabel Randolph, Nidhi Sinha

Management: Marc Rotenberg, Merve Hickok, Christabel Randolph, Selim Alan

Policy Clinic Team: Merve Hickok, Marc Rotenberg, Grace Thomson, Anca Radu, Selin Ozbek, Tamiko Eto, Tina Lassiter, Varsha Swelal; Guiliano Borter, Larissa Zutter, Lyan Chua

Special editorial assistance in 2025: Alireza Saebi, Anushka Sachdev, Bakyt Omurzakov, Caroline Friedman Levy, Çiğdem Akin, Dirk Brand, Eddie Liywalli, Idil Ilayda Kaner, Julian Theseira, Luciana Longo, Nayyara Rahman, Ren Bin Lee Dixon, Sharvari Dhote, Tatiana Zasheva

2024 Contributors: Aaron Schultz, Aashna Kothiyal, Abiodun Solanke, Abiola Joseph Azeez, Abraham Alonzo Guiyab, Aditi Rukhaiyar, Adriana Mardueno Villasenor, Adrianna Tan, Agita Pasaribu, Agus Azka Haria Fitra, Aimeé Pujadas Clavel, Aisha Najera, Aishvarya Rajesh, Aishwarya Gurung, Akanksha Ray, Akintunde Agunbiade, Alejandro Carlos Baltazar Ruiz, Aleksandra Iugunian, Aleksandra Wójtowicz, Alexandra Krastins Lopes, Alhassan Sulemana Alhassan, Alireza Saebi, Ally Tang, Allyson Kapin, Altynay Junusova, Amanda Leal, Amanda Maria Horzyk, Amelia Ayang Sabrina, Amir Noy, Ana Camerano, Ana Carolina César, Ana Carolina Sousa Dias, Ana Segovia, Anabel Karina Arias, Anahita Valakche, Ananda Gautam, Ananya Reddi, Andras Hlacs, Andrea Palumbo, Andrés Eduardo Rodriguez Gomez, Andressa Girotto Vargas, Andrew McIntyre, Andy Sanchez, Angie Orejuela, Anmol Bharuka, Anmol Mathur, Anna Pellegatta, Anna Teresa Aguilar, Antonella Perini, Antonia Dionicia Bogado Rodas, Anushka Jain, Anushka Sachdev, April Yoder, Ariana Gamarra, Ariel Riera, Arpit Gupta, Artem Kobrin, Aruzhan Seitmagambet, Arvin Obnasca, Atika Chahby, Aysu Dericioğlu Egemen, Bahaa El-Taweal, Bahadır Ozgenc, Bakyt Omurzakov, Barbara Simão, Bartlett Morgan, Begyira Donald Sharp, Belen Alondra Bringas Machicado, Bendjedid Rachad Sanoussi, Berenice Fernández Nieto, Bernard M. Nyaga, Beşir Orak, Biljana Molan Klisarova, Bridget Roddy, Bridgette Ndlovu, Bruna Sellin Trevelin, Caio Cesar Vieira Machado, Caitlin Goldenberg, Camila Alejandra Beltran Reyes, Camila Hidalgo, Camille Ford, Caragh Aylett-Bullock, Carissa Mears, Carla Verdiane Nkusi, Carlos Eduardo Torres Giraldez, Carlos Guerrero Argote, Carmen Ng, Carolina Judith Medina Guzmán, Caroline Lancelot, Caryn Swart, Casandra Rusti, Challace Pahlevan-

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Madalina Nicolai, Mansur Omonov, Manuel Gustavo Isaac, Maral Niazi, Marcel Mir Teijeiro, Marcell Petho, Marcelo Pasetti, Marco Bani, Maria Lungu, Maria ("Mary") Lang, Maria Hadjicosta, Maria Lungu, Mariana Avelar, Mariana Correa, Marianela Sarabia, Mariette Awad, Marisa Stones, Mark Mulobi, Marta Basystiuk, Marta Bienkiewicz Watson, Mary Oduor, Mashael Alzaid, Mateusz Łabuz, Md Ferdows Hossen, Megan McLaughlin, Melike Akkaya, Melodena Stephens, Mennatullah Hendawy, Mercy Chinazom Matthew, Mert Cuhadaroglu, Mgechikwere Nana Nwachukwu, Minna Adlan, Mireia Pérez Carretero, Mohammad Ghasemi, Morgan McMurray, Mostafa Abdelaziz Ashhab Elkadi, Mouloud Khelif, Mubarak Raji, Muhammad Sadiq, Murtala Makama Dattijo, Mykyta Petik, Nabil Fancy, Nada Alwadi, Nam Phuong Ngo, Nana Afua Brantuo, Nana Khechikashvili, Nandita Sampath, Natalia Alarcon, Natascia Arcifa, Natasha Karner, Nate McFaul, Nazareen Ebrahim, Neesha Patel, Nelly Rousseau, nesibe kiris, Niel Swanepoel, Nika Pranata, Niki Agrotou, Nikolas Schmidt, Ninsiima Melissa, Noah-Levin Damschke, Noemi Mejia, Noora Arajärvi Parsons, Nurulazmi Lamanda, Nuurrianti Jalli, Ojus Tyagi, Olga Grygorovska, Omer Han Bilgin, Ona Oshen, Onome Cynthia Anakanire, Ornela Sollaku, Oyinkan Adebimpe, Öznur Uğuz, Pablo Fuentes Nettel, Paola Katherine Galvez Callirgos, Paola Katherine Gálvez Callirgos, Parishrut Jassal, Parul Anand, Patricio Espinoza, Patrick Armstrong, Patrycjusz Szubryt, Paula Guedes Fernandes da Silva, Paula Marques Rodrigues, Paula Martins, Paulina Denhi Gomez Escalona, Pauline Baron, Pavlo Riepin, Perpetua Ndidiamaka Ogwuche, Pervin Harvinder SK, Peter Mmbando, Petra Müllerová, Pierre du Pasquier, Pius Kwao Gadosey, Prabhu Pradhan, Prakash Gupta, Pranav Bhaskar Tiwari, Precious Osegbo, Priya Goswami, Ranjini Syam, Raymond Amumpaire, Raymond Francis Sarmiento, Rémy Ibarcq, Renan Canaan, Rhea Subramanya, Ritika R Ranka, Rizka Khairunissa Herdiani, Romilla Syed, Rommel Abilio Infante Asto, Rose Boutboul, Rotimi Owolabi, Ruoyi Lu, Ruwani Sandeepani De Silva Uyanage, Rwamamara Lionel, Ryan Burns, Saba Tiku Beyene, Sabire Sanem Yilmaz, Saleh Laslom, Samantha González, Samantha Khoo, SaMee Harden, Samuel Goodger, Sandra Makumbirofa, Santiago Molina, Sara Concetta Santoriello, Sarah D'Andrea, Sechaba Keketsi, Sedef Akinli Kocak, Septiani Eka Wahyu Pratiwi, Serçin Kutucu, Serign Modou Bah, Shakhboz Juraev, Sharinee Lalit Jagtiani, Sharon Kutukwa, Sharon Ndinda Nzuki, Shauna Blackmon, Shezaad Dastoor, Shihori Maeda, Shiva Kanwar, Shuvarthi Bhattacharjee, Sidney Frank Engelbrecht, Snezana Nikcevic, Soledad Guilera, Srija Chakraborty, Stacey Berry, Stacy Owino, Stella Anne Teoh Ming Hui, Stella Lee, Stella Yiantet Letuya, Stephanie Forbes, Stephanie Muthoni Muthungu, Stephie-Lea Tabujara, Sukaasini Latchumanan, Suljo Corsulic, Sumair Gul, Supriya Kulkarni, Susan Ibukun Akinade, Susana Aires Gomes, Sven Ronen Spangenberg, Taina Silveira Baylao, Talha Bin Tariq, Tania Maria Skrapaliori, Tapiwa Ronald Cheuka, Taposh Dutta

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Roy, Taria Khaoma, Tatevik Davtyan, Tatia Mosidze, Tatiana Levi, Tatiana Zasheva, Tatjana Titareva, Temitayo Fajobi, Thiago Moraes, Thierry Grimm, Thomas Cassara, Thomas Linder, Thummim Iyoha - Osagie, Tiago Filipe Sousa Gonçalves, Timothy Sowa, Tlhaloso Mpopo, Tobias Wirth, Tom Utum, Tomiris Amirova, Tooba Kazmi, Tori Rousay, Tracy Vivian Odipo, Tsepo Ramoholi, Tulika Avni Sinha, Tyler Lance Jaynes, Uchenna Anyamele, Ulysse Richard, Uzma Alam, Uzoma Mkparu, Valeria Allen Gimenez, Valerie Elefante, Veronica Cretu, Veronica Tan, Veronika Klymova, Vicente Antonio Arias Gonzalez, Vicente Martinez Fernandez, Victor Bohorquez, Victoria Hendrickx, Vidhi Sharma, Vishmi Fernand, Vivek S. Rana, Vladimir Cortes, Waceera Kabando Kabando, Waridah Makena, Worawan Klinsawai, Xitshembhiso Russel Mulamula, Yasmin Hussien, Yerdaulet Rakhmatulla, Yiğitcan Çankaya, Yilmaz Sahin, Yolanda Botti-Lodovico, Youssef Horchani, Yuli Rubinsky, Yulia Askhadulina, Zeynep Ogretmen Kotil, Zoë Aikman, Zoe Yi Soh, Zoi Roupakia

2023 Contributors: Abdelrahman Hassanein, Abdulkarim Althiyabi, Abdulmecit İcelli, Abiodun Solanke, Abiola Joseph Azeez, Adeeba Asri, Adriana Mardueno Villasenor, Ahmed Esmat, Ahmet Bilal Aytekin, Aicha Jeridi, Aimeé Pujadas Clavel, Aishwarya Gurung, Akintunde Agunbiade, Alain Otaegui, Alain Perdomo, Alejandro Carlos Baltazar Ruiz, Alejandro Tamez, Alessandro Tufano, Alessio Azzutti, Alexa Hanson, Alexandra Krastins Lopes, Alexandre Aubert, Alfredo Collosa, Alhassan Sulemana Alhassan, Alina Antonie, Alireza Saebi, Allyson Kapin, Amanda Leal, Ameen Jauhar, Amina Akhmetbekova, Amir Noy, Amira Dhalla, Ana Camerano, Ana Carolina César, Ana Segovia, Anahita Valakche, Ananda Gautam, Ananya Reddi, Anastasia Nefeli Vidaki, Anca Radu, Andras Hlacs, André Fernandes, Andrea Sanchez Aguilar, Andréane Sabourin Laflamme, Andrew McIntyre, Anil Sena Bayindir, Anindita Bose, Anmol Mathur, Anna Pellegatta, Anna Teresa Aguilar, Anushka Sachdev, Apolline Rolland, April Yoder, Ariel Riera, Arohi Kashyap, Arpit Gupta, Artem Kobrin, Aruzhan Seitmagambet, Aryashree Kunhambu, Ashwini Natesan, Atika Chahby, Axel Beelen, Axel Ebermann, Ayca Ariyoruk, Ayesha Abduljalil, Ayomide Owoyemi, Aziz Soltobaev, Bahaa El-Taweal, Bahadır Ozgenc, Bakyt Omurzakov, Baris Cihan Canturk, Bartlett Morgan, Begyira Donald Sharp, Belen Sanchez Hidalgo, Bendjedid Rachad Sanoussi, Benjamin Faveri, Berenice Fernández Nieto, Bernard M. Nyaga, Besir Orak, Bhavna Sharma, Billy Kipkemboi Boruett, Blessing Udo, Brenda Maina, Bridget Chimbga, Busra Memisoglu, Caitlin Kearney, Cameron Benton, Camila Hidalgo, Camille Ford, Carissa Mears, Carla Vazquez Wallach, Carla Verdiane Nkusi, Carleen Boyer, Carlos Eduardo Torres Giraldez, Carlos Ferreira, Carmen Ng, Carolin von Bredow, Caroline Friedman Levy, Casandra Rusti, Catriona Gray, Cezary Gesikowski, Chananya Groner, Charitarth Bharti, Charlotte Esler, Chelsea Cunningham, Cherie Oyier, Chhavi Sharma, Chi Zhang, Chinmoy Rajpal, Chris Kihereko, Christabel Randolph, Christina Huntzinger,

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Christina Zarogianni, Christine Axsmith, Christopher Musodza, Çiğdem Akin, Clara Balon, Clara Linda Harris Hawking, Clarence Tocchio, Claudia Moreno Arcila, Claudio Ndeleva Mutua, Clea Strydom, Cody Rutherford, Colin Phillips, Collins Okoh, Confidence Osein, Cynthia Chepkemoi, Damian Flisak, Daniel Acheampong, Daniela Constantin, Daniela Dora Eilberg, Daniela Duta, Daniele Sabato, Daniella Esi Darlington, Daphne Wanjiku, Dariel Suarez, David Backovsky, Denisa Reshef Kera, Denise Schalet, Deniz Celikkaya, Desiree Valentine, Devin Almonor, Diana Mocanu, Diana Nyarang'o, Dila Sen, Dimple Shah, Diná Santana Santos, Dirk Brand, Dirk Johannes Brand, Divya Dwivedi, Dominique Greene-Sanders, Duduetsang Mokoele, Dumitrita Rogojinaru, Duong Hoang, Ebere Lisa Iroegbu, Eddie Liywalii, Edla Aittokallio, Eduarda Costa, Ekene Chuks-Okeke, Elan Silver, Elena Turci, Elina Margarita Castillo Jiménez, Ellie Copeland, Emiliano Mora, Emma Haywood, Emma Lamberton, Emmy Chirchir, Emsie Erastus, Enelton Satria, Enton Dimni, Erva Akin, Essa Mohamedali, Eva Sachar, Evangelia-Maria Kostopoulou, Evelina Ayrapetyan, Fabio Seferi, Faith Gitonga, Faith Mutune, Faith Oronga Amatika-Omondi, Fatemeh Babaeian, Fidis Muriithi, Fiona Melzer, Foteini-Maria Vassou, Francis Ngige, Freyja Van den Boom, Frincy Clement, Gabriel Toscano, Gabriella Maia, Galiya Yelubayeva, Gamze Büsra Kaya, Geetanjali Bisht, Georgeanela Flores Bustamante, Georgios Theodotou, Gergana Tzvetkova, Germán López Ardila, Ghofran Vilquin, Gianmarco Gabriele Marchionna, Gisele Waters, Giuseppe Claudio Cicu, Gizem Yardimci, Gizem Yilmaz, Hamid Mukhtar, Hans Christian Arents, Harri Williams, Harshana Ghoorhoo, Helen Robinson, Helen Titilola Oloiede, Helena Broi, Helga M. Brøgger, Héloïse Rivoal, Henok Russom, Heramb Podar, Hesam Nourooz Pour, Hoore Jannat, Humeyra Cirit, Iakovina Kindylidi, Ibrahim Yeku, Idil Ilayda Kaner, Idil Kula, Ifeoma Nwafor, Ikran Abdirahman, İlayda Süer, Ilona Poseliuzhna, Immaculate Odwera, Inés Fernández Gallego, Ingrid Soares, Insun Park, Irem Atik, Isabel Neubert, Ismael Kherroubi Garcia, Iulia Gabriela Popescu, Iva Sisul Brdar, Iwona Karkliniewska, Jacquelyn (Jacky)) Omotalade, Jae Seung Lee, James Townsend, Jane Chinyere Ezirigwe, Janelle Radcliffe, Janet Lim, Janhvi Patel, Javed Sajad, Java Vijayen, Jayati Dev, Jean Linis-Dinco, Jeanette Wong, Jenna Manhau Fung, Jenny Greve, Jens Meijen, Jeremy Ng, Jeremy Pesner, Jessie Yang, Jinqian Li, João Filipe Santiago Silva, Joel Christoph, Jorge Montiel, Jose E Diaz Azcunaga, Joseph Wehbe, Josephine Kaaniru, Joshua Mounsey, Joyce Grant, Juan Armando Becerra Gutiérrez, Julia Andrusiak, Julia Henriques Souza, Julia Meltzer, Júlia Mendonça, Julia Sterling, Julian Buchwalter, Julian Theseira, Julieta Carballo, Jumpei Komoda, Kara Doriani O'Shee, Kardelen Filorinalı Kargın, Kasia Polanska, Katleho Mokoena, Katria Tomko, Kayle Hatt, Kesang Yuden, Ketevani Kukava, Kewa Jiang, Kholofelo Kugler, Krerkkaiwan Kajohnkunchonlathorn, Krishna Kumar Saha, Kristiina Juurmaa, Kristina Fort, Kritika Roy, Kuan-Wei Chen, Kyoungsic Min,

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Lara Salgueiro Oliveira, Laura Gacho, Laura Greco, Lea Hani, Leah Park, Leandri Pretorius, Leila Doty, Lena Patricia Nieper, Lesa Lawrence, Leslie Salgado, Lillie Coney, Livia Crepaldi Wolf, Logan O'Shaughnessy, Lorena Almaraz De La Garza, Luciana Longo, Lucy Mwaura, Luis Jacob Retanan, Luis Vasquez, Luisa Abreu Dall'Agnese, Luise Eder, Lynn Pickering, Maciej Piszcz, Madeleine Matsui, Madhubhashini Rathnayaka, Maia Levy Daniel, Maitreya Shah, Malek Ben Achour, Manail Anis, Manal Siddiqui, Mansur Omonov, Manuel Gustavo Isaac, Maram Aldaiel, Marcelo Pasetti, Marcia Lindsey, Marcin Rabiza, Marco Bani, Maria Hadjicosta, Maria Lungu, Maria Tran, Mariam Shainidze, Marian Adly, Mariana Correa, Marine Lipartia, Marisa Stones, Marta Bienkiewicz Watson, Martina Malcheva, Martyna Kalvaityte, Marwa Soudi, Mary Ebeling, Marzia Coltri, Mashael Alzaid, Matias Banchero, Mayara Carneiro, Medhavi Mishra, Meg McNulty, Megan Cansfield, Megan McLaughlin, Melike Akkaya, Melissa Hamilton, Melvin W, Mennatullah Hendawy, Michael Nayebare, Michael Shoag, Michaela Sullivan-Paul, Michelle Calabro, Michelle Tan, Minna Adlan, Miranda McClellan, Mirela Buturovic, Mohammad Ghasemi, Moin Khan, Mollie Howard, Monique Munarini, Mostafa Abdelaziz Ashhab Elkadi, Mouloud Khelif, Mubarak Raji, Muneeba Rizvi, Musa Bitrus Ndahi, Nabil Fancy, Nana Afua Brantuo, Nana Khechikashvili, Nana Sakvarelidze, Nandita Sampath, Nasiruddeen Muhammad, Nata Kapanadze, Natalia Martins Fritzen, Natalie Milman, Natascia Arcifa, Rahman, Natasha Karanja, Nate McFaul, Nayyara Nelly Rousseau, Ngozichukwuamaka Yvonne Onyemenam, Niharika Gujela, Nika Pranata, Niki Agrotou, Nikolaos Prodromos, Nikolas Schmidt, Nino Taganashvili, Ninsiima Melissa, Nkechi Emmanuella Agugoesi, Nkurunziza Christophe, Noah-Levin Damschke, Noemi Mejia, Noora Arajärvi Parsons, Nurcan Uyar, Nuurrianti Jalli, Obichi Obiajunwa, Olga Grygorovska, Olgu Özdemir Ertürk, Olivia Corcoran, Ona Oshen, Ori Freiman, Ornella Belfiori, Oscar Lopez, Paige Lord, Pamela De La Rosa, Paola Katherine Gálvez Callirgos, Parul Anand, Pascal Musyoki, Patrick Armstrong, Patrick Folinsbee, Patrick Lin, Patrycjusz Szubryt, Paula Garuz Naval, Paula Guedes Fernandes da Silva, Paula Hernandez, Paulina Denhi Gomez Escalona, Perpetua Ndidiamaka Ogwuche, Pervin Harvinder SK, Peter Mmbando, Petra Müllerová, Petruta Pirvan, Philip Usigbe, Pierre du Pasquier, Pius Kwao Gadosey, Polycarp Okumu, Preskal Tadrous, Priya Goswami, Radhika Bajpai, Radoslaw Komuda, Rajalakshmi Balasubramanian, Ranjini Syam, Raúl Vizcarra Chirinos, Raymond Amumpaire, Rebecca Aspetti, Rebecca Bonnevie, Rebecca Distler, Reed Shaw, Reeneth Santos, Rehema Baguma, Rémy Ibarcq, Remy Takang Arrey, Ren Bin Lee Dixon, Renan Canaan, Renee Black, Roch Glowacki, Roselyn Martin, Rotimi Owolabi, Ruby, Ruofei Wang, Rwamamara Lionel, Ryan Burns, Ryan Watkins, Saba Elizbarashvili, Saba Tiku Beyene, Sabire Sanem YILMAZ, Sahr Muhammedally, Saimum Reza Talukder, Sajid Mahmud, Samantha González, Samantha Khoo, Samantha Ndiwalana, SaMee Harden,

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Sandra Makumbirofa, Santiago Molina, Sara Fratti, Sarah D'Andrea, Sarah Fu, Sarah Sinclair, Scarleth Herrera, Sebastián Dueñas Müller, Sechaba Keketsi, Sedef Akinli Kocak, Selin Ozbek Cittone, Sercin Kutucu, Serif Onur Bahcecik, Serign Modou Bah, Shahneela Shahbaz, Sharinee Lalit Jagtiani, Sharon Bassan, Sharon Ndinda Nzuki, Sharvari Dhote, Shauna Blackmon, Sheila Casserly, Shiva Kanwar, Shokhrukh Nuraliev, Shreenithi Annadurai, Sidney Frank Engelbrecht, Simone Maria Parazzoli, Siqi Zhao, Sofia Calado, Sofia Surla, Soham Bose, Soledad Guilera, Solomon Karanja Meru, Sophie Hale, Stacey Berry, Stacy Owino, Stefanos Vitoratos, Stella George, Stella Lee, Stella Yiantet Letuya, Stephan Sonnenberg, Stephanie Forbes, Stephanie Muthoni Muthungu, Stephie-Lea Tabujara, Sujitha Subramanian, Suljo Corsulic, Sumit Kumar, Supriya Kulkarni, Susan Ibukun Akinade, Svetluša Surová, Svitlana Tarasenko, Tabani Moyo, Taina Silveira Baylao, Talha Bin Tariq, Tamiko Eto, Tamilla Triantoro, Tatiana Zasheva, Teddy Odira, Tessa Darbyshire, Thiago Moraes, Thomas Linder, Thummim Iyoha Osagie, Timothy Sowa, Tlhaloso Mpopo, Tobias Wirth, Tom Utum, Tomiris Amirova, Tori Rousay, Uchenna Anyamele, Uchenna Mgbaja, Ulysse Richard, Uzma Alam, Valéria Silva, Valerie Edna, Valerie Elefante, Varsha Sewlal, Veronika Klymova, Victor Bohorquez, Vikash Madduri, Vishakha Agrawal, Vishmi Fernando, Vladimir Cortes, Vu Thach Thao Nguyen, Waridah Makena, Wathagi Ndungu, William Bello, Winnie Kungu, Worawan Klinsawai, Yasin Tokat, Yelyzaveta Markova, Yiğitcan Çankaya, Yishu Mao, Yogendrasingh Pawar, Youssef Horchani, Yulia Askhadulina, Yuval Sinay, Zanele Sokatsha, Zina Akrout, Zoe Yi Soh, Zurab Karchava

2022 Contributors: Abraham Kuuku Sam, Aleksei Gudkov, Alketa Hotaj, Ananya Ramani, Ashwini Natesan, Ayesha Dawood, Avinash Dadhich, Belen Bricchi, Benjamin Faveri, Bisma Shoaib, Busra Memisoglu, Caitlin Power, Cari Miller, Caroline Friedman Levy, Chukwuyere Izuogu, Ciğdem Akın, Claudia Wladdimiro Quevedo, Dalila Hoover, Deo Shao, Divya Diwedi, Doreen Aoko Abiero, Emily Mehalek, Eric Wamugu Maina, Fabienne Graf, Fatuma Ibrahim, Grace Thomson, Hande Cağla Yılmaz, Harsha Agrawal, Helen Samukeliso Sithole, İbrahim Sabra, Idil Kula, Ingrid Soares, Jaya Vijayen, João Santiago Silva, Jens Meijen, Jordan Richard Schoenherr, Julian Theseira, Leandri Pretorius, Liliane Obrecht, Livia Crepaldi Wolf, Lucy Wanjiku Mwaura, Magdalena Rzaca, Mahak Rathee, Mai Kato, Manail Anais, Mariam Jamal, Mark Sayre, Martyna Kalvaityte, Matthew Ogbeifun, Mokesioluwa Fanoro, Nasir Muftic, Nicole Lemke, Nikolas Kyriacou, Ori Freiman, Osaye Ekomwereren, Osman Gazi Güçlütürk, Peter Graham, Peter Samuel Chukwuebuka Tsamwa, Sajid Mahmud, Uzoigwe, Sanduni Wickramasinghe, Selina Onyando, Shouhui Zhou, Soraya Weiner, Tamar Kankava, Tina Lassiter, Victor Famubode, Yussuf Abdirahim, Davor Ljubenkov, Elisa Elhadi, Joel Kumwenda, Jonathan Kurniawan, Mélissa M'Raidi-Kechichian, Nidhi Sinha, Mercy Chinazom Godwin, Zhuozheng (Rick) Cai, Aditya Kumar Pal,

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Allan Ochola, Angel Arroyo, Ashkan Alinaghian, Ayca Ariyoruk, Bhredipta Socarana, Brenda Wangechi Maina, Canan Erez, Catherine Setiawan, Cherie Adhiambo Oyier, Christof Wolf-Brenner, Amir Mikail, Cody D. Rutherford, Deyanira Juliet Murga, Dută Daniela, Edwin Concepcion, Evelina Ayrapetyan, Florence Anyango Ogonjo, Gvantsa Baidoshvili, Ibrahim Said, Ibrahim Yeku, Jacob Odame-Baiden, Jamie Wong, Jodi Masters-Gonzales, John Mathew, Kerstin Waxnegger, Lesa Lawrence, Luca Nannini, Luz Elena Gonzalez, Marian Ela C. Ebillo, Emaediong Akpan, Jackline Akello, Marine Lipartia, Mario Emmanuel Rodriguez Trejo, Mark Anthony Perez, Melody Musoni, Muhannad K Aloqayli, Nayyara Rahman, Nazam Laila, Nicholas Kisundu, Fredrick Ishengoma, Nojus Antanas Bendoraitis, Olajide Olugbade, Omolola Oviroh, Parisa Osivand Pour, Parul Shukla, Pierrinne Leukes, Prarthana Vasudevan, Ruofei Wang, Saba Elizbarasvhili, Samantha De Soysa, Sandra Lattner, Sandra Omayi Musa, Shahira El Alfy, Shilpa Ramachandran, Shradhanjali Sarma, Sivaramakrishnan R Guruvayur, Takaya Terakawa, Umut Pajaro Velasquez, Unyime Paul Akpabio, Vaibhav Garg, Vakhtang Chkhenkeli, Stella Wamae, Varsha Sewlal, Vasileios Rovilos, Mohamed Elbashir, Victor Werimo, Wellington Galassi, Maha Jouini, Yasin Tokat, and Yogendrasingh Pawar

2021 Contributors: Adeboye Adegoke, Temofe Akaba, Selim Alan, Zelal Binici, Afi Blackshear, Bridget Boakye, Giuliano Borter, Stephanie Cairns, Shangamitra Chakraborty, Lyantoniette Chua, Roberto López Dávila, Pam Dixon, Divya Dwivedi, Elisa Elhadj, Pete Furlong, August Gweon, Lida Haghnegahdar, Gokce Cobansoy Hizel, Jason K. Johnson, Eddan Katz, Dongwoo Kim, Writankar Kundu, Thobekile Matimbe, Natalia Menendez, Kushang Mishra, Charles Kajoloweka, Mélissa M'Raidi-Kechichian, Alex Moltzau, Tamra Moore, Oarabile Mudongo, Somaieh Nikpoor, Diana Kemunto Nyakundi, Ubongabasi Edidiong Obot, Marcos López Oneto, Ananya Ramani, Rishi Ray, Rachel Stockton, Anirbar Sen, Niovi Vavoula, Sherry Wu, Khatia Zukhubaia, Larissa Zutter

2020 Contributors: Mariame Almoghanam, Francesca Bignami, Anne Carblanc, Karine Caunes, Emilio De Capitani, Pam Dixon, Paula Soumaya Domit, Giovanni De Gregorio, Douglas Frantz, Merve Hickok, Regina Iminova, Lorraine Kisselburgh, Rebecca Leeper, Wonki Min, Pablo Molina, Maria Helen Murphy, Stephanie Perrin, Bilyana Petkova, Oreste Pollicino, Nguyen Dinh Quy, Cristos Velasco, Wendell Wallach, and Larissa Zutter

Reviewers since 2020: Dr. Elena Abrusci, Brunel University London; Tetiana Avdieieva, Digital Security Lab Ukraine; Bruno Bioni, Data Privacy Brazil; Isabelle Buscke, Brussels Office, Federation of German Consumer Organisations; Darren Grayson Chng, Singapore Personal Data Protection Commission; Prof. Renée Cummings, University of Virginia; Prof. Giovanni De Gregorio, Católica Global School of Law; Prof. Virginia Dignum, Umea University; Dr. Hlengiwe

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Dube, University of Pretoria; Marina Garrote, Data Privacy Brazil; Armando Guio Español, Berkman Klein Center, Harvard University; Dr. Gry Hasselbalch, DataEthics.eu, InTouchAI.eu; Dr. Masao Horibe, Professor Emeritus at Hitotsubashi University, Former Chairman of Personal Information Protection Commission (PPC), Japan; Bulelani Jili, Harvard University; Leyla Keyser, IT Law Research Center, Istanbul Bilgi University (with Işıl Selen Denemeç, Zümrüt müftüoğlu, and Dr. Atilla Aydin); Prof. Dr. Katja Langenbucher, Goethe University; Prof. Seth Lazar, Australian National University; Prof. Justin Longo, University of Regina; Prof. Wonki Min, Technology Ambassador, Government of Korea; Prof. Valsamis Mitsilegas, Queen Mary University of London; Dr. Pablo G. Molina, Georgetown University; Julia Mendonça, Data Privacy Brazil; Prof. Maria Murphy, Maynooth University; Angella Ndaka, Centre for Epistemic Justice Foundation; Dr. Irena Nesterova, Researcher at the Institute of Legal Science, Faculty of Law, University of Latvia, member of the UNESCO Ad Hoc Expert Group for the Recommendation on the Ethics of Artificial Intelligence; Prof. Oreste Pollicino, Bocconi University; Prof. Viviana Polisena, Universidad Católica de Córdoba; Prof. Emma Ruttkamp-Bloem, University of Pretoria; Prof. Edward Santow, University of Technology Sydney; Prof. Dr. Ingrid Schneider, Universität Hamburg, Department of Informatics; Prof. Giovanni Sartor, University of Bologna, European University of Florence; Prof. Ben Shneiderman, University of Maryland; Takaya Terakawa, Technica Zen; Dr. Cristos Velasco; Dr. Kutoma Wakunuma, De Montfort University

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Endorsements

As the development and use of AI continues to increase exponentially, governments and civil society have struggled to keep pace. However, in recent years there has been unprecedented growth in law and policy. This report is essential reading for anyone looking to grasp the key trends that link how nation states are responding to the rise of AI, and for anyone looking to understand the key developments in specific states. It is both thoroughly researched and the product of deep and broad expertise.

- Edward Santow, Human Technology Institute, UTS (2025)

The AIDV Index is an incredibly impressive and valuable compendium. The country reports themselves offer an extremely valuable collection of case studies. – *Justin Longo, University of Regina (2025)*

The AI and Democratic Values 2024 report is a well-developed and highly technical work that provides essential insights into the intersection of artificial

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intelligence and democratic governance. This report serves as a crucial tool for understanding how nations can effectively promote and safeguard democratic values in the age of AI. It is an invaluable resource for countries seeking to strengthen democratic principles while leveraging AI responsibly.

– Armando Guio Español, Affiliate, Berkman Klein Center (2025)

It is always encouraging to see the progress in AIDV and its contribution to the formation of AI policies around the world.

- Wonki Min, KAIST (2025)

The report seeks to shed light on the broad landscape of AI regulation and governance. Accordingly, it seeks to explicate both the challenges and opportunities surrounding the adoption of AI systems, making the AIDV a useful reference document that points towards more inclusive digital futures.

- Bulelani Jili, Harvard University (2025)

I endorse this report for its clear and diverse inclusion of countries in both the Global North and the Global South. The report gives an important insight into AI-related activities globally. This is important because AI does not operate in a vacuum, nor does it operate in silos: its impact is intertwined across the globe.

– Kutoma Wakunuma, De Montfort University (2025)

The CAIDP 2024 Report continues its tradition of excellence in providing essential insights into the global relationship among democratic values, ethics and the accelerated pace of AI innovation and development. It is an essential tool to understand the nature of AI and its relationship to the public good. At UNESCO, with our global standard on the ethics of AI, we are proud to partner with CAIDP to achieve a technological transition that is fair and sustainable.

- Gabriela Ramos, UNESCO (2024)

CAIDP (AIDV 2023) report sheds light on the current landscape of international regulations, national laws and policies emerging from the fascinating and complex field of AI. The report emphasizes the imperative to protect fundamental rights and uphold the rule of law and will serve as a useful roadmap for shaping AI governance and to foster and advance a crucial dialogue among diverse stakeholders in the international arena."

- Cristos Velasco, DHBW Cooperative State University (2024)

CAIDP's flagship report provides insightful information how the AI principles are translated into practice across 75 countries.

- Wonki Min, SUNY Korea (2023)

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It is a great exercise of comparative digital law in action, providing a comprehensive perspective on the evolution of AI policy also contributing to underline the constitutional relationship between AI & democracy. Digital Democracy and rule of law in the digital context will be the real challenges for the next decade.

- Oreste Pollicino, Bocconi University (2023)

A very worthwhile analysis.

- Stuart Russell, University of Berkeley, California (2022)

An impressive body of work.

- Alessandro Acquisti, Carnegie Mellon University (2022)

An excellent report, a very useful tool for the community and a reference to see nexus between AI and Democratic Values.

- Leyla Keser, Istanbul Bilgi University (2022)

A very insightful report on AI laws and policies that addresses significant international developments and provides a terrific comparison of AI laws and policies across 50 countries.

- Lee J. Tiedrich, Duke University (2022)

This report is unique in that it compares AI policies and practices around the world and should inspire progress toward trustworthy and human-centric AI. The report also documents the important role of digital rights and consumer groups in this endeavor.

- Ursula Pachl, European Consumer Association (BEUC) (2022)

It's rare to read a document that has the potential to influence national policies on artificial intelligence around the world. The country descriptions and evaluations are thoughtfully organized, well-written, and carefully documented. The country rankings enable readers to have a broad understanding of who the leaders are and why, while pointing out what still needs to be done. The AI and Democratic Values index gives me hope that AI policy efforts can improve human rights, social justice, and dignity.

- Ben Shneiderman, author, Human-Centric AI (Oxford 2022)

In this historical moment of global interest, negotiation, and competition on AI we are in right now, we urgently need a shared narrative serving the human interest and democracy. With its comprehensive overview of key global and local power actors and initiatives The Artificial Intelligence and Democratic Values Index is

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an essential instrument for the facilitation of this shared global dialogue on AI now and in many years to come.

- Gry Hasselbalch, DataEthics.eu, InTouchAI.eu (2022)

This is a very ambitious and important exercise. The outcome is impressive—detailed and rigorous.

- Valsamis Mitsilegas, Queen Mary University of London (2022)

This comparative study sheds critical light on the adoption of Artificial Intelligence in democratic societies. AI and Democratic Values is an indispensable reference source for regulators, reporters, academics, and practitioners

- Dr. Pablo G. Molina, Georgetown University and founder, International Applied Ethics and Technology Association (iaeta.org) (2022)

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A Year in Review

2024: Principles to Action

The AI and Democratic Values Index published annually by the Center for AI and Digital Policy provides a comprehensive review of AI policies and practices worldwide. In this fifth edition, we highlight the rapid evolution of AI governance frameworks. From the completion of a global AI treaty and a comprehensive regulation for AI, through resolutions and recommendations from the United Nations, and the development of regional frameworks and national laws and enforcement actions, the pace of AI governance, much like the technology itself, is accelerating.

This year, the first legally binding global treaty on artificial intelligence and human rights opened for signature. Expert reports followed by discussions and negotiations among member and non-member states at the Council of Europe over several years culminated in the Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law. Over forty countries from Europe, the Americas, Middle East-North Africa, and Asia have signed, signaling a global commitment to protecting human rights, democracy, and the rule of law.

Activities at the United Nations also demonstrate widespread support for managing emerging technologies and the digital world in line with human rights and, more specifically the Sustainable Development Goals (SDGs). The UN resolution supported by more than 120 countries in March 2024 demonstrated farreaching support for ensuring that AI systems and applications are safe, secure, and trustworthy. The Global Digital Compact reiterated this commitment to ensuring that digital spaces conform to the same standards of international law and human rights protections we expect offline. The Pact for the Future lays out actions to ensure everyone enjoys these rights and to transform global governance to ensure all voices are heard.

Countries from the Global South led the world in implementing the UNESCO Recommendation on the Ethics of AI. Facilitated through partnerships with UNESCO, countries in Latin America, the Caribbean, Asia, and Africa have explicitly modeled AI policies and strategies on the Recommendation and completed the Readiness Assessment Methodology (RAM). The Latin American and Caribbean Regional Council developed through partnership with UNESCO and CAF provides opportunities to exchange best practices and develop a regional process for implementation. Brazil, Chile, the Dominican Republic, Mexico, and Uruguay from Latin America; Indonesia from Asia; Morocco and Saudi Arabia from MENA; and Gabon, Kenya, Mozambique, Senegal, and South Africa of Africa completed the RAM in 2024. More than thirty additional countries are in the process of completing the RAM.

Calls to transform global governance also translated into action in 2024. Brazil's presidency of the G20 led to an action plan to close the digital divide,

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reiterated calls for inclusive AI, and launched the Social 20 event to give civil society a place to be heard during the summit. The Digital Economy Working Group solidified goals for inclusive sustainable development in the Toolkit for AI Readiness and Capacity Assessment. The African Union's G20 membership and the South Africa presidency in 2025 can solidify this progress.

The Global Partnership on Artificial Intelligence (GPAI) joined forces with the OECD in July 2024. The integrated partnership creates another avenue for experts and policymakers from developing and emerging economies to contribute to discussions on AI policy and practice aligned with the OECD AI Principles.

The G7, too, translated principles and goals in the Hiroshima process to tools in 2024. The G7 Technology and Digital ministers launched the G7 Toolkit for AI in the Public, providing guidance to ensure AI in the public sector is safe, secure, and trustworthy. The section on AI, Science, Technology, and Innovation in the leaders' communiqué promised an action plan on AI in work. The communiqué identified partnerships as central to realizing an inclusive, human-centered, digital transformation. For example, collaboration with the OECD led to the launch of a monitoring tool for organizations developing advanced AI systems aligned to the Hiroshima Process International Code of Conduct.

At the regional level, the EU AI Act, a comprehensive regulation for the governance of AI, was formally adopted in March 2024 by the European Parliament, with a large majority of votes (523-46) in favor of the legislation. The risk-based framework notably includes a category of prohibited AI systems, such as subliminal manipulation, social scoring, scraping of facial images for facial recognition, biometric categorization, and real-time biometric identification. At the time of publication, nearly 200 national supervisory authorities have been selected to ensure the enforcement and implementation of the AI Act, with data protection agencies given a prominent role. The first provisions entered into force in August 2024.

Years of negotiations culminated in 2024 in the African Union's endorsement of the Continental AI Strategy. The strategy offers a test case for a development-oriented" "people-centered, approach to harnessing transformative potential of AI developments and mitigating the negative impacts and risks. The strategy provides concrete action steps to ensure that AI development is African-centric by addressing systemic limitations in human and technological capacity. The Association of Southeast Asian Nations (ASEAN) demonstrated the adaptability of governance frameworks and benefits of publicprivate partnership by targeting the ASEAN Guide on AI Governance and Ethics to organizations across private and public sectors. The framework exemplifies meaningful, human-centric development by ensuring AI systems are developed to solve specific problems, within explicit governance and accountability structures,

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with human involvement and stakeholder community, and through operations management to identify and monitor risks and biases.

In the 2023 *AI and Democratic Values Index*, we called attention to the use of autonomous weapons in regional conflicts, most prominently in Ukraine and Gaza. This year brought progress toward an international instrument on lethal autonomous weapons systems (LAWS). The UN Secretary-General report on LAWS in mid-2024 summarized various perspectives on and challenges in formulating one. However, the Secretary-General reiterated calls to develop the tool by 2026. At the REAIM 2024 summit in Korea, 63 countries agreed to concrete actions toward developing common normative frameworks for responsible AI in the military domain. A 2024 U.S. National Security Memorandum, for example, reiterated instructions to the U.S. military, the largest in the world, to use AI systems only in ways that align with democratic values and limited the use of AI systems in warfare.

In addition to updating and implementing national AI strategies, countries have also progressed on holding AI companies accountable. Brazil's judiciary banned and then fined X over its failure to handle accounts spreading misinformation about elections while the data protection authority prohibited Meta from using data originating in Brazil to train AI models. More than nine countries and the EU are investigating OpenAI over privacy and data protection violations and misinformation. Italy and Belgium are looking into DeepSeek. Meanwhile, Clearview paid new fines and was the subject of new investigations over databases of facial images collected and stored illegally.

We credit these milestones to the hard work and spirit of collaboration of the AI advisors, decisionmakers, heads of government, independent experts, civil society organizers, and individual advocates. Your work has built momentum that gives us confidence as we continue our mission to develop a better society, more fair, more just—a world where technology promotes broad social inclusion based on fundamental rights, democratic institutions, and the rule of law.

Of course, none of our work is possible without our extraordinary CAIDP team. Hundreds of Research Group members provided additions and updates to the report for 2024, guided by Team Leaders and Teaching Fellows. This year, we also benefitted from the editorial contributions of Policy Group members as well as reviews from our Global Academic Network. From the early project by a few people turned over in months, the current report reflects the efforts of more than 1000 contributors representing 120 countries over years of work.

We welcome your advice, suggestions, revisions, and insights about how you use the AIDV Index in your work. Please send editorial comments to editor@caidp.org and visit our website, www.caidp.org, for more information about our activities, recent AI policy developments, and how to get involved.

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Key Developments

- Forty-one countries endorsed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law
- The UN Resolution on Safe, Secure, and Trustworthy AI, along with the Global Digital Compact reflected widespread consensus on the importance of protecting fundamental rights and freedoms in digital interactions
- The Global Partnership on AI created an integrated partnership with OECD to broaden efforts to implement the OECD AI Principles
- The EU completed the AI Act, the first comprehensive regulation on AI; the first provisions entered into force
- The African Union endorsed the Continental AI Strategy
- G20, G7, ASEAN, OECD, and the AI Seoul Summit created tools to facilitate compliance with guiding principles and codes of conduct for organizations designing, developing, deploying, and using AI technology
- Twelve countries completed and more than 30 initiated the Readiness Assessment Methodology (RAM), signaling progress on implementing the UNESCO Recommendation on the Ethics of AI
- The UN Secretary-General reiterated the call for prohibitions on fully autonomous weapons and regulations on other forms of autonomous weapons systems

CAIDP Recommendations for 2025

- Global support for the International AI Treaty
- Prohibitions on AI systems that undermine human rights and democratic values
- Human oversight of AI systems across the lifecycle
- Implementation and enforcement of AI governance frameworks, such as the EU AI Act and the Hiroshima AI Process
- Algorithmic transparency, including the accountability to contest adverse outcomes
- Liability rules for AI systems

THE GLOBAL AI POLICY LANDSCAPE

As a field of research, AI policy is rapidly maturing. In the last several years, national governments and international organizations have adopted policy frameworks that explicitly regulate "Artificial Intelligence." This has occurred at a rapid pace. While government funding for work on Artificial Intelligence goes back to the mid-1950s, it would be many years before governments examined the consequences of this research. That gap is now closing. Governments around the world confront important decisions about AI priorities, AI ambitions, and AI risks. Much of this report concerns the current policies and practices of national governments.

In addition to national governments, many intergovernmental organizations are pursuing AI policies and initiatives. This section provides an overview of these organizations, listed in a simple A to Z. We also note the important work of technical associations and civil society organizations This section briefly summarizes these activities, as of early 2025.

Council of Europe

The Council of Europe (COE) is the continent's leading human rights organization.³ The COE comprises 47 member states, 27 of which are members of the European Union. All COE member states have endorsed the European Convention of Human Rights, a treaty designed to protect human rights, democracy, and the rule of law. Article 8 of the Convention concerning the right to privacy has influenced the development of privacy law around the world.

The COE Convention 108 (1981) was the first binding international instrument protecting the individual against abuses that may accompany the collection and processing of personal data and regulating the transborder flow of personal data.⁴ In 2018, the Council of Europe amended Convention 108 and opened for signature and ratification the COE Modernized Convention 108+.⁵ Article 9(1)(c) specifically addresses AI decision-making. As the COE explains,

https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/108

¹ [Editorial note: For the 2025 edition of the *AI and Democratic Values Index*, we have removed a lot of the background text that was typically included in the Global Policy Landscape section and focused on recent developments. These materials are still available in the 2024 edition of AIDV, which is available online at https://www.caidp.org/reports/aidv-2023/

² Marc Rotenberg, *Human Rights Alignment: The Challenge Ahead for AI Lawmakers*, in H. Werthner, et al., *Introduction to Digital Humanism*, Springer (Dec. 21, 2023), https://doi.org/10.1007/978-3-031-45304-5 38

³ Council of Europe, Who We Are, https://www.coe.int/en/web/about-us/who-we-are

⁴ Council of Europe Treaty Office, *Details of Treaty No. 108*,

⁵ Council of Europe, Data Protection, *Modernisation of Convention 108*, https://www.coe.int/en/web/data-protection/convention108/modernised

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the "modernised Convention extends the catalogue of information to be transmitted to data subjects when they exercise their right of access. Furthermore, data subjects are entitled to obtain knowledge of the reasoning underlying the data processing, the results of which are applied to her/him. This new right is particularly important in terms of profiling of individuals." Forty-six states have signed the protocol amending the Privacy Convention and 33 have ratified.⁷

The development of the Framework Convention on AI emerged in response to growing concerns over the artificial intelligence. The Council of Europe initiated discussions on AI governance in 2019, leading to the drafting of a binding legal framework. In 2024, the Council of Europe adopted the Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law. The AI Treaty aims to ensure that the development and use of AI technologies align with fundamental human rights, democratic values, and the rule of law, addressing risks such as misinformation, algorithmic discrimination, and threats to public institution.

At the time of publication, over 40 countries, counting the individual member states of the European Union, had signed the treaty, including Canada, Japan, and the United States. Leading experts in international law and AI have also endorsed the AI Treaty. The Treaty is expected to enter into force in 2025.

European Court of Human Rights

The European Court of Human Rights has generated an abundance of case law interpreting Article 8 of the European Convention on Human Rights on the right to private and family life. This case law will establish governance norms for AI systems. The opinions of the Court on privacy and data protection are widely regarded by other courts. The Court has addressed privacy challenges in relation to telephone conversations, computers, mass surveillance, bulk interceptions of telecommunications and the internet.⁸ The Court have deemed these aspects of personal data protection of fundamental importance to a person's enjoyment of their right to respect for private and family life.

In early 2025, the European Court of Human Rights sponsored a judicial seminar on Protecting Human Rights in a World of Artificial Intelligence,

⁶ Council of Europe, Data Protection, *Modernisation of Convention 108: Overview of the novelties* https://rm.coe.int/modernised-conv-overview-of-the-novelties/16808accf8

⁷ Council of Europe, Treaty Office, *Chart of Signatures and Ratifications of Treaty 223* (Mar. 26, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=223

⁸ For an overview of the case law, see European Court of Human Rights, *Mass Surveillance* (Jan. 2022), https://www.echr.coe.int/documents/fs mass surveillance eng.pdf; *Personal Data Protection* (Jan. 2022), https://www.echr.coe.int/Documents/FS Data ENG.pdf

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Algorithms and Big Data.⁹ A background paper prepared for the session outlined relevant European Court of Human Rights caselaw in three categories: Freedom of expression, right to a fair trial, and prohibition on discrimination.¹⁰ The paper further detailed specific areas of intersection between the case law of the Court of Human Rights and AI systems, such as facial recognition, the right to be forgotten, bias in the system, reasoned decision-making, and gender-based cyber violence.

European Union

The European Union (EU) was established by the Treaty of Masstricht in 1993. The European Union is a supranational political and economic union of 27 member states. Many institutions in the European Union now play a significant role in the development of AI policies and practices.

The EU AI Act, a comprehensive regulation for the governance of AI, was formally adopted in March 2024 by the European Parliament, with a large majority of 523-46 votes in favor of the legislation. The risk-based framework notably includes a category of prohibited AI systems, such as subliminal manipulation, social scoring, scraping of facial images for facial recognition, biometric categorization, and real-time biometric identification. At the time of publication, nearly 200 national supervisory authorities have been selected to ensure the enforcement and implementation of the AI Act, with data protection agencies given a prominent role.

European Commission

The European Commission plays an active role in developing the EU's overall strategy and in designing and implementing EU policies. The Commission is the initiator of EU legislation. AI was identified as a priority when the new Commission, under the Presidency of Ursula von der Leyen, was established in late 2019.¹¹ At that time, von der Leyen recommended new rules on Artificial Intelligence that respect human safety and rights.¹² Von der Leyen's proposal followed remarks at the G20 summit in 2019 by Chancellor Angela Merkel, who called on the European Commission to propose comprehensive regulation for artificial intelligence: "It will be the job of the next Commission to deliver

⁹ European Court of Human Rights, *Opening of the Judicial Year 2025* (Jan. 31, 2025), https://www.echr.coe.int/w/opening-of-the-judicial-year-2025-1

¹⁰ European Court of Human Rights, *Protecting Human Rights in a World of Artificial Intelligence, Algorithms and Big Data* (Nov. 19, 2024),

https://www.echr.coe.int/documents/d/echr/seminar-background-paper-2025-eng

¹¹ CAIDP Update 1.3, European Commission Proposes Four Options for Ethical AI (Aug. 2, 2020), https://dukakis.org/center-for-ai-and-digital-policy/center-for-ai-policy-update-european-commission-proposes-four-options-for-ethical-ai/

¹² European Commission, *A Union that Strives for More: The First 100 Days* (Mar. 6, 2020), https://south.euneighbours.eu/news/union-strives-more-first-100-days/

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something so that we have regulation similar to the General Data Protection Regulation that makes it clear that artificial intelligence serves humanity."

European Parliament

The European Parliament is co-legislator, together with the Council of the European Union. The Parliament has convened hearings and adopted resolutions to outline the elements of EU legislation. One resolution urged the Commission to establish legal obligations for artificial intelligence and robotics, including software, algorithms, and data. A second would make those operating high-risk AI systems strictly liable for any resulting damage. A third resolution on intellectual property rights makes clear that AI should not have legal personality: only people may claim IP rights.

Two committees in the European Parliament have taken the reins for the EU AI Act. The Committee on the Internal Market and Consumer Protection (IMCO Committee) is responsible for the legislative oversight and scrutiny of EU rules on the single market, including the digital single market, customs, and consumer protection. The Committee on Civil Liberties, Justice, and Home Affairs (LIBE Committee) "is responsible for the majority of legislation and democratic oversight of policies that enable the European Union to offer its citizens an area of freedom, security and justice (Article 3 TEU). While doing so, we ensure, throughout the EU, the full respect of and compliance with the EU Charter of Fundamental Rights, in conjunction with the European Convention on Human Rights." 15

The influential LIBE Committee has also highlighted concerns about AI and fundamental rights and AI in criminal justice. In February 2020, the Committee held a hearing on Artificial Intelligence and Criminal Law and examined the benefits, risks, and ethical and rights implications of AI, predictive policing, and facial recognition. LIBE worked in association with the United Nations Interregional Crime and Justice Research Institute (UNICRI), the European Union Agency for Fundamental Rights (FRA), and the Council of

¹³ CAIDP Update 1.12, *European Parliament Adopts Resolutions on AI* (Oct. 24, 2020), https://dukakis.org/center-for-ai-and-digital-policy/caidp-update-european-parliament-adopts-resolutions-on-ai/

¹⁴ European Parliament, *About IMCO, Welcome*, https://www.europarl.europa.eu/committees/en/imco/about

¹⁵ European Parliament, *LIBE*, *About*, https://www.europarl.europa.eu/committees/en/libe/about

¹⁶ CAIDP Update 1.8 *LIBE Committee of EU Parliament Examines AI Practices, Data Protection* (Sept. 9, 2020), https://dukakis.org/center-for-ai-and-digital-policy/caidp-update-libe-committee-of-eu-parliament-examines-ai-practices-data-protection/

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Europe (COE). In November 2020, LIBE issued an opinion concerning AI and the application of international law.¹⁷

Two Councils

The European Council defines the EU's overall political direction and priorities. ¹⁸ Its members are the heads of state or government of the 27 EU member states, the European Council President, and the President of the European Commission. The European Council is not one of the EU's legislating institutions, so does not negotiate or adopt EU laws. This is the prerogative of the Council of the European Union (Council), composed of representatives of member states' ministers.

Court of Justice of the European Union

Although the Court of Justice has yet to rule directly on the EU AI Act, the Court will play a significant role as AI policies evolve and AI law is adopted.¹⁹ The Court issued several judgements that implicate AI systems. In its *Ligue des Droits Humains* Judgment of June 2022, concerning the Passenger Name Records Directive, the Court of Justice reaffirmed the primacy of a human-centered approach to AI. The Court of Justice ruled that machine learning techniques may be incompatible with the protection of fundamental rights.²⁰ The Court observed that the opacity of artificial intelligence might make it impossible to understand the reason why a given program arrived at a positive match.²¹ As the Advocate General had earlier observed, algorithms "must function transparently and that the result of their application must be traceable."²² The Court added in *Ligue des droits humains* that the use of pre-determined criteria also precludes the use of systems that modify "the assessment criteria on which the result of the application of that process is based as well as the weighting of those criteria."²³ These holdings could

¹⁷ European Parliament, Committee on Civil Liberties, Justice and Home Affairs, On Artificial Intelligence: Questions of Interpretation and Application of International Law in so far as the EU Is Affected in the Areas of Civil and Military Uses and of State Authority Outside the Scope of Criminal Justice (2020/2013 (INI)) (Nov. 23, 2020),

 $[\]underline{https://www.europarl.europa.eu/doceo/document/LIBE-AD-652639_EN.pdf}$

¹⁸ European Council, https://www.consilium.europa.eu/en/european-council/

¹⁹ CAIDP Update 1.1, *EU Privacy Decision Will Have Global Consequences* (Jul. 19, 2020), https://dukakis.org/news-and-events/center-for-ai-and-digital-policy-update-eu-privacy-decision-will-have-global-consequences/

²⁰ Court of Justice of the European Union, *Ligue des droits humains v. Conseil des Ministres*, (Jun. 21, 2022),

https://curia.europa.eu/juris/document/document.jsf?text=&docid=261282&pageIndex=0&doclang=EN&mode=req&dir=&occ=first&part=1&cid=13059170

²¹ Court of Justice of the European Union, Ligue des droits humains, para. 194

²² Opinion of the Advocate General, *Ligue des droits humains*, para. 228

²³ Court of Justice of the European Union, Ligue des droits humains, para. 194

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have far-reaching significance for the use of AI techniques by law enforcement agencies and the future interpretation of the EU AI Act.²⁴

The Court has also addressed the transparency of automated processing. In the SCHUFA case, the Court of Justice held that the generation of credit scores by credit reference agencies are within the scope of the prohibition on automated decision-making in Article 22(1) of the GDPR.²⁵ The practical consequence is that automated decision-making enabled by AI systems will be subject to the GDPR. In another case, the Court found that individuals subject to adverse decisions are entitled to receive meaningful information about the basis of the decision.²⁶ In the Court's words: "The explanation provided must enable the data subject to understand and challenge the automated decision."

Judgments of the Court concerning data transfers will also impact the development of AI systems. In the 2020 *Schrems II* judgment, the Court struck down the Privacy Shield framework that permitted the transfer of personal data from the European Union to the United States.²⁷ The *Schrems II* judgment will likely limit the collection and use of personal data for AI systems.

European Data Protection Board

The European_Data Protection Board (EDPB) is an independent European body that contributes to the consistent application of data protection rules throughout the European Union and promotes cooperation among the EU's data protection authorities (DPAs).²⁸

The EDPB issued several reports in 2024 concerning Artificial Intelligence. A ChatGPT Taskforce expressed preliminary views on lawfulness, fairness, transparency, data accuracy, and the rights of data subjects.²⁹ A July 2024

²⁴ CAIDP Statement to the European Data Protection Board on Facial Recognition and Law Enforcement (Jul. 18, 2022), https://www.caidp.org/app/download/8405683363/CAIDP-Statement-EDPB-FRT-01082022.pdf; Marc Rotenberg, CJEU PNR Decision Unplugs the "Black Box," European Data Protection Law Review (2022)

²⁵ Court of Justice of the European Union, *Judgment—SCHUFA Holding, Case C-634/21 (Scoring)* (Dec. 7, 2023), https://curia.europa.eu/juris/liste.jsf?num=C-634/21

²⁶ Court of Justice of the European Union, Press Release No. 22/25, Automated Credit Assessment: The Data Subject Is Entitled to an Explanation as to How the Decision Was Taken in Respect of Him or Her (Feb. 27, 2025),

https://curia.europa.eu/jcms/upload/docs/application/pdf/2025-02/cp250022en.pdf

²⁷ CJEU, The Court of Justice Invalidates Decision 2016/1250 on the Adequacy of the Protection Provided by the EU-US Data Protection Shield (Jul. 16, 2020),

https://curia.europa.eu/jcms/upload/docs/application/pdf/2020-07/cp200091en.pdf

²⁸ EDPB, Who We Are, https://edpb.europa.eu/about-edpb/about-edpb en

²⁹ EDPB, Report of the Work Undertaken by the ChatGPT Taskforce (May 23, 2024), https://www.edpb.europa.eu/system/files/2024-

^{05/}edpb 20240523 report chatgpt taskforce en.pdf

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statement from the EDPB addressed the role of DPAs in the AI Act framework.³⁰ The Statement described the relationship between the AI Act and the GDPR as "complementary and mutually reinforcing instruments" and recommended a "prominent role" for DPAs due to their experience and expertise in developing guidelines and carrying out enforcement actions on AI-related issues with respect to the processing of personal data. For these reasons and others, the EDPB recommended that DPAs be designated as Market Surveillance Authorities (MSA) under the EU AI Act.

In December 2024, the EDPB issued an opinion on AI Models.³¹ The report addressed four questions raised by the Irish DPA: (1) when and how an AI model can be considered anonymous; (2) how controllers can demonstrate the appropriateness of legitimate interest as a legal basis in the development and (3) deployment phases; and (4) what are the consequences of the unlawful processing of personal data in the development phase of an AI model on the subsequent processing or operation of the AI model. Among the key findings: "the determination of whether an AI model is anonymous should be assessed, based on specific criteria, on a case-by-case basis"³²; AI models are very likely to require such a thorough evaluation of the risks of Identification"³³; "When there is the finding of an infringement, SAs may impose corrective measures, such as ordering controllers, taking into account the circumstances of each case, to take actions in order to remediate the unlawfulness of the initial processing";³⁴ and the lawfulness of the processing should be assessed case-by-case.³⁵

European Data Protection Supervisor

The European Data Protection Supervisor is the European Union's independent data protection authority.³⁶ The EDPS responsibilities include the mission to "monitor and ensure the protection of personal data and privacy when EU institutions and bodies process the personal information of individuals." This

https://www.edpb.europa.eu/system/files/2024-12/edpb_opinion_202428_ai-models_en.pdf

³⁰ EDPB, Statement 3/2024 on Data Protection Authorities' Role in the Artificial Intelligence Act Framework (Jul. 16, 2024), https://www.edpb.europa.eu/system/files/2024-07/edpb statement 202403 dpasroleaiact en.pdf

³¹ EDPB, Opinion 28/2024 on Certain Data Protection Aspects Related to the Processing of Personal Data in the Context of AI Models (Dec. 17, 2024),

³² Ibid, p. 14

³³ Ibid, p. 16

³⁴ Ibid, p. 32

³⁵ Ibid, p. 33

³⁶ EDPS, *About*, <u>https://edps.europa.eu/about-edps_en</u>

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AI work of the EDPS builds on earlier initiatives, including Recommendations on the AI Act (2023) and the EDPS-EDPB Joint Opinion on the AI Act (2021).³⁷

The European Data Protection Supervisor undertook many projects related to AI in 2024. In June, the EDPS published Orientations on "generative Artificial Intelligence and personal data protection" to provide EU institutions, bodies, offices and agencies with practical advice and instructions on the processing of personal data when using generative AI systems, to facilitate their compliance with the requirements of the data protection legal framework.³⁸ The Guidelines emphasize the general principles of data protection that should help EU institutions comply with the data protection requirements. The European Data Protection Supervisor also supported the work of the Global Privacy Assembly and the G7 DPA Privacy Roundtable, discussed above.

G7

The Group of Seven (G7) is an inter-governmental political forum consisting of Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States. The members represent the wealthiest liberal democracies. The group is officially organized around shared values of pluralism and representative government. The G7 is also the incubator for significant work on AI policy.

In 2024, Artificial Intelligence was a prominent feature in the G7 Leaders' Communique. G7 leaders said they would "pursue an inclusive, human-centered, digital transformation that underpins economic growth and sustainable development, maximizes benefits, and manages risks, in line with our shared democratic values and respect for human rights." The G7 leaders expressed support for the Hiroshima AI process and the development of a reporting framework for monitoring the International Code of Conduct for Organizations Developing Advanced AI Systems.

G7 leaders called attention to labor issues and said they would launch an action plan on the use of AI in the world of work. "We ask our Labor Ministers to develop the action plan, envisaging concrete actions to fully leverage the potential

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³⁷ EDPS, EDPS Opinion 44/2023 on the Proposal for Artificial Intelligence Act in the Light of Legislative Developments (Oct. 23, 2023), https://www.edps.europa.eu/data-protection/our-work/publications/opinions/2023-10-23-edps-opinion-442023-artificial-intelligence-act-light-legislative-developments_en; EDPS, EDPS-EDPB Joint Opinion on the Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) (Jun. 18, 2021), https://www.edps.europa.eu/node/7140 en

³⁸ EDPS, Generative AI and the EUDPR. First EDPS Orientations for Ensuring Data Protection Compliance when Using Generative AI Systems (Jun. 3, 2024), https://www.edps.europa.eu/system/files/2024-06/24-06-03 genai orientations en.pdf

³⁹ G7 Italia, *Apulia G7 Leaders' Communiqué*, p. 21 (Jun. 15, 2024), https://www.g7italy.it/wp-content/uploads/Apulia-G7-Leaders-Communique.pdf

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of AI to enable decent work and workers' rights and full access to adequate reskilling and upskilling, while addressing potential challenges and risks to our labor markets." The G7 leaders endorsed the UN General Assembly Resolution on Seizing the Opportunities of Safe, Secure and Trustworthy AI Systems for Sustainable Development and said they would work "towards closing digital divides, including the gender digital divide, and achieving digital inclusion."⁴⁰

The G7 leaders also recognized the impact of AI on the military domain and the need for a framework for responsible development and use. They stated, "We welcome those who have endorsed the Political Declaration on Responsible Military Use of AI and Autonomy (REAIM) and the REAIM Call to Action, and we encourage more States to do so to ensure that military use of AI is responsible, complies with applicable international law, particularly international humanitarian law, and enhances international security."⁴¹

Canada assumed the G7 Presidency in 2025.

G7 Privacy Roundtable

In recent years, privacy officials from G7 nations have gathered to host seminars and issue statements in conjunction with the Leaders' Summit. The G7 Privacy officials issued several statements related to AI at the 4th G7 Data Protection and Privacy Authorities Roundtable in Rome, Italy. First, the 2024 Communique emphasized "the challenges that artificial intelligence (AI) poses to privacy, data protection, and other fundamental rights and freedoms."⁴² In a second statement on AI and Children, the G7 Privacy officials warned about "potential violations of privacy and data protection linked to the use of AI systems which could have serious implications for children and young people."⁴³ The privacy officials identified several threats, including AI-based decision-making, manipulation and deception, and the use of children's data for training AI models. The officials recommended greater emphasis on privacy by design, privacy impact assessments, transparency, and digital literacy.

A third statement explored the role of Data Protection Agencies in fostering trustworthy AI.⁴⁴ The G7 Privacy officials welcomed the recognition of

п.:.

Communiqué: Privacy in the Age of Data (Oct. 11, 2024),

https://www.edps.europa.eu/system/files/2024-

10/g7 dpas rome roundtable draft communique en.pdf

⁴⁰ Ibid, p. 22

⁴¹ Ibid, p. 23

 $^{^{\}rm 42}$ G7 Privacy, Roundtable of G7 Data Protection and Privacy Authorities, G7 DPAs $^{\prime}$

⁴³ G7 Privacy, Roundtable of G7 Data Protection and Privacy Authorities, *Statement on AI and Children* (Oct. 11, 2024), https://www.edps.europa.eu/system/files/2024-10/statement on ai and children en.pdf

⁴⁴ G7 Privacy, Roundtable of G7 Data Protection and Privacy Authorities, *Statement on the Role of Data Protection Authorities in Fostering Trustworthy AI* (Oct. 11, 2024),

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DPAs in many of the international instruments for AI, including the OECD AI Principles (2019) and the UNESCO Recommendation on AI Ethics (2019), as well as the Bletchley Declaration (2023) and the Seoul Declaration (2024). The privacy officials explained, "many AI technologies, including generative AI, are based on the processing of personal data, which can subject natural persons to unfair stereotyping, bias and discrimination even when not directly processing their respective personal data." The G7 privacy officials emphasized, "Current privacy and data protection laws apply to the development and use of generative AI products, even as different jurisdictions continue to develop AI-specific laws and policies." The statement concluded, "Many data protection overarching principles can be transposed into broader AI governance frameworks"; "DPAs supervise a core component of AI"; "DPAs can help address problems at their source"; and "DPAs have experience."

G20

The G20 is an international forum made up of 19 countries, the African Union, and the European Union, representing the world's major developed and emerging economies. ⁴⁵ Together, the G20 members represent 85% of global GDP, 75% of international trade, and two-thirds of the world's population. According to the OECD, because of its size and strategic importance, the G20 has a crucial role in setting the path for the future of global economic growth.

Global Privacy Assembly

The Global Privacy Assembly is the global network of privacy officials and experts. The Global Privacy Assembly meets annually to discuss emerging privacy issues and to adopt resolutions. In recent years, the focus of the GPA has moved toward $AI.^{46}$

In October 2023, the Assembly adopted a resolution on Generative AI Systems. The signatories stressed that they were particularly "concerned by the release—often with insufficient pre-deployment assessment—of generative AI systems to the wider public, which may present risks and potential harms to data

https://www.edps.europa.eu/system/files/2024-

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^{10/}draft statement dpas governance trustworthy ai en.pdf

⁴⁵ OECD, OECD and G20, https://www.oecd.org/en/about/oecd-and-g20.html

⁴⁶ CAIPD Update 1.15, *Privacy Commissioners Adopt Resolutions on AI, Facial Recognition* (Oct. 19, 2020), https://dukakis.org/center-for-ai-and-digital-policy/caidp-update-privacy-commissioners-adopt-resolutions-on-ai-facial-recognition/

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protection, privacy and other fundamental human rights if not properly developed and regulated."⁴⁷

The GPA Working Group on Ethics and Data Protection in Artificial Intelligence presented a report at the October 2024 meeting in Jersey.⁴⁸ The Working Group set out a 2024–2025 workplan to (1) establish a clear definition of what constitutes a meaningful human review of automated decisions, (2) report on Generative AI-related work, (3) assess AI auditing capabilities, and (4) examine discrimination in insurance pricing and decisions.

OECD

The OECD is an international organization that "works to build better policies for better lives." The goal of the OECD is to "shape policies that foster prosperity, equality, opportunity and well-being for all." The OECD has led the global effort to develop and establish the first government-endorsed framework for AI policy. This was a result of a concerted effort by the OECD and member states to develop a coordinated international strategy. The OECD AI Principles also build on earlier OECD initiatives such as the OECD Privacy Guidelines, a widely recognized framework for transborder data flows and the first global framework for data protection. OECD policy frameworks are not treaties, do not have legal force, and are not directly applicable to OECD member states. However, there are many instances of countries adopting national laws based on OECD policies and a clear convergence of legal norms, particularly in the field of data protection.

Global Partnership on Al

The Global Partnership on Artificial Intelligence (GPAI) emerged from the OECD Recommendation on Artificial Intelligence.⁵¹ GPAI activities are intended to foster the responsible development of AI grounded in "human rights, inclusion, diversity, innovation, and economic growth."⁵² The GPAI aims to "bridge the gap between theory and practice on AI by supporting cutting-edge research and

⁴⁷ Global Privacy Assembly, *Resolution on Generative AI* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁴⁸ CNIL, EDPS, PIPC, Working Group on Ethics and Data Protection in Artificial Intelligence (October 2024), https://globalprivacyassembly.org/wp-content/uploads/2024/11/8.-
Ethics and Data Protection in AI Working Group Annual Report.pdf

⁴⁹ OECD, Who We Are, https://www.oecd.org/about/

⁵⁰ OECD, OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data (1981, updated Feb. 12, 2002), https://www.oecd.org/en/publications/2002/02/oecd-guidelines-on-the-protection-of-privacy-and-transborder-flows-of-personal-data_glgh255f.html

⁵¹ GPAI, The Global Partnership on Artificial Intelligence, https://gpai.ai

⁵² GPAI, About GPAI, https://gpai.ai/about/

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applied activities on AI-related priorities." As of March 2025, GPAI's members include Argentina, Australia, Belgium, Brazil, Canada, Czech Republic, Denmark, France, Germany, India, Ireland, Israel, Italy, Japan, Korea, Mexico, the Netherlands, New Zealand, Poland, Senegal, Serbia, Singapore, Slovenia, Spain, Sweden, Türkiye, the United Kingdom, the United States, and the European Union.⁵³

In 2024, GPAI formalized an integration partnership with OECD "for harnessing the potential of AI for Good and for All."⁵⁴ According to a press statement, "The OECD and the Global Partnership on Artificial Intelligence (GPAI) are joining forces to advance an ambitious agenda for implementing human-centric, safe, secure and trustworthy Artificial Intelligence (AI) embodied in the principles of the OECD Recommendation on AI."⁵⁵ The OECD further said, "The existing GPAI Expert Support Centres—in Paris, France, Montreal, Canada, and Tokyo, Japan—will continue to take an active role in shaping and advancing the new partnership's work."⁵⁶

OECD AI Policy Observatory

The OECD AI Policy Observatory launched in February 2020 provides extensive data and multi-disciplinary analysis on artificial intelligence across a wide range of policy areas.⁵⁷ According to the OECD, the AI Policy Observatory is based on multidisciplinary, evidence-based analysis and Global multistakeholder partnerships.

Collaboration with United Nations

In September 2024, the OECD and the United Nations announced a collaborative effort to strengthen global AI governance. This partnership focuses on conducting regular, science-based assessments of AI risks and opportunities.⁵⁸ The collaboration seeks combines the OECD's technical expertise with the UN's global reach to inform policy decisions and promote responsible AI development worldwide. OECD Deputy Secretary General Knudsen said, "The speed of AI technology development and the breadth of its impact requires diverse policy

⁵³ GPAI, Community, https://gpai.ai/community/

⁵⁴ India, Ministry of Electronics & IT, 6th Meeting of the GPAI Ministerial Council Held on 3rd July 2024 at New Delhi [New Delhi Declaration] (Jul. 3, 2024), https://pib.gov.in/PressReleasePage.aspx?PRID=2030534

⁵⁵ OECD, *GPAI* and *OECD* Unite to Advance Coordinated International Efforts for Trustworthy AI (Jul. 3, 2024), https://www.oecd.org/en/about/news/speech-statements/2024/07/GPAI-and-OECD-unite-to-advance-coordinated-international-efforts-for-trustworthy-AI.html
⁵⁶ Ibid

⁵⁷ OECD, AI Policy Observatory, https://www.oecd.ai/

⁵⁸ OECD, *OECD and UN Announce Next Steps in Collaboration on Artificial Intelligence* (Sept. 22, 2024), https://www.oecd.org/en/about/news/press-releases/2024/09/oecd-and-un-announce-next-steps-in-collaboration-on-artificial-intelligence.html

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ecosystems to work more cohesively. And in real time. I am delighted that the OECD and the UN will link their efforts to help governments improve the quality and timeliness of their policy response to AI's opportunities and its risks." UN Under-Secretary General Gill said, "We will work with all stakeholders, including leading scientists and academic centres from around the globe, to realise this goal."

United Nations

The Secretary-General of the United Nations has led a global campaign for AI governance over many years. Speaking in February 2025 at the AI Action Summit in Paris, Secretary-General António Guterres said, "We must all work together so that artificial intelligence can bridge the gap between developed and developing countries—not widen it. It must accelerate sustainable development—not entrench inequalities." Guterres emphasized the need to ensure technology serves humanity, not the other way around. "The creation of an Independent International Scientific Panel on AI will be central to translating this vision into reality," said the Secretary-General. He also called attention to the growing impact of AI on the climate and sustainability. He concluded, "It is in all our interests for Governments and technology leaders to commit to global guardrails, share best practices and shape fair policy and business models."

The UN accomplished several milestones in 2024.

The Pact for the Future, adopted by World Leaders at the Summit for the Future in September 2024, outlined several goals for AI aligned with the Sustainable Development Goals, including enhancing international governance of AI for the benefit of humanity.⁶⁰ The Pact also warned of the "risks of existing and potential risks associated with the military applications of artificial intelligence."⁶¹

The Global Digital Compact, also adopted at the Summit for the Future, established the first universal agreement on the governance of AI. The Compact reiterated calls for building AI capacity in developing nations.

UNESCO

In 2020, UNESCO embarked on a project to develop a global standard for Artificial Intelligence. UNESCO Director General Audrey Azoulay stated, "Artificial intelligence can be a great opportunity to accelerate the achievement of

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⁵⁹ United Nations, Secretary-General, at Action Summit, Urges Working Together so Artificial Intelligence Expedites Sustainable Development, Not Creates World of "Haves and Have-Nots" (Feb. 11, 2025), https://press.un.org/en/2025/sgsm22548.doc.htm

⁶⁰ United Nations, *Pact for the Future* A/RES/79/1 (Sept. 22, 2024), https://www.un.org/en/summit-of-the-future/pact-for-the-future

⁶¹ Ibid, p. 19

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sustainable development goals. But any technological revolution leads to new imbalances that we must anticipate."62

The UNESCO Recommendation sets out about a dozen principles, five Action Goals, and eleven Policy Actions. Notable among the recommendations is the emphasis on Human Dignity, Inclusion, and Diversity. UNESCO also expresses support for Human Oversight, Privacy, Fairness, Transparency and Explainability, and Safety and Security, among other goals. Understandably, UNESCO is interested in the scientific, educational, and cultural dimensions of AI, the agency's program focus.

The UNESCO Recommendation was adopted in 2021. This is the first global agreement on the Ethics of Artificial Intelligence. UNESCO Director General Audrey Azoulay stated, "The world needs rules for artificial intelligence to benefit humanity. The recommendation on the ethics of AI is a major answer. It sets the first global normative framework while giving member states the responsibility to apply it at their level. UNESCO will support its 193 member states in its implementation and ask them to report regularly on their progress and practices."

UNESCO explained, "The Recommendation aims to realize the advantages AI brings to society and reduce the risks it entails. It ensures that digital transformations promote human rights and contribute to the achievement of the Sustainable Development Goals, addressing issues around transparency, accountability and privacy, with action-oriented policy chapters on data governance, education, culture, labour, healthcare and the economy." The key achievements of the UNESCO AI Recommendation include:

- 1. Protecting data. The UNESCO Recommendation calls for action beyond what tech firms and governments are doing to guarantee individuals more protection by ensuring transparency, agency and control over their personal data.
- 2. Banning social scoring and mass surveillance. The UNESCO Recommendation explicitly bans these uses of AI systems.
- 3. Monitoring and Evaluation. The UNESCO Recommendation establishes new tools that will assist in implementation, including Ethical Impact Assessments and a Readiness Assessment Methodology (RAM).
- 4. Protecting the environment. The UNESCO Recommendation emphasizes that AI actors should favor data-, energy-, and resource-efficient AI methods to help ensure that AI becomes a more prominent tool in the fight against climate change and on tackling environmental issues.

⁶² UNESCO, Artificial intelligence with Human Values for Sustainable development, https://en.unesco.org/artificial-intelligence

⁶³ UNESCO, Recommendation on the Ethics of Artificial Intelligence (2021), https://unesdoc.unesco.org/ark:/48223/pf0000380455

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The Recommendation aims to provide a basis to make AI systems work for the good of humanity, individuals, societies, and the environment and ecosystems, and to prevent harm. It also aims at stimulating the peaceful use of AI systems. The Recommendation provides a universal framework of values and principles of the ethics of AI. It sets out four values: respect, protection, and promotion of human rights and fundamental freedoms and human dignity; environment and ecosystem flourishing; ensuring diversity and inclusiveness; living in peaceful, just, and interconnected societies.

Further, the Recommendation outlines 10 principles—proportionality and do no harm, safety and security, fairness and non-discrimination, sustainability, right to privacy and data protection, human oversight and determination, transparency and explainability, responsibility and accountability, awareness and literacy—backed by more concrete policy actions on how they can be achieved. The Recommendation also introduces red lines to unacceptable AI practices. For example, it states that "AI systems should not be used for social scoring or mass surveillance purposes."

The Recommendation focuses not only on values and principles but also on their practical realization via concrete eleven policy actions. UNESCO encourages Member States to introduce frameworks for ethical impact assessments, oversight mechanisms, etc. Member States should ensure that harms caused through AI systems are investigated and redressed by enacting strong enforcement mechanisms and remedial actions to make certain that human rights, fundamental freedoms, and the rule of law are respected.

UN High Commissioner for Human Rights

In the Roadmap for Digital Cooperation, the UN Secretary-General stated, "To address the challenges and opportunities of protecting and advancing human rights, human dignity and human agency in a digitally interdependent age, the Office of the United Nations High Commissioner for Human Rights will develop system-wide guidance on human rights due diligence and impact assessments in the use of new technologies, including through engagement with civil society, external experts and those most vulnerable and affected."⁶⁴

In September 2021, the UN High Commissioner for Human Rights Michelle Bachelet called for a moratorium on the sale and use of AI that pose a serious risk to human rights until adequate safeguards are put in place. ⁶⁵

2020), https://www.un.org/en/content/digital-cooperation-

roadmap/assets/pdf/Roadmap for Digital Cooperation EN.pdf)

⁶⁴ UN Secretary General, Report: Roadmap for Digital Cooperation (Jun.

⁶⁵ UN Human Rights, Office of the High Commissioner, *Artificial Intelligence Risks to Privacy Demand Urgent Action—Bachelet* (Sept. 15, 2021),

https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=27469&LangID=E;

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She also called for a ban on AI applications that do not comply with international human rights law. "Artificial intelligence can be a force for good, helping societies overcome some of the great challenges of our times. But AI technologies can have negative, even catastrophic, effects if they are used without sufficient regard to how they affect people's human rights," Bachelet said.

The High Commissioner's statement accompanied the release of a new report on The Right to Privacy in the Digital Age. The UN Report details how AI systems rely on large datasets, with information about individuals collected, shared, merged, and analyzed in multiple and often opaque ways. The UN Report finds that data used to guide AI systems can be faulty, discriminatory, out of date, or irrelevant. Long-term storage of data also poses risks, as data could in the future be exploited in as yet unknown ways.⁶⁶

UN Special Rapporteur

An extensive 2018 report by a UN Special Rapporteur explored the implications of artificial intelligence technologies for human rights in the information environment, focusing in particular on rights to freedom of opinion and expression, privacy, and non-discrimination.⁶⁷ The Report of the Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression defines key terms "essential to a human rights discussion about artificial intelligence"; identifies the human rights legal framework relevant to artificial intelligence; and presents preliminary guidelines to ensure that human rights are considered as AI systems evolve. The report emphasizes free expression concerns and notes several frameworks, including the International Covenant on Civil and Political Rights and the UN Guiding Principles on Business and Human Rights.

Among the Recommendations, the Special Rapporteur proposed "Companies should make all artificial intelligence code fully auditable and should pursue innovative means for enabling external and independent auditing of artificial intelligence systems, separately from regulatory requirements. The results of artificial intelligence audits should themselves be made public." The report emphasizes the need for transparency in the administration of public services. "When an artificial intelligence application is being used by a public

see also *UN Urges Moratorium on AI that Violates Human Rights*, CAIDP Update 2.34 (Sept. 15, 2021), https://www.caidp.org/app/download/8343909663/CAIDP-Update-2.34.pdf

⁶⁶ Human Rights Council, *The Right to Privacy in the Digital Age, Report of the United Nations High Commissioner for Human Rights* (Sept. 13, 2021),

https://www.ohchr.org/EN/HRBodies/HRC/RegularSessions/Session48/Documents/A_HRC_48_31_AdvanceEditedVersion.docx

⁶⁷ UN Special Rapporteur, *Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression*, A/73/348 (Aug. 29, 2018), https://freedex.org/wp-content/blogs.dir/2015/files/2018/10/AI-and-FOE-GA.pdf

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sector agency, refusal on the part of the vendor to be transparent about the operation of the system would be incompatible with the public body's own accountability obligations," the report advises.

An article published in 2024 by the CAIDP founder urged the creation of a Special Rapporteur for AI and Human Rights.⁶⁸ Rotenberg wrote, "to effectively navigate the intricate landscape of AI and human rights, there is a pressing need for the creation of a UN Special Rapporteur on AI and Human Rights. This role would not only complement existing efforts but also provide the agility, authority, and competence required to address emerging challenges and safeguard human rights in the digital age."

UN and Lethal Autonomous Weapons

In 2024, the UN Secretary-General urged the Security Council to act decisively to establish international guardrails for artificial intelligence, warning that delays could heighten risks to global peace and security. Every moment of delay in establishing international guardrails increases the risk for us all, Mr. Guterres said. No country should design, develop, deploy or use military applications of AI in armed conflict that violate international humanitarian and human rights laws. Recent conflicts have become testing grounds for AI military applications, he said, citing AI use in autonomous surveillance, predictive policing, and even reported life-and-death decisions.

Particularly alarming, he underscored, is the potential integration of AI with nuclear weapons and the advent of quantum-AI systems that could destabilize global security. "The fate of humanity must never be left to the 'black box' of an algorithm," he stated, stressing the importance of human control over decisions involving the use of force.

The Secretary-General's remarks follow a long history of efforts to establish rules to limit the use of AI systems in warfare. In fact, one of the first AI applications to focus the attention of global policymakers was the use of AI for warfare. In 2016, the United Nations established the Group of Governmental Experts (GGE) on Lethal Autonomous Weapons Systems (LAWS) following a review of the High Contracting Parties to the Convention on Certain Conventional

⁶⁸ Marc Rotenberg, *The Imperative for a UN Special Rapporteur on AI and Human Rights*, Journal of AI Law and Regulation, Volume 1, Issue 1, pp. 110–112 (2024), DOI: https://doi.org/10.21552/aire/2024/1/13

⁶⁹ United Nations, *Humanity's Fate Can't Be Left to Algorithms, UN Chief Tells Security Council* (Dec. 19, 2024), https://un.dk/humanitys-fate-cant-be-left-to-algorithms-un-chief-tells-security-council/

⁷⁰ The Computer Professionals for Social Responsibility (CPSR), a network of computer scientists based in Palo Alto, California, undertook early work on this topic in the 1980s. CPSR History, http://cpsr.org/about/history/; See also David Bellin and Gary Chapman, *Computers in Battle Will They Work?* (1987)

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Weapons (CCW).⁷¹ In November 2019,⁷² the CCW High Contracting Parties endorsed 11 Guiding Principles for LAWS.⁷³ But concerns about the future of regulation of lethal autonomous weapons remain. At present, some countries believe that current international law "mostly suffices" while others believe new laws are needed.⁷⁴ Human Rights Watch provided an important overview of country positions on the future of banning fully autonomous weapons in August 2020.⁷⁵ Concerns over killer reports also arose at the 75th UN Assembly in October 2020. Pope Francis warned that lethal autonomous weapons systems would "irreversibly alter the nature of warfare, detaching it further from human agency." He called on states to "break with the present climate of distrust" that is leading to "an erosion of multilateralism, which is all the more serious in light of the development of new forms of military technology."⁷⁶ The Permanent Representative of the Holy See to the UN called for a ban on autonomous weapons in 2014.⁷⁷

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https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and#

https://reachingcriticalwill.org/images/documents/Disarmament-

fora/unga/2020/25Sept HolySee.pdf

⁷¹ United Nations, 2018 Group of Governmental Experts on Lethal Autonomous Weapons Systems (LAWS).

⁷² Meeting of the High Contracting Parties to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, *Final Report* (Dec. 13, 2019),

⁷³ Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons System, *Report of the 2019 session of the Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems* (Sept. 25, 2019), https://documents-dds-

nv.un.org/doc/UNDOC/GEN/G19/285/69/PDF/G1928569.pdf?OpenElement

⁷⁴ Dustin Lewis, *An Enduring Impasse on Autonomous Weapons*, Just Security (Sept. 28, 2020), https://www.justsecurity.org/72610/an-enduring-impasse-on-autonomous-weapons/

⁷⁵ Human Rights Watch, *Stopping Killer Robots: Country Positions on Banning Fully Autonomous Weapons and Retaining Human Control* (Aug. 10, 2020), https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-

⁷⁶ Address of His Holiness Pope Francis to the Seventy-fifth Meeting of the General Assembly of the United Nations, *The Future We Want, the United Nations We Need: Reaffirming our Joint Commitment through Multilateralism* (Sept. 25, 2020),

⁷⁷ Statement by H.E. Archibishop Silvano M. Tomasi, Permanent Representative of the Holy See to the United Nations and Other International Organizations in Geneva at the meeting of Experts on Lethal Autonomous weapons systems of the High Contracting Parties to the Convention, *On Prohibitions or Restrictions on the Use of Certain Conventional Weapons which May Be Deemed to be Excessively Injurious or to Have Indiscriminate Effect* (May 13, 2014),

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At the 2022 UN General Assembly, 70 countries endorsed a joint statement on autonomous weapons systems. The joint statement urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law, including through maintaining human responsibility and accountability in the use of force." ⁷⁸

At the 78th UN General Assembly First Committee in 2023, 164 states voted in favor⁷⁹ of resolution L.56⁸⁰ on autonomous weapons systems. The Resolution emphasizes the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. The report presented in July 2024 summarized views from more than 40 Member and Observer States and 28 civil society organizations.81 The statements reflect a breadth of perspectives and concerns over defining LAWS and whether international law is sufficient for governing these weapons or a new instrument should be developed. Questions about the best approach remain but the Secretary-General noted the urgency "to take preventative action on this issue" and reiterated his call for "the conclusion by 2026, of a legally binding instrument to prohibit lethal autonomous weapons that function without human control or oversight and that cannot be used in compliance with international humanitarian law."82 He concluded, "The autonomous targeting of humans by machines is a moral line that must not be crossed."

https://www.unog.ch/80256EDD006B8954/(httpAssets)/D51A968CB2A8D115C1257CD800255 2F5/\$file/Holy+See+MX+LAWS.pdf

⁷⁸ UN General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

 $[\]frac{\text{https://estatements.unmeetings.org/estatements/}11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcS}{nnAm_en.pdf}$

⁷⁹ Isabelle Jones, *164 States Vote against the Machine at the UN General Assembly*, Stop Killer Robots (Nov. 1, 2023), https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

⁸⁰ UN General Assembly, *Resolution L56: Lethal Autonomous Weapons* (Oct. 12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

⁸¹ UN General Assembly, *Lethal Autonomous Weapons Systems: Report of the Secretary-General* (Jul. 1, 2024), https://docs.un.org/en/a/79/88
⁸² Ibid, p. 18

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The Vatican

Pope Francis has emerged as a leading figure in AI policy. In addition to his statements on autonomous weapons, in November 2020 the Pope warned that AI could exacerbate economic inequalities around the world if a common good is not pursued. "Artificial intelligence is at the heart of the epochal change we are experiencing. Robotics can make a better world possible if it is joined to the common good. Indeed, if technological progress increases inequalities, it is not true progress. Future advances should be oriented towards respecting the dignity of the person and of Creation."⁸³

Earlier in 2020, the Pope endorsed the Rome Call for AI Ethics.⁸⁴ The goal of the Rome Call is to "support an ethical approach to Artificial Intelligence and promote a sense of responsibility among organizations, governments and institutions." The Pope said, "The Call's intention is to create a movement that will widen and involve other players: public institutions, NGOs, industries and groups to set a course for developing and using technologies derived from AI." The Pope also said that the Rome Call for Ethics is the "first attempt to formulate a set of ethical criteria with common reference points and values, offering a contribution to the development of a common language to interpret what is human."

The key principles of the Rome Call are 1) Transparency: AI systems must be explainable; 2) Inclusion: the needs of all human beings must be taken into consideration so that everyone can benefit and all individuals can be offered the best possible conditions to express themselves and develop; 3) Responsibility: those who design and deploy the use of AI must proceed with responsibility and transparency; 4) Impartiality: do not create or act according to bias, thus safeguarding fairness and human dignity; 5) Reliability: AI systems must be able to work reliably; 6) Security and privacy: AI systems must work securely and respect the privacy of users. These principles are described as "fundamental elements of good innovation."

The Pope delivered several speeches on Artificial Intelligence in 2024. Speaking to the G7 leaders in June, the Pope described AI as an "exciting and fearsome" tool, "that can autonomously adapt to the task assigned to it and, if designed this way, can make choices independent of the person in order to achieve

⁸³ Vatican News, *Pope's November Prayer Intention: That Progress in Robotics and AI "Be Human*" (Nov. 2020), https://www.vaticannews.va/en/pope/news/2020-11/pope-francis-november-prayer-intention-robotics-ai-human.html

⁸⁴ Rome Call AI Ethics, https://romecall.org

⁸⁵ Pontifical Academy for Life, *Rome Call for Ethics* (Feb. 28, 2020), http://www.academyforlife.va/content/pav/en/events/intelligenza-artificiale.html

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the intended goal."⁸⁶ The Pope called attention to inherent bias in AI systems, particularly those that may be deployed for judicial decision-making, and explained that algorithms are neither objective nor neutral. The Pope also urged world leaders to reconsider the development and use of lethal autonomous weapons and ultimately ban their use. He said, "No machine should ever choose to take the life of a human being."

Speaking to the World Forum in Davos in 2025, the Pope said that AI must promote and never violate human dignity.⁸⁷ The Pope said, AI raises "fundamental questions about ethical responsibility, human safety, and the broader implications of these developments for society." The Pope warned against the risk that AI will be used to advance the "technocratic paradigm," which perceives all the world's problems as solvable through technological means alone. "Within this paradigm," he explained, "human dignity and fraternity are frequently subordinated in the pursuit of efficiency, as though reality, goodness, and truth inherently emanate from technological and economic power."

Technical Societies

Technical societies have also played a leading role in the articulation of AI principles. The IEEE led several initiatives, often in cooperation with government policymakers, to develop and promote Ethically Aligned Design (EAD). 88 The initial report, A Vision for Prioritizing Human Well-being with Autonomous and Intelligent Systems, was published in 2015. The IEEE published the second edition in 2017. 89 In 2019 the IEEE issued a Positions Statement on Artificial Intelligence, concluding that "AI systems hold great promise to benefit society, but also present serious social, legal and ethical challenges, with corresponding new requirements to address issues of systemic risk, diminishing trust, privacy challenges and issues of data transparency, ownership and agency."90

In November 2022, the IEEE Board approved the IEEE Standard for Operator Interfaces of Artificial Intelligence. The standard defines a set of operator

⁸⁶ The Holy See, *Address of His Holiness Pope Francis* (Jun. 14, 2024), https://www.vatican.va/content/francesco/en/speeches/2024/june/documents/20240614-g7-intelligenza-artificiale.html

⁸⁷ Vatican News, *Pope to World Economic Forum: AI Must Promote and Never violate human Dignity* (Jan. 23, 2025), https://www.vaticannews.va/en/pope/news/2025-01/pope-francis-sends-message-to-dayos.html

⁸⁸ IEEE Standards Association, *Autonomous and Intelligent Systems (AIS)*, https://standards.ieee.org/initiatives/autonomous-intelligence-systems/

⁸⁹ IEEE Standards Association, *IEEE Releases Ethically Aligned Design, Version 2 to Show "Ethics in Action" for the Development of Autonomous and Intelligent Systems (A/IS)* (Dec. 12, 2017), https://standards.ieee.org/news/2017/ead_v2.html

⁹⁰ IEEE, *Artificial Intelligence* (Jun. 24, 2019), https://globalpolicy.ieee.org/wp-content/uploads/2019/06/IEEE18029.pdf

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interfaces frequently used in AI applications and highlights various types of operators, such as those related to basic mathematics, neural network, and machine learning.⁹¹

ACM, an international society of computer scientists and professionals, has also contributed to the global AI policy landscape. In 2017 ACM released a Statement on Algorithmic Transparency and Accountability, identifying key principles to minimize bias and risks in algorithmic decision-making systems, including transparency, accountability, explainability, auditability, and validation. In 2020, in response to growing concerns about the use of facial recognition technologies in public spaces, ACM released another statement addressing the unique issues of biometric data systems and the potential bias and inaccuracies that have significant consequences for violation of human rights. A 2023 Statement addressed emerging challenges of generative AI and proposed several new principles, including Limits and guidance on Deployment and Use, Ownership, Personal Data Control, and Correctability.

Legal Societies

Legal societies are also playing a more prominent role in the AI policy landscape. The European Law Institute has published several reports and recommendations on AI law and policy. In 2024, the International Bar Association endorsed the Council of Europe Framework Convention on Artificial Intelligence, Human Rights, Democracy and the Rule of Law. 97

⁹¹ IEEE Standards Association, *IEEE Standard for Artificial Intelligence (AI) Model Representation, Compression, Distribution, and Management* (Mar. 2022), https://standards.ieee.org/ieee/2941/10363/

92 Association for Computing Machinery, www.acm.org/public-policy

https://www.acm.org/binaries/content/assets/publicpolicy/2017_usacm_statement_algorithms.pdf
⁹⁴ ACM, US Technology Policy Committee, *Statement on Principles and Prerequisites for the Development, Evaluation and Use of Unbiased Facial Recognition Technologies* (Jun. 30, 2020), https://www.acm.org/binaries/content/assets/public-policy/ustpc-facial-recognition-tech-statement.pdf

⁹⁵ ACM, US Technology Policy Committee, *Statement on Principles for the Development, Deployment and Use of Generative AI Technologies* (Jun. 27, 2023), https://www.acm.org/binaries/content/assets/public-policy/ustpc-approved-generative-ai-principles

⁹⁶ See, for example, European Law Institute, *ELI Guiding Principles and Model Rules on Algorithmic Contracts* (2022), https://www.europeanlawinstitute.eu/projects-publications/current-projects/current-projects/eli-guiding-principles-and-model-rules-on-algorithmic-contracts/

⁹⁷ International Bar Association, The IBA Is the First Association of Legal Practitioners to Endorse the Council of Europe Framework Convention on Artificial Intelligence (Oct. 2, 2024),

⁹³ ACM, US Public Policy Council, *Statement on Algorithmic Transparency and Accountability* (Jan. 12, 2017),

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Civil Society

Civil society organizations engage in AI policymaking through a variety of means. Whether researching AI-related justice issues like facial recognition in public spaces, submitting comments, or sitting in the rooms where policymakers make decisions on legislation, civil society organizations hold government leaders accountable for rights-violating AI uses and help develop more just policies. This section highlights some recent engagement by civil society organizations.

Global Efforts

International organizations such as the G20 provide channels for representatives from civil society. In 2024, for example, Brazil launched the G20 Social to "increase the participation of non-governmental actors in G20 activities and decision-making processes."98 The São Luís Declaration, a joint statement on inclusive AI by the civil, labor, think-tank, and women engagement groups, emerged from meetings leading up to the Social Summit held in connection with the Leaders' Summit.99

Other global meetings and venues such as the AI Safety Summit also include civil society organizations. The Sixth Athens Roundtable on AI and the Rule of Law in December 2024 brought together over 130 leading AI decisionmakers in person and more than 800 participants online. The event emphasized the urgency of establishing robust, globally coordinated accountability mechanisms to safeguard the rule of law, democratic values, and global wellbeing. Key discussions centered on enforcing global standards for AI risk management, building an interoperable ecosystem for AI evaluations, and ensuring transparency and accessible information flows.

Africa

In Africa, civil society organizations have actively engaged with continental initiatives surrounding AI governance, exemplified by an open letter published in July 2024 addressing the African Union (AU).¹⁰⁰ The letter was coordinated by Pollicy and the Media Institute of Southern Africa (MISA) and

https://www.ibanet.org/The-IBA-is-the-first-association-of-legal-practitioners-to-endorse-the-Council-of-Europe-Framework-Convention-on-Artificial-Intelligence

⁹⁸ G20 Brasil 2024, G20 Social (2024), https://g20.gov.br/en/g20-social

⁹⁹ T20, Brasil 2024, São Luís Declaration: A Joint Statement from Engagement Groups to the G20 States on Artificial Intelligence (Sept. 19, 2024), https://www.t20brasil.org/en/news/82/saoluis-declaration-a-joint-statement-from-engagement-groups-to-the-g20-states-on-artificialintelligence

¹⁰⁰ Pollicy, Media Institute of Southern Africa (MISA) & Kristophina Shilongo, We Submitted an Open Letter to the African Union. Here Is What We Learned about AI Policymaking in Africa, Mozilla (Aug. 12, 2024), https://foundation.mozilla.org/en/blog/we-submitted-an-open-letter-tothe-african-union-here-is-what-we-learned-about-ai-policymaking-in-africa/

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supported by a coalition comprising various organizations including Mozilla, Paradigm Initiative, African Internet Rights Alliance, and the Women of Uganda Network. The letter was issued in response to the endorsement of the Continental AI Strategy and the African Digital Compact by African ICT and Communications Ministers, applauding the AU for its visionary leadership and collective effort.

Signatories expressed significant concerns regarding the effectiveness of implementation at the national level, emphasizing that the transformative potential of these continental frameworks depends heavily on their translation into binding domestic policies. The coalition highlighted the importance of protecting African societies from potential negative impacts of AI, such as misinformation and AI-enabled propaganda, stressing the critical necessity of robust policies addressing data governance and fundamental rights. Recommendations included calling upon African Heads of State to actively participate in discussions during the AU Assembly, urging AU Chairperson Moussa Faki Mahamat to underscore the importance of the AU Data Policy Framework, and advocating for strengthened partnerships between civil society, communities, and AU bodies like AUDA-NEPAD. The letter strongly emphasized collaborative governance as essential, underlining civil society's willingness to partner with political leaders to ensure AI development truly benefits all Africans, reflecting a collective vision toward digital transformation rooted firmly in human rights and ethical standards.

Americas

Civil society organizations continue to advocate for individual rights in their struggle against facial recognition in public spaces. In Argentina, the Civil Rights Association (*Asociación por los Derechos Civiles*, ADC) organized against facial recognition in 2020–2023.¹⁰¹ A judge ruled the system implemented in Buenos Aires unconstitutional in 2022.¹⁰² The Coalition Rights on the Net (*Coalizão Direitos na Rede*) in cited several examples of arrests after mistaken identity in a 2024 open letter advocating for the Brazilian AI regulation to ban facial recognition technologies.¹⁰³ This action continues research informing the public on facial recognition in public spaces by Brazilian think tank Instituto

¹⁰¹ Asociación por los Derechos Civiles, *ConMiCaraNo*, https://conmicarano.adc.org.ar/
¹⁰² Future of Privacy Forum, *Judge Declares Fugitive Facial Recognition System Unconstitutional* (Sept. 30, 2022), https://fpf.org/blog/judge-declares-buenos-aires-fugitive-facial-recognition-system-unconstitutional/; See also Judicial Branch of the City of Buenos Aires, Judicial Decision on the Administrative and Tribute Litigation No. 4 (Sept. 7, 2022), https://www.cels.org.ar/web/wp-

content/uploads/2022/09/reconocimientofacialsentencia070922.pdf

103 Coalizão Direitos Na Rede (Coalition Rights on the Net), *Open Letter: Advocating for*

Brazilian AI Regulation that Protects Human Rights (Jul. 8, 2024), https://direitosnarede.org.br/2024/07/08/open-letter-advocating-for-brazilian-ai-regulation-that-protects-human-rights/

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Igarapé¹⁰⁴ and a 2018 class action by the Brazilian Institute for Consumer Protection before the São Paulo Court of Justice in 2018.¹⁰⁵

In Mexico, the multi-stakeholder National Alliance on Artificial Intelligence (ANIA, *Alianza Nacional de Inteligencia Artificial*) revitalized the charge for a national AI strategy with the Proposal for a National AI Strategy for Mexico, 2024–2030. On ANIA brings together experts from academia, private enterprise, government, and NGOs to conduct roundtables, offer public webinars and workshops, research AI use cases, and collaborate with other regional leaders.

In the United States, a variety of civil society organizations, including the Center for AI and Digital Policy, engage in policymaking and public advocacy. The Algorithmic Justice League, led by Dr. Joy Buolamwini, ¹⁰⁷ unites these areas with testimony to Congress and statements to legislators, organizing and capacity-building through public campaigns, and media such the documentary *Coded Bias*. ¹⁰⁸ Buolamwini's study, *Gender Shades*, co-authored with former Google AI Ethics co-lead Timnit Gebru, ¹⁰⁹ prompted her advocacy and activism. Gebru's organization, Distributed AI Research Institute, centers research that aims to "mitigate/disrupt/eliminate/slow down harms caused by AI technology, and cultivate spaces to accelerate imagination and creation of new technologies and tools to build a better future." DAIR centers research on the real, present harms of AI technologies in society.

Asia

AI Safety Asia (AISA), co-founded in 2024 by Lyantoniette Chua, Senior Policy Advisor and Fellow at the Center for AI and Digital Policy is a global non-profit organization dedicated to the international governance of safe AI, beginning with initiatives in Southeast Asia. By promoting safe and governed AI in Asia, AISA aims to mitigate catastrophic risks, reduce adverse societal impacts, and unlock equitable socioeconomic development for 60% of the global population. Through programs such as the AISA Governance Academy and the Southeast Asia Policy Observatory, AISA seeks to enhance AI safety governance, upskill civil

https://igarape.org.br/infografico-reconhecimento-facial-no-brasil/

¹⁰⁴ Instituto Igarapé, *Facial Recognition in Brazil* (Accessed Feb. 3, 2025),

¹⁰⁵ Instituto Brasileiro de Defesa do Consumidor, *ViaQuatro* (Aug. 30, 2018), https://idec.org.br/sites/default/files/acp_viaquatro.pdf

¹⁰⁶ ANIA, About ANIA [Sobre ANIA] (2024), https://www.ania.org.mx/

¹⁰⁷ Algorithmic Justice League, *About* (2025), https://www.ajl.org/about

¹⁰⁸ Algorithmic Justice League, *Policy/Advocacy* (2025), https://www.ajl.org/library/policy-advocacy

¹⁰⁹ Joy Buolamwini and Timnit Gebru, *Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification*, Proceedings of Machine Learning Research 81, no. 1 (2018), https://proceedings.mlr.press/v81/buolamwini18a/buolamwini18a.pdf

¹¹⁰ DAIR, Research Philosophy (2024), https://www.dair-institute.org/research/

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servants, incubate junior researchers, and foster cross-disciplinary collaboration. AISA has conducted AI Safety Roundtables in Manila, Jakarta, Singapore, Kuala Lumpur, and Bangkok, convening stakeholders to discuss regional opportunities, challenges, and strategies for AI safety governance.

AISA joined with Asia Society France at the AI Action Summit in Paris, France, in February 2025, to convene a high-level dialogue in Paris on the sidelines of the AI Action Summit titled From Oil to Water: Governing AI as a Global Public Good—A Europe-Asia Dialogue.

Europe

Civil society organizations across Europe have issued an urgent collective response to the third draft of the EU Code of Practice for General Purpose AI (GPAI) models, warning that crucial protections for fundamental rights and child safety have been significantly weakened. The joint letter, 111 endorsed by influential groups including the Ada Lovelace Institute, ARTICLE 19, 5Rights Foundation, and The Future Society, criticized the relegation of fundamental rights concerns such as child sexual abuse material (CSAM) and non-consensual intimate image abuse (NCII) to voluntary measures listed in an appendix, rather than central obligations. According to these groups, this approach drastically shifts responsibility for assessing risks from GPAI model providers to downstream system developers, undermining the accountability envisioned by the EU AI Act. Furthermore, the coalition asserts that by reducing fundamental rights issues to mere "potential considerations," the code becomes incompatible with established international frameworks, such as the International Scientific Report on the Safety of Advanced AI, which explicitly acknowledges these harms. They also highlighted inadequacies in current industry safety frameworks cited by the drafters, pointing out that prominent frameworks from companies including Meta and Google notably fail to address critical risks related to human rights, discrimination, and child safety.

Civil society organizations urged EU policymakers to ensure the code aligns firmly with the original intent of the AI Act, maintaining mandatory protections rather than permitting companies to selectively recognize or ignore systemic risks. The signatories concluded that without these revisions, the code risks normalizing a regulatory landscape in which safeguarding fundamental rights and protecting vulnerable groups become discretionary rather than obligatory moral imperatives.

11

¹¹¹ Civil Society's Urgent Warning: The EU's Code of Practice for General Purpose AI Final Draft Cannot Abandon Fundamental Rights, and Protections for Children, Center for Democracy & Technology (Mar. 28, 2025), https://cdt.org/wp-content/uploads/2025/03/Joint-Letter-CSO-CoP.pdf

COUNTRY REPORTS

Argentina

In 2024, Argentina's data protection agency completed a public consultation on a guide to using AI responsibly and published a guide on transparency and personal data protection in AI. The legislature also proposed a bill to create a regulatory framework for AI and a federal AI observatory. Internationally, Argentina participated in negotiations for the Council of Europe international AI treaty. However, Argentina has not signed the treaty and refused to sign the UN Pact for the Future.

National AI Strategy

The Ministry of Science, Technology and Productive Innovation (MINCYT) published the National Strategy for Artificial Intelligence in 2019. The plan includes two priority initiatives: Digital Agenda Argentina 2030 and the National Strategy for Science, Technology, and Innovation, Argentina Innovates 2030. The National Strategy for Science, Technology, and Innovation, Argentina Innovates 2030.

With the goal of positioning Argentina as a regional leader on AI, the tenyear strategy plan seeks to transform the country through AI, leveraging the technology in pursuit of developmental objectives built on the UN's sustainable Development Goals (SDGs). The Strategy aims to minimize the potential risks of AI development and implementation for Argentinean society by protecting personal data and individual privacy through guidelines for the design of AI systems consistent with ethical and legal principles. The strategy also proposes to analyze the impact in the production scheme, to measure effects on labor force, and to prevent automate systems from reproducing or reinforcing discriminatory or exclusionary stereotypes. The Strategy addresses the areas of:

- Talent and education
- Data
- Research & Development and Innovation
- Supercomputing infrastructure
- Actions to facilitate job transitions
- Facilitating public-private co-operation on data use
- Public services and manufacturing (as target sectors for AI development)

https://oecd.ai/en/dashboards/countries/Argentina

Presidency of the Nation, Argentina Digital Agenda — Decree 996/2018 (Nov. 2, 2018), https://www.boletinoficial.gob.ar/detalleAviso/primera/195154/20181105

¹¹² OECD.ai, AI National Plan (Updated Jun. 14, 2023),

¹¹⁴ Presidency of the Nation, *National Artificial Intelligence Plan Argentina (Plan Nacional de Inteligencia Artificial de la República de Argentina*) (2019), https://oecd-opsi.org/wp-content/uploads/2021/02/Argentina-National-AI-Strategy.pdf

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The cross-cutting themes in the Strategy are:

- Ethics and regulation
- Communication and awareness building
- International co-operation

As the wide range of topics indicates, the Strategy requires a whole-of-government effort that brings together different government ministries under the leadership of the Digital Agenda Executive Roundtable (*Mesa Ejecutiva Agenda Digital*). This effort is supported by twenty different government agencies, as well as a Multi-sectoral Committee of Artificial Intelligence and a Scientific Committee of experts.

The 2019 National AI Strategy for Argentina set out ambitious goals that were built upon other national strategies developed under the former President Mauricio Marci, just before President Alberto Fernandez was elected in December 2019. The Executive Branch of the Fernandez administration published the Productive Development Plan Argentina 4.0 in April 2021. This plan, an initiative of the National Ministry of Productive Development, aims to promote the incorporation of technologies 4.0—including AI—in the national production chain. The Argentina 4.0 Plan does not refer to the National AI Strategy. In November 2021, the Secretariat for Strategic Affairs also adopted the Artificial Intelligence Program. This Program complements Decree 970/2020. The aim is to foster the responsible use of technology, such as artificial intelligence, "that contribute to consolidating Argentine technological sovereignty in the 4.0 revolution." 117

Local Strategies

The Autonomous City of Buenos Aires launched Future City: AI Strategy (*Ciudad Futuro: Plan Estratégico Inteligencia Artificial*) in August 2021. The Plan outlines the following three objectives:

- Use AI for the city's development
- Use AI for the benefit of the citizens
- Use cross-cutting tools to ensure the city's sustainability

Under this strategy, the Buenos Aires government has established Buenos Aires AI Lab (*BA Laboratorio IA*), which provides opportunities for training and

https://www.argentina.gob.ar/normativa/nacional/resoluci%C3%B3n-90-2021-357421

https://www.argentina.gob.ar/normativa/nacional/decreto-970-2020-344786/texto

¹¹⁵ Ministry of Productive Development, *Productive Development Plan: Argentina 4.0* (Apr. 2021),

https://www.argentina.gob.ar/sites/default/files/plan_de_desarrollo_productivo_argentina_4.0.vf_2.pdf

¹¹⁶ Secretary for Strategic Affairs, Resolution 90/2021 (Nov. 26, 2021),

¹¹⁷ National Executive Branch, *Decree 970/2020* (Dec. 1, 2020),

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professional development to the youth and serves as a hub for facilitating R&D and application of AI. 118 As with the National Plan, one of the key aspects of the Buenos Aires strategy is that it aims to foster mechanisms and tools for the development and use of AI technology that respects fundamental values and human rights.¹¹⁹

Public Participation

Since the initial development of Argentina's national AI strategy, the government has taken further steps to increase public participation in AI-related initiatives. In 2023, the Agency for Access to Public Information (AAIP) launched a program¹²⁰ focused on AI transparency and the protection of personal data. To further support these efforts, the AAIP has published the Guide to Transparency and the Protection of Personal Data in Responsible AI, 121 outlining AI's potential risks and challenges and offering guidance on implementing responsible AI principles throughout the AI lifecycle. These efforts reflect Argentina's aim to ensure AI development aligns with societal values and effectively addresses public concerns.

Data Protection

Article 43 of Argentina's Constitution guarantees an individual's access to personal data in private and public registries, and exercise agency over how that data is used. Argentina's Personal Data Protection Law (PDPL) follows international standards regarding basic personal data rules and has even been deemed adequate by the European Commission. 122 A new proposal has been put forward by the former administration to reform the PDPL and related legislation. However, the legislative draft has been under consideration by the National Congress since 2018, with no formal decision made in that regard as of this date. The purpose of this reform is not only for the country to keep its international

119 Ibid

¹¹⁸ Buenos Aires Secretary of Innovation and Digital Transformation, *Artificial Intelligence Plan* for the City (Aug. 13, 2021),

http://buenosaires.gob.ar/jefaturadegabinete/innovacion/noticias/ciudad-futuro-el-primer-plande-inteligencia-artificial-de

¹²⁰ Agency for Access to Public Information, *Program for Transparency and Protection of* Personal Data in the Use of Artificial Intelligence — Resolution 161/2023 (Sept. 4, 2023), https://www.argentina.gob.ar/noticias/programa-de-transparencia-y-proteccion-de-datospersonales-en-el-uso-de-la-inteligencia

¹²¹ Agency for Access to Public Information of Argentina, Guide for Transparency and Personal Data Protection in Responsible AI (Sept. 16, 2024),

https://www.argentina.gob.ar/sites/default/files/aaip-argentina-

guia para usar la ia de manera responsable.pdf

¹²² DLA Piper, Data Protection Laws of the World – Argentina (Jan. 24, 2022), https://www.dlapiperdataprotection.com/index.html?t=law&c=AR

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status as a jurisdiction that provides an adequate level of protection, particularly after the passing of the European General Data Protection Regulation, but also to keep its data protection regime up to date with the technological and legal developments that have taken place in recent years.

The AAPI is Argentina's data protection authority. Although it enjoys functional autonomy by law, the agency remains under the National Executive Branch from a structural perspective; an aspect that, along with the absence of proper mechanisms in place, has led civil society groups to question the impartiality and independence of the appointment process of its Executive Director.¹²³

The AAPI released a new draft bill on personal data protection for public consultation in late 2022.¹²⁴ Following an extended public consultation featuring 173 submissions, the AAPI took up 80 articles in its final proposal and modified 43 based on public comments. The reform package was presented to Argentina's government for review before introduction to the National Congress of Argentina in June 2023.¹²⁵

AAIP issued a resolution that established the Transparency and Protection of Data Program on the use of AI.¹²⁶ This program has the objective of enhancing regulatory frameworks and strengthening state powers necessary for the development and use of AI, based on the assumption that the state is responsible for guaranteeing the effective exercise of citizens' rights regarding transparency and the protection of personal data.

Additionally, it included the formation of the Observatory on AI, an initiative to foster governance and community engagement. A week after this Resolution was created, Argentina's President Chief of Staff issued Administrative Decision No. 750/2023 which created an Inter-Ministerial roundtable on AI.¹²⁷

direccion-de-la-agencia-de-acceso-a-la-informacion-publica/

124 Agency for Access to Public Information, *Proposal for Bill on Personal Data Protection Law: Toward the Realization of Law 25.326*, Official Bulletin, Annex 1 (Sept. 2022), https://www.boletinoficial.gob.ar/detalleAviso/primera/271369/20220912

https://www.boletinoficial.gob.ar/detalleAviso/primera/293363/20230904

¹²³ Association for Civil Rights, *Observations of the ADC on the Proposed Candidate for the Director of the Agency of Access to Public Information* (Mar. 17, 2021), https://adc.org.ar/2021/03/17/observaciones-de-la-adc-a-la-candidatura-propuesta-para-la-

¹²⁵ National Executive Branch, *The National Executive Branch Sent the Personal Data Protection Bill to Congress* (Jun. 30, 2023), https://www.argentina.gob.ar/noticias/el-poder-ejecutivo-nacional-envio-al-congreso-el-proyecto-de-ley-de-proteccion-de-datos
¹²⁶ AAIP, *Resolution No 161/23* (Sept. 2023),

¹²⁷ M. OFarrell Mairal, *Agency of Access to Public Information Creates Transparency and Personal Data Protection Program for Using Artificial Intelligence*, Lexology (Oct. 5, 2023), https://www.lexology.com/library/detail.aspx?g=d4c2fb3b-4502-46af-8831-783ee5946503

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As a member of the Ibero-American Network for the Protection of Personal Data (RIPD), which comprises 16 data protection authorities of 12 countries, the AAPI endorsed the General Recommendations for the Processing of Personal Data in Artificial Intelligence¹²⁸ and the accompanying Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects. 29 Both have been framed in accordance with the RIPD Standards for Personal Data Protection for Ibero-American States. 130 With the adoption of the Standards, a series of guiding principles and rights for the protection of personal data were recognized, that can be adopted and developed by the Ibero-American States in their national legislation in order to guarantee a proper treatment of personal data, and to have homogeneous rules in the region. The guiding principles of personal data protection are legitimation, lawfulness, loyalty, transparency, purpose, proportionality, quality, responsibility, safety and confidentiality. Controllers must also guarantee the exercise of the following rights by data subjects: right of access, right to correction, right to cancellation, right to opposition, right not to be subject to automated individual decisions, right to portability of personal data and right to the limitation of treatment of personal data.

In May 2023, the RIPD data protection authorities initiated a coordinated action regarding ChatGPT, developed by OpenAI, on the basis that it may entail risks for the rights and freedoms of users in relation to the processing of their personal data. Concerns regarding the risk of misinformation. "ChatGPT does not have knowledge and/or experience in a specific domain, so the precision and depth of the response may vary in each case, and/or generate responses with cultural, racial or gender biases, as well as false ones."¹³¹

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¹²⁸ Ibero-American Network for the Protection of Personal Data (RIPD), *General Recommendations for the Processing of Personal Data in Artificial Intelligence* (Jun. 21, 2019), https://www.redipd.org/en/document/guide-general-recommendations-processing-personal-data-ai-en.pdf

¹²⁹ Ibero-American Network for the Protection of Personal Data (RIPD), Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects (Jun. 21, 2019), https://www.redipd.org/en/document/guide-specific-guidelines-ai-projects-en.pdf

¹³⁰ Ibero-American Network for the Protection of Personal Data (RIPD), *Standards for Personal Data Protection for Ibero-American States* (2017), https://www.redipd.org/sites/default/files/2022-04/standars-for-personal-data.pdf

¹³¹ Ibero-American Network for the Protection of Personal Data (RIPD), *Authorities from the Ibero-American Network for the Protection of Personal Data Begin a Coordinated Action in Relation to ChatGPT* (May 8, 2023), https://www.redipd.org/noticias/autoridades-red-iberoamericana-de-proteccion-de-datos-personales-inician-accion-chatgpt

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Argentina's AAIP has been a member of the Global Privacy Assembly (GPA) since 2018.¹³² AAIP co-sponsored the 2018 GPA Resolution on AI and Ethics, ¹³³ 2020 Resolution on AI and Accountability, ¹³⁴ 2022 Resolution on Facial Recognition Technology, ¹³⁵ and the 2023 Resolution on Generative AI. ¹³⁶

Argentina is also party to Convention 108 since June 2019. Argentina became the 23rd state to ratify 108+ on data protection in 2023. 137

Building on these initiatives, in July 2024 the Argentine Congress proposed the establishment of a Federal Observatory on AI¹³⁸ to guide ethical AI policy, enhance transparency, and ensure that AI systems respect constitutional rights. The Center for AI and Digital Policy (CAIDP)¹³⁹ praised Argentina's efforts, particularly the AAIP guidelines' focus on transparency and data protection, which is aligned with global standards such as the OECD AI Principles and UNESCO Recommendation on AI Ethics.

Algorithmic Transparency

Argentinian data protection law and AI regulation do not specifically include the right of citizens to receive notification when they interact with

132 Global Privacy Assembly, List of Accredited Members,
 https://globalprivacyassembly.org/participation-in-the-assembly/list-of-accredited-members/
 133 Global Privacy Assembly, Declaration on Ethics and Data Protection in Artificial Intelligence (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922_ICDPPC-40th_AI-Declaration_ADOPTED.pdf
 134 Global Privacy Assembly, Resolution on Accountability in the Development and Use of Artificial Intelligence (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

¹³⁵ Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

¹³⁶ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

¹³⁷ Council of Europe, *Argentina Becomes the 23rd State to Ratify Convention 108+ on Data Protection* (Apr. 17, 2023), https://www.coe.int/en/web/human-rights-rule-of-law/-/argentina-ratifies-convention-108-during-the-privacy-symposium

¹³⁸ Chamber of Deputies of Argentina, *Bill No. 3900-D-2024 — Establishing the Federal Observatory on Artificial Intelligence* (currently under deliberation) (Jul. 24, 2024), https://digitalpolicyalert.org/event/21749-introduced-bill-establishing-the-federal-observatory-on-artificial-intelligence-bill-no-3900-d-2024

¹³⁹ Center for AI and Digital Policy (CAIDP), Comments to the Agency for Access to Public Information (AAIP) of the Government of the Argentine Republic - Consultation on AAIP Guide to Using Artificial Intelligence Responsibly (Oct. 29, 2024), https://files.constantcontact.com/dfc91b20901/9606ce1c-1bdb-4e26-8ee9-60314f3d40ac.pdf

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automated-decision systems or to object to a decision based solely on automatic data processing methods. However, some efforts have been made to promote algorithmic transparency. The Agency for Access to Public Information (AAIP)¹⁴⁰ published a preliminary draft of the Guide on Transparency and Personal Data Protection for Responsible AI,¹⁴¹ which outlines challenges and risks associated with AI while providing recommendations for implementing these principles throughout the AI lifecycle, in 2024. The guide promotes algorithmic transparency in the AI lifecycle and ensures data subjects are provided with relevant information regarding the AI system. Public consultation on this guide was opened after its publication.¹⁴²

The AAPI provided interpretation guidelines of the Personal Data Protection Act¹⁴³ through Resolution No. 4/2019¹⁴⁴ in which it recognizes that, under the right of access enshrined in the current data protection law, data subjects have the right to request from data controllers an explanation about the logic used by any system that reaches decisions solely based on automated processing of data and which can affect citizens or have pernicious legal effects on them.¹⁴⁵

The AAPI's proposed reform Act includes the right of citizens to get information about "the existence of automated decision systems, including those that create digital profiles," as well as "meaningful information" about the logic applied by those systems. ¹⁴⁶ A formal right to object to a decision based solely on automatic processing methods is also included in the proposal. ¹⁴⁷

The RIPD Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence

https://www.argentina.gob.ar/sites/default/files/aaip-argentina-

guia para usar la ia de manera responsable.pdf

 $\underline{https://sherloc.unodc.org/cld/uploads/res//uncac/LegalLibrary/Argentina/Laws/Argentina%20Personal%20Data%20Protection%20Act%202000.pdf$

https://www.argentina.gob.ar/normativa/nacional/resoluci%C3%B3n-4-2019-318874

 $\underline{http://servicios.infoleg.gob.ar/infolegInternet/anexos/315000-319999/318874/norma.htm.}$

¹⁴⁰ Data Guidance, *Argentina: AAIP Publishes Guide on Transparency and Personal Data Protection in AI* (Sept. 17, 2024), https://www.dataguidance.com/news/argentina-aaip-publishes-guide-transparency-and

¹⁴¹ Government of Argentina, Guide for Private and Public Entities for Transparency and Protection of Personal Data for Responsible AI (Sept. 27, 2024),

¹⁴² Government of Argentina, AAIP Guide for the Responsible Use of AI (2024),

 $[\]underline{https://www.argentina.gob.ar/noticias/guia-de-la-aaip-para-usar-la-inteligencia-artificial-de-manera-responsable}$

¹⁴³ UNODC, Personal Data Protection Act [Translation] (2000),

¹⁴⁴ Government of Argentina, Resolution 4 /2019, Guiding Criteria and Indicators for Best Practices in the Application of Law No. 25.326 (2019),

¹⁴⁵ Annex I of Resolution 4/2019 (IF-2019-01967621-APN-AAIP),

¹⁴⁶ Ibid, Article 28 (h) of the draft Bill

¹⁴⁷ Ibid, Article 32 of the draft Bill

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Projects also provide guidance on algorithmic transparency such that "The information provided regarding the logic of the AI model must include at least basic aspects of its operation, as well as the weighting and correlation of the data, written in a clear, simple and easily understood language, it will not be necessary to provide a complete explanation of the algorithms used or even to include them. The above always looking not to affect the user experience."¹⁴⁸

Data Scraping

The AAIP and 16 of its international counterparts released a follow-up joint statement laying out expectations for industry related to data scraping and privacy in 2024. The initial statement in August 2023 established that "[social media companies] and other websites are responsible for protecting personal information from unlawful scraping." The follow-up, which incorporates feedback from engagement with companies such as Alphabet (YouTube), X Corp (formerly Twitter), and Meta Platforms (Facebook, Instagram, WhatsApp), adds that organizations must "comply with privacy and data protection laws when using personal information, including from their own platforms, to develop AI large language models"; must regularly review and update privacy protection measures to keep pace with technological advances; and ensure that permissible data scraping, such as that for research, "is done lawfully and following strict contractual terms." ¹⁵¹

Data scraping generally involves the automated extraction of data from the web. The statements responded to increasing incidents involving data scraping, particularly from social media companies and the operators of other websites that host publicly accessible data. Scraped personal information can be exploited for targeted cyberattacks, identity fraud, monitoring, profiling and surveillance

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¹⁴⁸ Ibero-American Network for the Protection of Personal Data (RIPD), *Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects* (Jun. 2019), p. 17, www.redipd.org/en/document/guide-general-recommendations-processing-personal-data-ai-en.pdf

¹⁴⁹ ICO, Global Privacy Authorities Issue Follow-Up Joint Statement on Data Scraping after Industry Engagement (Oct. 28, 2024), https://ico.org.uk/about-the-ico/media-centre/news-and-blogs/2024/10/global-privacy-authorities-issue-follow-up-joint-statement-on-data-scraping-after-industry-engagement/

¹⁵⁰ Regulatory Supervision Information Commissioner's Office of the United Kingdom, Joint Statement on Data Scraping and the Protection of Privacy (Aug. 24, 2023), https://ico.org.uk/media/about-the-ico/documents/4026232/joint-statement-data-scraping-202308.pdf

¹⁵¹ ICO, Global Privacy Authorities Issue Follow-Up Joint Statement on Data Scraping after Industry Engagement (Oct. 28, 2024), https://ico.org.uk/about-the-ico/media-centre/news-and-blogs/2024/10/global-privacy-authorities-issue-follow-up-joint-statement-on-data-scraping-after-industry-engagement/

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purposes, unauthorized political or intelligence gathering purposes, unwanted direct marketing or spam.

Use of AI in Public Administration

Argentina is among the Latin American and the Caribbean countries that have been utilizing AI in the public sector. Some of the implementations include Prometea, ¹⁵² developed in 2017, which is a virtual assistant that anticipates case solutions (based on previous cases and solutions) and helps assemble judicial case files. Laura, an application developed by the Ministry of Finance of the Province of Cordoba, automates tasks in bureaucratic procedures. ¹⁵³ One of the most controversial uses was the use of AI by the Government of the Province of Salta, which implemented a system to predict teenage pregnancy and school dropout using machine learning algorithms trained on personal, environmental, and health data collected in low-income districts of Salta City in 2016 and 2017. ¹⁵⁴ The program came to an end following the 2019 national and state elections when the new administration terminated several programs, including the use of algorithms to predict pregnancy. ¹⁵⁵

The Undersecretariat of Information Technologies enacted a resolution delineating a comprehensive framework of ethical principles and recommendations for the design, development, implementation, and use of AI projects in the public service. The Ministry of Justice launched the National Comprehensive Program of Artificial Intelligence in Justice through Resolution 149/2024. The National Program aims to apply AI in strategic areas that directly impact the lives of citizens, especially in justice and public administration, health, and education and training. Resolution No. 710/2024 of the Ministry of Security

en/1/3/3/index.html?itemId=/content/publication/1f334543-

 $\underline{https://www.dentons.com/en/insights/articles/2023/june/15/resolution-2-2023-guidelines-for-reliable-artificial-intelligence}$

https://www.argentina.gob.ar/normativa/nacional/resoluci%C3%B3n-149-2024-398921

¹⁵² OECD, The Strategic and Responsible Use of Artificial Intelligence in the Public Sector of Latin America and the Caribbean: AI Use Cases in LAC governments (Mar. 2022), https://www.oecd-ilibrary.org/sites/1f334543-

¹⁵⁴ Wired, *The Case of the Creepy Algorithm That 'Predicted' Teen Pregnancy* (Feb. 16, 2022), https://www.wired.com/story/argentina-algorithms-pregnancy-prediction/

¹⁵⁵ TNI, What Artificial Intelligence is Hiding, Microsoft and Vulnerable Girls in Northern Argentina (Feb. 23, 2023), https://www.tni.org/en/article/what-artificial-intelligence-is-hiding
¹⁵⁶ S. Oliva Pinto and D. Macchi, Resolution 2/2023: Guidelines for Reliable Artificial Intelligence (Jun. 15, 2023),

¹⁵⁷ Government of Argentina, Resolution 149/2024 (May 2024),

¹⁵⁸ World Law Group, *The National Artificial Intelligence Program: Harnessing Technology for the Common Good in Argentina*, (Oct. 21, 2024),

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furthered the use of AI systems in the justice system with the creation of the Artificial Intelligence Unit Applied to Security (UIAAS)¹⁵⁹ to enhance crime prevention and investigation using AI tools like social media monitoring, facial recognition, and predictive algorithms.

As a member of the Latin American Centre for Development Administration (CLAD), Argentina approved the principles in the Ibero American Charter on Artificial Intelligence in Civil Service in late 2023. 160 The Charter aims to provide a roadmap and common framework for CLAD member states to adapt their AI policy strategies and laws for the challenges and opportunities involved in the implementation of AI in public administration. The guiding principles include human autonomy; transparency, traceability and explainability; accountability, liability and auditability; security and technical robustness; reliability, accuracy, and reproducibility; confidence, proportionality, and prevention of damage; privacy and protection of personal data; data quality and safety; fairness, inclusiveness, and non-discrimination; human-centering, public value, and social responsibility; and sustainability and environmental protection.

The Charter recommends that member states create policies and laws to adopt regulatory tools to assess the impact of AI systems on human rights and freedoms and to register algorithms to "anticipate risks, prevent undesirable effects and ensure its proper implementation."161 The Charter also proposes a risk classification mechanism that would require guardrails for middle-risk uses and prohibitions against high-risk applications. Prohibited uses include facial recognition systems; systems aimed at behavior and cognitive manipulation of specific individuals or vulnerable groups (children or the elderly); and social ranking systems based on certain personality traits, individual behaviors, sociodemographic features or economic status. 162

Facial Recognition

Several documented cases of facial recognition technology use have been reported in various cities and localities as well as at the provincial level in the country. Facial recognition systems being deployed include: for the identification

https://www.theworldlawgroup.com/membership/news/news-the-national-artificial-intelligenceprogram-harnessing-technology-for-the-common-good-in-argentina-1

¹⁵⁹ Government of Argentina, Resolution 710/2024 (Jul. 26, 2024), https://www.boletinoficial.gob.ar/detalleAviso/primera/311381/20240729

¹⁶⁰ Latin American Centre for Development Administration (CLAD), *Ibero American Charter on* Artificial Intelligence in Civil Service (Nov. 2023), https://clad.org/wp-

content/uploads/2024/03/CIIA-EN-03-2024.pdf

¹⁶¹ Ibid, p. 10

¹⁶² Ibid, p. 21

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and capture of fugitives (in the Autonomous City of Buenos Aires);¹⁶³ for the identification of missing persons and of people with criminal backgrounds (town of Tigre, Buenos Aires province);¹⁶⁴ for the use of the police to surveil mass gatherings (Mendoza province); 165 or for the prevention and prosecution of crimes (Salta province). 166 The program in the City of Buenos Aires in particular was denounced by the UN Special Rapporteur for the Right of Privacy as a technology whose "proportionality" was questionable when compared to the "serious privacy implications" for people not related to any crime and for not carefully updating and checking for accuracy. 167 Human Rights Watch also denounced the system, noting the illegal exposure of minor's personal information. ¹⁶⁸ The City legislature approved a bill in 2020 to authorize the use of AI for the purpose of capturing fugitives. 169 But it has been alleged that this fact does not alter the unconstitutional character of the Buenos Aires program. ¹⁷⁰ The increasing and unaccountable use of this technology led to the creation of a national campaign by the Association for Civil Rights (Asociación por los Derechos Civiles), a well-known Argentinian human rights organization. With the slogan: "Con mi Cara No" ("Not with my face"), the organization aims to raise awareness about the dangers facial

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¹⁶³ Al Sur, Facial Recognition in Latin America: Trends in the Implementation of a Perverse Technology (2021), p. 11, https://www.alsur.lat/sites/default/files/2021-

^{11/}ALSUR Reconocimiento facial en Latam ES.pdf

¹⁶⁴Ambito, *Tigre Implemented a New Facial Recognition System* (May 10, 2019), https://www.ambito.com/municipios/municipios/tigre-lanzo-un-nuevo-sistema-reconocimiento-facial-n5030978

¹⁶⁵ El Sol, *Facial Recognition: More Than 100 People with Arrest Warrants Found* (May 20, 2019), https://www.elsol.com.ar/reconocimiento-facial-hallaron-a-mas-de-100-personas-con-pedido-de-captura

¹⁶⁶ Salta Government, Secretary of Press and Communication, *Facial Recognition Cameras Lead to the Detention of a Person with an Arrest Warrant* (Jun. 19, 2019), https://www.salta.gob.ar/prensa/noticias/las-camaras-de-reconocimiento-facial-permitieron-detener-a-una-persona-con-pedido-de-captura-64939

¹⁶⁷ OHCHR, Statement to the Media by the United Nations Special Rapporteur on the Right to Privacy, on the Conclusion of His Official Visit to Argentina, 6–17 May 2019 (May 17, 2019), https://www.ohchr.org/en/statements/2019/05/statement-media-united-nations-special-rapporteur-right-privacy-conclusion-his?LangID=E&NewsID=24639

¹⁶⁸ Human Rights Watch, *Argentina Publishes Personal Data of Boys and Girls Accused of Crimes Online* (Oct. 9, 2020), http://www.hrw.org/es/news/2020/10/09/argentina-publica-enlinea-datos-personales-de-ninos-y-ninas-acusados-de-cometer

¹⁶⁹ Asociación por los Derechos Civiles, *The Buenos Aires Legislature Should Reject the Use of Facial Recognition Technology for the Surveillance of Public Space* (Oct. 21, 2020), https://adc.org.ar/2020/10/21/la-legislatura-portena-debe-rechazar-el-uso-de-la-tecnologia-de-reconocimiento-facial-para-la-vigilancia-del-espacio-publico/

¹⁷⁰ iProfessional, *Now they come for your face? This Expert Warns of the Dangers of Facial Recognition* (May 10, 2020), https://www.iprofesional.com/tecnologia/338236-reconocimiento-facial-advierten-sobre-peligros-en-argentina

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recognition technologies pose to citizens, particularly when their data is included within opaque and unaccountable systems.¹⁷¹ A trial judge declared the implementation of the Fugitive Facial Recognition System (SRFP, for its name in Spanish) by the Government of the City of Buenos Aires unconstitutional.¹⁷²

The Court of Appeals of the City of Buenos Aires confirmed the unconstitutionality of the use of the Fugitive Facial Recognition System implemented by the Buenos Aires City Government in 2023.¹⁷³ The use of SRFP is currently suspended. Meanwhile on the national level, the Artificial Intelligence Applied to Security Unit (UIAAS) plans to use facial recognition to predict future crimes.¹⁷⁴ AI may be used to cross-reference databases related to the commission of crimes (such as records of convictions, arrests, etc.) with others related to criminals and other persons of interest to generate predictions. UIAAS also expects to deploy facial recognition software to identify "wanted persons," patrol social media, and analyze real-time security camera footage to detect suspicious activities.

Environmental Impact of AI

In Argentina, the role of AI in environmental management is becoming increasingly important as it has the potential to address critical challenges such as climate change, pollution, and biodiversity loss. AI is already being used in initiatives such as the United Nations Environment Programme's (UNEP)¹⁷⁵ World Environment Situation Room (WESR),¹⁷⁶ which uses AI for real-time analysis of environmental data. This includes monitoring CO2 levels, sea level rise and other key indicators to inform policy decisions and improve

https://www.boletinoficial.gob.ar/detalleAviso/primera/311381/20240729

¹⁷¹ Association for Civil Rights, Con Mi Cara No: Facial Recognition in Buenos Aires, https://conmicarano.adc.org.ar/

¹⁷² Future of Privacy Forum, *Judge Declares Fugitive Facial Recognition System Unconstitutional* (Sept. 30, 2022), https://fpf.org/blog/judge-declares-buenos-aires-fugitive-facial-recognition-system-unconstitutional/; See also Judicial Branch of the City of Buenos Aires, *Judicial Decision on the Administrative and Tribute Litigation No. 4* (Sept. 7, 2022), https://www.cels.org.ar/web/wp-

content/uploads/2022/09/reconocimientofacialsentencia070922.pdf

¹⁷³ CELS, The Court of Appeals of the City of Buenos Aires Confirmed the Unconstitutionality of the Use of the Fugitive Facial Recognition System (SRFP) Implemented by the Buenos Aires City Government (Apr. 29, 2023), https://www.cels.org.ar/web/en/2023/04/the-court-of-appeals-of-the-city-of-buenos-aires-confirmed-the-unconstitutionality-of-the-use-of-the-fugitive-facial-recognition-system-srfp-implemented-by-the-buenos-aires-city-government/">https://www.cels.org.ar/web/en/2023/04/the-court-of-appeals-of-the-city-of-buenos-aires-confirmed-the-unconstitutionality-of-the-use-of-the-fugitive-facial-recognition-system-srfp-implemented-by-the-buenos-aires-city-government/

¹⁷⁴ Government of Argentina, Resolution 710/2024 (Jul. 26, 2024),

¹⁷⁵ United Nations Environment Programme, *How Artificial Intelligence Is Helping Tackle Environmental Challenges* (Nov. 7, 2022), https://www.unep.org/news-and-stories/story/how-artificial-intelligence-helping-tackle-environmental-challenges

¹⁷⁶ UN Environment Programme, WESR CCA Portal, *Country Overview: Argentina* (2024), https://wesr.unep.org/cca/argentina

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environmental sustainability. AI also plays an important role in monitoring emissions, optimizing the use of renewable energy and supporting smarter environmental policies. However, there is growing concern about the environmental costs of AI, particularly in terms of data processing and e-waste. Argentina's growing focus on AI for sustainability must balance the technology's environmental impact with its benefits.

Lethal Autonomous Weapons

Argentina has been very critical about the development and use of lethal autonomous weapons systems, particularly those without significant human involvement. Argentina has set out a strong position in public statements as well as within international organizations, including during meetings regarding the Convention on Conventional Weapons. Within the framework of those meetings, Argentina stressed the need "to preserve meaningful human control at all phases of the development and use" of weapons systems. On behalf of the Group of Latin American and Caribbean Countries, Argentina raised several concerns over fully autonomous weapons, including the risks of reprisal, retaliation, and terrorism. And Argentina has called for a "preemptive prohibition of the development of lethal autonomous systems."

At the 78th UN General Assembly First Committee in 2023, Argentina voted in favor of the resolution on autonomous weapons systems, along with 163 other states. The resolution stressed the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems and ways to address the related challenges and concerns they raise from humanitarian, legal, security, technological and ethical perspectives and on the role of humans in the use of force.

Argentina was one of the 70 countries that endorsed a 2022 joint statement on autonomous weapons systems at the UN General Assembly meeting. In this joint statement, States urged "the international community to further their understanding and address these risks and challenges by adopting appropriate

¹⁷⁷ United Nations, Statement to the Convention on Conventional Weapons Group of Governmental Experts on Lethal Autonomous Weapons Systems (Mar. 26, 2019), https://documents.unoda.org/wp-content/uploads/2020/09/CCW_GGE.1_2019_3_E.pdf

¹⁷⁸ Human Rights Watch, *Stopping Killer Robots: Country Positions on Banning Fully Autonomous Weapons and Retaining Human Control* (Aug. 10, 2020), https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and

¹⁷⁹ United Nations, *Statement to the Convention on Conventional Weapons Fifth Review Conference* (Dec.12, 2016), https://meetings.unoda.org/ccw-revcon/convention-certain-conventional-weapons-fifth-review-conference-2016

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rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law (IHL), including through maintaining human responsibility and accountability in the use of force."180

Argentina endorsed, along with more than 30 other Latin American and Caribbean states, the Belén Communiqué, ¹⁸¹ which calls for "urgent negotiation" of a binding international treaty to regulate and prohibit the use of autonomous weapons to address the grave concerns raised by removing human control from the use of force. Argentina voted in favor of UN General Assembly Resolution 78/241¹⁸² on lethal autonomous weapons systems, which takes up several of the points expressed in Resolution L.56. Most recently, the country also supported a draft resolution that calls for open informal consultations that shall be open to the full participation of all member states and observer states, international and regional organizations, the International Committee of the Red Cross, and civil society, including the scientific community and industry. 183

Human Rights

According to the Freedom House 2024 report, Argentina is "free," receiving overall a score of 85/100.184 The Freedom House country report highlights concerns regarding democratic backsliding. Citizens continue to use social media to mobilize protests on political and social issues although new president Javier Milei has implemented restrictions on protests. The President has also dismantled several ministries, reducing their number from 20 to 8. Some controversial reforms have also been engaged regarding women, gender, and Indigenous affairs, raising concerns regarding the protection of vulnerable groups. On the other hand, in June 2024 the Argentine Chamber of Deputies proposed a bill to create an AI regulatory framework with INTI oversight, penalties for non-

https://www.rree.go.cr/files/includes/files.php?id=2261&tipo=documentos

¹⁸⁰ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal* Autonomous Weapons Systems First Committee, 77th United Nations General Assembly Thematic Debate - Conventional Weapons (Oct. 21, 2022),

https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcS nnAm en.pdf

¹⁸¹ Latin American and the Caribbean Conference of Social and Humanitarian Impact of Autonomous Weapons, Communiqué (Feb. 24, 2023),

¹⁸² General Assembly, Lethal Autonomous Weapons, Resolution 78/241 (Dec. 22, 2023), https://digitallibrary.un.org/record/4033027?ln=en&v=pdf

¹⁸³ General Assembly, Lethal Autonomous Weapons, Resolution L.77 (Nov. 5, 2024), https://digitallibrary.un.org/record/4065061?ln=en&v=pdf

¹⁸⁴ Freedom House, Freedom in the World 2024: Argentina (2024), https://freedomhouse.org/country/argentina/freedom-world/2024

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compliance, and an advisory board for ethical and human rights impact assessment. 185

In the international arena, Argentina has shown a strong commitment to the protection of human rights, including international and regional initiatives that pertain to AI. However, in September 2024, during the 79th session of the United Nations General Assembly, Argentina refused to sign the UN Pact for the Future, which includes the Global Digital Compact, a comprehensive framework for global governance of digital technology and artificial intelligence. ¹⁸⁶

OECD / G20 AI Principles

As part of the G20 and as a prospective member to the OECD, Argentina has endorsed the OECD/G20 AI Principles. ¹⁸⁷ According to an OECD report, several policies of Argentina's national AI strategy align with the G20 AI principles. These include the comprehensive, human-centered and human rights-focus nature, which aligns with the Principles for Responsible Stewardship of Trustworthy AI (Section 1). Argentina's investment initiatives, the focus on conditions for AI development, educational plans and international engagements implement Section 2 of the G20 AI Principles (National Policies and International Co-operation for Trustworthy AI). ¹⁸⁸

In October 2023, the OECD's The State of the Implementation of the OECD AI Principles Four Years On noted that Argentina's Ethics Principles for the Development of AI reflect the five value-based OECD AI Principles and the five recommendations to national governments.¹⁸⁹

https://doi.org/10.1787/1f334543-en; OECD Policy Observatory, AI in Argentina, AI Policies in Argentina (2024), https://oecd.ai/en/dashboards/countries/Argentina

¹⁸⁵ Chamber of Deputies, *Proposed Bill that Establishes the Legal Regime Applicable for the Responsible Use of AI* (Jun. 10, 2024),

 $[\]underline{\text{https://www.diputados.gov.ar/comisiones/permanentes/clgeneral/proyecto.html?exp=3003-D-2024}$

¹⁸⁶ UN, World Leaders Pledge Bold Action to Protect Present, Future Generations amid Climate Crisis, Conflicts Gripping Globe, as General Assembly Adopts Pact for Future (Sept. 22, 2024), https://press.un.org/en/2024/ga12627.doc.htm

¹⁸⁷ OECD, OECD Takes First Step in Accession Discussions with Argentina, Brazil, Bulgaria, Croatia, Peru and Romania (Jan. 225, 2022), https://www.oecd.org/newsroom/oecd-takes-first-step-in-accession-discussions-with-argentina-brazil-bulgaria-croatia-peru-and-romania.htm

¹⁸⁸OECD/CAF, The Strategic and Responsible Use of Artificial Intelligence in the Public Sector of Latin America and the Caribbean, OECD Public Governance Reviews (2022), https://doi.org/10.1787/1534543.en; OECD Policy Observatory, Alin Argenting, Al Policies in

¹⁸⁹ OECD, *The State of Implementation of the OECD AI Principles Four Years On* (Oct. 2023), https://www.oecd-ilibrary.org/science-and-technology/the-state-of-implementation-of-the-oecd-ai-principles-four-years-on_835641c9-en;jsessionid=jt1NNUJg_y5unvJHpYDEfwhyG4UeK-GicjMTtqlw.ip-10-240-5-183

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Council of Europe Convention on Al

Argentina contributed as an Observer State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of Law. The Treaty has been signed by 10 countries and the European Union since opening for signature in September 2024. However, Argentina has not initiated the procedures for signing.¹⁹⁰

UNESCO Recommendation on AI Ethics

Argentina is a UNESCO member and adopted the UNESCO Recommendation on the Ethics of AI during the 41st General Conference in November 2021.

In 2022, CAF, the development bank of Latin America, and UNESCO signed a letter of intent to collaborate on the implementation of the UNESCO Recommendation in Latin America and the Caribbean.¹⁹¹ They pledged to create a Regional Council composed of national and local governments in the region which will support their implementation efforts.

The Regional Council, comprising national and local governments from Latin America and the Caribbean, including Argentina, was formally established, with its inaugural meeting convened in October 2023.¹⁹²

Argentina also signed the resulting 2023 Santiago Declaration to Promote Ethical Artificial Intelligence. The declaration reflects UNESCO's Recommendation on the Ethics of AI and establishes fundamental principles that should guide public policy on AI. These include proportionality, security, fairness, non-discrimination, gender equality, accessibility, sustainability, privacy, and data protection.

More recently, Argentina co-sponsored the adoption of the UNGA AI Resolution, a landmark resolution that emphasized the respect, protection, and promotion of human rights in the design, development, deployment, and use of AI. The resolution also urged all states, the private sector, civil society, research

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Council of Europe, Chart of Signatures and Ratifications of Treaty 225 (Sept. 9, 2024),
 https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225
 Angel Melguizo and Gabriela Ramos, Ethical and Responsible Artificial Intelligence: From Words to Actions and Rights, Somos Ibero-America (Feb. 1, 2023),
 https://www.somosiberoamerica.org/pt-br/tribunas/inteligencia-artificial-etica-e-responsavel-das-palavras-aos-fatos-e-direitos/

¹⁹² UNESCO, Chile Will Host the First Latin American and Caribbean Ministerial and High Level Summit on the Ethics of Artificial Intelligence (Sept. 25, 2023), https://www.unesco.org/en/articles/chile-will-host-first-latin-american-and-caribbean-ministerial-

and-high-level-summit-ethics

193 High-Level Ministerial Summit on the Ethics of Artificial Intelligence, *Declaration of*

Santiago "To Promote Ethical Artificial Intelligence in Latin America and the Caribbean" (Oct. 2023), https://minciencia.gob.cl/uploads/filer_public/40/2a/402a35a0-1222-4dab-b090-5c81bbf34237/declaracion_de_santiago.pdf

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organizations, and the media to develop and support regulatory and governance approaches and frameworks related to the safe, secure, and trustworthy use of AI. The resolution was designed to amplify the work already being done by the UN, including the International Telecommunication Union (ITU), the UN Educational, Scientific and Cultural Organization (UNESCO), and the Human Rights Council. Finally in August 2024, Argentina also signed the Declaration of Cartagena de Indias, 194 which establishes the commitment to promote governance frameworks and AI ecosystems for a safe, inclusive, ethical and responsible development of AI within the Latin American region.

Evaluation

Argentina's comprehensive, ambitious, and human-centered national strategy reflects the country's interest in matching socioeconomic development with strong human rights commitments in the design and development of AI. Despite the initial enthusiasm that surrounded the launching of the Plan, the new government seems to have abandoned this path. It remains to be seen how the Productive Development Plan Argentina 4.0 will be operationalized in practice. Despite significant progress in modernizing data protection law and bringing it up to international standards, the deployment of facial recognition systems has raised widespread concern that AI could be used for purposes that violate individual rights. This threat is especially concerning given recent reports of democratic backsliding. The non-signing of the Pact for the Future or the adoption of the Council of Europe's AI Treaty could represent a significant change of foreign policy to the detriment of human rights safeguards.

Argentina has the resources and the infrastructure to pursue regional leadership. Argentina has signed the UNESCO Recommendation on AI Ethics and, with the collaboration of the CAF, is on its path to its implementation. Argentina has also been calling for a prohibition and regulation of autonomous weapons.

Australia

In 2024, Australia modernized the national privacy act to account for threats to privacy from emerging technology and proposed guidelines for high-risk AI systems. The country also launched a Voluntary Safety Standard and AI Impact Navigator to assist companies developing and using AI systems. Australia

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¹⁹⁴ Digital Policy Alert, Argentina: Signed Cartagena de Indias Declaration for Governance, the Construction of AI Ecosystems and the Promotion of AI Education in an Ethical and Responsible Manner in Latin America and the Caribbean (Aug. 9, 2024),

https://digitalpolicyalert.org/event/22018-signed-cartagena-de-indias-declaration-for-governance-the-construction-of-ai-ecosystems-and-the-promotion-of-ai-education-in-an-ethical-and-responsible-manner-in-latin-america-and-the-caribbean

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continued to participate in international discussions about human control and autonomous weapons at the UN and through REAIM.

National AI Strategy

The Australian government published a Roadmap for AI in 2019 to "help develop a national AI capability to boost the productivity of Australian industry, create jobs and economic growth, and improve the quality of life for current and future generations." 195 Australia's AI Technology Roadmap is intended to help guide future investment in AI and provide a pathway to ensure Australia captures the full potential of AI. 196 The Roadmap identifies three domains of AI development and application where AI could transform Australian industry based on existing strengths and comparative advantages, opportunities to solve Australian problems, and opportunities to export solutions to the rest of the world. These domains are Health, Aging, and Disability; Cities, Towns, and Infrastructure (including connected and automated vehicle technology); and National Resources and Environment (building on strengths related to mining and agriculture). The Roadmap also elaborates necessary foundations for realizing these goals in terms of data governance, ethics, trust research, skills, and infrastructure, while underscoring its complementarity with the OECD AI Principles.

Australia also published an AI Ethics Framework in 2019 to "help guide businesses and governments looking to design, develop, and implement AI in Australia." ¹⁹⁷ Key goals are to achieve better outcomes, reduce the risk of negative impact, and practice the highest standards of ethical business and good governance. The eight AI Ethics Principles are Human, social, and environmental wellbeing; Human-centered values; Fairness; Privacy protection and security; Reliability and safety; Transparency and explainability; Contestability and Accountability. ¹⁹⁸

¹⁹⁵ Commonwealth Scientific and Industrial Research Organisation (CSIRO), *Artificial Intelligence Roadmap* (Nov. 2019), https://www.csiro.au/en/research/technology-space/ai/Artificial-Intelligence-Roadmap

¹⁹⁶ Commonwealth Scientific and Industrial Research Organisation (CSIRO), *Artificial Intelligence: Solving Problems, Growing the Economy and Improving Our Quality of Life* (2019), https://data61.csiro.au/~/media/D61/AI-Roadmap-assets/19-00346 DATA61 REPORT AI-Roadmap WEB 191111.pdf

¹⁹⁷ Australian Government, Department of Industry, Science, Energy and Resources, *AI Ethics Framework* (Nov. 2019), https://www.industry.gov.au/strategies-for-the-future/artificial-intelligence

¹⁹⁸ Ibid

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In 2020, the Australian Department of Industry, Science and Resources (DISR) launched a public consultation to inform the AI Action Plan, which was published in 2021 as part of the Digital Economy Strategy. This plan aims to position Australia as a leader in developing and adopting "trusted, secure, and responsible AI," enhancing business productivity, building a skilled workforce, and addressing national challenges."

The Plan allocated \$53.8 million over four years to create the National AI Centre (NAIC) and four Capability Centres to support SMEs and promote ethical AI.²⁰² On July 1, 2024, DISR took over administration of the NAIC to strengthen government-industry engagement on AI.²⁰³

Australia's AI Strategy includes coordinated initiatives for responsible AI development and adoption. After a public consultation launched in 2023 on safe and responsible AI in Australia, including the need to regulate AI, ²⁰⁴ the government's interim response in January 2024 concluded that the current regulatory framework likely did not sufficiently address known risks presented by AI systems. ²⁰⁵

Following the AI Strategy and interim public consultation response, DISR established a temporary AI Expert Group to advise on measures for testing, transparency, and accountability in high-risk AI contexts and ensure system

¹⁹⁹ Australian Department of Industry, Science and Resources, *Australia's AI Action Plan: Discussion Paper* (Jun. 22, 2021), https://consult.industry.gov.au/australias-ai-action-plan-discussion-paper

²⁰⁰ Australian Department of Industry, Science and Resources — Digital Economy Branch, *Australia's Digital Economy* (Mar. 30, 2022),

https://web.archive.org.au/awa/20220816053410mp_/https://digitaleconomy.pmc.gov.au/

201 Australian Department of Industry, Science and Resources, *Australia's Artificial Intelligence Action Plan* (Jun. 18, 2021), https://www.industry.gov.au/publications/australias-artificial-intelligence-action-plan

²⁰² Australian Department of Industry, Science and Resources, *National Artificial Intelligence Centre* (2024), https://www.industry.gov.au/science-technology-and-innovation/technology/national-artificial-intelligence-centre

²⁰³ Commonwealth Scientific and Industrial Research Organisation (CSIRO), *National Artificial Intelligence Centre* (Jul. 2024), https://www.csiro.au/en/work-with-us/industries/technology/National-AI-Centre

²⁰⁴ Department of Industry, Science and Resources, *Responsible AI in Australia: Have Your Say* (Jun. 1, 2023), https://www.industry.gov.au/news/responsible-ai-australia-have-your-say
²⁰⁵ Australian Department of Industry, Science and Resources, *The Australian Government's Interim Response to Safe and Responsible AI Consultation* (Jan. 17, 2024), https://consult.industry.gov.au/supporting-responsible-ai-australia-have-your-say

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safety.²⁰⁶ Comprising 12 industry, academic, and legal experts, the group operated through September 2024, with plans for a permanent group expected.²⁰⁷

DISR launched the Voluntary AI Safety Standard in September 2024²⁰⁸ to establish consistent practices and help organizations manage AI risks, aligning with the broader objectives of the AI Action Plan. The standard provides guidance on the safe and responsible use of AI through ten voluntary guidelines emphasizing testing, transparency, and accountability. The AI Impact Navigator, a tool launched by the NAIC in October 2024, will assist users in implementing the Voluntary AI Safety Standard and in evaluating the impact of their AI systems.²⁰⁹

DISR also laid a path toward regulating the use of AI in high-risk settings with the release of a proposal paper outlining definitions, principles, and mandatory guardrails, including for the use of general-purpose AI systems.²¹⁰ These guardrails reference international AI regulations and include five of the most agreed-upon goals in the AI policy realm: fairness, accountability, transparency, rule of law, and fundamental rights. Public consultation on the proposal closed in October 2024 but how and if DISR implements feedback remains to be seen.²¹¹

The government has also acted to strengthen existing laws in areas that will help to address known harms with AI. This includes the implementation of privacy law reforms, including an in principle agreement to require non-government entities to conduct a privacy impact assessment to identify and manage, minimize or eliminate risks, which is already a requirement for government entities and an

 $\underline{\text{https://www.minister.industry.gov.au/ministers/husic/media-releases/new-artificial-intelligence-expert-group}$

Australian Department of Industry, Science and Resources, Al Impact Navigator Will Help Australian Companies Tackle the Challenges of AI (Oct. 21, 2024),

 $\underline{https://www.industry.gov.au/news/ai-impact-navigator-will-help-australian-companies-tackle-\underline{challenges-ai}}$

²⁰⁶ Ministers for the Department of Industry, Science and Resources, *The Hon Ed Husic MP: New Artificial Intelligence Expert Group* (Feb. 14, 2024),

²⁰⁷ Australian Department of Industry, Science and Resources, *AI Expert Group Terms of Reference* (2024), https://www.industry.gov.au/science-technology-and-innovation/technology/artificial-intelligence/ai-expert-group-terms-reference

Australian Department of Industry, Science and Resources, Voluntary AI Safety Standard
 (Sept. 5, 2024), https://www.industry.gov.au/publications/voluntary-ai-safety-standard
 Australian Department of Industry, Science and Resources, AI Impact Navigator Will Help

²¹⁰ Australian Government, Department of Industry, Science and Resources, *Introducing Mandatory Guardrails for AI in High-Risk Settings: Proposals Paper* (Sept. 5, 2024), https://consult.industry.gov.au/ai-mandatory-guardrails

²¹¹ Ibid, *Published Responses* (2024), https://consult.industry.gov.au/ai-mandatory-guardrails/submission/list

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amendment to the Online Safety Act 2021.²¹² A proposed amendment to existing communications legislation targeted misinformation and disinformation²¹³ but was withdrawn in committee over censorship concerns.²¹⁴

While the AI Strategy and bodies like the Australian Human Rights Commission recognize the need for regulation, Australia lacks a specific federal framework for AI. Nonetheless, the Senate formed the Select Committee on Adopting Artificial Intelligence in March 2024 to explore potential opportunities and challenges. ²¹⁵ Findings were presented in late November 2024. ²¹⁶

International Cooperation on Safe and Responsible AI

Australia and Singapore, building on their pre-existing trade agreement, signed the Singapore-Australia Digital Economy Agreement (SADEA) in 2020. The parties agreed to advance their cooperation on AI to "realise the benefits of AI and minimise any risks, and also shape the development of international frameworks, policies and standards."²¹⁷

Australia participated in the first AI Safety Summit and endorsed the Bletchley Declaration in November 2023.²¹⁸ Australia thus committed to

https://www.aph.gov.au/Parliamentary_Business/Bills_Legislation/Bills_Search_Results/Result?bld=r7284

²¹² Parliament of Australia, *Online Safety Amendment (Social Media Minimum Age) Bill 2024* (Nov. 29, 2024),

²¹³ Parliament of Australia, Communications Legislation Amendment (Combatting Misinformation and Disinformation) Bill 2024 (Oct. 23, 2024),

https://www.aph.gov.au/Parliamentary Business/Bills Legislation/bd/bd2425/25bd014

Parliament of Australia, Communications Legislation Amendment (Combatting Misinformation and Disinformation) Bill 2024 [Provisions]: Report (Nov. 2024), https://www.aph.gov.au/Parliamentary Business/Committees/Senate/Environment and Communications/MisandDisinfobill/Report

²¹⁵ Parliament of Australia, *Select Committee on Adopting Artificial Intelligence (AI)* (Mar. 26, 2024),

https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Adopting_Artificial_Intelligence_AI

²¹⁶Parliament of Australia, *Select Committee on Adopting Artificial Intelligence (AI): Final Report* (Nov. 2024),

https://www.aph.gov.au/Parliamentary Business/Committees/Senate/Adopting Artificial Intelligence AI/AdoptingAI/Report

²¹⁷ The Government of the Republic of Singapore and the Government of Australia, Memorandum of Understanding between the Government of the Republic of Singapore and the Government of Australia on Cooperation on Artificial Intelligence (Mar. 23, 2020), https://www.mti.gov.sg/-/media/MTI/Microsites/DEAs/Singapore-Australia-Digital-Economy-Agreement/MOUs/MOU-on-Cooperation-on-Artificial-Intelligence.pdf

²¹⁸ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, Prime Minister's Office, *The Bletchley Declaration by Countries Attending the AI Safety Summit* (Nov. 2, 2023), https://www.gov.uk/government/publications/ai-safety-

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participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that "for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible." The next AI Safety Summit was renamed the AI Action Summit and took place in February 2025 in France.

Public Participation

The Australian government has responded to recommendations and feedback from the public in national efforts on AI and digital policy, including the AI Ethics Framework²¹⁹ and Supporting Responsible AI discussion paper.²²⁰ More recently, the Australian Government opened a public consultation²²¹ as part of a review of the Online Safety Act 2021.²²² CAIDP's comments²²³ highlighted "the online risks which accompany the advent of generative AI are extensive, and include threats to personal privacy, intellectual property, and life-altering outcomes based on AI-enabled decision-making" as it recommended additional safeguards to ensure the Act upholds fundamental rights and safety principles.

The Australian government published an interim response to the Safe and Responsible AI in Australia discussion paper in early 2024.²²⁴ The government committed to developing a regulatory environment that builds community trust and promotes AI adoption. Subsequently, DISR issued a formal request for

 $[\]frac{summit-2023-the-bletchley-declaration/the-bletchley-declaration-by-countries-attending-the-aisafety-summit-1-2-november-2023$

²¹⁹ Department of Industry, Science and Resources, *Australia's Artificial Intelligence Ethics Principles: How We Developed the Principles* (Oct. 11, 2024),

https://www.industry.gov.au/publications/australias-artificial-intelligence-ethics-principles

Discussion Paper (Jun. 2023), https://consult.industry.gov.au/supporting-responsible-ai

²²¹ Australian Government, Department of Infrastructure, Transport, Regional Development, Communications and the Arts, *Consultation Open for the Online Safety Act Review* (Apr. 29, 2024), https://www.infrastructure.gov.au/department/media/news/consultation-open-online-safety-act-review

²²² Australian Government, Federal Register of Legislation, *Online Safety Act 2021* (Oct. 14, 2024), https://www.legislation.gov.au/C2021A00076/latest/text

²²³ Center for AI and Digital Policy, *CAIDP Provides Comments to Australian Government on Online Safety Act and AI* (Jun. 20, 2024),

https://files.constantcontact.com/dfc91b20901/9898eecc-96bc-4d01-b123-05d08f1a23ce.pdf

224 Australian Government, Department of Industry, Science and Resources, *The Australian Government's Interim Response to Safe and Responsible AI Consultation* (Jan. 17, 2024), https://www.industry.gov.au/news/australian-governments-interim-response-safe-and-responsible-ai-consultation

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comment on Mandatory Guardrails for AI in High-risk Settings.²²⁵ The views were asked on the proposed guardrails, high-risk AI definition, and regulatory options for mandating the guardrails. CAIDP issued a Statement to the Australian Government on Mandatory Guardrails for AI²²⁶ with its recommendations.

The Therapeutic Goods Administration of the Department of Health and Aged Care²²⁷ and Department itself issued separate calls for public consultation in September 2024 as they reviewed their legislative frameworks to "clarify and strengthen legislation and regulation for AI in Australia's health care settings.²²⁸ In particular, they sought feedback on stakeholders, what about AI to regulate, and how to prevent AI harms and enable the benefits. The Joint Committee of Public Accounts and Audit adopted an inquiry into the use and governance of artificial intelligence systems by public sector entities in September 2024.²²⁹

The Australian Treasury opened a formal request for comment for a Review of AI and the Australian Consumer Law (ACL).²³⁰ The review will examine the ACL's fitness to address consumer harms and support responsible use of AI. Inputs are sought to determine if provisions on product safety, prohibitions on businesses for deceptive conduct and unfair contract terms, prohibitions on false representations, etc., sufficiently safeguard and provide remedies against consumer harm. The review also seeks input on whether there are ambiguities around ACL's application to AI and how it can be addressed.

Australian Government, Department of Industry, Science and Resources, Safe and Responsible AI in Australia: Proposals Paper for Introducing Mandatory Guardrails for AI in High-Risk Settings (Sept. 2024), https://consult.industry.gov.au/ai-mandatory-guardrails
 Center for AI and Digital Policy, CAIDP Statement to the Australian Government on Mandatory Guardrails for AI (Oct. 4, 2024), https://www.caidp.org/statements
 Australian Government, Department of Health and Aged Care, Therapeutic Goods Administration, Consultation: Clarifying and Strengthening the Regulation of Artificial Intelligence (AI) (Sept. 12, 2024), https://www.tga.gov.au/resources/consultation/consultation-clarifying-and-strengthening-regulation-artificial-intelligence-ai

²²⁸ Australian Government, Department of Health and Aged Care, *Safe and Responsible Artificial Intelligence in Health Care: Legislation and Regulation Review* (Sept. 13, 2024), https://consultations.health.gov.au/medicare-benefits-and-digital-health-division/safe-and-responsible-artificial-intelligence-in-he

²²⁹ Parliament of Australia, Joint Committee of Public Accounts and Audit, *Inquiry into the Use and Governance of Artificial Intelligence Systems by Public Sector Entities* (Sept. 12, 2024), https://www.aph.gov.au/Parliamentary Business/Committees/Joint/Public Accounts and Audit/PublicsectoruseofAI

²³⁰ Australian Government, Treasury, *Review of AI and the Australian Consumer Law* (Oct. 2024), https://treasury.gov.au/consultation/c2024-584560

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Data Protection

In February 2023, the Australian Attorney-General's Department released its review of the Privacy Act 1988,²³¹ a significant step initiated in 2020.²³² The review was initiated after the 2019 Australian Competition and Consumer Commission (ACCC) recommended reforms to the Privacy Act that would "ensure consumers are adequately informed, empowered and protected, as to how their data is being used and collected."²³³. The Privacy Act Review Report²³⁴ includes 116 recommendations based on 30 "key themes and proposals" from stakeholders. "The proposed reforms are aimed at strengthening the protection of personal information and the control individuals have over their information. Stronger privacy protections would support digital innovation and enhance Australia's reputation as a trusted trading partner," according to the Attorney-General's Department.

The Office of the Australian Information Commissioner welcomed the release of the report. "This is an important milestone as we move towards further reform of Australia's privacy framework," said Angelene Falk, the Australian Information Commissioner and Privacy Commissioner at the time of the report's release. "As the privacy regulator we see the proposal to introduce a positive obligation that personal information handling is fair and reasonable, as a new keystone of the Australian privacy framework. This shifts the burden from individuals, who are currently required to safeguard their privacy by navigating complex privacy policies and consent requirements, and places more responsibility on the organisations who collect and use personal information to ensure that their practices are fair and reasonable in the first place."

The Government released its Response to the Privacy Act 1988 Review, noting 10 proposals, agreeing in-principle to 68, and fully agreeing to 38 proposals, including that "further consideration should be given to enhanced risk assessment requirements in the context of facial recognition technology and other uses of biometric information and that this work should be coordinated with the

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²³¹ Attorney-General's Department, *Privacy Act 1988* (Nov. 30, 2024), https://www.legislation.gov.au/Series/C2004A03712

²³² Australian Government, Attorney-General's Department, *Privacy Act Review Issues Paper* (Oct. 30, 2020), https://www.ag.gov.au/rights-and-protections/publications/review-privacy-act-1988-cth-issues-paper

 ²³³ Australian Competition and Consumer Commission, *Digital Platforms Inquiry Report* (Jul. 26, 2019), https://www.accc.gov.au/about-us/publications/digital-platforms-inquiry-final-report
 ²³⁴ Department of the Attorney-General, *Review of the Privacy Act 1988* (Feb. 16, 2023), https://www.ag.gov.au/integrity/consultations/review-privacy-act-1988

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Government's ongoing work on Digital ID and the National Strategy for Identity Resilience.²³⁵

These reforms build on Australia's efforts to enact regulation for accountability and data protection. The Privacy APP Code 2017 requires agencies subject to the Privacy Act (Australian Government Agencies – Governance) to conduct privacy impact assessments for all "high privacy risk projects." Furthermore, section 33D of the Privacy Act grants the Commissioner authority to require an agency to provide impact assessments whenever an activity or function may have a "significant impact on the privacy of individuals." ²³⁷

The Privacy Act also builds on efforts to address privacy concerns raised by facial recognition and other biometric technology. The Federal Attorney-General referred positively to the 2022 Human Technology Institute (HIT) report outlining a Facial Recognition Model Law to address "threats to Australians' privacy and other human rights" using a risk-based approach. The Federal Attorney-General noted that the Model Law is "a way of striking the right balance, endorsing, in principle, a risk assessment approach to regulating facial recognition and other biometric technologies." ²³⁹

The Government also oversaw public voice opportunities on privacy reform and doxxing. Doxxing is the "intentional online exposure of an individual's identity, private information or personal details without their consent."²⁴⁰ The Government received 97 written statements, 62 of which are publicly accessible,

andprotections/publications/government-response-privacy-act-review-report

236 Australian Government, Office of the Australian Information Commissioner, When Do

Agencies Need to Conduct a Privacy Impact Assessment? (Sept. 14, 2020),

https://www.oaic.gov.au/privacy/privacy-guidance-for-organisations-and-government-agencies/government-agencies/australian-government-agencies-privacy-code/when-do-agencies-need-to-conduct-a-privacy-impact-assessment

²³⁸ Human Law Technology, *A Blueprint for Regulation of Facial Recognition Technology*, (Sept. 27, 2022), https://www.uts.edu.au/news/business-law/blueprint-regulation-facialrecognition-technology

²³⁹ Human Technology Institute, *Facial Recognition Technology: Towards a Model Law*, https://www.uts.edu.au/human-technology-institute/projects/facial-recognition-technology-towards-model-law

²⁴⁰ Australian Government, Attorney-General's Department, *Public Consultation on Doxxing and Privacy Reforms* (Sept. 6, 2024), https://consultations.ag.gov.au/integrity/doxxing-and-privacy-reforms/

Australian Government, Attorney-General's Department, Government Response to the Privacy Act Review Report (Sept. 28, 2023), https://www.ag.gov.au/rights-

²³⁷ Australian Government, Office of the Australian Information Commissioner, *Chapter 10: Directing a Privacy Impact Assessment* (Jan. 2023), https://www.oaic.gov.au/about-the-OAIC/our-regulatory-approach/guide-to-privacy-regulatory-action/chapter-10-directing-a-privacy-impact-assessment

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on how to "most appropriately address doxxing through civil remedies"²⁴¹ that would "allow for redress and give individuals greater control and transparency over their personal information."²⁴² The Parliament approved a bill to amend the Privacy Act 1988 to implement reforms that include "creating a statutory tort for serious invasions of privacy" and amending the Criminal Code Act 1995 to introduce two offenses for doxxing. ²⁴³ The bill awaits Royal Assent to become law. ²⁴⁴

Algorithmic Transparency

Australian law does not explicitly protect a right to algorithmic transparency. However, the transparency and explainability, contestability, and accountability principles in the AI Ethics Framework provide guidance for organizations²⁴⁵ and the 2024–2025 National Action Plan²⁴⁶ charges the Attorney-General's Department and DISR to "create transparency in the use of automated decision making and artificial intelligence." The Australian Government released the Transparency of Automated Decision Making (AU0024) to address public concerns about the transparency and integrity of government decisions made using automated systems and AI.²⁴⁷

These actions follow reports and advice from various agencies to establish algorithmic transparency as a right. In early 2019, the Australian Human Rights Commission called for an AI Policy Council to guide companies and regulators regarding artificial intelligence technology. "When companies use AI decision-making systems, they must build them in a way that allows a person to understand the basis of decisions that affect them. This is fundamental to ensuring

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²⁴¹ Australian Government, Attorney-General's Department, *Public Consultation on Doxxing and Privacy Reforms, Published Responses* (2024), https://consultations.ag.gov.au/integrity/doxxing-and-privacy-reforms/consultation/published select respondent

²⁴² Australian Government, Attorney-General's Department, *Public Consultation on Doxxing and Privacy Reforms* (Sept. 6, 2024), https://consultations.ag.gov.au/integrity/doxxing-and-privacy-reforms/

²⁴³ Parliament of Australia, *Privacy and Other Legislation Amendment Bill 2024* (Nov. 18, 2024), https://www.aph.gov.au/Parliamentary Business/Bills Legislation/bd/bd2425/25bd016

²⁴⁴ Parliament of Australia, *Privacy and Other Legislation Amendment Bill 2024* (Nov. 29, 2024), https://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;query=Id%3A%22legislation%2 Fbillhome%2Fr7249%22

²⁴⁵ Australian Department of Industry, Science and Resources, *Australia's AI Ethics Principles*, https://www.industry.gov.au/publications/australias-artificial-intelligence-ethics-principles/australias-ai-ethics-principles

²⁴⁶ Open Government Partnership, *Australia's Third Open Government Partnership National Action Plan 2024–2025* (2024), https://www.opengovpartnership.org/wp-content/uploads/2023/12/Australia Action-Plan 2023-2025 December.pdf

²⁴⁷ Open Government Partnership, *Australia: Transparency of Automated Decision Making* (AU0024) (Oct. 28, 2024),

https://www.opengovpartnership.org/members/australia/commitments/AU0024/

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accountability and will be really important for all companies that use AI," Human Rights Commissioner Ed Santow said.²⁴⁸ In a 2020 paper, Santow called on the Australian government to modernize privacy and human rights laws to account for the rise of artificial intelligence.²⁴⁹ "We need to apply the foundational principles of our democracy, such as accountability and the rule of law, more effectively to the use and development of AI," he said.

The Office of the Australian Information Commissioner (OAIC) emphasized the need for greater transparency in its 2023 response to the Safe and Responsible AI in Australia discussion paper. ²⁵⁰ The OAIC highlighted that "most Australians view transparency about the use of AI and the right to request information on how AI decisions are made as essential preconditions for its responsible deployment in decision-making."²⁵¹

The Senate Economics References Committee's Interim Report on international digital platforms in 2023 included a chapter on algorithmic transparency. 252 Chapter 6 outlines risks such as misinformation, echo chambers, and biases in automated decision-making, stressing the need for algorithm disclosure, especially in content curation and targeted ads. The report called for regulation to ensure algorithms promote fairness, accuracy, privacy, and user safety.²⁵³

An interim report released by the Senate Select Committee on Adopting Artificial Intelligence in October 2024²⁵⁴ recommended that mandatory

²⁴⁸ James Eyers, Call for "AI Policy Council" to Govern How Algorithms Use Personal Information, Financial Review (Mar. 15, 2020), https://www.afr.com/technology/call-for-aipolicy-council-to-govern-how-algorithms-use-personal-information-20190315-h1cej1 ²⁴⁹ Australian Human Rights Commission, *Human Rights and Technology: Discussion Paper* (Dec. 2019), https://tech.humanrights.gov.au/sites/default/files/2019-12/TechRights2019 DiscussionPaper.pdf

²⁵⁰ Office of the Australian Information Commissioner, OAIC Submission to the Department of Industry, Science and Resources - Safe and Responsible AI in Australia Discussion Paper (Sept. 21, 2023), https://www.oaic.gov.au/engage-with-us/submissions/oaic-submission-to-thedepartment-of-industry-science-and-resources-safe-and-responsible-ai-in-australia-discussionpaper

²⁵¹ Ibid

²⁵² Parliament of Australia, *Influence of International Digital Platforms* (Nov. 2023), https://www.aph.gov.au/Parliamentary Business/Committees/Senate/Economics/Digitalplatform s/Report

²⁵³ Parliament of Australia, *Influence of International Digital Platforms: Chapter 6 - Algorithmic* Transparency (Nov. 2023),

https://www.aph.gov.au/Parliamentary Business/Committees/Senate/Economics/Digitalplatform s/Report/Chapter 6 - Algorithmic transparency

²⁵⁴ Parliament of Australia, *Interim Report* (Oct. 2024),

https://www.aph.gov.au/Parliamentary Business/Committees/Senate/Adopting Artificial Intelli gence AI/AdoptingAI/Interim report

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transparency and disclosure requirements for AI-generated content should be developed before the 49th Parliament election.²⁵⁵

Data Scraping

The Office of the Australian Information Commissioner (OAIC) and 16 of its international data protection and privacy counterparts released a follow-up joint statement laying out expectations for industry related to data scraping and privacy. ²⁵⁶ The initial statement in August 2023 established that "[social media companies] and other websites are responsible for protecting personal information from unlawful scraping." The follow-up, which incorporates feedback from engagement with companies such as Alphabet (YouTube), X Corp (formerly Twitter), and Meta Platforms (Facebook, Instagram, WhatsApp), adds that organizations must "comply with privacy and data protection laws when using personal information, including from their own platforms, to develop AI large language models"; must regularly review and update privacy protection measures to keep pace with technological advances; and ensure that permissible data scraping, such as that for research, "is done lawfully and following strict contractual terms."²⁵⁸

Data scraping generally involves the automated extraction of data from the web. Data protection authorities are seeing increasing incidents involving data scraping, particularly from social media companies and the operators of other websites that host publicly accessible data. Scraped personal information can be exploited for targeted cyberattacks, identity fraud, monitoring, profiling and surveillance purposes, unauthorized political or intelligence gathering purposes, unwanted direct marketing or spam.

The OAIC's press release places the joint initiative in the context of national efforts to hold industry accountable to privacy laws, noting "The joint initiative, with its focus on the implications of AI large language models, coincides with the OAIC recently publishing detailed guidance on privacy and developing

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²⁵⁵ Parliament of Australia, *Select Committee on Adopting Artificial Intelligence* (Oct. 2024), https://parlinfo.aph.gov.au/parlInfo/download/committees/reportsen/RB000493/toc_pdf/SelectCommitteeonAdoptingArtificialIntelligence(AI).pdf

²⁵⁶ Australian Government, Office of the Australian Information Commissioner, *Concluding Joint Statement on Data Scraping and the Protection of Privacy* (Oct. 2024), https://www.priv.gc.ca/en/opc-news/speeches-and-statements/2024/js-dc 20241028/

²⁵⁷ Australian Government, Office of the Australian Information Commissioner, *Global Expectations of Social Media Platforms and Other Sites to Safeguard against Unlawful Data Scraping* (Aug. 24, 2023), https://www.oaic.gov.au/news/media-centre/global-expectations-of-social-media-platforms-and-other-sites-to-safeguard-against-unlawful-data-scraping

Australian Government, Office of the Australian Information Commissioner, *Global Privacy Authorities Issue Follow-up Joint Statement on Data Scraping* (Oct. 29, 2024), https://www.oaic.gov.au/news/media-centre/global-privacy-authorities-issue-follow-up-joint-statement-on-data-scraping

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and training generative AI models.²⁵⁹ This guidance communicates the OAIC's expectations of industry to ensure that in these new and developing areas industry operates within the boundaries of Australia's privacy law."²⁶⁰.

Privacy Commissioner Carly Kind's statement in August 2024 on the OAIC decision against investigating Clearview AI cited the initial joint statement to reiterate companies' obligations to protect personal information. The Clearview AI case demonstrates the significance of this guidance. In 2021, the Australian Information Commissioner declared that Clearview AI must "cease collecting images from individuals in Australia" and delete images it previously collected because the company had violated the Privacy Act and several Australian Privacy Principles in its use of facial recognition technology to collect images and biometric templates from people in Australia. Kind reiterated that "the determination against Clearview AI still stands" and promised guidance for companies seeking to develop and train AI models. The follow-up joint statement provides such guidance.

Use of AI in Public Administration

After a scandal involving an automated system issuing unlawful and inaccurate debt notices, the Australian government has worked to establish principles and procedures for the responsible use of AI systems in public administration. These efforts culminated in the Policy for the Responsible Use of AI in Government, which took effect on September 1, 2024.²⁶²

From 2016 through 2019, the Australian government agency Services Australia used an automated debt recovery system known as Robodebt to calculate overpayments and issue debt notices to welfare recipients. Robodebt was an automated data matching system that compared the records of Services Australia payment compliance program with averaged income data from the Australian Taxation Office. Robodebt was suspended in 2019 following investigations by the

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²⁵⁹ Australian Government, Office of the Australian Information Commissioner, *Guidance on Privacy and Developing and Training Generative AI Models* (Oct. 23, 2024), https://www.oaic.gov.au/privacy/privacy-guidance-for-organisations-and-government-agencies/guidance-on-privacy-and-developing-and-training-generative-ai-models

Australian Government, Office of the Australian Information Commissioner, *Global Privacy Authorities Issue Follow-up Joint Statement on Data Scraping* (Oct. 29, 2024), https://www.oaic.gov.au/news/media-centre/global-privacy-authorities-issue-follow-up-joint-statement-on-data-scraping

Australian Government, Office of the Australian Information Commissioner, *Statement on Clearview AI* (Aug. 21. 2024), https://www.oaic.gov.au/news/media-centre/statement-on-clearview-ai

²⁶² Australian Government, Digital Transformation Agency, *Policy for the Responsible Use of AI in Government* 1.1 (Sept. 1, 2024), https://www.digital.gov.au/policy/ai/policy

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Commonwealth Ombudsman,²⁶³ two Senate Committees,²⁶⁴ and several legal challenges,²⁶⁵ including class-action lawsuits against the government. In one such suit, Federal Court Justice Bernard Murphy condemned the Government in his ruling and approved a \$1.8 billion settlement, including repayments of debts paid, wiping of outstanding debts, and legal costs.²⁶⁶ In October 2022, the newly elected government effectively forgave the debts of 197,000 people that were still under review.²⁶⁷

A Royal Commission into the Robodebt scheme issued a report in July 2023. The Report detailed the human impact of system and its errors, including false or incorrectly calculated debt notices; negative consequences on the physical and mental health of debt notice recipients, often among the most vulnerable; and the lawfulness of the scheme.

In August 2023, the House of Representatives passed a formal motion apologizing for the scheme on behalf of the Parliament. In November 2023, the Australian government formally accepted or accepted in principle all 56

https://robodebt.royalcommission.gov.au/system/files/2023-09/rrc-accessible-full-report.PDF;

²⁶³ Commonwealth Ombudsman, Lessons Learnt about Digital Transformation and Public Administration: Centrelink's Online Compliance Intervention (Jul. 2017), https://www.ombudsman.gov.au/ data/assets/pdf_file/0024/48813/AIAL-OCI-Speech-and-Paper.pdf

²⁶⁴ Matthew Doran, Centrelink Debt Recovery Program to Be Investigated at Senate Committee Today, ABC News (Mar. 7, 2017), http://www.abc.net.au/news/2017-03-08/centrelink-debt-recovery-program-to-be-investigated/8334072; Parliament of Australia, Centrelink's Compliance Program,

https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Community_Affairs/Centrelinkcompliance

²⁶⁵ Victoria Legal Aid, *Learning from the Failures of Robodebt – Building a Fairer, Client-centred Social Security System* (Nov. 14, 2023), https://www.legalaid.vic.gov.au/learning-from-the-failures-of-robodebt; Luke Henriques-Gomes, *Centrelink Cancels 40,000 Robodebts, New Figures Reveal: Robodebt Faces Landmark Legal Challenge over 'Crude' Income Calculations*, The Guardian (Feb. 6, 2019), https://www.theguardian.com/australia-

news/2019/feb/06/robodebt-faces-landmark-legal-challenge-over-crude-income-calculations ²⁶⁶ Rebecca Turner, *Robodebt Condemned as a 'Shameful Chapter' in Withering Assessment by Federal Court Judge*, Australian Broadcasting Corporation (ABC News) (Jun. 11, 2021), https://www.abc.net.au/news/2021-06-11/robodebt-condemned-by-federal-court-judge-as-shameful-

<u>chapter/100207674?utm_campaign=abc_news_web&utm_content=link&utm_medium=content_shared&utm_source=abc_news_web_utm_content=link&utm_medium=content_shared&utm_source=abc_news_web_utm_content=link&utm_medium=content_shared&utm_source=abc_news_web_utm_content=link&utm_medium=content_shared&utm_source=abc_news_web_utm_content=link&utm_medium=content_shared&utm_source=abc_news_web_utm_content_shared&utm_source=abc_news_web_utm_content_shared&utm_source=abc_news_web_utm_shared&utm_</u>

²⁶⁷ Matthew Doran, Robodebt Cases Dumped and Debts Wiped Amid Royal Commission into Controversial Scheme, ABC News (Oct. 11, 2022), https://www.abc.net.au/news/2022-10-11/robodebt-reviews-wiped-government-clears-final-remnants-scheme/101523702

²⁶⁸ Royal Commission into the Robodebt Scheme, *Report* (Jul. 2023),

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recommendations in the Royal Commission report.²⁶⁹ In the Government Response, the Prime Minister and Cabinet promised increased funding to implement the recommendations aligned to reforms aimed at "building trust in government, investing in a capable public sector, delivering strong institutions[,] and ensuring humans are put back at the centre of human services and service delivery."270

In September 2023, the Digital Transformation Agency (DTA) and the Department of Industry, Science and Resources (DISR) established the Artificial Intelligence in Government Taskforce.²⁷¹ The Chief Executive Officer for the DTA, Chris Fechner, said that government has an important role to play in setting an example for the safe and ethical use of AI technologies. "We don't want to be left behind but we do want to protect government systems and ensure we're ultimately benefiting the wider Australian community."272

The Taskforce comprised representatives from multiple Australian Public Service (APS) agencies and aimed to develop a safe, ethical, and responsible approach to AI application, policy, standards, and guidance across the government. The Taskforce identified four key principles for implementing AI safely and responsibly in the public sector: "1) AI should be deployed responsibly in low-risk situations, 2) Transparency and explainability: tell when AI is used and why its use was warranted, 3) Privacy protection and security: use only public information, and 4) Accountability and human centred decision-making: final word should be with a human."273

In July 2023, the AI Taskforce released initial interim guidance on government use of publicly available generative artificial intelligence (AI) platforms. The Guidance was updated in November 2023.274 According to the Guidance, one of the golden rules that Australian Public Service staff should consider for the responsible use of generative AI tools is: "you should be able to

agPost/2023/November/Ethical AI and the Australian public sector

²⁶⁹ Australian Government, Department of the Prime Minister and Cabinet, Government

Response to the Royal Commission into the Robodebt Scheme (Nov. 13, 2023), https://www.pmc.gov.au/resources/government-response-royal-commission-robodebt-scheme ²⁷⁰ Ibid

²⁷¹ Australian Government, Digital Transformation Agency, The AI in Government Taskforce: Examining Use and Governance of AI by the APS (Sept. 20, 2023), https://www.dta.gov.au/blogs/ai-government-taskforce-examining-use-and-governance-ai-aps ²⁷² Ibid

²⁷³ Antonino Nielfi, Ethical AI and the Australian Public Sector: Plotting an Unknown Course, Parliament of Australia, Flagpost (Nov. 13, 2023), https://www.aph.gov.au/About Parliament/Parliamentary departments/Parliamentary Library/Fl

²⁷⁴ Digital Transformation Agency and Department of Industry, Science and Resources, *Interim* Guidance on Government Use of Publicly Available Generative Artificial Intelligence (Nov. 22, 2023), https://architecture.digital.gov.au/guidance-generative-ai

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explain, justify and take ownership of your advice and decisions."²⁷⁵ In addition, the Interim Guidance encouraged all APS staff to "read and understand Australia's AI Ethics Principles," and outlined steps to adhere to the Principles.²⁷⁶

In December 2023, the Australian government issued the Data and Digital Government Strategy. The data and vision for a world-class APS to 2030.²⁷⁷ The Data and Digital Government Strategy is accompanied by an Implementation Plan and a Roadmap timeline.

With the Strategy, the Australian government commits to "improving and maintaining trust in its use of data and digital technology through adopting a whole-of-government Data Ethics Framework [...] and adopting AI technologies in safe, ethical and responsible ways."²⁷⁸

Building on the Strategy, the Data and Digital Ministers Meeting released a National Framework for using AI in government in 2024.²⁷⁹ This framework establishes a consistent and holistic approach to AI assurance across all aspects of government using 5 cornerstones.²⁸⁰ Shortly after release of the national framework, the Digital Transformation Agency's Policy for the responsible use of AI in government took effect.²⁸¹ The policy outlines an adaptive whole-of-government framework that attempts to unite uses of AI in Public Administration and strengthen public trust in the Government's use of AI.²⁸² Adherence is mandatory for non-corporate Commonwealth entities, excepting national defense matters and members of the national intelligence community, who are encouraged to adopt elements of the policy that do not compromise national security.²⁸³ The policy also requires government agencies to designate accountable official(s) to

https://www.dataanddigital.gov.au/sites/default/files/2023-

12/Data%20and%20Digital%20Government%20Strategy%20v1.0.pdf

 $\frac{https://www.finance.gov.au/government/public-data/data-and-digital-ministers-meeting/national-framework-assurance-artificial-intelligence-government}$

²⁷⁵ Ibid

²⁷⁶ Ibid

²⁷⁷ Australian Government, *Data and Digital Government Strategy: The Data and Vision for a World-Class APS to 2030* (Dec. 15, 2023),

²⁷⁸ Ibid, p. 23

²⁷⁹ Australian Government, Department of Finance, *National Framework for the Assurance of Artificial Intelligence in Government* (Jun. 21, 2024),

²⁸⁰ Ibid

²⁸¹ Australian Government, Artificial Intelligence in Government, *Policy for the Responsible Use of AI in Government* (2024), https://www.digital.gov.au/policy/ai/policy

²⁸² Australian Government, Artificial Intelligence in Government, *Policy Aims* (2024), https://www.digital.gov.au/policy/ai/aim

²⁸³ Australian Government, Digital Transformation Agency, *Policy for the Responsible Use of AI in Government* (Sept. 1, 2024), https://architecture.digital.gov.au/responsible-use-of-AI-ingovernment

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assume responsibility for their respective agency's implementation of the Policy by November 30, 2024.²⁸⁴

Use of AI in Education

In May 2022, in a global investigative report on the education technology (EdTech) endorsed by for children's education during the pandemic, Human Rights Watch analyzed the technical and policy features of Minecraft: Education Edition used in Australia. Human Rights Watch found that the endorsements of this online learning platform put at risk or directly violated children's rights due their tracking abilities for advertising purposes.

According to Human Rights Watch, in line with child data protection principles as well as corporations' human rights responsibilities outlined in the United Nations Guiding Principles on Business and Human Rights, EdTech and AdTech companies should not collect and process children's data for advertising. The report noted steps companies should take to protect children's rights, including working with governments to define clear retention and deletion rules for children's data collected during the pandemic. Furthermore, governments should develop, refine, and enforce modern child data protection laws and standards, and ensure that children who want to learn are not compelled to give up rights to do so.²⁸⁵

In February 2023, education ministers agreed to develop an evidence-based, best practice framework to guide schools in harnessing AI tools to support teaching and learning, and to establish a Taskforce to develop the framework.

The Taskforce issued the Australian Framework for Generative AI in Schools in November 2023.²⁸⁶ The Education Ministers will review the Framework at least once each 12 months, to accommodate the fast-moving pace of technological development. The framework relies on key principles such as Human and Social Wellbeing, including the use of AI tools "in ways that respect and worker rights, including individual autonomy and dignity"; Transparency, including explainability: "vendors ensure that end users broadly understand the methods used by generative AI tools and their potential biases"; Fairness; Accountability; Privacy, Security and Safety: safe and ethical use of generative AI tools; best practice implementation of generative AI tools in the classroom to lift

Human Rights Watch, *How Dare They Peep into My Private Life* (May 25, 2022), https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rights-violations-governments

²⁸⁴ Australian Government, Digital Transformation Agency, *Standards for Accountable Officials* (2024), https://architecture.digital.gov.au/standard-accountable-officials

²⁸⁶ National AI in Schools Taskforce, *Australian Framework for Generative Artificial Intelligence in Schools* (Nov. 17, 2023),

 $[\]frac{https://www.education.gov.au/schooling/resources/australian-framework-generative-artificial-intelligence-ai-schools}{}$

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student outcomes; reducing workload burden and administration using generative AI tools; and establishing education-specific standards and governance to meet the needs of Australian schools.

On September 10, 2024, the House of Representatives Standing Committee on Employment, Education, and Training tabled its report, Study Buddy or Influencer, ²⁸⁷ following its Inquiry into the Use of Generative Artificial Intelligence in the Australian Education System.²⁸⁸ The Committee's 25 recommendations explore how Australian schools can maximize the opportunities presented by generative artificial intelligence (GenAI) while successfully mitigating the risks of using the emerging technology and ensuring adequate safeguards and guardrails are in place to prevent misuse. The recommendations focus on integrating GenAI into Australia's national curriculum as a study buddy for all students.

Use of AI in the Military

Although Australia participates in forums on AI use in the military, the Defence Digital Strategy and Roadmap 2024, released on August 27, 2024, did not explicitly include a plan for integrating AI systems.²⁸⁹ The roadmap outlines a vision for a "secure, integrated, and scalable digital environment to compete and succeed in the digital age," but only briefly mentions the use of modern technologies such as AI and business process mining to inform and enhance defense operations.²⁹⁰

Moreover, Australian universities are collaborating with industry and government to train students in applied AI and other emerging technologies as part of Australia's Next Generation Graduates Program. The program seeks to create a skilled workforce that will enhance Australia's defense and aerospace sectors while leveraging engagement with Australia's First Nations peoples. 291

https://www.aph.gov.au/Parliamentary Business/Committees/House/Employment Education an d Training/Alineducation/Report

https://www.aph.gov.au/Parliamentary Business/Committees/House/Employment Education an d Training/Alineducation

²⁸⁷ Parliament of Australia, House of Representatives Standing Committee on Employment, Education, and Training, Study Buddy or Influencer (Aug. 2024),

²⁸⁸ Parliament of Australia, House of Representatives Standing Committee on Employment, Education, and Training, Inquiry into the Use of Generative Artificial Intelligence in the Australian Education System (May 24, 2023),

²⁸⁹ Australian Government, Defence, *Defence Digital Strategy and Roadmap 2024* (Aug. 27, 2024), https://www.defence.gov.au/about/strategic-planning/defence-digital-strategy-roadmap-2024

²⁹⁰ Ibid

²⁹¹ Commonwealth Scientific and Industrial Research Organisation (CSIRO), Applied AI and Digital Innovation for Defence and Aerospace Applications (2024),

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Lethal Autonomous Weapons

At the 78th UN General Assembly First Committee in 2023, Australia voted in favor²⁹² of resolution L.56²⁹³ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems" from humanitarian, legal, security, technological, and ethical perspectives and reflect on the role of humans in the use of force. The Resolution mandated the UN Secretary-General prepare a report reflecting the views of member and observer states on autonomous weapons systems.

In addition, Australia is a high contracting party to the convention on Certain Conventional Weapons (CCW). ²⁹⁴ Australia has also endorsed the United Nations General Assembly Resolution 78/241 on lethal autonomous weapons systems (LAWS). ²⁹⁵ Australia made a submission to the Secretary-General's Report on Lethal Autonomous Weapons Systems in May 2024, ²⁹⁶ indicating that the government "considers that the CCW is the most appropriate framework for multilateral discussions on LAWS" and reinforced its compromises to IHL and ethical standards. The submission also called attention to a joint proposal Australia co-sponsored to the Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems (GGE). ²⁹⁷ The Proposal introduces a two-tier approach that involves total bans on specific LAWS (e.g., those designed to target civilians or civilian objects) and the imposition of restrictions on other systems to ensure adherence to IHL. ²⁹⁸

<u>Programs/Awarded-programs/Applied-AI-and-Digital-Innovation-for-Defence-and-Aerospace-Applications?start=0&count=12&keyword=&cat=</u>

 $\underline{https://documents.un.org/doc/undoc/gen/n23/431/11/pdf/n2343111.pdf?fe=true}$

²⁹² Stop Killer Robots, 164 States Vote against the Machine at the UN General Assembly (Nov.

^{1, 2023),} https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

²⁹³ General Assembly, Lethal Autonomous Weapons Systems, *Resolution L56* (Oct.12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-

fora/1com/1com23/resolutions/L56.pdf

²⁹⁴ United Nations, Office for Disarmament Affairs, *High Contracting Parties and Signatories CCW* (2024), https://disarmament.unoda.org/the-convention-on-certain-conventional-weapons/high-contracting-parties-and-signatories-ccw/

²⁹⁵ United Nations General Assembly, *Resolution A/RES/78/241 on Lethal Autonomous Weapons Systems* (Dec. 28, 2023),

²⁹⁶ United Nations, Office for Disarmament Affairs, *Australia's Submission to the United Nations Secretary-General's Report on Lethal Autonomous Weapons Systems* (May 2024), https://docs-library.unoda.org/General_Assembly_First_Committee_-Seventy-Ninth_session_(2024)/78-241-Australia-EN.pdf

²⁹⁷ Ibid

²⁹⁸ United Nations, Office for Disarmament Affairs, Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons System, *Draft Articles on Autonomous Weapon Systems: Prohibitions and Other Regulatory Measures on the Basis of International Humanitarian Law (IHL)*, CCW/GGE.1/2024/WP.10 (Aug. 26, 2024), https://docs-page-12-2024/

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In October 2022, Australia was one of 70 states that endorsed a joint statement on autonomous weapons systems at the United Nations General Assembly. The statement called for the recognition of the dangers of autonomous weapons systems, acknowledged the need for human oversight and accountability, and emphasized the importance of an international framework of rules and constraints.²⁹⁹ In this joint statement, States declared that they "are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law (IHL), including through maintaining human responsibility and accountability in the use of force."³⁰⁰

In February 2023, Australia participated in the Responsible Artificial Intelligence in the Military Domain (REAIM) international summit, co-hosted by the Netherlands and the Republic of Korea. At the end of the Summit, Government representatives, including Australia, agreed on a joint call for action on the responsible development, deployment, and use of artificial intelligence in the military domain. In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." They also "affirm that data for AI systems should be collected, used, shared, archived and deleted, as applicable, in ways that are consistent with international law, as well as relevant national, regional and international legal frameworks and data standards. Adequate data protection and data quality governance mechanisms should be established and ensured from the early design phase onwards, including in obtaining and using AI training data."

States also "stress the importance of a holistic, inclusive and comprehensive approach in addressing the possible impacts, opportunities and challenges of the use of AI in the military domain and the need for all stakeholders,

library.unoda.org/Convention on Certain Conventional Weapons -

<u>Group of Governmental Experts on Lethal Autonomous Weapons Systems (2024)/CCW-GGE.1-2024-WP.10.pdf</u>

 $\frac{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm_en.pdf}{}$

²⁹⁹ Stop Killer Robots, 70 States Deliver Joint Statement on Autonomous Weapons Systems at UN General Assembly (Oct. 21, 2022), https://www.stopkillerrobots.org/news/70-states-deliver-joint-statement-on-autonomous-weapons-systems-at-un-general-assembly/

³⁰⁰ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

³⁰¹ Responsible Artificial Intelligence in the Military Domain (REAIM), *REAIM 2023 Programme* (2023), https://reaim2023.org/

³⁰² Government of Netherlands, *Call to Action on Responsible Use of AI in the Military Domain*, Press Release (Feb. 16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action

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including states, private sector, civil society and academia, to collaborate and exchange information on responsible AI in the military domain."³⁰³ Australia has also endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023.304

At the 2023 REAIM Summit, the Netherlands also took the initiative to launch a Global Commission on Responsible AI in the Military Domain in the Hague. The Global Commission, which includes Australian commissioners and experts, has been established for an initial period of two years to help promote mutual awareness and understanding regarding the global governance of AI in the military domain and support fundamental norm development and policy coherence in the field.³⁰⁵ The Global Commission will produce a strategic guidance report to identify short and long term recommendations for governments and the wider multi-stakeholder community.306

The second edition of the REAIM was held in Seoul, South Korea, on September 9–10, 2024.³⁰⁷ The Summit led to the adoption of the Blueprint for Action on the responsible use of AI in the military domain, endorsed by Australia.³⁰⁸ This commitment builds on the groundwork from the 2023 summit in The Hague, proposing broader guidance for the ethical and responsible application of AI in military contexts, emphasizing compliance with international law, human accountability, reliability, human involvement, and data governance.

Environmental Impacts of AI

Although AI technology is seen as a possible solution to clean energy and sustainability, Australia's national science agency, the Commonwealth Science

306 Ibid

³⁰³ Responsible AI in the Military Domain Summit, REAIM Call to Action (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action ³⁰⁴ US Department of State, Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy, Endorsing States (Feb. 12, 2024), https://www.state.gov/politicaldeclaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

The Hague Centre for Strategic Studies, Global Commission on Responsible Artificial Intelligence in the Military Domain (GC REAIM) (Nov. 11, 2024), https://hcss.nl/gcreaimcommissioners/

³⁰⁷ The Hague Centre for Strategic Studies, Summit on Responsible Artificial Intelligence in the Military Domain (REAIM), Seoul, South Korea (2024), https://hcss.nl/global-commission-onresponsible-artificial-intelligence-in-the-military-domain-gc-reaim-seoul-south-koreaconference-meeting-2/

³⁰⁸ Responsible Artificial Intelligence in the Military Domain (REAIM), Blueprint for Action (Sept. 11, 2024),

https://reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163&shareBbsMngNo=10 264&shareMenuId=11613&shareTabMenuId=

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and Industrial Research Organization (CSIRO),³⁰⁹ has shifted focus to the potential environmental impacts of AI technology. This focus is expected to progress considering Australia's aim to "become a host for AI data [centers] in the Asia-Pacific region."³¹⁰ Australia's DISR commissioned a 2021 report to review the energy efficiency of data centers. The report found that "[g]rowth in edge computing (the use of data centres close to the point of use), which is required to support applications such as 5G, Artificial Intelligence and Virtual Reality, is likely to increase energy demand."³¹¹ Beyond data center energy impacts, the DISR proposal for mandatory guardrails included environmental impacts among those organizations should consider in assessing whether the use of an AI system is "high-risk." ³¹²

Australia was one of 19 signatories to the Net Zero Government Initiative at the United Nations Framework Convention on Climate Change Conference of Parties (COP27).³¹³ The Net Zero in Government Operations Strategy, which outlines the Australian government's approach to achieve net zero government operations by 2030, set energy efficiency and environmental standards for new data centers.³¹⁴ As part of these efforts, the Digital Transformation Agency established a new Data Centre Panel to "help promote sustainable practices across the data centre market [...] to reach net zero."³¹⁵

programs/funding/Next-Generation-Graduates-Programs/Awarded-programs/AI-Clean-Energy-Sustainability?start=0&count=12&keyword=&cat=

 $\underline{https://www.dcceew.gov.au/sites/default/files/documents/international-review-energy-efficiency-\underline{data-centres.pdf}}$

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³⁰⁹ Commonwealth Science and Industrial Research Organization (CSIRO), *AI for Clean Energy and Sustainability* (2024), https://www.csiro.au/en/work-with-us/funding-

³¹⁰ Australian Government, Australian Trade and Investment Commission, *Artificial Intelligence and Data Centres: Helping to Power Digital Transformation* (2024), https://international.austrade.gov.au/en/do-business-with-australia/sectors/technology/ai-and-data-centres#ref3

³¹¹ Australian Government, Department of Industry, Science, Energy and Resources, Commissioned Report by Fiona Brocklehurst, Ballarat Consulting, *International Review of Energy Efficiency in Data Centres* (Sept. 2021),

³¹² Australian Government, Department of Industry, Science and Resources, *Introducing Mandatory Guardrails for AI in High-Risk Settings: Proposals Paper* (Sept. 5, 2024), https://consult.industry.gov.au/ai-mandatory-guardrails

³¹³ Australian Government, Department of Finance, *APS Net Zero Emissions by 2030* (Jan. 17, 2024), https://www.finance.gov.au/government/climate-action-government-operations/aps-net-zero-emissions-2030

³¹⁴ Australian Government, Department of Finance, *Net Zero in Government Operations Strategy* (2023), https://www.finance.gov.au/sites/default/files/2023-

^{11/}Net Zero Government Operations Strategy.pdf

³¹⁵ Australian Government, Digital Transformation Agency, *New Data Centre Panel* (May 18, 2023), https://www.dta.gov.au/blogs/new-data-centre-panel

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Human Rights

Human rights are respected and protected through various laws in Australia at the federal, state and territory levels, through the Australian Constitution, and the common law.³¹⁶ Australia has formally agreed to be bound as a party to seven core international human rights treaties,³¹⁷ including as an original signatory to the Universal Declaration of Human Rights.³¹⁸ Under the Human Rights (Parliamentary Scrutiny) Act 2011, all bills and legislations are scrutinized against these covenants and conventions for compatibility with human rights and freedoms.³¹⁹

Freedom House ranked Australia very highly (95/100) in 2024 and reported that, "Australia has a strong record of advancing and protecting political rights and civil liberties. Challenges to these freedoms include the threat of foreign political influence, harsh policies toward asylum seekers, discrimination against LGBT+ people, legal constraints on the press, and ongoing difficulties ensuring the equal rights of First Nations Australians." Although Australia has maintained its "free" ranking, the score declined from 97 in 2021. 321

Australia also ranks highly in the Freedom House Freedom on the Net report, scoring 76/100 in 2024. Although Australia ranks highly in access to information, the report warns of proposed legislation that "sought to increase online surveillance and limit the security of encrypted communications."³²²

Human rights and Artificial Intelligence came together in the Australian Human Rights Commission 2023 report to DISR on Safe and Responsible AI. The report outlined human rights risks of AI, called for government action to "ensure human rights-centred design in the deployment of new and emerging technologies (including AI)," and supported human rights impact assessments to increase public

³¹⁶ Australian Government, Attorney-General's Department, *Human Rights Protections* (2024), https://www.ag.gov.au/rights-and-protections/human-rights-and-anti-discrimination/human-rights-protections

³¹⁷ Australian Government, Attorney-General's Department, *International Human Rights Systems* (2024), https://www.ag.gov.au/rights-and-protections/human-rights-and-anti-discrimination/international-human-rights-system

³¹⁸ Australian Government, Department of Foreign Affairs and Trade, *Australia's Commitment to Human Rights* (2024), https://www.dfat.gov.au/international-relations/themes/human-rights
³¹⁹ Australian Government, Attorney-General's Department, *Human Rights Scrutiny* (2024), https://www.ag.gov.au/rights-and-protections/human-rights-and-anti-discrimination/human-rights-scrutiny

Freedom House, *Freedom in the World 2024: Australia* (2024), https://freedomhouse.org/country/australia/freedom-world/2024

³²¹ Freedom House, *Freedom in the World 2021: Australia* (2021), https://freedomhouse.org/country/australia/freedom-world/2021

³²² Freedom House, *Freedom on the Net 2024: Australia* (2024), https://freedomhouse.org/country/australia/freedom-net/2024

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trust.³²³ The Commission reiterated the need to center human rights in the development and deployment of AI systems in a 2024 report the Senate Select Committee on Adopting Artificial Intelligence.³²⁴ The report provided 6 recommendations to the Select Committee to "address risks that are not currently within the scope of the existing regulatory framework."

OECD / G20 AI Principles

Australia has endorsed the OECD and the G20 AI Principles. Australia has been actively aligning its policies with the OECD AI Principles, including through the AI Ethics Principles, the creation of NAIC, and the Voluntary AI Safety Standard. The OECD notes the Australia Roadmap for AI, the AI Ethics Framework, and the Australia's AI Standards Roadmap, "intended to identify priority areas for AI standards development and a pathway for Australian leadership on international standardization activities for AI." The OECD also notes the work of Australia on trustworthy AI for health.

Australia joined the Global Partnership on AI as a founding member in June 2020.³²⁶ Minister Andrews stated, "Australia is committed to responsible and ethical use of AI. Membership of the GPAI will allow Australia to showcase our key achievements in AI and provide international partnership opportunities which will enhance our domestic capability." Andrews further stated, "Membership of the GPAI will build on the work the Government started at last year's National AI Summit, which brought together 100 AI experts to discuss the challenges and opportunities which AI will present for the Australian economy."

Australia actively participated in the G20 meetings held in Brazil in 2024 and it also endorsed the Maceio Ministerial Declaration of the Digital Economy Working Group (DEWG).³²⁷ The declaration calls for international cooperation to

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³²³ Australian Human Rights Commission, *The Need for Human Rights-Centred Artificial Intelligence* (Jul. 26, 2023), https://humanrights.gov.au/our-work/legal/submission/need-humanrights-centred-ai

Australian Human Rights Commission, *Adopting AI in Australia* (May 15, 2024), https://humanrights.gov.au/sites/default/files/select_committee_on_adopting_artificial_intelligen_ce_0.pdf

³²⁵ OECD, G20 Digital Economy Task Force, Examples of National AI Policies (2020), https://www.mcit.gov.sa/sites/default/files/examples-of-ai-national-policies.pdf; OECD, State of Implementation of the OECD AI Principles: Insights from National AI Policies (Jun. 18, 2021), https://doi.org/10.1787/1cd40c44-en; OECD, An Overview of National AI Strategies and Policies (Aug. 2021), https://goingdigital.oecd.org/data/notes/No14_ToolkitNote_AIStrategies.pdf (326 Hon Karen Andrews MP, Minister for Industry, Science and Technology, Australia Joins Global Partnership on Artificial Intelligence (Jun. 16, 2019),

 $[\]underline{https://www.minister.industry.gov.au/ministers/karenandrews/articles/australia-joins-global-partnership-artifical-intelligence}$

³²⁷ G20 Brazil, *G20 Brazil Approves Global Principles on Digital Economy* (Sept. 13, 2024), https://www.g20.org/pt-br/noticias/g20-brasil-aprova-principios-globais-sobre-economia-digital

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establish transparent and reliable AI guidelines to ensure equitable global benefits, human rights, and ethical standards. The declaration also highlights AI's potential in addressing challenges like climate change and health crises, urging investments in digital infrastructure and skills to maximize its positive impact."³²⁸

Council of Europe AI Treaty

Australia is not a Council of Europe (COE) member, but became a voluntary party to the COE Convention on Cybercrime in November 2023.³²⁹ Australia participated in the negotiation and drafting process for the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law.³³⁰ The first-of-its-kind global framework, the treaty aims to ensure "respect of human rights, the rule of law and democratic legal standards in the use of artificial intelligence (AI) systems."³³¹ The Framework Treaty opened for signature on September 5, 2024.³³² Australia has not yet endorsed the treaty as a signatory.³³³

UNESCO Recommendation on AI Ethics

Australia endorsed the UNESCO Recommendation on the Ethics of AI in 2021.³³⁴ The Australian AI Action Plan contains no explicit reference to the Recommendation because the Plan was published before.³³⁵ The country is only partially implementing the Recommendations according to the readiness assessment methodology (RAM) released by UNESCO in 2023.³³⁶ The recent

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³²⁸ Ibid

³²⁹ Council of Europe, *Council of Europe Days: Telling the COE's Story, Key Facts* (2024), https://www.coe.int/en/web/coe-story/key-facts

³³⁰ Council of Europe, *The Framework Convention on Artificial Intelligence* (2024), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

³³¹ Council of Europe, *Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law* (2024), https://edoc.coe.int/en/artificial-intelligence-and-human-rights-democracy-and-the-rule-of-law.html

³³² Council of Europe Newsroom, *Council of Europe Opens First Ever Global Treaty on AI for Signature* (Sept. 5, 2024), https://www.coe.int/en/web/portal/-/council-of-europe-opens-first-ever-global-treaty-on-ai-for-signature

³³³ Center for AI and Digital Policy, *Council of Europe AI Treaty* (Sept. 5, 2024), https://www.caidp.org/resources/coe-ai-treaty/

³³⁴ UNESCO, *UNESCO Adopts First Global Standard on the Ethics of Artificial Intelligence* (Aug. 31, 2023), https://www.unesco.org/en/articles/unesco-adopts-first-global-standard-ethics-artificial-intelligence

³³⁵ Australian Government, Department of Industry, Science, Energy, *Australia's AI Action Plan* (Jun. 2021), https://wp.oecd.ai/app/uploads/2021/12/Australia AI Action Plan 2021.pdf
³³⁶ UNESCO, *Readiness Assessment Methodology: A Tool of the Recommendation on the Ethics of Artificial Intelligence* (2023), https://unesdoc.unesco.org/ark:/48223/pf0000385198

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responsible use of AI in government policy³³⁷ and the national data sharing framework signal further progress.³³⁸ A comprehensive assessment could help Australia evaluate the effectiveness of policy and further implement the UNESCO Recommendation.

Evaluation

Australia has set out an AI Roadmap and an AI Ethics Framework, in addition to endorsing the OECD/G20 AI Principles. The Government is implementing these values-based principles through practical initiatives such as the National Artificial Intelligence Center (NAIC) based on the country's AI Ethical Principles. The AI Ethical Principles are built upon OECD values.³³⁹ In addition, Australia has enacted the Next Generation AI Graduates Program that implements OECD AI Principle 2.4 on "AI skills, jobs and [labor] market transformations," as well as the Singapore-Australia Digital Economy Agreement (SADEA), which enacts the OECD AI Principle 2.5 on "international cooperation."³⁴⁰ Australia has encouraged public participation in the development of AI policy, joined the Global Partnership on AI, and has a strong record on human rights. Australia has independent agencies, including a national regulator for privacy and freedom of information³⁴¹ and a human rights commission that is engaged in AI oversight. Australia was also a cosponsor of the GPA resolution on Accountability in the development and use of AI. However, questions have been raised about the adequacy of the Ethics Framework.

Although Australia has endorsed the UNESCO Recommendations on the Ethics of AI, the Government should take steps to conduct a comprehensive assessment to evaluate their effectiveness and further implement the UNESCO Recommendation on AI Ethics. The UNESCO readiness assessment methodology (RAM) released in 2023³⁴² credits Australia with partially implementing the Recommendations. The modernization of Australia's data protection law to better protect human rights continues to progress, most recently with the amendments to the Privacy Act passing through Parliament. In addition, Australia's national AI

³³⁷ Australian Government, Digital Transformation Agency, Standards for Accountable Officials (2024), https://architecture.digital.gov.au/standard-accountable-officials

³³⁸ Australian Government, Office of National Data Commissioner, Introducing the DATA Scheme (Apr. 2023), https://www.datacommissioner.gov.au/the-data-scheme

³³⁹ OECD Artificial Intelligence Papers, The State of Implementation of the OECD AI Principles Four Years On, No. 3 (Oct. 2023), https://www.oecd-ilibrary.org/science-and-technology/thestate-of-implementation-of-the-oecd-ai-principles-four-years-on 835641c9-en 340 Ibid

³⁴¹ Australian Government, Office of the Australian Information Commission, *Human Rights and* Technology Discussion Paper (Dec. 2019),

https://tech.humanrights.gov.au/sites/default/files/2019-12/TechRights2019 DiscussionPaper.pdf ³⁴² UNESCO, Readiness Assessment Methodology: A Tool of the Recommendation on the Ethics of Artificial Intelligence (2023), https://unesdoc.unesco.org/ark:/48223/pf0000385198

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strategy continues to develop, including the release of the Voluntary AI Safety Standard in August 2024, which aims to "ensure that the development and deployment of AI systems in Australia in legitimate but high-risk settings is safe and can be relied on, while ensuring the use of AI in low-risk settings can continue to flourish largely unimpeded."³⁴³ Concerns exist regarding facial recognition and it remains to be seen whether the modernization of Australia's data protection law will encompass this aspect as well.

Austria

In 2024, Austria developed the AI Implementation Plan to supplement and apply the national AI strategy. The country also progressed on implementing the EU AI Act. Internationally, Austria also endorsed the Council of Europe AI Treaty as part of the European Union.

National AI Strategy

The Austrian Government presented the national AI strategy, Artificial Intelligence Mission Austria 2030 (AIM AT 2030), in August 2021.³⁴⁴ The objectives are: A broad use of AI oriented to the common good; Positioning Austria as an innovation location for AI in key areas and fields of strength; Securing the competitiveness of Austria through the development and use of AI.

The Austrian strategy is guided by the two cornerstones of the European AI strategy: an ecosystem for trust and an ecosystem for excellence. Austria not only supports increased cooperation at the European level, as proposed in the European Commission's White Paper on AI³⁴⁵ and the EU AI Act,³⁴⁶ but also intends to shape national AI ecosystems in line with the European AI strategy.³⁴⁷

AIM AT 2030 UA-bf.pdf

³⁴³ Australian Government, Department of Industry, Science and Resources, National Artificial Intelligence Centre, *Voluntary AI Safety Standard* (Aug. 2024),

https://www.industry.gov.au/sites/default/files/2024-09/voluntary-ai-safety-standard.pdf

³⁴⁴ Federal Ministry of the Republic of Austria, Digital and Economic Affairs, *Strategy of the Austrian Federal Government for Artificial Intelligence, AIM AT 2030* (2021), https://www.bmf.gv.at/dam/jcr:c1312d0a-6209-4e92-8631-aea93130e392/2021-

³⁴⁵ White Paper on Artificial Intelligence: a European approach to excellence and trust, COM(2020) 65 final, 19/02/2020, https://ec.europa.eu/info/sites/default/files/commission-white-paper-artificial-intelligence-feb2020 en.pdf

³⁴⁶ European Union, EUR-Lex, Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 Laying Down Harmonised Rules on Artificial Intelligence and Amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Jun. 13, 2024), https://eur-lex.europa.eu/eli/reg/2024/1689/oj/eng ³⁴⁷ Federal Ministry of the Republic of Austria, Digital and Economic Affairs, AIM AT 2030, p. 20 (2021), https://www.bmf.gv.at/dam/jcr:c1312d0a-6209-4e92-8631-aea93130e392/2021-AIM AT 2030 UA-bf.pdf

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The Austrian strategy is based on a human-centered approach to AI to ensure that resources are used to support fundamental European values and respect and guarantee fundamental rights such as privacy and the principle of equality. Citizens' involvement is also identified as key.³⁴⁸ Regarding ethical principles,³⁴⁹ reference is made to the European High-Level Expert Group on AI's Ethics guidelines for trustworthy AI.³⁵⁰ Accordingly, AI systems must fulfil three basic principles to be considered trustworthy. They must:

- "be lawful by respecting all existing laws and regulations;
- respect ethical principles and values such as equality and fairness; and
- be robust, both in a technical sense and from a societal perspective."351

The Strategy also mentions the need to establish a clear legal framework that releases innovation in science and economy, reduces uncertainties and at the same time guarantees legal certainty. The Austrian Federal Government supports the creation of a Europe-wide legal framework for AI applications to avoid isolated national solutions.

The AI Implementation Plan introduced in 2024 supplements and updates the AIM AT 30 and "based on the fundamental European values and the upcoming European legal framework." The implementation plan considers implementation of the EU AI Act along with the national AI strategy.³⁵²

The Federal Ministry Republic of Austria Climate Action, Environment, Energy, Mobility, Innovation and Technology oversees AI policy. Under the broad topic of innovation, the Ministry oversees topics such as digital policy, international/EU aspects, future mobility, research technology and innovation policy in Austria. 353

The Austrian Council on Robotics and Artificial Intelligence (ACRAI) which was established in 2017 and consisted of experts on robotics, and artificial intelligence from industry, research and teaching used to advise the Federal

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³⁴⁸ Ibid, p. 22

³⁴⁹ Council for Robotics and Artificial Intelligence [Rat für Robotik und Künstliche Intelligenz (ACRAI)], *Positive Shaping the Future of Austria with Robotics and Artificial Intelligence, White Paper* [Die Zukunft Österreichs mit Robotik und Künstlicher Intelligenz positiv gestalten] (2018),

https://www.bmk.gv.at/themen/innovation/publikationen/forschungspolitik/ki/whitepaper.html ³⁵⁰ High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI* (2019), https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai ³⁵¹ Federal Ministry of the Republic of Austria, Digital and Economic Affairs, *AIM AT 2030*, p. 27 (2021), https://www.bmf.gv.at/dam/jcr:c1312d0a-6209-4e92-8631-aea93130e392/2021-AIM AT 2030 UA-bf.pdf

³⁵² Digital Austria, *Harnessing the Potential of AI, AI Implementation Plan* (2024), https://www.digitalaustria.gv.at/eng/strategy/strategy-AI-AIM-AT-2030.html#ai-implementation-plan

³⁵³ Federal Ministry Republic of Austria Climate Action, Environment, Energy, Mobility, Innovation and Technology, *Innovation*, https://www.bmk.gv.at/en/topics/innovation.html

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Ministry Republic of Austria Climate Action, Environment, Energy, Mobility, Innovation and Technology on top priorities, topical issues, challenges, risks, on the use of artificial intelligence as well as robotics and autonomous systems and had been commissioned to help the Ministry to develop its national AI strategy. ACRAI's mandate expired in July 2023 and the Council was subsequently disbanded and transferred to a new Council for Research, Science, Innovation and Technology Development.³⁵⁴

The Interministerial Working Group on the 2030 Agenda was set up under the joint leadership of the Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and Technology and the Federal Ministry of Science, Research and Economy to ensure the continuous exchange of information and the participatory and interministerial coordination processes. This mechanism acts as a participatory exchange mechanism and coordinates reporting on the implementation of the 2030 Agenda at federal level. With the preparation of Austria's first Voluntary National Review on the implementation of the Sustainable Development Goals, the country has taken an important step towards implementing these goals.³⁵⁵

Austria's 11-member AI Advisory Board established in early 2024 includes experts from academia, law, and ethics. This board advises the federal government on AI regulatory measures and ethical concerns and assists in incorporating EU AI Act guidelines into national policy frameworks.³⁵⁶

In Austria, Research and Technology Reports are compiled annually. The focus lies on current topics of national and international research and technology. Reports include information on current developments and trends, extensive data on research and development, and other priority topics. Currently, the Government of Austria does not offer any specific annual report about developments regarding AI or monitoring the implementation of the AI strategy.³⁵⁷

 $\frac{https://www.bundeskanzleramt.gv.at/dam/jcr:87c1e200-7bc5-4e2b-89d8-8367988a28ff/austria-second-vnr-\underline{2024.pdf}$

https://www.digitalaustria.gv.at/eng/topics/AI.html

Austrian Council on Robotics and Artificial Intelligence, *Council for Research, Science, Innovation and Technology Development* (Jun. 30, 2023), https://www.acrai.at/

³⁵⁵ Republic of Austria, Austria and the 2030 Agenda: 2nd Austrian Voluntary National Review on the Implementation of the 2030 Agenda and the SDGs,

³⁵⁶ Digital Austria, Topics, Artificial Intelligence (2025),

³⁵⁷ Austrian Federal Ministry of Education, Science and Research, *Austrian Research and Technology Report* (2022), https://www.bmbwf.gv.at/en/Topics/Research/Research-in-Austria/Services/FTB.html

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EU Digital Services Act

As an EU member state, Austria is bound by the EU Digital Services Act (DSA).³⁵⁸ The accompanying national implementing legislation, called the "DSA-Begleitgesetz" (DSA Accompanying Act) has been in force since February 2024.³⁵⁹

EU AI Act

As an EU member State, Austria is bound by the EU AI Act. 360 Austria will designate national market surveillance, notifying authorities, and public authorities. The national public authorities are charged with protecting fundamental rights. Austria may also introduce legislation to further restrict some AI uses or protect rights, such as in relation to biometric identification.

Public Participation

Experts and other stakeholders were involved in the development of the national AI strategy through the Austrian Council on Robotics and AI.³⁶¹ The strategy also provides for broad participation of civil society organizations, intermediaries, and citizens in the implementation of the measures. The Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR) created an AI Service Desk to serve as a "point of contact and information hub for the general public" on AI. The service desk also supports implementation of the EU AI Act.³⁶²

The Federal Government endeavors to formulate its target provisions in close coordination and comprehensive agreement with the fundamental values and objectives of the European Union. With this strategy, Austria is thus also

³⁵⁸ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and Amending Directive 2000/31/EC (Digital Services Act), (Oct. 21, 2022), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022R2065

³⁵⁹ Federal Ministry, Judiciary, *Digital Services Act* (2024), https://www.bmj.gv.at/themen/EU-und-Internationales/Digital-Services-Act.html

³⁶⁰ European Parliament, Artificial Intelligence Act, European Parliament Legislative Resolution of 13 March 2024 on the Proposal for a Regulation of the European Parliament and of the Council on Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts (COM(2021)0206 – C9-0146/2021 – 2021/0106(COD)), P9_TA(2024)0138,

https://www.europarl.europa.eu/RegData/seance_pleniere/textes_adoptes/definitif/2024/03-13/0138/P9_TA(2024)0138_EN.pdf

³⁶¹ Digital Austria, *Artificial Intelligence: From a Human Perspective* (2024), https://www.digitalaustria.gv.at/eng/topics/AI.html

³⁶² Austrian Regulatory Authority for Broadcasting and Telecommunications, *Service Desk for Artificial Intelligence* (2025), https://www.rtr.at/rtr/service/ki-servicestelle/KI-Servicestelle.en.html

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contributing to the promotion of Europe's industrial and technical performance regarding AI.

Data Protection

Austria is an EU Member State, so the General Data Protection Regulation (GDPR)³⁶³ applies. The Austrian Data Protection Act (DSG) supplements the GDPR.³⁶⁴

Following the EU AI Act's policy framework on AI systems, Austria has strengthened its data privacy measures. New policies require detailed impact assessments for systems handling sensitive data or biometric recognition. These updates further Austria's commitment to protecting data privacy and human rights.³⁶⁵

According to Article 35(4) GDPR, national supervisory authorities shall compose and publish the list of processing operations that requires performing a data protection impact assessment. According to the list established by the Austrian DPA, a data protection impact assessment is necessary in some cases involving AI use. These concern:

- assessment or classification related to a person's work, economic situation, health, preferences and interests, reliability or behavior, location or movements and that is based solely on automated processing and may have negative legal, physical, or financial consequences
- evaluating the behavior and other personal aspects in cases that may be used by third parties to make automated decisions that have legal effects on the persons evaluated or similarly significantly affect them
- using or applying new or novel technologies or organizational solutions in processing data that make it difficult to assess the impact on data subjects and the social consequences, in particular through the use of artificial intelligence and the processing of biometric data beyond the real-time reproduction of facial images

³⁶³ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the Protection of Natural Persons with Regard to the Processing of Personal Data and on the Free Movement of Such Data (Apr. 27, 2016), https://eur-lex.europa.eu/EN/legal-content/summary/general-data-protection-regulation-gdpr.html

³⁶⁴ Austria Data Protection Authority, Federal Act Concerning the Protection of Personal Data (Datenschutzgesetz - DSG) (May 25, 2018),

https://www.ris.bka.gv.at/Dokumente/Erv/ERV 1999 1 165/ERV 1999 1 165.html

365 Austria Data Protection Authority [Republik Österreich, Datenschutz behörde], *Legal Sources*, https://dsb.gv.at/rechte-pflichten/rechtsquellen

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• where the use of algorithms makes it possible to take decisions that significantly affect the data subject by going beyond the processing operations normally expected of a data subject³⁶⁶

Regarding the activities of law enforcement authorities, Austria also transposed the EU Data Protection Law Enforcement Directive (LED)³⁶⁷ with the DSG.³⁶⁸

Austria is a member of the Council of Europe and ratified the Council of Europe's Convention 108+ for the protection of individuals regarding the processing of personal data.³⁶⁹

The Austrian DPA is a member of the Global Privacy Assembly (GPA) since 2002. The DPA did not endorse the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence,³⁷⁰ the 2020 GPA Resolution on AI Accountability,³⁷¹ the 2022 GPA Resolution on Facial Recognition Technology,³⁷² or 2023 GPA Resolution on Generative AI Systems.³⁷³

³⁶⁶ European Data Protection Board, Regulation of the Data Protection Authority on Processing Operations for which a Data Protection Impact Assessment is Required (DSFA-V) (2018), https://edpb.europa.eu/sites/default/files/decisions/at sa dpia final decision.pdf

³⁶⁷ European Parliament, *Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the Protection of Natural Persons with Regard to the Processing of Personal Data by Competent Authorities for the Purposes of the Prevention, Investigation, Detection or Prosecution of Criminal Offences or the Execution of Criminal Penalties, and on the Free Movement of Such Data, and Repealing Council Framework Decision 2008/977/JHA* (Apr. 27, 2016), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

³⁶⁸ Federal Legal Information System, *Federal Act Concerning the Protection of Personal Data* (Datenschutzgesetz - DSG) (May 25, 2018),

https://www.ris.bka.gv.at/Dokumente/Erv/ERV 1999 1 165/ERV 1999 1 165.html

³⁶⁹ Council of Europe, *Modernised Convention for the Protection of Individuals with Regard to the Processing of Personal Data* (May 18, 2018), https://www.coe.int/en/web/data-protection/convention108-and-protocol

³⁷⁰ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

³⁷¹ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

³⁷² Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology (Oct. 2022),

 $[\]frac{https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf$

³⁷³ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 20, 2023), https://www.edps.europa.eu/system/files/2023-10/edps-gpa-resolution-on-generative-ai-systems en.pdf

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Algorithmic Transparency

Austria is subject to the GDPR, as well as Convention 108+ since July 2022. Austrians have a general right to obtain access to information about automated decision-making and to the factors and logic of an algorithm.³⁷⁴

Research shows that the Public Employment Service Austria (AMS) makes use of algorithmic profiling of job seekers and there have been concerns about notable discrimination and bias.³⁷⁵ Algorithm Watch also disclosed that the sorting algorithm used in Austria for employment gives lower scores to the disabled and women, and women with children are given even more negative weight.³⁷⁶

On this matter, the Austrian Federal Administrative Court rendered a decision before Austria ratified the Modernized Convention 108. The Court held at the time that the "Public Employment Service could lawfully process personal data belonging to jobseekers as this was necessary to guarantee a well-functioning labour market."³⁷⁷

On the one hand, the Court stressed that "there are no indications that such data processing is not sufficiently clear [...] and is not otherwise regulated by means of adequate and specific measures to protect the fundamental rights and interests of the person concerned. It should be noted that the result of [any] assessment undoubtedly depends not only on the [personal] data used, but also on who or what carries out the assessment and how the individual factors (data) are weighted in each case. An assessment based on the same (personal) data may therefore not always lead to the same result. However, this does not change the fact that the result is based on the same (personal) data and thus the same information."

On the other hand, the Court pointed out that "the case of an automated decision [...] is not given here, because [...] [t]he final decision on a jobseeker's chances of finding work and his or her further support remains with the counsellors, and not only were guidelines and instructions issued by the Public Employment Service to its employees, but training courses were also held."³⁷⁸

³⁷⁴ See Recital 63 and Article 22 of the GDPR; Article 9 c) of the Convention 108+ as well as Recital 77, *Explanatory Report, Convention 108*+, p. 24, https://rm.coe.int/convention-108-convention-for-the-protection-of-individuals-with-regar/16808b36f1

³⁷⁵ Nicolas Kayser-Bril, Austria's Employment Agency Rolls Out Discriminatory Algorithm, Sees No Problem (2020),

 $[\]underline{\text{https://algorithmwatch.org/en/austrias-employment-agency-ams-rolls-out-discriminatory-algorithm/}$

³⁷⁶ Ibid

³⁷⁷ GDPR hub, *BVwG* – *W2562235360-1* (Mar. 31, 2021).

https://gdprhub.eu/index.php?title=BVwG - W256 2235360-1

³⁷⁸ Ibid

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The DPA ruled on a case concerning the calculation of marketing scores in 2020. The "scores consisted of alleged likelihoods (expressed in a percentage number) that the complainant would belong to certain demographic groups, such as "conservatives," "traditionalists," "hedonists," or "digital individualists." The complainant sent an access request on how the marketing scores had been calculated. The respondent refused access to the request because the requested information qualified as a trade secret.

The DPA first held that the marketing scores constitute personal data. The processing activities leading to the creation of the marketing scores constitute profiling. According to the DPA, the right to information under the GDPR is not limited to cases of automated decision making. The DPA further held that the respondent was not required to disclose the algorithm, source code, or compiler code used when creating the marking scores (as this would most likely qualify as a trade secret). However, the respondent "had to provide the following information in connection with the score calculation: parameters/input variables and how they came about (e.g., using statistical information); effect of the parameters/input variables on the score; explanation of why the data subject was assigned to a particular evaluation result; list of possible profile categories or similar equivalent information that enable the data subject to exercise his or her rights of rectification and erasure and to review the lawfulness of processing."

Facial Recognition

Since December 2017, 25 "E-Gates," where border controls are supported by facial recognition, have been installed at the Vienna International Airport in Austria. Manual border controls have also remained in place.³⁸⁰

After a one-year test phase, facial recognition for law enforcement has been in regular operation in Austria since August 2020. The police can only use digital image comparison if there is a suspicion of the commission of an intentional judicially punishable act in the case of unknown perpetrators. The Ministry of the Interior published information about the use of the software after parliamentary inquiries.³⁸¹ Accordingly, the Federal Criminal Police Office may use the system to investigate intentional acts authorized by the judiciary regardless of the level of

³⁸⁰ Passenger Self Service, *Vienna International Airport Installs ABC eGates from Secunet* (Dec. 19, 2017), https://www.passengerselfservice.com/2017/12/vienna-international-airport-installs-abc-egates-secunet/

³⁷⁹ GDPR hub, *DSB (Austria)* – *2020-0.436.002* (Jun. 9, 2021), https://gdprhub.eu/index.php?title=DSB (Austria) - 2020-0.436.002

³⁸¹ Federal Ministry of the Interior, *Query Response Parliamentary Question No. 2648/J:* "Findings from the Test Operation of the Face Recognition System (2662/AB)" (Sept. 4, 2020), https://www.parlament.gv.at/PAKT/VHG/XXVII/AB/AB 02662/index.shtml#

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punishment for an offense. Whether Austrian law allows for such practice has been the object of controversy in the country. ³⁸²

The Austrian supervisory authority (Datenschutzbehörde, "DSB") issued a decision in 2023 against the facial recognition company Clearview AI, which maintains a database of over 30 billion facial images collected globally. The DSB found Clearview AI to have violated several GDPR provisions, citing a lack of lawfulness, fairness, and transparency in processing the complainant's personal data, and of illegally scanning and extracting uniquely identifying facial features of the complainant. Clearview AI was ordered to delete the complainant's personal data and designate a representative within the European Union. 383

Predictive Policing

Efforts to base police work on computer-assisted forecasts have existed in Austria since 2004.³⁸⁴ Due to the increasing importance of big data and AI, an increase and expansion of predictive policing methods is to be expected in the next few years. Most of the predictive policing methods developed or applied in Austria do not affect the scope of protection of the right to respect for privacy or the fundamental right to data protection and are intended in particular to support the patrol service and burglary prevention.³⁸⁵ The situation was different with the project called INDECT, in which an Austrian university, the FH Technikum Wien, was also involved.³⁸⁶ In this project, personal data from social media was to be combined with retained data and video recordings to identify "abnormal behavior" at an early stage. The project was funded by the European Commission from 2009 to 2014.³⁸⁷ Neither the official project website, nor the official website of the FH Technikum Wien show further information on this project.³⁸⁸

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https://doi.org/10.33196/juridikum201903041901

³⁸² Florian Terharen-Schoenherr, *Facial Recognition Technology: Regulations and Use _ Austria* (Apr. 6, 2021), https://iclg.com/briefing/16092-facial-recognition-technology-regulations-and-use-austria

use-austria
383 European Data Protection Board, *Decision by the Austrian SA against Clearview AI*Infringements of Articles 5, 6, 9, 27 of GDPR (May 12, 2023),
https://www.edpb.europa.eu/news/national-news/2023/decision-austrian-sa-against-clearview-ai-

infringements-articles-5-6-9-27 en ³⁸⁴ Angelika Adensamer and Lukas Daniel Klausner, *I Know What You Will Do Next Summer: Predictive Policing in Österreich*, Juridikum Zeitschrift für Kritik, no. 3, p. 419 (Sept. 2019),

³⁸⁵ Ibid

³⁸⁶ Der Standard, *INDECT: Anonymous Mobilizes against Total Surveillance* (Jul. 20, 2012), https://derstandard.at/1342139631592/INDECT-Totale-Ueberwachung- als-EU-Projekt

³⁸⁷ Antonio Tajani, *Answer to a Written Question: Indect Project, Data Protection Breach* — *E-1332/2010 and E-1385/2010* (May 3, 2020), https://www.europarl.europa.eu/doceo/document/E-7-2010-1332-ASW EN.html

Angelika Adensamer and Lukas Daniel Klausner, *I Know What You Will Do Next Summer: Predictive Policing in Österreich*, Juridikum Zeitschrift für Kritik, no. 3 (Sept. 2019), https://doi.org/10.33196/juridikum201903041901

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Automated Tax Fraud Detection

The Austrian Ministry of Finance operates the Predictive Analytics Competence Center (PACC). The expectation is that the use of AI will make a significant contribution to establishing a more efficient risk management structure with an increased efficiency in auditing, fraud prevention and tax collection.³⁸⁹

Approximately 6 million income tax disclosures and 1.4 million applications for COVID-19 assistance payments were reviewed by PACC in an automated manner. Based on machine learning, potential fraud scenarios are derived from a variety of historical data sources. This method is used, among other things, for the selection of tax audits, plausibility checks of tax returns, and the evaluation of start-ups and applications of all kinds. The Ministry of Finance claims that this will make it easier to detect tax evasion, including customs fraud.³⁹⁰

According to a Ministry of Finance's press release on the 2023 annual balance sheet, PACC's analysis identified 375,000 cases out of 34 million as potentially implausible, targeting them for further investigation into tax evasion and fraud.³⁹¹

User Tracking and Website Analytics

Many websites use tracking technologies to track users and show them personalized advertisement. The Austrian Data Protection Authority, after declaring the use of Google Analytics illegal,³⁹² held a similar decision on the "Facebook Login" and "Meta Pixel" tools provided by Meta.³⁹³ If these tools are used, data is inevitably transferred to the United States, where the data is at risk of intelligence surveillance. Such transfer would contravene the European Court of Justice's 2020 *Schrems II* decision. According to NOYB, "there is no information

https://gdprhub.eu/index.php?title=DSB (Austria) - 2022-0.726.643

³⁸⁹ Federal Ministry of Finance, *Predictive Analytics Competence Center* (2022), https://www.bmf.gv.at/themen/betrugsbekaempfung/einheiten-betrugsbekaempfung/Predictive-Analytics-Competence-Center.html

³⁹⁰ Austria Press Agency, *BMF/Special Unit PACC: Around 6 Million Employee Assessments* and 1.4 Million Applications for COVID-19 Aid Payments Checked in 2021: Predictive Analytics in the Fight against Organized Tax Evasion and Tariff Fraud (Sept. 11, 2022), https://www.ots.at/presseaussendung/OTS 20220911 OTS0004/bmfspezialeinheit-pacc-2021-rund-6-mio-arbeitnehmerveranlagungen-und-14-mio-antraege-auf-covid-19-hilfszahlungen-ueberprueft

³⁹¹ Federal Ministry of Austria, Finance, *Brunner: Ministry of Finance Generated around EUR 185 Million in Tax Income from AI in 2023* (Aug. 8, 2024),

 $[\]underline{\text{https://www.bmf.gv.at/en/press/press-releases/2024--New/August-2024/BMF-generated-around-EUR-185-million-in-tax-income-from-AI-in-2023-.html}$

³⁹² GDPRhub, *DSB (Austria)* – 2021-0.586.257 (D155.027) (Dec. 12, 2021),

https://gdprhub.eu/index.php?title=DSB_(Austria) - 2021-0.586.257_(D155.027)

³⁹³ GDPRhub, *DSB (Austria)* – 2022-0.726.643 (Mar. 3, 2023),

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if a penalty was issued or if the DSB is planning to also issue a penalty. The GDPR foresees penalties of up to €20 million or 4% of the global turnover in such cases, but data protection authorities seem unwilling to issue fines, despite controllers ignoring two CJEU rulings for more than two years."³⁹⁴

Environmental Impact of AI

Austria's 2024 AI Implementation Plan identifies Climate Neutrality and Sustainability as a Key Area from and through AI.³⁹⁵ The Environmental Impact Assessment Directive requires environmental impact assessments for 89 types of projects, including industrial plants, expected to have "substantial adverse impact on the environment." However, the directive contains threshold values and criteria that could allow some AI systems or data centers to avoid assessment.³⁹⁶

Lethal Autonomous Weapons

Austria supports a legally binding instrument that would ban autonomous weapons and systems that are not meaningfully controlled by humans.³⁹⁷ At the virtual conference, Safeguarding Human Control over Autonomous Weapon Systems in 2021,³⁹⁸ the Austrian Federal Minister for European and International Affairs of Austria situated the country as the vanguard of many disarmaments, non-proliferation, and arms control issues. They also talked about the challenges of AI and questioned algorithms that make death or life decisions based on ethics, morality, and law and called for a legal norm in the form of a treaty to ensure human control.³⁹⁹

Austria was among the 70 countries that endorsed a joint statement on autonomous weapons systems at the 2022 United Nations General Assembly. The joint statement urged "the international community to further their understanding

https://noyb.eu/en/austrian-dsb-meta-tracking-tools-illegal

³⁹⁴ noyb, Austrian DSB: Meta Tracking Tools Illegal (Mar. 16, 2023),

³⁹⁵ Digital Austria, *AI Implementation Plan, Objectives of the 2024 Implementation Plan* (2024), https://www.digitalaustria.gv.at/eng/strategy/strategy-AI-AIM-AT-2030.html#ai-implementation-plan

³⁹⁶ Federal Ministry Climate Action, Environment, Energy, Mobility, Innovation and Technology, *General Facts: Environmental Impact Assessment (EIA)* (2025), https://www.bmk.gv.at/en/topics/climate-environment/environmental-protection-company/eia/general-facts.html

³⁹⁷ DW Akademie, *Austria Wants Ethical Rules on Battlefield Killer Robots* (Nov. 15, 2020), https://www.dw.com/en/austria-wants-ethical-rules-on-battlefield-killer-robots/a-55610965 ³⁹⁸ Austrian Federal Ministry for European and International Affairs, *Autonomous Weapons Systems (AWS)*, https://www.bmeia.gv.at/en/european-foreign-policy/disarmament/conventional-arms/autonomous-weapons-systems

³⁹⁹ EventMaker, Safeguarding Human Control over Autonomous Weapons Systems, Speakers: High-Level Opening Panel (Sept. 15, 2021),

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and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law, including through maintaining human responsibility and accountability in the use of force."⁴⁰⁰

At the Responsible AI in the Military Domain Summit (REAIM 2023) cohosted by the Netherlands and the Republic of Korea, nearly sixty states agreed to issue a joint call to action on the responsible development, deployment and use of AI in the military domain.⁴⁰¹ Austria has now endorsed the resulting Political Declaration issued in November 2023.⁴⁰²

The second REAIM summit took place in September 2024 in the Republic of Korea. Following the summit, a 'Blueprint for Action'—a framework for the responsible use of AI systems in the military—was adopted by 61 countries, including Austria.⁴⁰³

At the 78th UN General Assembly First Committee in 2023, Austria tabled and voted in favor⁴⁰⁴ of resolution L.56⁴⁰⁵ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems.

Following the resolution, Austria hosted the first Vienna Conference on Autonomous Weapons Systems Humanity at the Crossroads: Autonomous

https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm_en.pdf

https://reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163&shareBbsMngNo=10 264&shareMenuId=11613&shareTabMenuId=

⁴⁰⁰ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee, 77th United Nations General Assembly Thematic Debate – Conventional Weapons* (Oct. 21, 2022),

⁴⁰¹ Government of Netherlands, *Call to Action on Responsible Use of AI in the Military Domain* (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action

⁴⁰² US Department of State, *Political Declaration on Responsible Military Use of Artificial and Autonomy, Endorsing States* (Nov. 27, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

⁴⁰³ Responsible AI in the Military Domain Summit, *REAIM Blueprint for Action* (Sept. 9–10, 2024),

⁴⁰⁴ Stop Killer Robots, 164 States Vote against the Machine at the UN General Assembly (Nov.

^{1, 2023), &}lt;a href="https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/405">https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/405 General Assembly, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/405 General Assembly, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/405 General Assembly, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/405 General Assembly, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/405 General Assembly, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/405 (Oct.12, 2023),

https://reachingcriticalwill.org/images/documents/Disarmament-

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Weapons Systems and the Challenge of Regulation. More than 1000 participants from 140 countries participated in the conference to advance the debate on international regulation of autonomous weapons and discuss the challenges of a legally binding document. 406

The UN Secretary-General released the report mandated by the earlier resolution. The report reiterated the need for a legally binding treaty by 2026. The treaty would seek to prohibit autonomous weapon systems that function without human oversight and are incompatible with international humanitarian law.⁴⁰⁷

Human Rights

According to the 2024 Freedom House report, Austria scores highly for political rights and civil liberties 2022 (93/100), and is designated as "Free." Austria was the 70th country that joined the United Nations and is party to the most important international legal instruments for the protection and defence of human rights. 409

With regards to AI policy, as part of the objectives contained in its AI Strategy, Austria states that it will deploy AI responsibly targeting the common good relying on fundamental human rights. The strategy further provides that a human-rights compliant framework is being created in partnership with European partners in order to ensure that fundamental rights issues are tackled, likely a reference to the Council of Europe international treaty on AI.

In a 2020 Recommendation to member States on the human rights impacts of algorithmic systems, the Council of Europe Committee of Ministers recalled that "Considering that member States of the Council of Europe have committed themselves to ensuring the rights and freedoms enshrined in the Convention for the Protection of Human Rights and Fundamental Freedoms to everyone within their jurisdiction and that this commitment stands throughout the continuous processes of technological advancement and digital transformation that European societies are experiencing; Reaffirming that, as a result, member States must ensure that any design, development and ongoing deployment of algorithmic systems occur in compliance with human rights and fundamental freedoms, which

⁴⁰⁶ Federal Ministry Republic of Austria Europe and International Affairs, 2024 Vienna Conference on Autonomous Weapons Systems, Chair's Summary (Apr. 30, 2024), https://www.bmeia.gv.at/fileadmin/user_upload/Zentrale/Aussenpolitik/Abruestung/AWS_2024/Chair_s_Summary.pdf

⁴⁰⁷ United Nations General Assembly, *Lethal Autonomous Weapons: Report of the Secretary-General* (Jul. 1, 2024), https://docs-library.unoda.org/General Assembly First Committee - Seventy-Ninth session (2024)/A-79-88-LAWS.pdf

⁴⁰⁸ Freedom House, *Freedom in the World 2024: Austria* (2024), https://freedomhouse.org/country/austria/freedom-world/2024

⁴⁰⁹ United Nations, *The United Nations in Vienna*, https://www.unvienna.org/
⁴¹⁰ AIM AT 2030

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are universal, indivisible, inter-dependent and interrelated, with a view to amplifying positive effects and preventing or minimising possible adverse effects."

OECD AI Principles

Austria has endorsed the OECD and G20 AI Principles.⁴¹² Regarding implementation, the OECD notes that Austria is actively involved in relevant international organizations, the EU, and other processes and its AI strategy specifically addresses "human-centered values and fairness, robustness, security and safety, inclusive growth, sustainable development and well-being, investing in AI R&D and providing an enabling policy environment for AI."⁴¹³

Austria is not a member of the Global Partnership on AI, a multistakeholder initiative that aims to foster international cooperation on AI research and applied activities and is "built around a shared commitment to the OECD Recommendation on Artificial Intelligence."⁴¹⁴

Council of Europe AI Treaty

Austria contributed as a Council of Europe and EU member state in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of Law. Austria endorsed the international treaty as part of the European Union.⁴¹⁵

UNESCO Recommendation on AI Ethics

Austria endorsed the UNESCO Recommendation on AI, the first ever global agreement on the ethics of AI. 416

The Austrian Commission for UNESCO created an Advisory Board on the Ethics of Artificial Intelligence to implement the UNESCO Recommendation on the Ethics of Artificial Intelligence. The Advisory Board aims to exchange

⁴¹¹ Council of Europe Committee of Ministers, *Recommendation CM/Rec*(2020)1 of the Committee of Ministers to Member States on the Human Rights Impacts of Algorithmic Systems (Apr. 8, 2020), https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154
⁴¹² OECD, *AI Principles Overview, Countries Adhering to the AI Principles* (2025), https://oecd.ai/en/ai-principles

⁴¹³ OECD AI Observatory, *AI Mission Austria 2030*, https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faipo.oecd.org%2F2021-data-policyInitiatives-24233

⁴¹⁴ Government of Canada, *Canada Concludes Inaugural Plenary of the Global Partnership on Artificial Intelligence with International Counterparts in Montreal* (Dec. 4, 2020), https://www.globalprivacyblog.com/legislative-regulatory-developments/uae-publishes-first-federal-data-protection-law/.

⁴¹⁵ Council of Europe Portal, *Chart of Signatures and Ratifications of Treaty 225* (Jan. 22, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225 ⁴¹⁶ UNESCO, *UNESCO Member States Adopt the First Ever Global Agreement on the Ethics of Artificial Intelligence* (Nov. 2021), https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence

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information on developments related to AI and the UNESCO Recommendation, advise the National Contact Point at the Austrian Commission for UNESCO, and support measures to raise awareness and initiate a dialogue in society on the ethical implications of AI.⁴¹⁷

Austria's TU Wien Informatics program became the first to hold a UNESCO Chair on Digital Humanism in 2023. The UNESCO Chair was part of a collaboration among Austria Federal Ministry of Education, Science and Research, Austria Federal Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology, Austria Federal Ministry of European and International Affairs, and the City of Vienna. Following UNESCO's AI ethics recommendations, the Chair seeks to lay scientific groundwork for meaningful regulations and foster an interdisciplinary approach to educating future IT professionals.

The Digital Humanism initiative⁴¹⁸ is a collaborative effort across science, politics, business, and civil society to ensure that technological advancements remain human-centered, aligning with values such as the rule of law, fundamental and human rights, a social market economy, and fact-based free discourse. The roots of this initiative in Vienna trace back to the foundational work⁴¹⁹ done by the Vienna Science and Technology Fund in 2019 and the Vienna Manifesto on Digital Humanism.⁴²⁰

Evaluation

The Austrian AI strategy released in late 2021 follows the larger goals of the EU strategy, emphasizing both excellence and the protection of fundamental rights. Austria has emphasized public participation in the development of the national AI strategy and receives expert advice from the Austrian Council on Robotics and Artificial Intelligence, which has stressed the importance of human-centric AI.

Austria ranks highly for traditional human rights protection and is active at the OECD, although it is not a member of the Global Partnership on AI. Austria ratified the Modernized Convention 108 of the Council of Europe, which includes an important provision on algorithmic transparency. This should avoid any doubts

⁴¹⁸ Vienna Science and Technology Fund, *Digital Humanism*, https://www.wwtf.at/impact-projects/digitalisation/digital-humanism/index.php?lang=EN

⁴¹⁷ Austrian Commission for UNESCO, *New Advisory Board on the Ethics of Artificial Intelligence at the Austrian UNESCO Commission* (Jul. 6, 2023), https://www.unesco.at/presse/artikel/article/neuer-fachbeirat-ethik-der-ki

⁴¹⁹ Vienna Science and Technology Fund, *Akteure, Instrumente und Themen für eine Digital Humanism Initiative in Wien* (Jul. 2019), https://www.wwtf.at/upload/digital-humanism-wien.pdf
⁴²⁰ Digital Humanism Initiative, *Vienna Manifesto on Digital Humanism* (May 2019), https://dighum.ec.tuwien.ac.at/wp-

content/uploads/2019/07/Vienna Manifesto on Digital Humanism EN.pdf

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in the future regarding the scope of application of the right to algorithmic transparency. With the adoption of the EU AI Act, Austria shall establish a national supervisory mechanism which, it is to be hoped, will be an independent and will take the protection of human rights seriously. Concerns persist regarding the use of AI techniques for facial surveillance and predictive policing.

Azerbaijan

In 2024, Azerbaijan announced a draft strategy for AI development. Azerbaijan continued to use autonomous weapons and abstained from or opposed UN efforts to ban LAWS. The country's use of AI systems for military and surveillance purposes intensifies human rights concerns.

National AI Strategy

In recent years, Azerbaijan has taken an active interest in Artificial Intelligence and new technologies to reform the country's economy and extend internal security and policing.⁴²¹ The Ministry of Economy of the Republic of Azerbaijan announced in February 2022 that the country would establish an AI Strategy.⁴²² In March 2024, Acting Chairperson of the Innovation and Digital Development Agency of the Ministry of Digital Development and Transport Inara Valiyeva declared that a roadmap for the national AI strategy "is now at the approval stage."⁴²³

Minister of Digital Development and Transport Rashad Nabiyev announced the draft strategy for the development of artificial intelligence in October 2024. The minister's announcement focused on investment for startups and research to "establish a platform for the exchange of ideas and experience among all participants in the innovation ecosystem." The minister emphasized the plan to integrate sustainable develop principles in the agenda, but did not mention ethical or human rights principles such as transparency or fairness.⁴²⁴

The Fourth Industrial Revolution Analysis and Coordination Centre (4SIM), in collaboration with the World Economic Forum Artificial Intelligence

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⁴²¹ Vahid Aliyev, *Azerbaijan's Newfound Orientation towards Artificial Intelligence and Robots* (May 20, 2020), https://www.researchgate.net/profile/Vahid-

Aliyev/publication/341598034 Azerbaijan's newfound orientation towards Artificial Intellige nce and Robots/links/5ec9301092851c11a8817e42/Azerbaijans-newfound-orientation-towards-Artificial-Intelligence-and-Robots.pdf

⁴²² Azernews, *Azerbaijan to Develop National Artificial Intelligence Strategy* (Feb. 11, 2022), https://www.azernews.az/nation/189013.html

⁴²³ Trend News Agency, *Azerbaijan's National AI Strategy Nears Approval* (Mar. 19, 2024), https://en.trend.az/business/it/3876181.html

⁴²⁴ Nazrin Abdul, Azernews, *Azerbaijan Announces Draft Strategy for Artificial Intelligence Development* (Oct. 10, 2024), https://www.azernews.az/business/232395.html

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and Machine Learning Platform, played a key role in preparing the roadmap for shaping Azerbaijan's National Strategy on Artificial Intelligence.⁴²⁵

In parallel, the Azerbaijan is also preparing a digital development strategy,⁴²⁶ including a data management strategy,⁴²⁷ with the support of the World Bank.

In 2016, Azerbaijan approved the Strategic Roadmap for Development of Telecommunications and Information Technologies in the Azerbaijan Republic (Roadmap).⁴²⁸ The Roadmap focuses on Information Communication Technology (ICT) sector and sets three main strategic targets:

- Improve governance structures and strengthen ICT;
- Increase productivity and operational efficiency of the business environment;
- Digitize government and social environment.⁴²⁹

In February 2021, Azerbaijan adopted its 2030 Vision: National Priorities on Socio-Economic Development,⁴³⁰ which highlighted the importance of technological transformation.

Both the Ministry of Economy and the Ministry of Digital Development and Transport have been active in areas related to AI adoption. The Ministry of Economy manages the Center for Analysis and Coordination of the Fourth Industrial Revolution established by Presidential Decree of January 6, 2021. The mandate of the center is to respond to global challenges and trends including artificial intelligence.⁴³¹ In October 2021, another Presidential Decree established

Qabil Asirov, Roadmap for Azerbaijan's National AI Strategy Has Been Prepared, Azernews (Apr. 13, 2023), https://www.azernews.az/nation/208630.html

⁴²⁶ E-Government, *The Document on Digital Development Strategy of Azerbaijan Republic Was Prepared on the Basis of Initial Modules by World Bank Group* (Jun. 6, 2023), https://www.e-gov.az/en/news/read/881

⁴²⁷ Report News Agency, *Azerbaijan, World Bank Developing Strategy* (Nov. 13, 2023), https://report.az/en/infrastructure/azerbaijan-world-bank-developing-strategy/

⁴²⁸ President of the Republic of Azerbaijan, *Strategic Roadmap for Development of Telecommunications and Information Technologies in Azerbaijan Republic* (Dec. 6, 2016), https://monitoring.az/assets/upload/files/6683729684f8895c1668803607932190.pdf

⁴²⁹ Asian Development Bank, *Country Diagnostics Azerbaijan: Country Digital Development Overview*, p. 2 (Jan. 2019), https://www.adb.org/sites/default/files/institutional-document/484586/aze-digital-development-overview.pdf

⁴³⁰ President of Azerbaijan, Order of the President of the Republic of Azerbaijan on approval of Azerbaijan 2030: National Priorities for Socio-Economic Development (Feb. 2, 2021), https://president.az/en/articles/view/50474

⁴³¹ Ministry of Economy of the Republic of Azerbaijan, *Fourth Industrial Revolution* (2025), https://www.economy.gov.az/en/page/dorduncu-senaye-inqilabi

⁴²⁵ Ministry of Economy of the Republic of Azerbeijan, *A Roadmap for the Development of a National Strategy on Artificial Intelligence Has Been Presented* (Jan. 26, 2023), https://economy.gov.az/az/post/1131/suni-intellekt-uzre-milli-strategiyanin-hazirlanmasi-%20ucun-yol-xeritesi-teqdim-olunub

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the Innovation and Digital Development Agency under the Ministry of Digital Development and Transport. This decision aimed to "improve governance in the field of digitalization, innovation, high technologies and communications in the Republic of Azerbaijan."⁴³²

Public Participation

Azerbaijan has a law that promotes public participation in the formulation and implementation of government policies. Membership of the public council is open to everyone and elections are held to elect members of the public council. As a member of the Council of Europe (CoE), the country is committed to implement the Council of Europe (CoE) National Action Plan for the Promotion of Open Government 2020–2022, through the adoption and implementation of an expanded CoE Action Plan for Azerbaijan 2022–2025, which among several goals, is intended to enhance digitalization, improve civilian oversight, expand public participation, and prevent corruption.

Azerbaijan is part of the Enlarged Partial Agreement of the North-South Centre of the Council of Europe (NSC) to encourage a bottom-up dialogue between civil society and other democratic governance actors around four goals: global development education, youth co-operation, women's empowerment, and migration.

Data Protection

Data Protection is enshrined in the Constitution of the Republic of Azerbaijan. Article 32, paragraph VIII establishes the right to inviolability of private life, and states that the "scope of the personal information, as well as the conditions of their processing, collection, passing, use and protection is prescribed by law.⁴³⁶

⁴³² Ministry of Digital Development and Transport of the Republic of Azerbaijan, *Innovation and Digital Development Agency Public Legal Entity* (2021),

 $[\]underline{https://mincom.gov.az/en/ministry/structure/innovation-and-digital-development-agency-public-\underline{legal-entity}}$

⁴³³ President of the Republic of Azerbaijan, *Law of the Republic of Azerbaijan on Public Participation* (Nov. 22, 2013), https://www.icnl.org/wp-content/uploads/Azerbaijan Azerparticipate.pdf

⁴³⁴ Ministry of Digital Development and Transport of the Republic of Azerbaijan, *Elections to Public Council Under Ministry of Digital Development and Transport Held* (Oct. 21, 2024), https://mincom.gov.az/en/media-en/news/elections-to-public-council-under-ministry-of-digital-development-and-transport-held

⁴³⁵ Council of Europe, *Action Plan for Azerbaijan 2022–2025* (Feb. 1, 2022), https://rm.coe.int/action-plan-azerbaijan-2022-2025-eng/1680a59aa3

⁴³⁶ President of the Republic of Azerbaijan Ilham Aliyev, *Constitution of the Republic of Azerbaijan* (Nov. 27, 1995), https://president.az/en/pages/view/azerbaijan/constitution

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The country's data protection laws also currently encompass three bodies of legislation:⁴³⁷ (1) the Law on State Secrets,⁴³⁸ (2) the 1998 Law on Data, Data Processing and Data Protection, and (3) the 2010 Law on Personal Data.⁴³⁹

The Personal Data Law provides for data subjects' right to be informed, right to access, right to rectification, right to erasure, right to object opt-out, and right not to be subject to automated decision-making (unless this is required by law). The Law regulates the collection, processing and protection of personal data, in the public and private sectors. The Law also covers cross-border transfer of personal data and the rights and obligations of public bodies and local authorities, individuals, and legal entities operating in this field.

The Ministry of Digital Development and Transport is the authority tasked with the implementation of this Law.⁴⁴⁰ A 2018 Decree of the President of the Republic of Azerbaijan authorized the ministry, formerly known as the Ministry of Transport, Communications, and High Technologies,⁴⁴¹ to exercise the authority to avoid infringements of the provision of the law, ensure information security, verify compliance in collection, processing and protection of personal data, and keep registry on information resources related to personal data. The State Security Service, Ministry of Internal Affairs, Ministry of Justice, and Special State Protection Service are also involved in the implementation of the data protection legal regime.⁴⁴²

Azerbaijan is party to Convention 108 or Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data.⁴⁴³ Convention 108 reaffirms the fundamental values of respect for privacy. Article 5 defines the need for personal data to be "obtained and processed fairly and lawfully."

https://mincom.gov.az/storage/pages/1015/34a816171817c6fe6feadf9e170def84.pdf

⁴³⁷ Council of Europe. *Action Plan for Azerbaijan 2022-2025* (Feb 1, 2022), https://rm.coe.int/action-plan-azerbaijan-2022-2025-eng/1680a59aa3

⁴³⁸ Republic of Azerbaijan, Law of 7 September 2004 No. 733-IIQ: Azərbaycan Respublikasının Odliyyə Nazirliyi Hüquqi aktların vahid elektron bazası, Dövlət sirri haqqında Azərbaycan Respublikasının Qanunu (Sept. 7, 2004), https://e-qanun.az/framework/5526; CIS Legislation, Law of the Azerbaijan Republic of September 7, 2004 No. 733–IIQ: About the State Secret, unofficial AI translation (Amended Dec. 19, 2023), https://cis-legislation.com/document.fwx?rgn=7434

⁴³⁹ Milli Majlis [National Assembly] of the Republic of the Azerbaijan, *Law No 998-IIIQ: Fardi məlumatlar haqqında* (May 11, 2010), https://meclis.gov.az/news-qanun.php?id=1201&lang=az ⁴⁴⁰ President of the Republic of Azerbaijan (Oct. 11, 2021),

⁴⁴¹ E-gov, Regulations of the Ministry of Transport, Communications and High Technologies of the Republic of Azerbaijan (Jan. 12, 2018), https://www.e-gov.az/en/news/read/630

⁴⁴² Council of Europe, *Data Protection Systems in the Republic of Azerbaijan* (Dec. 2016), https://rm.coe.int/16806ee927

⁴⁴³ Council of Europe Portal, *Data Protection: Azerbaijan* (May 3, 2010), https://www.coe.int/en/web/data-protection/azerbaijan

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Convention 108 requires Azerbaijan to establish an independent data protection authority.

The Council of Europe (CoE) Action Plan for Azerbaijan 2022–2025 has a specific chapter on data protection and artificial intelligence. Azerbaijan is committed to:

- Move closer to signing and ratifying the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (Convention 108+)
- Adopt legislation compliant with the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (ETS No. 108)
- Establish a dedicated independent authority for personal data protection
- Disseminate and implement Council of Europe guidelines on the use of artificial intelligence
- Conduct an awareness-raising campaign on the importance of data protection for the benefit of the local population

The Chief of Special Communication and Information Security State Service of Azerbaijan, Tural Mammadov, said during the Cyber-Secure Economy: Reforms, Innovative Approaches and Solutions event in 2022 that a draft law on ensuring personal data protection has been prepared in Azerbaijan based on European standards, the GDPR in particular. 444

Azerbaijan is not an accredited member of the Global Privacy Assembly and has not sponsored the 2018 GPA Resolution on AI and Ethics, 445 the 2020 Resolution on AI and Accountability, 446 the 2022 Resolution on Facial Recognition Technology, or the 2023 GPA Resolution on Generative AI Systems.447

Declaration ADOPTED.pdf

⁴⁴⁴ Azernews, Azerbaijan Applying Effective Measures to Ensure Population's Protection from Cyber Attacks (Sept. 21, 2022), https://www.azernews.az/business/199707.html

⁴⁴⁵ International Conference of Data Protection & Privacy Commissioners, *Declaration on Ethics* and Data Protection in Artificial Intelligence (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-

⁴⁴⁶ Global Privacy Assembly, Adopted Resolution on Accountability in the Development and Use

of Artificial Intelligence (Oct 2020), https://globalprivacyassembly.org/wpcontent/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN.pdf

⁴⁴⁷ Global Privacy Assembly, Resolution on Generative Artificial Intelligence Systems (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

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Algorithmic Transparency

Azerbaijan has neither signed nor ratified the protocol modernizing Convention 108, which provides for algorithmic transparency.⁴⁴⁸ National legislation does not provide for algorithmic transparency.

AI Readiness and Digitization

The Azerbaijan government has taken concrete steps to promote technology innovation. In June 2019, Presidential Decree 718 created a Centralized Government Cloud⁴⁴⁹ for the effective organization of the formation, storage, maintenance and integration of state information systems and reserves. The Decree also supports innovative solutions based on Artificial Intelligence and robotics and committed Azerbaijan to use "machine learning" (M2M), "artificial intelligence" (EU), "big data," and "internet of things" (IoT) as bases for providing public services in the country.

In April 2021, the e-Gov Development Center of the State Agency for Public Service and Social Innovations organized the International Conference on Artificial Intelligence in Digital Governance. The first panel discussions were dedicated to the transformation of healthcare with AI, the second panel focused on AI and society and the last session addressed the future of artificial intelligence and how it will change human life.⁴⁵⁰

The Center for Analysis and Coordination of the Fourth Industrial Revolution (C4IR) held several events dedicated to AI and machine learning. The events focused on exchanging views and experience on the development of AI and machine learning with the involvement of government agencies, private companies, scientific and educational institutions, and civil society. 451

In October 2022, a mission of the Center for Analysis and Coordinator of the Fourth Industrial Revolution (C4IR) participated in a "Global Dialogue: The

⁴⁴⁸ Council of Europe, Treaty Office, *Charter of Signatures and Ratifications of Treaty 223* (Jan. 26, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=223

⁴⁴⁹ President of the Republic of Azerbaijan, *Strategic Roadmap for Development of Telecommunications and Information Technologies in Azerbaijan Republic* (Dec. 6, 2016), https://monitoring.az/assets/upload/files/6683729684f8895c1668803607932190.pdf

⁴⁵⁰ State Agency for Public Service and Social Innovations under the President of the Republic of Azerbaijan, *The International Conference on Artificial Intelligence in Digital Governance Has Ended* (Apr. 28, 2021), https://www.digital.gov.az/en/media/press/the-international-conference-on-artificial-intelligence-in-digital-governance-has-ended

⁴⁵¹ Ministry of Economy of Azerbaijan, *Another Artificial Intelligence Event Organized* (Nov. 27, 2021), https://old.economy.gov.az/en/article/suni-intellekt-uzre-novbeti-tedbir-teshkil-edilib/32162;

The Ministry of Economy of Azerbaijan, *Sessions Held within "Trends of the Fourth Industrial Revolution" Event* (Feb. 24, 2022), https://www.economy.gov.az/en/article/dorduncu-senaye-i-nqilabinda-trendler-movzusunda-tedbir-cherchivesinde-sessiyalar-kechirilib/32341.

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role of artificial intelligence in the new global development- innovation and inclusiveness," presenting the measures taken by the government on the digital economy in the country. 452

AI and the Judiciary

The Head of the Innovation and Digital Development Agency of Azerbaijan, Inara Valiyeva, announced the introduction of the Unified Court System based on AI for 2023. The Unified Court System is currently operating in test mode in coordination with the Supreme Court with about 50,000 documents used in the creation of the system. Azerbaijan plans to focus on improving the quality of decision-making and management by using Big Data and AI technologies. The project, conducted with the cooperation of the Council of Europe for the Efficiency of Justice (CEPEJ) and the World Bank, includes an automated random allocation of cases based on criteria regarding subject matter, weight of the case, and the court's or judge's caseload; a "fast-track procedure for uncontested small clams; an "e-Order" automated system"; and a unified judicial portal.

Biometrics

The Law on Biometric Data adopted in 2008 determines the formation and requirements for biometric information resources, the organization and purpose of the biometric identification system, and the application of biometric technologies. The law also regulates the relations arising in this area. Azerbaijan began issuing biometric-based electronic identity cards in September 2018. The cards contain

⁴⁵⁵ Judge Dr. Ramin Gurbanov, Project Coordinator, President of the European Commission for the Efficiency of Justice (CEPEJ), *Azerbaijan: e-Courts and the Joint Achievements in Digitalization of Justice* (Jun. 2021),

https://thedocs.worldbank.org/en/doc/3ecf7262788a3ec69c8a45bbd3342a28-

<u>0080022021/related/29-06-21-Presentation-e-Court-WB-Dr-Ramin-Gurbanov.pdf</u>; European Commission for the Efficiency of Justice, *Strengthening the Efficiency and Quality of the Judicial System in Azerbaijan* (Mar. 2019–Feb. 2023),

https://www.coe.int/en/web/cepej/strengthening-the-efficiency-and-quality-of-the-judicial-system-in-azerbaijan.

⁴⁵² Azertag, *Azerbaijan's Center for Analysis and Coordination of Fourth Industrial Revolution Attends International Event in Geneva* (Oct. 12, 2022),

https://azertag.az/en/xeber/Azerbaijans Center for Analysis and Coordination of Fourth Industrial Revolution attends international event in Geneva-2331065

⁴⁵³ Report News Agency, *Azerbaijan Creates Unified Judicial System Based on Artificial Intelligence* (Dec. 16, 2022), https://report.az/en/ict/azerbaijan-creates-unified-judicial-system-based-on-artificial-intelligence/

⁴⁵⁴ Ibid

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information on place of residence and marital status as well as photos and fingerprints if the citizen is over age 15.456

AI Surveillance

A Freedom House 2022 report indicated that "state surveillance is pervasive, though the exact extent to which security agencies monitor ICT activity or track users remains unclear." Usage of surveillance tools by the Azerbaijani Government was also reported by Amnesty International. The OCCRP (Organized Crime and Corruption Reporting Project) named Azerbaijan's surveillance a Digital Autocracy. A report by Open Tech found that Azerbaijan is one of several countries where censorship, facial recognition, and access to encrypted communication have been prevalent as forms of information control.

The Law on Operative-Search Activity authorizes agencies to conduct surveillance without a court order in cases where it is regarded as necessary to prevent serious crimes against individuals or especially dangerous crimes against the state. The vaguely written provision leaves the law open to abuse. It has long been believed that the State Security Service and the Ministry of Internal Affairs monitor the communications of individuals, especially foreigners, prominent political activists, and business figures. 461

In 2015, leaked documents showed that the Azerbaijani government was a client of the Italian surveillance company Hacking Team. 462 In the previous year,

https://freedomhouse.org/country/azerbaijan/freedom-net/2022

https://freedomhouse.org/country/azerbaijan/freedom-net/2021

⁴⁵⁶ Azerbaijan Milli Majlis [National Assembly], *Law No. 651–IIIQ: Biometric Data Law* (*Ədliyyə Nazirliyi Hüquqi aktların vahid elektron bazası, Biometrik informasiya haqqında*) (Jun. 13, 2008), https://e-qanun.az/framework/15144

⁴⁵⁷ Freedom House, *Freedom of the Net 2022*,

⁴⁵⁸ Amnesty International, *Demand an End to the Targeted Surveillance of Human Rights Defenders* (Aug. 16, 2016), https://www.amnesty.org/en/petition/targeted-surveillance-human-rights-defenders/

⁴⁵⁹ Miranda Patrucic and Kelly Bloss, *Life in Azerbaijan's Digital Autocracy: 'They Want to be in Control of Everything* (Jul. 18, 2021), https://www.occrp.org/en/the-pegasus-project/life-in-azerbaijans-digital-autocracy-they-want-to-be-in-control-of-everything

⁴⁶⁰ Valentin Weber, *The Worldwide Web of Chinese and Russian Information Controls*, p. 20, https://public.opentech.fund/documents/English_Weber_WWW_of_Information_Controls_Final.pdf

⁴⁶¹ Freedom House, Freedom of Net 2021 (2021),

⁴⁶² Cora Currier, *A Detailed Look at Hacking Team's Emails about Its Respective Clients* (Jul. 7, 2015), https://theintercept.com/2015/07/07/leaked-documents-confirm-hacking-team-sells-spyware-repressive-countries/, also please see Amnesty International, *New EU Dual Use Regulation Agreement "A Missed Opportunity" to Stop Exports of Surveillance Tools to Repressive Regimes* (Mar. 25, 2021), https://www.amnesty.org/en/latest/news/2021/03/new-eu-dual-use-regulation-agreement-a-missed-opportunity-to-stop-exports-of-surveillance-tools-to-repressive-regimes/

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Citizen Lab reported that the government was using RCS (Remote Control System) spyware sold by Hacking Team. The RCS endpoint was active in Azerbaijan between June and November 2013. Azerbaijan hit international headlines in 2013 when the results of the October presidential elections were accidentally released before voting began. RCS allows anyone with access to activate a targeted device's camera and microphone and to steal videos, photos, documents, contact lists, and emails.

In 2017, Amnesty International reported that Azerbaijani human rights activists, journalists, and political dissidents have been the targets of a sustained spear phishing campaign using emails and Facebook chat, apparently aimed at gaining access to their personal information and private communications. In the same year, malware targeted Azerbaijani dissidents.

An April 2018 report by Qurium revealed that Azerbaijan had purchased specialized security equipment, in particular Deep Packet Inspection (DPI) technology, from the Israeli company Allot Communications for some \$3 million. 467

In October 2018, Israeli newspaper Haaretz reported that Israel's Verint Systems had sold surveillance equipment and software to the Azerbaijani government. Local police later used the equipment to identify the sexual orientation of users on Facebook. Haaretz reported that a few years after Verint's systems began being used Azerbaijani police arrested and tortured 45 gay men and transgender women. He work was a series of the sexual orientation of users of Facebook.

In July 2021, an investigative initiative led by Forbidden Stories concluded that the Pegasus software produced by the Israeli cybersurveillance company NSO

https://freedomhouse.org/country/azerbaijan/freedom-net/2021

⁴⁶³ Citizen Lab, *Mapping Hacking Team's "Untraceable" Spyware* (Feb. 17, 2014), https://citizenlab.ca/2014/02/mapping-hacking-teams-untraceable-spyware/

⁴⁶⁴ Freedom House, Freedom of Net 2021 (2021),

⁴⁶⁵ Amnesty International, *Azerbaijan: Activists Targeted by "Government-Sponsored" Cyberattack* (Mar. 10 2017), https://www.amnesty.org/en/latest/news/2017/03/azerbaijan-activists-targeted-by-government-sponsored-cyber-attack/

⁴⁶⁶ Amnesty International, False Friends: How Fake Accounts and Crude Malware Targeted Dissidents in Azerbaijan (Mar. 10, 2017),

 $[\]underline{https://www.amnesty.org/en/latest/research/2017/03/false-friends-spearphishing-of-dissidents-in-azerbaijan/}$

⁴⁶⁷ Qurium, *Corruption, Censorship and a Deep Packet Inspection Vendor* (Apr. 10, 2018), https://www.qurium.org/alerts/azerbaijan/corruption censorship and a dpi vendor/

⁴⁶⁸ Haaretz, *Revealed: Israel's Cyber-Spy Industry Helps World Dictators Hunt Dissidents and Gays* (Oct. 20, 2018), https://www.haaretz.com/israel-news/.premium.MAGAZINE-israel-s-cyber-spy-industry-aids-dictators-hunt-dissidents-and-gays-1.6573027
https://www.haaretz.com/israel-news/.premium.MAGAZINE-israel-s-cyber-spy-industry-aids-dictators-hunt-dissidents-and-gays-1.6573027
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Group was used in Azerbaijan to target more than 40 Azerbaijani journalists.⁴⁷⁰ Reporters with the Organized Crime and Corruption Reporting Project (OCCRP), which was among the groups working on the project, found some 250 potential targets in Azerbaijan, the majority of whom were "dissidents, activists, journalists, and opposition politicians." The report added that "journalists came under particular pressure, with dozens of prominent names, including OCCRP's Khadija Ismayilova, appearing on the list."471

The day full-scale war erupted between Azerbaijani and Armenian forces in Nagorno-Karabakh, the Ministry of Transport, Communications and High Technologies throttled mobile and fixed-line broadband internet across Azerbaijan and blocked a number of social media platforms and websites, including Facebook, WhatsApp, and Skype. The action lasted 46 days, Azerbaijan's longest internet disruption to date. 472

Facial Recognition

In December 2019, a report by Qurium indicated that the government may be using facial-recognition technology. Qurium identified an AzerTelecom server running the software.⁴⁷³

The Ministry of Transport, Communications and High Technologies (now Ministry of Digital Development and Transport) developed a Public-Private Partnership with SVORT and Sinam to establish AzInTelecom LLC.474 AzInTelecom is developing a new generation cloud digital signature called SIMA. 475 SIMA's initial purpose is to facilitate access to e-government services but will expand to the use of services through banks, mobile operators, internet providers, and household appliance stores. SIMA combines face recognition, public key, and cloud technologies and is based on biometric authentication.

https://freedomhouse.org/country/azerbaijan/freedom-net/2021

https://mincom.gov.az/en/view/news/1431/new-generation-digital-signature-presented-inazerbaijan-sima

⁴⁷⁰ The Amnesty International, Massive Data Leak Reveals Israeli NSO Group's Spyware Used to Target Activists, Journalists, and Political Leaders Globally (Jul. 19, 2021), https://www.amnesty.org/en/latest/news/2021/07/the-pegasus-project-2/

⁴⁷¹ Freedom House, Freedom on the Net 2021 (2021),

⁴⁷² Ibid

⁴⁷³ Qurium, Find Face and Internet Blocking in Azerbaijan (Dec. 3, 2019),

https://www.qurium.org/alerts/azerbaijan/find-face-and-internet-blocking-in-azerbaijan/ ⁴⁷⁴ Ministry of Digital Development and Transport of Azerbaijan, AzInTelecom, LLC (2025),

https://mincom.gov.az/en/ministry/structure/azintelecom-llc ⁴⁷⁵ Ministry of Digital Development and Transport of Azerbaijan, *New Generation Digital* Signature Presented in Azerbaijan – SIMA (Feb. 11, 2022),

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Based on SIMA signatures, the Information Computing Centre is developing a payment system with face recognition technology. ⁴⁷⁶ Users scan their identity card and verify their identity via face recognition through the front camera of the mobile devices. ⁴⁷⁷ E-signatures are regulated by the Law of Azerbaijan on Electronic Signature and Electronic Document of March 9, 2004. ⁴⁷⁸ No amendments were introduced concerning SIMA, biometric authentication, or facial recognition.

Smart Cities

As part of its plan to repopulate the Karabakh area following the war with Armenia, Azerbaijan plans to build Smart Cities/Villages in Zangilan. After the first pilot project of the Aghali village, three additional smart villages were planned for 2023.⁴⁷⁹

The President of Azerbaijan, Ilham Aliyev, announced in January 2021 that "settlements recently liberated from Armenian occupation will be reestablished based on the concept of smart city/village." The Concept of Smart Cities and Smart Villages was later approved by presidential order. The Smart City/Village concept is to be implemented through working groups representing various ministries. A publication of the Baku Research Institute provides insights about the Smart Cities concept as a means to promote sustainable

and Electronic Document (Mar. 9, 2004), https://dth.az/legal-framework

⁴⁷⁶ Xeberler, *A Payment System Will Be Introduced in Azerbaijan* (Nov. 5, 2021), https://xeberler.az/new/details/azerbaycanda-uztanima-ile-odenis-sistemi-tetbiq-edilecek-27254.htm

⁴⁷⁷ Sadraddin Aghjayev, Azerbaijan Eyes Creating New Payment Service Using e-Signature Capabilities (Interview) (Mar. 14, 2022), https://en.trend.az/business/3568769.html
⁴⁷⁸ Digital Trade Hub of Azerbaijan, Law of the Republic of Azerbaijan on Electronic Signature

⁴⁷⁹ Asif Mehman, *Azerbaijani State to Fund Implementation of "Smart Village" Project in Aghdam* (Sept. 6, 2023), https://en.trend.az/azerbaijan/politics/3793294.html; Dilara Aslan Özer, Daily Sabah, *Azerbaijan to Build 3 More "Smart Villages" in Zangilan by End of 2023* (Sept. 22, 2022), https://www.dailysabah.com/politics/azerbaijan-to-build-3-more-smart-villages-in-zangilan-by-end-of-2023/news.

⁴⁸⁰ Ruslan Rehimov, AA (Anadolu Agency), *Azerbaijan to Build "Smart Cities" in Liberated Regions* (Jan. 26, 2021), https://www.aa.com.tr/en/azerbaijan-front-line/azerbaijan-to-build-mart-cities-in-liberated-regions/2123643

⁴⁸¹ President of the Republic of Azerbaijan, *Order No. 2584 on Developing the Concept of Smart City and Smart Village* (Apr. 19, 2021), https://minenergy.gov.az/en/prezidentin-ferman-ve-serencamlari/page/3

⁴⁸² Ruslan Rehimov, AA (Anadolu Agency), *Azerbaijan to Build 'Smart Cities' in Liberated Regions* (Jan. 26, 2021), https://www.aa.com.tr/en/azerbaijan-front-line/azerbaijan-to-build-smart-cities-in-liberated-regions/2123643

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development of territories and attract population back.⁴⁸³ The World Bank published a framework and Smart Villages Readiness Index for Azerbaijan to support the country in ensuring that economic opportunities, access of service, and governance are applied in the process.⁴⁸⁴

Environmental Impact of AI

The Minister of Digital Development and Transport emphasized the country's attention the principles of sustainable development in its technology and innovation agenda in his announcement of the national strategy for AI development.⁴⁸⁵ However, no available policies demonstrate how officials plan to implement the principles.

Lethal Autonomous Weapons

During his swearing-in ceremony in February 2024, Azerbaijan's President, Ilham Aliyev stated, "Today, in the field of industrial development, in military industrial complex and, in general, in the military field, technological development and superiority are of great importance. Everyone saw this during the Second Karabakh War and the anti-terrorist operation. [...] Technological development, digitization, cybersecurity, application of artificial intelligence—all these should become part of our daily life. Government agencies, the private sector, and all other segments of society must be ready for this. [...] I do not see any dangers or threats to Azerbaijan but I know why—because they know that our response will be merciless, it will be crushing, and it will be given regardless of anything. Therefore, if we do not achieve technological development, if there are just a few thousand not tens of thousands of Azerbaijanis in this business, we may be overtaken. Therefore, I think that all institutions and, at the same time, society should know and see this as a duty."⁴⁸⁶

Azerbaijan is not a party to the Convention on Conventional Weapons (CCW),⁴⁸⁷ although the country participated as an observer on CCW meetings on

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⁴⁸³ Baku Research Institute, *Building Smart Cities and Villages in Azerbaijan: Challenges and Opportunities* (Aug, 6, 2021), https://bakuresearchinstitute.org/en/building-smart-cities-and-villages-in-azerbaijan-challenges-and-opportunities/

⁴⁸⁴ World Bank, *A Framework for Developing Smart Villages in Azerbaijan* (Oct. 19, 2021), https://www.worldbank.org/en/country/azerbaijan/publication/a-framework-for-developing-smart-villages-in-azerbaijan

⁴⁸⁵ Nazrin Abdul, Azernews, *Azerbaijan Announces Draft Strategy for Artificial Intelligence Development* (Oct. 10, 2024), https://www.azernews.az/business/232395.html

⁴⁸⁶ Report News Agency, *Inauguration Ceremony of President Ilhan Aliyev Held at Milli Majlis* (Feb. 14, 2024), https://report.az/en/domestic-politics/inauguration-ceremony-of-president-ilham-aliyev-held-at-milli-majlis/

⁴⁸⁷ United Nations Office for Disarmament Affairs, *High Contracting Parties and Signatories CCW* (Jun. 25, 2024), https://www.un.org/disarmament/the-convention-on-certain-conventional-weapons/high-contracting-parties-and-signatories-ccw/

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killer robots in November 2019.⁴⁸⁸ Azerbaijan is not among the countries that support a ban on lethal autonomous weapons.⁴⁸⁹ At the Plenary meeting on December 22, 2023, Azerbaijan abstained from voting on General Assembly Resolution 78/241, which asks UN Secretary-General António Guterres to seek the views of countries and other stakeholders on addressing the challenges of autonomous weapons systems from various perspectives and report back in the second half of 2024.⁴⁹⁰

Over the last decade, Azerbaijan has steadily built up its armed forces and purchased weapons from Russia, Israel, and Türkiye. ⁴⁹¹ Azerbaijan also developed drone arsenal composed of Turkish and Israeli UAVs. ⁴⁹²

In 2016, during the Four-Day War, also known as the Nagorno-Karabakh conflict in which the Azerbaijani Armed Forces faced the Armenian-backed Artsakh Defense Army, Azerbaijan used the Harop UAV to hit many targets, including artillery, air defense systems, and a busload of Armenian troops. As Forbes reported, the Harops were supplied by Israel. In 2017 a team from Aeronautics was in Azerbaijan to finalize a contract for Orbiter 1K kamikaze drones and were asked to attack enemy positions. Apparently when the Israeli drone operators refused, "senior representatives of the company took control and operated the craft themselves, ultimately missing their targets." Israeli authorities imposed a two-year ban on Aeronautics for this stunt. But when the ban expired in 2019, the company promptly announced a \$13m deal to sell drones to

ny.un.org/doc/UNDOC/GEN/G19/343/64/PDF/G1934364.pdf?OpenElement

⁴⁸⁸ United Nations Office for Disarmament Affairs, *Final Report of the Meeting of High Contracting Parties to the Convention on Conventional Weapons*, CCW/MSP/2019/9 (Nov. 13–15, 2019), https://documents-dds-

⁴⁸⁹ Human Rights Watch, *Stopping Killer Robots: Country Positions on Banning Fully Autonomous Weapons and Retaining Human Control* (Aug. 10, 2020), https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and

⁴⁹⁰ Human Rights Watch, *Resounding Support for Killer Robots Treaty* (May 2, 2024), https://www.hrw.org/news/2024/05/02/resounding-support-killer-robots-treaty

⁴⁹¹ Human Rights Watch, *Stopping Killer Robots: Country Positions on Banning Fully Autonomous Weapons and Retaining Human Control* (Aug. 10, 2020), https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and

⁴⁹² Centre for Strategic and International Studies, *The Air and Missile War in Nagorno-Karabakh: Lessons for the Future of Strike and Defence* (Dec. 8, 2020), https://www.csis.org/analysis/air-and-missile-war-nagorno-karabakh-lessons-future-strike-and-defense

⁴⁹³ Forbes, *The Weird and Worrying Drone War in the Caucasus* (Jun. 22, 2020), https://www.forbes.com/sites/davidhambling/2020/06/22/the-weird-and-worrying-drone-war-in-the-caucasus/?sh=5a3148f145da

⁴⁹⁴ Ibid

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Azerbaijan. In the longer term, Azerbaijan plans to produce a licensed copy of the Orbiter known as Zarba themselves.

An Azerbaijani company announced in 2018 that it was working on three different sizes of kamikaze drones, ⁴⁹⁵ including one with an 11-pound warhead able to cruise for three hours looking for targets, while another company announced manufacturing kamikaze-drone called Bat. ⁴⁹⁶

Algorithm Watch reported that Azerbaijani forces used at least three different models of drones capable of identifying and destroying a target automatically⁴⁹⁷ and several autonomous weapons in the Second Nagorno-Karabakh conflict, known as the 2020 War. ⁴⁹⁸

The 2020 War raised serious questions concerning the legality of UAVs and autonomous weapons. Ulrike Franke, autonomous weapons expert from the European Council on Foreign Relations, saw a watershed in warfare and commented: "The really important aspect of the conflict in Nagorno-Karabakh, in my view, was the use of these loitering munitions, so-called "kamikaze drones"—these pretty autonomous systems." Human Rights Watch, in a statement to support the International Committee of the Red Cross initiative to ban Killer Robots, indicated: "the increased use of weapons systems with autonomy in today's armed conflicts underscores the importance of creating a new international legal standard now, before it is too late." 500

The Republic of Nagorno-Karabakh was dissolved in 2024.⁵⁰¹ In 2023, with Russia distracted and bogged down by its war in Ukraine, Azerbaijan

 $\frac{https://web.archive.org/web/20180528041925/http:/en.azeridefence.com/azerbaijani-company-has-made-prototype-of-three-kinds-of-loitering-munitions/$

 $\underline{https://www.washingtonpost.com/world/europe/nagorno-karabkah-drones-azerbaijan-aremenia/2020/11/11/441bcbd2-193d-11eb-8bda-814ca56e138b\ story.html$

⁴⁹⁵ Azeri Defence, *Azerbaijani Company Has Made Prototype of Three Kinds of Loitering Munitions* (Mar. 15, 2018),

⁴⁹⁶ Azernews, *Azerbaijan Academy of Sciences Produces Kamikaze Drone* (Apr. 26, 2018), https://www.azernews.az/nation/138175.html

⁴⁹⁷ Algorithm Watch, *The Year Algorithms Escaped Quarantine: 2020 in Review* (Dec. 28, 2020), https://algorithmwatch.org/en/review-2020/

⁴⁹⁸ Robyn Dixon, Washington Post, Azerbaijan's Drones Owned the Battlefield in Nagorno-Karabakh — And Showed Future of Warfare (Nov. 11, 2020),

⁴⁹⁹ Deutsche Welle, *DW Report on Cyber and Autonomous Weapons: Future Wars — And How to Prevent Them* (Jun. 7, 2021), https://www.dw.com/en/dw-report-on-cyber-and-autonomous-weapons-future-wars-and-how-to-prevent-them/a-57801575

⁵⁰⁰ Human Rights Watch, *International Committee of the Red Cross Backs Killer Robot Ban* (May 13, 2021), https://www.hrw.org/news/2021/05/13/international-committee-red-cross-backs-killer-robot-ban

⁵⁰¹ CNN, *Nagorno-Karabakh to Officially Dissolve*, *Marking an End to Its Decades-Long Struggle* (Sept. 28, 2023), https://edition.cnn.com/2023/09/28/europe/nagorno-karabakh-officially-dissolve-intl/index.html

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launched a blockade of Nagorno Karabakh, eventually seizing the region and causing the majority of its Armenian population to flee. 502

In the preliminary report on the draft of the UNESCO Recommendation on the Ethics of AI, Azerbaijan was referenced as a case of the use of AI technologies in armed conflicts. The report concluded that: "from the point of view of international humanitarian law, it is highly recommended to have certain regulations concerning the use of AI in military technology, so-called lethal autonomous weapons."503

Human Rights

Azerbaijan is a Member State of the United Nations and of the Council of Europe. Azerbaijan endorsed the UN Universal Declaration of Human Rights⁵⁰⁴ and ratified the European Convention on Human Rights. Azerbaijan also has human rights obligations at the regional⁵⁰⁵ and universal levels.

The 2024 Freedom House report on Azerbaijan ranks the country as "Not Free" with a score of 7 out of 100, two points lower than in 2023. 506 Among key aspects, the report cited the concentration of power in the authoritarian regime headed by President Ilham Aliyev since 2003 and his family. According to Freedom House, "Corruption is rampant, and the formal political opposition has been weakened by years of persecution. The authorities have carried out an extensive crackdown on civil liberties in recent years, leaving little room for independent expression or activism." The fleeing of nearly all ethnic Armenians from the Nagorno-Karabakh region following Azerbaijani control in 2023 also contributed to the country's "not free" status.

Azerbaijan scores 34/100 on internet freedom. 507 Internet freedom continues to be restricted with blocked access to several social media sites and self-censorship through a media registry. "The government also launched a media

https://ijrcenter.org/country-factsheets/country-factsheets-europe/azerbaijan-human-rightsfactsheet/#:~:text=It%20has%20accepted%20the%20complaints,Social%20and%20Cultural%20 Rights%20(ICESCR)

⁵⁰² Simon Anglim, Azerbaijan's Victory: Initial Thoughts, Observations (and Caveats for the 'Innovative'), Military Strategy Magazine 7, no. 3, pp. 10–17 (2021), https://www.militarystrategymagazine.com/article/azerbaijans-victory-initial-thoughts-andobservations-and-caveats-for-the-innovative/

⁵⁰³ UNESCO, Compilation of Comments Received from Member States on the First Draft of the Recommendation (2021), https://unesdoc.unesco.org/ark:/48223/pf0000376747

⁵⁰⁴ International Justice Resource Center, Azerbaijan Factsheet (Jul. 2019),

⁵⁰⁵ Council of Europe, 46 Member States (2023), https://www.coe.int/en/web/portal/46-members-

⁵⁰⁶ Freedom House, Freedom in the World 2024: Azerbaijan (2024), https://freedomhouse.org/country/azerbaijan/freedom-world/2024 ⁵⁰⁷ Freedom House, Freedom on the Net 2024: Azerbaijan (2024),

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registry, required by the new media law adopted in 2022, and rejected the applications of several independent news outlets to join the registry. Prosecution of activists for their online criticism of the government continued during the coverage period. Additionally, activists faced online harassment, doxing, and blackmail." ⁵⁰⁸

The Council of Europe (CoE) Action Plan for Azerbaijan 2022–2025 includes strategic programming to align legislation, institutions, and practices further with CoE standards in human rights, the rule of law, and democracy. Among the objectives of the Action Plan are: the implementation of the UN 2030 Agenda for Sustainable Development, and the identification of areas for cooperation in artificial intelligence.

Azerbaijan is also part of Partnership for Good Governance, through which the European Union and the Council of Europe cooperate to strengthen governance in the Eastern Partnership region⁵¹¹ and advance localized efforts to improve "stability, prosperity, and resilience." ⁵¹²

OECD / G20 AI Principles

Azerbaijan is not an OECD member and has not endorsed the OECD AI Principles. The OECD Development Centre has been supporting Azerbaijan in the promotion of enterprise digitalization. A 2022 study highlighted the significance of digitalization to allow Small Medium Enterprises access to strategic resources and integration into global markets.⁵¹³

Council of Europe AI Treaty

Azerbaijan contributed as a Council of Europe Member State in the negotiations of the Council of Europe Framework Convention on AI and Human

https://freedomhouse.org/country/azerbaijan/freedom-net/2023

https://www.un.org/sustainabledevelopment/

 $^{^{508}}$ Freedom House, Freedom on the Net 2023: Azerbaijan (2023),

⁵⁰⁹ Council of Europe, *Council of Europe Action Plan for Azerbaijan 2022–2025* (Feb. 1, 2022), https://rm.coe.int/action-plan-azerbaijan-2022-2025-eng/1680a59aa3

⁵¹⁰ United Nations, Sustainable Development Goals (2023),

⁵¹¹ The Diplomatic Service of the European Union, *Eastern Partnership*) (Mar. 17, 2022), https://www.eeas.europa.eu/eeas/eastern-partnership en

⁵¹² Council of Europe, European Commission for the Efficiency of Justice, *Partnership for Good Governance in Azerbaijan*, https://www.coe.int/en/web/cepej/cooperation-programmes/partnership-for-good-governance-azerbaijan

⁵¹³ OECD, *Promoting Enterprise Digitalisation in Azerbaijan*, OECD Publishing (2022), https://doi.org/10.1787/6a612a2a-en

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Rights, Democracy, and the Rule of Law.⁵¹⁴ However, Azerbaijan has not signed the treaty.⁵¹⁵

UNESCO Recommendation on AI Ethics

Azerbaijan is a UNESCO member since 1992 and is one of the 193 countries that endorsed the UNESCO Recommendation on the Ethics of AI. ⁵¹⁶ It remains to be seen which steps Azerbaijan will take to implement the Recommendation.

Evaluation

Azerbaijan has set an ambitious goal of embracing new technologies to propel the economic growth of the country. The digitalization process in Azerbaijan has been accelerating and has stimulated several initiatives, including the development of a National AI Strategy. The country has not yet signed the protocol modernizing Convention 108 nor created an independent agency or mechanism for data (and AI) oversight to modernize its data protection law regime. Concerns exist that, with the use of AI, Azerbaijan is turning into a "digital autocracy." The country has not endorsed any declaration against the use of LAWS and has been a laboratory for their use.

Bahrain

In 2024, Bahrain approved a law to punish the misuse of AI and introduced legal frameworks to protect individual privacy and reduce algorithmic biases through implementation of the Personal Data Protection Law. Limits on the freedom of expression and mobility remain, especially given the government's use of AI systems for mass surveillance and tracking.

National AI Strategy

The Kingdom of Bahrain has declared AI as one of the focus areas of its digital strategy plans. Notwithstanding Bahrain's relatively strong position as a leader in cloud technology and e-government in the Gulf Region, and a strong

⁵¹⁴ Council of Europe, *The Framework Convention on Artificial Intelligence* (Sept. 5, 2024), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

⁵¹⁵ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225:*Council of Europe Framework Convention on Artificial Intelligence and Human Rights,
Democracy, and the Rule of Law (Jan. 17, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

⁵¹⁶ UNESCO, UNESCO Member States Adopt the First Ever Global Agreement on the Ethics of Artificial Intelligence (Apr. 21, 2022), https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence

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Government AI readiness index,⁵¹⁷ the country is yet to formulate an AI policy framework.⁵¹⁸

However, Bahraini Prime Minister Prince Salman bin Hamad Al Khalifa approved the Sixth National Telecommunications Plan with the promulgation of an Edict on the Minister of Transportation and Telecommunications recommendation in November 2023.⁵¹⁹ The plan seeks to boost the telecommunication sector and includes the development of a national AI strategy and monitoring mechanism, "collaborative AI governance," "conducive AI," and AI "adoption across high-impact sectors." ⁵²⁰

Bahrain's Shura Council unanimously approved a new standalone law to regulate AI in April 2024. The law identifies some offenses for misusing AI punishable by fines and imprisonment.⁵²¹

Under the leadership of HM King Hamad bin Isa Al Khalifa, King of Bahrain, the government initiated plans for the transition of Bahrain to a knowledge-based economy that keeps pace with the global trends in science and technology. ⁵²² In the opening of the 5th legislative cycle of 2019, H.M. directed the government to undertake a national plan to increase the readiness for the digital economy "by adopting and employing artificial intelligence technology in the production and service sectors, through the establishment of the necessary systems and technical frameworks, as well as through encouraging quality investments, in order to guarantee the maximum benefit to our national economy."⁵²³

f/1 642778757117/Government AI Readiness 21.pdf

⁵¹⁷ Oxford Insights, *Government AI Readiness Index 2021* (Jan. 21, 2022), https://static1.squarespace.com/static/58b2e92c1e5b6c828058484e/t/61ead0752e7529590e98d35

⁵¹⁸ Al-Ammal and Aljawder, *Strategy for Artificial Intelligence in Bahrain: Challenges and Opportunities, Artificial Intelligence in the Gulf*, edited by Azar and Haddad, Palgrave Macmillan, pp. 47–76 (2021), https://link.springer.com/content/pdf/10.1007%2F978-981-16-0771-4.pdf

⁵¹⁹ Prime Minister's Office, Kingdom of Bahrain, *HRH the Crown Prince and Prime Minister Issues Edict (102) of 2023* (Nov. 9, 2023) https://pmo.gov.bh/en/article/hrh-the-crown-prince-and-prime-minister-issues-edict-102-of-2023

⁵²⁰ Telecommunications Regulatory Authority, *Sixth National Telecommunication Plan* (Oct. 2023), https://tra-website-prod-01.s3-me-south-

<u>1.amazonaws.com/Media/Documents/National Telecommunications Plans/2023111415281221</u> <u>5_5dylpg40_in5.pdf</u>

Gulf Daily News Online, New Law to Regulate Use of AI Approved in Bahrain (Apr 29, 2024), https://www.zawya.com/en/world/middle-east/new-law-to-regulate-use-of-ai-approved-in-bahrain-dipvmm4r

⁵²² Oxford Business Group, *Viewpoint: King Hamad bin Isa Al Khalifa* (2020), https://oxfordbusinessgroup.com/articles-interviews/eye-on-the-future-king-hamad-bin-isa-al-khalifa-on-modernisation-and-the-ongoing-transition-to-a-knowledge-based-economy-viewpoint Bahrain News Agency, *HM King Opens Second Session of 5th Legislative Term* (Oct. 13, 2019),

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Elements of an AI roadmap are nested within the broader strategic digital and economic initiatives, including the Kingdom's Economic Vision 2030,⁵²⁴ which addresses AI policy and development in the country⁵²⁵. The Digital Transformation Journey of the Kingdom focuses on fostering an innovation ecosystem for the use of emerging technologies for the benefit of the Bahraini society. The Kingdom "encourages those involved in designing, developing, and deploying new technologies to ensure that they are consistent with the Kingdom's values and adhere to international norms and standards."⁵²⁶

The Digital Transformation Journey engages key government entities across multiple sectors such as the Bahrain Economic Development Board (EDB), which sets the goals and policies for Vision 2030, and the Information and eGovernment Authority (IGA), which implements digital transformation under the supervision of the ICT Government Committee (ICTGC).⁵²⁷ Tamkeen, the Bahrain Labor Fund, supports the private sector through strategies for enterprise growth and workforce development and by leveraging AI in the higher education sector. Other actors are the Bahrain Information Technology Society and AI Society, which act as a medium for civil society under license of government regulators.⁵²⁸

This vision for a modernized and digital economy in the public and private sector helped shape Bahrain's Digital Government Strategy 2022 to digitize and transform public services and increase digital usage in the country. The strategy is part of the Government of Bahrain's Government Action Plan 2019–2022, under the supervision of the Supreme Council for Information & Communication

 $\underline{https://www.bna.bh/en/HMKingopenssecondsessionof5thLegislativeTerm.aspx?cms=q8FmFJgiscL2fwIzON1%2BDnPyGy%2FzC%2BrQlxqVtgB48bs%3D$

2dbf17810c94/Vision%2B2030%

2BEnglish%2B%28low%2Bresolution%29.pdf?MOD=AJPERES

https://www.iga.gov.bh/en/category/emerging-technologies

https://www.bahrain.bh/wps/portal/!ut/p/a1/pZLLbsIwEEV_JSyyDJ7E5EF3KaK0iEcFpSXeICcYJyixQ2 Kg_H0NqFIrlUJV78Y6d3zvjBFBc0QE3WWcqkwKmh9r4i0ex-

https://www.iga.gov.bh/en/category/consultancy

⁵²⁴ Bahrain's National Portal, *The Economic Vision 2030 Bahrain* (2016),

https://www.bahrain.bh/wps/wcm/connect/38f53f2f-9ad6-423d-9c96-

⁵²⁵ Information & eGovernment Authority, Emerging Technologies (2022),

⁵²⁶ Bahrain's National Portal, *Government of Bahrain's Digital Transformation Journey* (Jan. 16, 2022).

DZTuD0AzzDEI69zqTdBbsHrgairwBg3

⁵²⁷ Information & eGovernment Authority, Consultancy (2022),

⁵²⁸ Al-Ammal and Aljawder, *Strategy for Artificial Intelligence in Bahrain: Challenges and Opportunities, Artificial Intelligence in the Gulf*, edited by Azar and Haddad, pp. 47-76 (2021), https://link.springer.com/content/pdf/10.1007%2F978-981-16-0771-4.pdf

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Technology (SCICT) led by the Deputy Prime Minister. The digital initiatives are under the coordination of the National ICT Governance Committee (ICTGC).⁵²⁹

The Digital Government Strategy 2022 promotes principles of inclusion, increased digitization, design considerations, data analysis and transparency, and has five focus areas for including artificial intelligence:

- Strengthening digital infrastructure, reinforcement of the cloud based working environment, data, and artificial intelligence to fostering AI for the digital economy
- Accelerating the transformation and collaboration efforts of various public sector entities
- Ensuring the enforcement of policies, regulations and standards by safeguarding constituents' basic rights and protecting them against cyber risks
- Strengthening accountability, transparency and civic engagement through open data and e-Participation
- Encouraging innovation & nurturing entrepreneurship.

Bahrain launched the 2022–2026 Telecommunications, ICT, and Digital Economy Sector Strategy in February 2022 in line with the Economic Recovery Plan and the Digital Government Strategy 2022. Minister of Transportation and Telecommunications Kamal bin Ahmed Mohammed explained that the strategy aims "to increase the efficiency of government services through e-transformation, digitizing documents, moving to e-payments, and expanding the use of AI, while strengthening public private partnerships."530 Performance indicators set for evaluation of the implementation by 2026, include the increase of start-ups by 20%, automation of 200 government services, increase in the sector by 35% and training 20,000 on cybersecurity. The government has aligned the ICT digital strategy to the UN Sustainable Development Goals, the Government Action Plan, and the Economic Vision 2030.⁵³¹

Bahrain is one of the first countries, along with the United Kingdom, to pilot test the World Economic Forum (WEF) AI procurement guidelines for the

https://www.bahrain.bh/wps/portal/!ut/p/a0/hcrBCoJAEADQr E8systdpQIw4tQRNteZJFBNnV GaxI X qCjg8eBPAQOK6pj5qE4 hzcO2lQWdsYesiv-

dYNu50PZ7RVHiAGzHU 5KHZ3otSyghdMJKm4KnXtZ

Z3hrHljjDL1u0JsNOpimpEn1gHqrHDivtAQk!/

⁵²⁹ Bahrain's National Portal, Committees Contributing to the Development of ICT and Digital *Transformation in the Kingdom of Bahrain* (Nov. 24, 2021),

⁵³⁰ Sovereign Group News, Bahrain Launches Telecommunications, ICT and Digital Economy Strategy (Feb. 25, 2022), https://www.sovereigngroup.com/news/news-and-views/bahrainlaunches-telecommunications-ict-and-digital-economy-sector-strategy/

⁵³¹ Bahrain's National Portal, Government of Bahrain's Digital Transformation Journey (Jan. 16, 2022), https://www.bahrain.bh/wps/portal/digitaltransformatonjourney

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public sector.⁵³² The guidelines aim to "enable governments to responsibly and sustainably deploy AI technology,"⁵³³ and "set government use and adoption of AI on a better path."⁵³⁴ The guidelines have the potential to enhance explainability and accountability in the AI systems before acquiring and deploying these solutions, at the stage of writing proposal requests.⁵³⁵ Under the leadership of the Bahrain Economic Development Board (EDB), the adoption of the framework was in line with the country's "reputation as the Middle East's testbed thanks to its innovative regulatory framework, strong technology ecosystem and rapid shift to e-government."⁵³⁶ To date there are no reports about the progress of the pilot in Bahrain.

Public Participation

Since 2016, Bahrain has been very active in promoting and developing public participation in relation to its digital services and technology. This has consistently involved a theme of strong encouragement of citizens and users to primarily engage with the government via digital means and social media. Bahrain's eGov Strategy 2016 included a digitized National Suggestions and Complaints System, an open data platform, and continued encouragement of uptake of eGovernment services. In 2018, the strategy directly prioritized objectives including "Nurturing active participation and engagement with constituents." ⁵³⁷

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⁵³² World Economic Forum, *Unlocking Public Sector AI* (Jun. 2020), https://www.cips.org/supply-management/news/go19/july/bahrain-to-pilot-ai-procurement-standard-uk-first-in-the-world-to-pilot-new-artificial-intelligence-procurement-guidelines-across-government-119070401389_1.html
<a href="https://www.cips.org/supply-management/news/2019/july/bahrain-to-pilot-ai-procurement-news/2019/july/bahrain-to-pilot-ai-procurement-news/2019/july/bahrain-to-pilot-ai-procurement-news/2019/july/bahrain-to-pilot-ai-procurement-news/2019/july/bahrain-to-pilot-ai-procurement-news/2019/july/bahrain-to-pilot-ai-procurement-news/2019/july/bahrain-to-pilot-ai-procurement-news/2019/july/bahrain-to-pilot-ai-procurement-news/2019/july/bahrain-to-pilot-ai-procurement-news/2019/july/bahrain-to-pilot-ai-procurement-news/2019/july/bahrain-to-pilot-ai-procurement-news/2019/july/bahrain-to-pilot-ai-procurement-news/2019/july/bahrain-to-pilot-ai-procurement-news/2019/july/bahrain-to-pilot-ai-procurement-news/2019/july/bahrain-to-pilot-ai-procurement-news/2019/july/bahrain-to-pilot-ai-procurement-news/2019/july/bahrain-to-pilot-ai-procurement-news/2019/july/bahrain-news

guidelines/
534 World Economic Forum, AI Government Procurement Guidelines (2019),

https://www.weforum.org/whitepapers/ai-government-procurement-guidelines
535 EDB Bahrain, Bahrain and UK First in the World to Pilot New Artificial Intelligence

Procurement Guidelines across Government (Jul. 3, 2019), https://www.bahrainedb.com/latest-news/bahrain-and-uk-first-in-the-world-to-pilot-new-artificial-intelligence-procurement-guidelines-across-

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⁵³⁶ CIPS, Bahrain to Pilot AI Procurement Guidelines (Jul. 9, 2019),

 $[\]underline{https://www.cips.org/supply-management/news/2019/july/bahrain-to-pilot-ai-procurement-guidelines/}$

⁵³⁷ Government of Bahrain, *The Information & eGovernment Authority's Strategy, eGov Strategy* 2018,

https://www.bahrain.bh/wps/portal/en/!ut/p/z0/fY69TsNQDEZfxUtmX4r6wwhUImWgSAyUu1ROY27cJnZ661Tk7QlMTIyfdM7RhxF3GJWuksjFlNppf8TF_mYzD-

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The Public consultation on the implementation of at least six draft regulations to complement the Personal Data Protection Law (PDPL)⁵³⁸ resulted in the enactment of ten ministerial resolutions in March 2022 to align the PDPL more closely to international standards and the GDPR.⁵³⁹ For example, the resolution on technical and organizational measures to guarantee the protection of personal data requires Data Protection Impact Assessments in cases such as the use of special categories of data or profiling.⁵⁴⁰

In the Digital Government Strategy 2022, the government developed the "Leave No One Behind" digital policy to focus on citizen needs, underpinned by the Digital First principle.⁵⁴¹ This principle prioritizes the design of public services digitally first to encourage citizens voicing their concerns and opinions via portals such as Tawasul. The design should require citizens and corporations to supply data only once to a government entity and the pooling of government data for greater public accessibility and civic engagement, which supports Bahrain's Digital Identities initiative.

Public participation in Bahrain focuses on deriving feedback from users on how to run services more efficiently and effectively. However, despite these efforts, outcomes and findings from participatory action are not always publicly available.

Data Protection

Bahrain has led the region in the enactment of legislation aligned to the highest global standards. The Kingdom was the second State in the Gulf Region, following Qatar, to address personal data protection as a right, with the enactment

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⁵³⁸ Bahrain News Agency, Consultation on Implementing Bahrain's Personal Data Protection Law Launched Online (Jun. 14, 2021),

 $\frac{https://www.bna.bh/en/ConsultationonimplementingBahrainsPersonalDataProtectionLawlaunche\ donline.aspx?cms=q8FmFJgiscL2fwIzON1%2BDhLTzyak%2BXqL0ckS1SQmlDM%3D$

539 DLA Piper, Data Protection Laws of the World: Bahrain (Jan. 17, 2024),

https://www.dlapiperdataprotection.com/index.html?t=law&c=BH

540 Ministry of Justice, Islamic Affairs and Waqf, Order No. (43) of 2022: Regarding the Conditions to Be Met in the Technical and Organizational Measures that Guarantee Protection of Personal Data (Mar. 17, 2022), http://www.pdp.gov.bh/en/assets/pdf/executive-decisions/eng/the be met in the technical.pdf

⁵⁴¹ Kingdom of Bahrain, Digital-First Policies: Bahrain's Digital Path (Jul. 30, 2024), <a href="https://www.bahrain.bh/wps/portal/en/BNP/HomeNationalPortal/ContentDetailsPage/!ut/p/z0/lY67bsJAEEV_ZVO4RDPYxEAZgoQTiYSAxGMbtLZH9oTNrLEXIM_HUPGo6O69Oro6oGEN_WsyRC-PZibFt3-h42_14xWTwjigb90L8WQ7n8WjaxekkggUJfIK-

hpKv2Rjj72TQD ujCCM8v Dvfq fQGdOPP17WKdSbUkCNKk7eOVLUjuWInd AaamrA0L K0sFN bi0gRYUxspV95VnLW9IVNnpWK54e5tHpWftMm5YG-

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of Law No. (30) of 2018 with Respect to Personal Data Protection Law (PDPL).⁵⁴² The Royal Decree No (78) of 2019 established the Personal Data Protection Authority (PDPA),⁵⁴³ and granted the Minister of Justice, Islamic Affairs and Waqf the chair of the Board of Directors of the PDPA.⁵⁴⁴ The PDPA has the responsibility to enforce the law and investigate potential violations.⁵⁴⁵

The PDPL, inspired by the EU GDPR, entered into effect in August 2019. The Law protects the rights of individuals regarding the collection, processing, and storage of their personal data (whether by automatic or manual means), and establishes obligations to data controllers or data processors in their relationship with data owners or subjects.⁵⁴⁶

The PDPL shares similarities with the GDPR⁵⁴⁷ in the rights to notification of data collection and processing, right to erasure, and right of rectification, but differs in some specifics related to the right to be informed (Article 18) and the right to object to processing of personal data (Articles 19, 20, and 21). Exceptions to the right not to be subject to decision-making based on solely automated means (Article 22), the absence of the right to data portability, and the shorter period of response to data subjects' requests (15 days vs one month in the GDPR) are important differences.

Unlike the GDPR, the PDPL mandates data managers to recognize the right of Bahraini data owners to object to personal data that causes harm or distress to the data owner or any persons. Prior written approval from the Personal Data Protection Authority is mandatory before processing certain personal data. Article 58 defines criminal and civil penalties for violations including prison, in specified cases, in contrast with GDPR where only monetary penalties are defined.

Following public consultations, the Minister of Justice issued ten decisions to guide implementation of the PDPL. These decisions specified technical requirements to protect personal data, rules and procedures for professing, the transfer of data outside of Bahrain, conditions for creating publicly accessible

http://www.pdp.gov.bh/en/assets/pdf/regulations.pdf

http://www.pdp.gov.bh/en/royal-decree.html

⁵⁴² Personal Data Protection Authority, *The Law* (2018),

⁵⁴³ Personal Data Protection Authority, *Royal Decree No.* 78 (2022),

⁵⁴⁴ Personal Data Protection Authority, *Overview* (2022), http://www.pdp.gov.bh/en/about-PDPA.html

⁵⁴⁵ Akin Gump, *Bahrain Ministry of Justice to Act as Data Protection Authority* (Oct. 15, 2019), https://www.mondaq.com/data-protection/857510/bahrain-ministry-of-justice-to-act-as-data-protection-authority

⁵⁴⁶ DLA Piper, *Bahrain Publishes Personal Data Protection Law* (Sept. 17, 2018), https://www.dlapiper.com/en/qatar/insights/publications/2018/09/bahrain-publishes-personal-data-protection-law/

⁵⁴⁷ Securiti, Bahrain's PDPL vs. GDPR (2023), https://securiti.ai/bahrains-pdpl-vs-gdpr/

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personal data records, and administrative fees and policies.⁵⁴⁸ Terms and language such as transparency and accountability are mentioned briefly, as well as human rights and freedoms.

Other laws in Bahrain that provide general rights to privacy including digital privacy are:

- 1. Article 26 of the Kingdom's constitution, which safeguards confidentiality of postal, telegraphic, telephonic or electronic communication⁵⁴⁹
- 2. Law No. 16 on Electronic Transactions, Law No. 48 on Telecommunications, Law No. 60 on Information Technology Crimes, and Law No. 16 on Protection of State Information and Documents⁵⁵⁰
- 3. Previous laws related to data protection that complement PDPL also include the Central Bank of Bahrain and Financial Institutions Law 2006 and Labour Law 2012, which regulates data protection between employees and employers⁵⁵¹
- 4. In January 2017, Bahrain ratified the Arab Treaty on Combating Cybercrime to establish new rules on retaining user data and real-time monitoring of activities

Bahrain is not listed as one of the members of the Global Privacy Assembly.⁵⁵² Bahrain has neither sponsored nor taken part in the 2018 GPA Resolution on AI and Ethics.⁵⁵³ the 2020 GPA Resolution on AI and

https://www.dataguidance.com/notes/bahrain-data-protection-overview 552 Global Privacy Assembly, *List of Accredited Members* (2025),

 $\underline{\underline{https://global privacy assembly.org/participation-in-the-assembly/list-of-accredited-members/}$

⁵⁴⁸ Ministry of Justice, Islamic Affairs and Waqf, *The Minister of Justice Issues Ten Decisions to Implement the Personal Data Protection Law* (Mar. 20, 2022), https://www.moj.gov.bh/index.php/en/news-archived-291

⁵⁴⁹ Constitute Project, *Bahrain's Constitution of 2002 with Amendments through 2017* (Aug. 26, 2021), https://www.constituteproject.org/constitution/Bahrain 2017.pdf?lang=en

⁵⁵⁰ Council of Europe, *Bahrain* (May 28, 2020), https://www.coe.int/en/web/octopus/-/bahrain

 $^{^{551}}$ One Trust DataGuidance, Bahrain Data Protection Overview (Aug. 2021),

⁵⁵³ International Conference of Data Protection & Privacy Commissioners, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018),

https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922_ICDPPC-40th_AI_Declaration_ADOPTED.pdf

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Accountability,⁵⁵⁴ the 2022 GPA Resolution on AI and Accountability,⁵⁵⁵ or the 2023 GPA Resolution on Generative AI Systems.⁵⁵⁶

Algorithmic Transparency

Bahrain has not enacted algorithmic transparency laws. The PDPL in Article 15, requires permission from the Authority before the automated processing of personal data of sensitive nature, biometric data, genetic data, linking data to two or more data controllers for different purposes. Article 22 includes the right to object to decisions based solely on automated processing for purposes of assessing performance at work, financial standing, credit scoring, reliability or conduct. Yet the PDPL does not include provisions to ensure transparency in the methods of processing.

According to Bahrain's National Digital Portal, the country introduced legal frameworks to protect individual privacy and reduce algorithmic biases in 2024. Although specific implementation details were not provided, Bahrain identified transparency, explainability, and non-discrimination as essential values for ethical AI systems to support more effective bias mitigation.⁵⁵⁷

Previously, Bahrain joined other member states of the Digital Cooperation Organization (DCO) to adopt the Riyadh AI Call for Action Declaration (RAICA) during the Global AI Summit of 2022.⁵⁵⁸ This Declaration is a commitment to

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⁵⁵⁴ Global Privacy Assembly (GPA), *Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN.pdf

⁵⁵⁵ Global Privacy Assembly (GPA), Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology (Oct. 2022) https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁵⁵⁶ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁵⁵⁷ Government of Bahrain, Artificial Intelligence (Sept. 24, 2024),

⁵⁵⁸ WIRED, *The Key Wins of Saudi Arabia's Global AI Summit* (Sept. 27, 2021), https://wired.me/technology/saudi-arabia-global-ai-summit/

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develop AI technology that benefits people, communities, and nations. Item 4 of the Call for Action addresses safeguards to prevent unfairness of algorithms against individuals due to their orientation, culture, gender, or race.

Digitization

Bahrain stands for digitization with its e-government and smart city plans. In November 2021, Bahrain launched an ambitious Economic Recovery Plan to propel growth post-COVID-19 through an investment of more than \$30 billion in national infrastructure and strategic priority sectors. Government entities with plans to use AI include the National Space Science Agency in agriculture, the Supreme Judicial Council in the courtroom, the University of Bahrain in research labs, and advanced computing for applications in industry. The Kingdom has taken steps to build Smart cities, establish Smart traffic control, Smart cooling systems, and Smart banking.

The Digital Government Strategy issued on September 2022, focuses on modern technologies and AI in the development of government services, leveraged by digital infrastructure and data. 563

In cooperation with UNDP Bahrain, the country developed a comprehensive plan and roadmap of implementation of the sustainable Digital economy by 2025. A range of AI related initiatives and policies related to emerging technologies included:

• A cloud-first policy approach for the public sector during procurement processes

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⁵⁵⁹ Zawya, *New Four-Year Strategy for Bahrain Digital Economy Outlined* (Jan. 13, 2022), https://www.zawya.com/en/business/new-four-year-strategy-for-bahrain-digital-economy-outlined-nwxa95in

⁵⁶⁰ National Space Science Agency, *About 257 Thousand Palm Trees in Bahrain and the Western Regions Are on Top* (Feb. 27, 2021), https://www.sjc.bh/page-016.php?pID=760

⁵⁶¹ Supreme Judicial Council, *Courts 4.0 International Conference for Artificial Intelligence in Judiciary*, https://www.sjc.bh/page_016.php?pID=760

⁵⁶² Kingdom of Bahrain National Portal, Artificial Intelligence & Smart Cities (2023), <a href="https://www.bahrain.bh/wps/portal/en/!ut/p/z1/rVLLbsIwEPyVcOAY7Rry4Br6Cq3UUiAEfEGOMcElsUOwKOLr6xypBKFS92Bp7ZnxaHeAwgKoYkeZMyO1YoXtlzRYkZGP8eABMQ5mPOyil7A_Hj8RnHiQXgLILEH8nI-iycfzI0GPAL2Hj1cqwvv4NwD0tvxt_tBv-

⁵⁶³ Kingdom of Bahrain, *Digital Government Strategy Principles* (Jul. 10, 2024), https://www.bahrain.bh/wps/portal/en/!ut/p/z0/fcy7DoIwFIDhV-

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- AI and Robotics use in banking, retail and financial services, supported by the government agencies such as Tamkeen
- The creation of the region's first national data repository, encompassing 73 government bodies for predictive analytics to improve public service and data access, including a partnership with AWS for a Big Data Hub

Internet of Things (IoT) initiatives are also being developed with agencies including the National Space Science Agency (NSSA); the Ministry of Transportation and Telecommunication; the Ministry of Works, Municipalities Affairs, and Urban Planning; and the Economic Development Board. The Government of Bahrain is partnering with Amazon Web Services to establish Big Data centers. ⁵⁶⁴

Mass Surveillance

Amnesty International reported about an ongoing investigation on the use of Pegasus Spyware to infect the devices of three political activists in Bahrain in 2021. ⁵⁶⁵ The misuse of the spyware provided by Israeli NSO Group to trace mobile phones targeted at least 50,000 devices of journalists and human rights activists. According to Citizen Lab, Bahraini authorities used cyber surveillance since 2013, including phone forensics technology sold by Israeli company Cellebrite to extract private data from the devices of arrested activists. ⁵⁶⁶

The Carnegie Endowment for Peace report on AI surveillance, found that Bahrain is using facial recognition for smart policing, mainly from Chinese technology providers such as Dahua.⁵⁶⁷ Reports of use of surveillance cameras in public spaces also surfaced.

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⁵⁶⁵ Amnesty International, *Bahrain: Devices of Three Activists Hacked with Pegasus Spyware* (Feb. 18, 2022), https://www.amnesty.org/en/latest/news/2022/02/bahrain-devices-of-three-activists-hacked-with-pegasus-spyware/

⁵⁶⁶ The Citizen Lab, From Pearl to Pegasus. Bahraini Government Hacks Activists with NSO Group Zero-Click iPhone Exploits (Aug. 24, 2021), https://citizenlab.ca/2021/08/bahrain-hacks-activists-with-nso-group-zero-click-iphone-exploits/

⁵⁶⁷ Carnegie Endowment for International Peace, *The Global Expansion of AI Surveillance* (Sept. 2019), https://carnegieendowment.org/files/WP-Feldstein-AISurveillance final1.pdf

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The OHCHR reiterated concerns about surveillance of individuals and groups cooperating with the United Nations.⁵⁶⁸ The Ministry of Interior has issued statements warning about legal procedures against activists and their followers who participate in cybercrime on social media. 569

Bahrain's eGovernment authority released the "BeAwareBahrain" app to "ensure the safety of all its citizens and residents." The app alerted individuals in case of close contact with a confirmed case of COVID-19 and was able to confirm the location of people who had moved more than 15 meters from their phone. A 2020 report by Amnesty International on 11 countries using data tracking apps for COVID-19 concluded that the BeAwareBahrain app was among "the most alarming tools [...] carrying out live or near-live tracking of users' locations by frequently uploading GPS coordinates to a central server."571 The surveillance activities included the real-time broadcast of users' locations to a government database, the publication of online sensitive information linked to their national ID, and the enforced use of a Bluetooth bracelet during quarantine.

Biometric Identification

Bahrain has integrated biometrics and digital IDs as part of the Digital First Policy. The use of a nationwide digital identity scheme to include Sijilat (the Commercial Registration Portal), the National Taxation System, and Sehati (the National Social Health Insurance Program), aims to facilitate users access to government services through one-time input into the system.⁵⁷² Users can visit a Government Service Center if they lack internet access.

Bahrain introduced biometric identification for automated border control in Bahrain International Airport (BIA) in 2019, as part of the Airport

⁵⁶⁸ OHCHR, Report Details Disturbing Trends as Reprisals Continue against People Cooperating with the UN (Sept. 29 2022), https://www.ohchr.org/en/pressreleases/2022/09/report-details-disturbing-trends-reprisals-continue-against-people ⁵⁶⁹ Ministry of Interior of Bahrain, Anti-Cyber Crime Message on Twitter (May 21, 2019),

https://twitter.com/moi bahrain/status/1130802153663213568

⁵⁷⁰ Ministry of Health, BeAwareBahrain (2023), https://healthalert.gov.bh/en/category/beaware-

⁵⁷¹ Amnesty International, Bahrain Kuwait and Norway Contact Tracing Apps among Most Dangerous for Privacy (Jun. 16, 2020),

https://www.amnesty.org/en/latest/news/2020/06/bahrain-kuwait-norway-contact-tracing-appsdanger-for-privacy/

⁵⁷² Kingdom of Bahrain, Digital-First *Policies: Bahrain's Digital Path* (Jul. 30, 2024), https://www.bahrain.bh/wps/portal/en/BNP/HomeNationalPortal/ContentDetailsPage/!ut/p/z0/IY 67bsJAEEV ZVO4RDPYxEAZgoQTiYSAxGMbtLZH9oTNrLEXIM HUPGo6O69Oro6oGEN WsyRC-PZibFt3-h42 14xWTwjigb90L8WQ7n8WjaxekkggUJfIK-

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Modernization Programme (AMP).⁵⁷³ In July 2022, Bahrain joined the Global Entry Partnership, the U.S. Customs and Border Protection (CBP) program for expedited entry into the U.S. for pre-approved, low-risk travelers. The program makes use of facial recognition and travelers can make use of biometric kiosks at airports to process them.⁵⁷⁴

Tamkeen (Labour Fund), Bahrain's government agency promoting private-sector business and individual development, launched digital onboarding using biometric identification to register customers. Tamkeen uses B2B payment integrated with BENEFIT Pay. ⁵⁷⁵ BenefitPay is a financial network established in 1997 under license of the Central Bank of Bahrain. ⁵⁷⁶ Benefit uses facial recognition for validation and authentication of users, recognizing all GCC IDs and passports of all nationalities. The service is available for FinTech, insurance, and investment companies to curtail cybercrime. ⁵⁷⁷

Bahrain witnessed a significant uptake of digital identification and online civil registration services, with 743,000 transactions completed in 2023. The digitization of these services is crucial to the country's digital transformation.

With the growing trend towards digitization, only around 5% of transactions require physical contact, mainly for issues related to issuing residence permits and biometric updates. New initiatives include a national birth system, digital archiving of records, and a Central Population Registration System.⁵⁷⁸

⁵⁷⁴ Frank Hersey, *Bahrain Latest Addition to US Biometric Global Entry Partnership*, BiometricUpdate (Jul. 18, 2022), https://www.biometric-global-entry-partnership

⁵⁷³ Security World Market, *Bahrain Enhances Border Control with Biometric Identification* (Jun. 6, 2019), https://www.securityworldmarket.com/me/Newsarchive/bahrain-enhances-border-control-with-biometric-identification1

⁵⁷⁵ Government of Bahrain, National Portal of the Kingdom of Bahrain (2025), https://www.bahrain.bh/wps/portal/BNP/HomeNationalPortal/!ut/p/z1/04_Sj9CPykssy0xPLMn Mz0vMAfIjo8ziDT1NDTwsnA0MLEND3QzMLNzdTEzMLILMTc31wwkpiAJKGAAjgZA_V FgJXATDENCDQwCwzwdg_zdXAwNTAyhCvCYUZAbYZDpqKgIAGWtYeA!/dz/d5/L3dDZyEvUUZRSS9ZTlEh/

⁵⁷⁶ Benefit, The Pulse of Bahrain (2023), https://benefit.bh/

⁵⁷⁷ News of Bahrain, *BENEFIT Holds Identification and Verification Service Workshops* (Jul. 25, 2022), https://www.newsofbahrain.com/business/82774.html

⁵⁷⁸ Biometric Update, *Bahrain Sees High Uptake of Digital ID, CRVS Services through Online Platforms* (Feb. 5, 2024), https://www.biometricupdate.com/202402/bahrain-sees-high-uptake-of-digital-id-crvs-services-through-online-platforms

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Environmental Impact of AI

Bahrain revised its strategy roadmap in the wake of the COVID-19 pandemic to reprioritize its digital projects and ensure alignment with the UN Sustainable Development Goals.⁵⁷⁹

Additionally, the government is working toward a strong and sustainable digital economy by 2025. This is reflected in the Kingdom of Bahrain Economic Vision 2030, which seeks to ensure "a safe, secure, sustainable and attractive environment and world class infrastructure." ⁵⁸⁰

Bahrain has developed ethics to guide the responsible development and adoption of AI in the country, including a principle that "AI systems should be developed and used in a way that is sustainable and minimizes their environmental impact."⁵⁸¹

AI is also a driver of sustainable development in Bahrain. The University of Bahrain and the Benefit Company signed a Memorandum of Understanding to use AI and advanced computing for research and innovation into sustainable energy, climate change, and sea-level prediction.

Lethal Autonomous Weapons

Bahrain is a High Contracting party to the Convention on Certain Conventional Weapons' (CCW) Protocols III, IV, and V.⁵⁸² Bahrain is one of the 12 Arab state parties to the CCW that in 2020 called "for a new treaty to prohibit and restrict lethal autonomous weapons systems [...] and [stressed] the importance

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0ewxkjpo0deaiToZMHZvRLDktdtUPUV8t1w!!/

⁵⁷⁹ Kingdom of Bahrain, The Information & eGovernment Authority's Strategy,

⁵⁸¹ Kingdom of Bahrain, Artificial Intelligence (Sept. 24, 2024),

⁵⁸² United Nations, *High Contracting Signatories, Convention on Certain Conventional Weapons* (Jun. 25, 2024), https://www.un.org/disarmament/the-convention-on-certain-conventional-weapons/high-contracting-parties-and-signatories-ccw/

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of maintaining human control over the critical functions of weapons."⁵⁸³ Such a treaty would also prohibit the use of weapons considered injurious or indiscriminate such as landmines and booby traps.

Bahrain, as part of the Non-Aligned Movement (NAM), expressed its position against lethal autonomous weapons systems during the UN General Assembly of 2015, due to its "moral, humanitarian, and legal challenges for the international community." In a statement presented during the Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems Meeting in Geneva in 2022, the NAM called for the negotiation of a "legally binding international instrument stipulating prohibitions and regulations on lethal autonomous weapons systems."

Bahrain voted for the UN General Assembly Resolution 78/241 on lethal autonomous weapons systems, which directed the UN Secretary-General to prepare a report reflecting the views of member and observer states. Bahrain also supported the more recent UN General Assembly Resolution L.77. The resolution raised concerns about the impact of autonomous weapons on global security and regional and international stability and provides for open consultations to consider the Secretary-General's report. 585

Bahrain endorsed the Political Declaration resulting from the Responsible AI in the Military Domain Summit (REAIM 2023) co-hosted by the Netherlands and the Republic of Korea in November 2023. The Declaration followed a joint call to action on the responsible development, deployment, and use of AI in the military domain issued during the summit. S87

Bahrain is not among the countries who supported the REAIM Blueprint for Action that resulted from the second REAIM Summit, which took place in Korea. 588

https://www.stopkillerrobots.org/news/diplomatic2020/

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 $^{^{583}}$ Stop Killer Robots, Diplomatic Talks Re-convene (Sept. 25, 2020),

⁵⁸⁴ Non-Aligned Movement, Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects (CCW) (Jul. 2022), https://documents.unoda.org/wp-content/uploads/2022/08/WP-NAM.pdf

⁵⁸⁵ Automated Decision Research, *State Positions: Bahrain*, https://automatedresearch.org/news/state position/bahrain/

⁵⁸⁶ US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Nov. 27, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

⁵⁸⁷ Government of Netherlands, *Call to Action on Responsible Use of AI in the Military Domain* (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action

⁵⁸⁸ REAIM, Blueprint for Action (Sept. 11, 2024),

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Human Rights

Bahrain is a signatory of the Universal Declaration of Human Rights.⁵⁸⁹ The Prime Minister has expressed the importance of the UDHR in public statements.⁵⁹⁰ The country has completed four cycles of Universal Periodic Reviews, the most recent in November 2022.⁵⁹¹ The UPR of Bahrain noted the recommendations of various states for Bahrain to ratify international human rights covenants. The country made a voluntary pledge and commitment to implement projects of the national human rights plan (102 projects), for 2022–2026 and to submit voluntary reports every two years on the ongoing efforts to enhance the country's human right system.⁵⁹²

Bahrain is one of the 16 State Parties to the Arab Charter on Human Rights⁵⁹³ and has ratified the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social, and Cultural Rights (ICESCR).⁵⁹⁴

Freedom House rated Bahrain as "Not Free" (12/100) in 2024.⁵⁹⁵ Restrictions to freedom of expression and beliefs and the use of spyware and surveillance technology to target activists and dissidents are areas of concern. Internet freedom in Bahrain remained restricted in 2024 with content critical of the government blocked and removed. Freedom House notes that despite the continued use of social media for activism, self-censorship prevailed due to fear of state surveillance.⁵⁹⁶

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 $\underline{http://www.lasportal.org/ar/legalnetwork/Pages/agreements_details.aspx?RID=69}$

Values and Path to Solutions (Dec. 12, 2023), https://bahrain.un.org/en/255528-universal_declaration-human-rights-75-our-shared-values-and-path-solutions

⁵⁹⁰ Bahrain News Agency, *HRH Prime Minister Highlights Universal Declaration of Human Rights* (Dec. 8, 2018),

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⁵⁹¹ United Nations Human Rights Council, *Universal Periodic Review: Bahrain* (2023), https://www.ohchr.org/en/hr-bodies/upr/bh-index

⁵⁹² United Nations Human Rights Council, *Report of the Working Group on the Universal Periodic Review: Bahrain,* (Jan. 11, 2023), https://www.upr-info.org/sites/default/files/country-document/2023-02/a hrc wg.41 BAH E.pdf

⁵⁹³ League of Arab States, *The Arab Charter for Human Rights* (2004),

⁵⁹⁴ Ministry of Foreign Affairs, *Human Rights*, https://www.mofa.gov.bh/en/overview
⁵⁹⁵ Freedom House, *Freedom in the World 2024: Bahrain* (2024),

https://freedomhouse.org/country/bahrain/freedom-world/2024

⁵⁹⁶ Freedom House, *Freedom on the Net 2024: Bahrain, Key Developments, June 1, 2023–May 31, 2024* (2024), https://freedomhouse.org/country/bahrain/freedom-net/2024

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The Transparency International's 2023 Corruption Perception Index ranks Bahrain in 76 out of 180 countries with a score of 42/100, with 100 being very clean.⁵⁹⁷

Human Rights Watch reported on the ongoing imprisonment human rights defenders, some for more than a decade, and pro-democracy activists and abysmal conditions and denial of adequate healthcare in prisons. Limits on freedom of expression and the return of the death penalty, especially given unfair trials, remain concerns.⁵⁹⁸

OECD / G20 AI Principles

Bahrain is not a member of the OECD and has not endorsed the OECD AI Principles. 599 Bahrain has not submitted reports to the OECD AI Policy Observatory in relation to ongoing policies, strategies, or activities associated with AI 600

Bahrain is a member of the MENA-OECD Initiative on Governance and Competitiveness created in 2021 to implement reforms to improve governance structures and cooperation.⁶⁰¹

Council of Europe AI Treaty

Bahrain has not endorsed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law, the first legally binding international AI treaty.⁶⁰²

https://www.transparencv.org/en/cpi/2023/index/bhr

⁵⁹⁷ Transparency International, Corruption Perceptions Index (2023)

⁵⁹⁸ Human Rights Watch, World Report 2024, Bahrain: Events of 2023 (2024),

https://www.hrw.org/world-report/2024/country-

⁵⁹⁹ OECD, OECD AI Principles Overview: Countries Adhering to the AI Principles (May 2024), https://oecd.ai/en/ai-principles

⁶⁰⁰ OECD.AI, National AI Policies & Strategies (2025), https://oecd.ai/en/dashboards/overview
601 OECD, MENA-OECD Initiative on Governance & Competitiveness for Development, 2021
Ministerial Conference (2021), https://www.oecd.org/en/regions/middle-east-and-north-africa.html

Good Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Jan. 27, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

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UNESCO Recommendation on AI Ethics

Bahrain is a UNESCO member since 1972⁶⁰³ and is one of the member States which endorsed the Recommendation on the Ethics of AI.⁶⁰⁴ However, no reports exist about how Bahrain is implementing the UNESCO Recommendation.

Evaluation

Bahrain's Economic Vision 2030, Digital Government Strategy 2022, and Digital Economy Sector Strategy 2022–2026 frame the efforts of the Kingdom to provide a roadmap and KPIs for the governance of AI. The formulation of a National AI Strategy is a necessary next step in Bahrain's pathway to responsible and trustworthy innovation, if Bahrain takes the drafting of the Strategy as an opportunity to implement the UNESCO Recommendation on the Ethics of AI.

The participation of multiple governmental agencies advancing the digitalization and AI plans is a strength in the pathway to governing AI. Building on the experience of the public consultation for the Personal Data Protection Law (PDPL) in 2021, Bahrain has the potential to establish a formalized system for public consultation in AI policy to ensure the adoption of explainable, trustworthy, and fair AI.

While Bahrain has made strides in adopting the Gulf Cooperation Council's AI Ethics Initiative and reinforcing its commitment to AI privacy, security, and ethical standards, the limited public access to these documents makes it challenging to assess their effectiveness and transparency.

In terms of data protection and independent oversight, the alignment of the Bahrain's Personal Data Protection Law (PDPL) to GDPR, and the draft regulations for Data Protection Impact Assessments (DPIA) are positive steps, which can be enhanced by the adoption of algorithmic transparency and the creation of an independent data and AI supervisory authority.

Although it has signed the Universal Declaration of Human Rights and the Arab Charter on Human Rights, Bahrain stands as a "not free" country in relation to human rights protection. Concerns exist regarding the use of AI for mass surveillance purposes.

Bangladesh

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In 2024, Bangladesh introduced a draft National AI Policy that identifies principles such as transparency and accountability, fairness, and sustainability as key to AI implementation in the country. Bangladesh also initiated the UNESCO Readiness Assessment Methodology (RAM).

⁶⁰³ UNESCO, Member States, Bahrain, https://www.unesco.org/en/countries/bh

⁶⁰⁴ UNESCO, *UNESCO Member States Adopt the First Ever Global Agreement on the Ethics of Artificial Intelligence* (Nov. 25, 2021), https://en.unesco.org/news/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence

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National AI Strategy

Bangladesh published its National Strategy on Artificial Intelligence in March 2020.⁶⁰⁵ The goal is to make Bangladesh a "technologically advanced nation by the next decade." The National AI Strategy is driven by the slogan "AI for Innovative Bangladesh." The AI Strategy identified seven national priority sectors, which are:

- 5. public service delivery
- 6. manufacturing
- 7. agriculture
- 8. smart mobility and transportation
- 9. skill & education
- 10. finance & trade
- 11. health

To create a "sustainable AI Ecosystem," the report proposes six strategic pillars, namely:

- 12. research and development
- 13. skilling and reskilling of AI workforce
- 14. data and digital infrastructure
- 15. ethics, data privacy, security & regulations
- 16. funding and accelerating AI startups
- 17. industrialization for AI technologies

Each pillar consists of a strategic brief, a roadmap, action plan, related stakeholders and lead ministries. Finally, a summary roadmap in the report includes steps for the development of AI over the next five years.

Under Strategy 4 of the AI national roadmap: "Ethics, Data Privacy, Security & Regulations," the Bangladeshi government will create a new set of AI ethics guidelines to address issues such as fairness, safety, cybersecurity, and transparency. The ICT Division and Ministry of Law, Justice and Parliamentary Affairs intend to formulate Right to Explanation (RTE) Guideline for AI Algorithm. 606

The national Parliament passed the Agency to Innovate (a2i) Bill 2023, creating the a2i as Bangladesh's national innovation agency, a statutory body. It is a flagship program of the 2019 Smart Bangladesh's Vision 2041 and its 20-year

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⁶⁰⁵ Information and Communication Technology Division, Government of the People's Republic of Bangladesh, *National Strategy for Artificial Intelligence Bangladesh* (Mar. 2020), https://ictd.portal.gov.bd/sites/default/files/files/ictd.portal.gov.bd/policies/e57f1366_a62c_4d1a

^{%20}Bangladesh%20.pdf

⁶⁰⁶ Ibid, pp. 40-41

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Perspective Plan,⁶⁰⁷ which aim to utilize technology for societal advancement by 2041. The Vision and Perspective Plan focus on four institutional pillars: governance, democratization, decentralization, and capacity building. As part of the three-prong strategy for Bangladesh's Innovation Economy, the Plan aims to leverage the fourth industrial revolution, including AI and smart machines, for competitiveness and a low-carbon economy. To this end, Bangladesh aims to develop a robust legal framework and governance structure for e-government and enacted laws in 2023 to lay the groundwork for AI regulation as part of this initiative.⁶⁰⁸

Minister of Law, Justice, and Parliamentary Affairs Mr. Anisul Huq announced the government's initiative to draft a law on AI in February 2024. The Minister emphasized plans to consult with international stakeholders before finalizing the act. 609 Minister Huq led a discussion with the Ministry of Posts on the draft framework for the AI law, stressing the importance of addressing critical aspects related to human welfare and the ethical use of AI. He highlighted the commencement of discussions on AI's legal framework, with a focus on safeguarding human rights and promoting the beneficial application of AI across various sectors. 610

The Ministry of Posts, Telecommunications, and Information Technology released a draft National Artificial Intelligence Policy 2024 online.⁶¹¹ The policy lists 10 priority sectors for AI implementation: public services; governance and judiciary; telecommunication, data governance, surveillance; agriculture; environment; smart cities, transportation, mobility; finance, trade, and economy; manufacturing and industrial transformation; education, skill, and employment; health and wellbeing; science, technology, research and innovation. The draft also discusses key principles for AI development and implementation, including fairness, transparency and accountability, safety and security, sustainability,

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⁶⁰⁷ General Economics Division (GED) Bangladesh Planning Commission Ministry of Planning Government of the People's Republic of Bangladesh, *Making Vision 2041 a Reality Perspective Plan of Bangladesh 2021–2041* (Mar. 2020),

http://oldweb.lged.gov.bd/uploadeddocument/unitpublication/1/1049/vision%202021-2041.pdf
608 Bangladesh Parliament, *Legislation* (Mar. 2024), https://www.parliament.gov.bd/acts-of-parliament

⁶⁰⁹ Dhaka Tribune, *Govt to Make Law on Artificial Intelligence* (Feb. 13, 2024), https://www.dhakatribune.com/bangladesh/339317/anisul-govt-to-make-law-on-artificial

⁶¹⁰ Dhaka Tribune, *Law Minister: Draft of Law on AI and Its Use to Be Formulated by September* (Mar. 21, 2024), https://www.dhakatribune.com/bangladesh/laws-rights/342388/draft-of-law-on-ai-and-its-use-to-be-formulated-by

⁶¹¹ Ministry of Posts, Telecommunication, and Information Technology, Government of the People's Republic of Bangladesh, *National AI Policy* (Apr. 2024), https://ictd.portal.gov.bd/sites/default/files/files/ictd.portal.gov.bd/page/6c9773a2 7556 4395 b bec fl32b9d819f0/National AI Policy 2024 DRAFT.pdf

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partnership and collaboration, and human-centered AI. It proposes to establish a National AI Center of Excellence for the coordination, monitoring, and facilitation of AI-related initiatives.

Public Participation

The National AI Strategy of Bangladesh identified engagement with media and civil societies for creating a "robust ethics, data privacy, security and regulations guideline" for emerging technologies. As part of its National Internet of Things (IoT) Strategy, the Bangladesh government proposed to establish "an Advisory Committee including representatives from Government, industry, academia, and community" to provide ongoing guidance in the emerging areas of IoT.

The Bangladeshi government sought civil society input on its draft of the Cyber Security Act in 2023, receiving around 900 recommendations in the two weeks of the comment period.⁶¹⁴

Data Protection

Although the Constitution of Bangladesh does not explicitly grant the fundamental right to privacy, Article 43 of the Constitution recognizes this right under certain restrictions and states that, "every citizen shall have the right, subject to any reasonable restrictions imposed by law in the interests of the security of the State, public order, public morality or public health – (a) to be secured in his home against entry, search and seizure; and b) to the privacy of his correspondence and other means of communication." 615

Bangladesh proposed a draft Data Protection Act in 2022.⁶¹⁶ One critic noted that "The proposed Data Protection Act 2022 and the Bangladesh

 $\underline{www.amnesty.org/en/latest/news/2023/08/bangladesh-government-must-remove-draconian-provisions-from-the-draft-cyber-security-act/}$

⁶¹² Information and Communication Technology Division, Government of the People's Republic of Bangladesh, *National Strategy for Artificial Intelligence Bangladesh*, pp. 40-41 (Mar. 2020), https://ictd.portal.gov.bd/sites/default/files/files/ictd.portal.gov.bd/policies/e57f1366 a62c 4d1a 8369 a9d3bc156cd5/National%20Strategy%20for%20Artificial%20Intellgence%20-%20Bangladesh%20.pdf

⁶¹³ Information and Communication Technology Division, Government of the People's Republic of Bangladesh, *National Internet of Things Strategy*, p. 11 (Mar. 2020), https://bcc.portal.gov.bd/sites/default/files/files/bcc.portal.gov.bd/page/bdb0a706_e674_4a40_a8 a8 7cfccf7e9d9b//2020-10-19-15-04-9807d52e24da56e66f7ec89f7eb540ec.pdf

⁶¹⁴ Amnesty International, Bangladesh: Government Must Remove Draconian Provisions from the Draft Cyber Security Act (Sept. 5, 2023),

⁶¹⁵ Sadiya S. Silvee and Sabrina Hasan, *The Right to Privacy in Bangladesh in the Context of Technological Advancement*, International and Comparative Law Journal 1(2) (Dec. 8, 2018), https://ssrn.com/abstract=3298069 or https://dx.doi.org/10.2139/ssrn.3298069

⁶¹⁶ Information and Communication Technology Division Government of the People's Republic of Bangladesh, *The Proposed Data Protection Act 2022* (Jul. 16, 2022),

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Telecommunication Regulatory Commission Regulation for Digital, social media and OTT Platforms, 2021 attempt to protect citizen information against American tech companies, but both draft regulations grant Bangladesh authorities powers to control everything on the Bangladeshi internet."⁶¹⁷ The purpose of this law is to provide security for personal data. The law does not provide a definition of personal data. The proposed data protection law mandates storage of citizen data within Bangladesh. "The localization of the data within Bangladesh gives authorities broad powers to access people's personal data without judicial oversight and accountability for any violation of people's right to privacy," ⁶¹⁹ wrote Amnesty International in feedback to the proposed bill.

In November 2023, the Cabinet of Bangladesh gave its approval in principle to the Draft Data Protection Act 2023. The Act shall now be enacted by the Parliament.⁶²⁰ The revised Act addressed stakeholders' feedback on the transition period and data localization requirements. However, the definition of personal data was not addressed.⁶²¹ The Act provides for the establishment of a Board in charge of overseeing data protection in the country. The Board shall be constituted by the Government and consisting of a chairman and four members.

The Telecommunications Act (2000) is a law "for the purpose of development and efficient regulation of telecommunication systems and telecommunication services in Bangladesh." Under Section 67 (b) of the Act no person can "intercept any radio communication or telecommunication nor shall [utilize] or divulge the intercepted communication, unless the originator of the communication or the person to whom the originator intends to send it has consented to or approved the interception or divulgence." Under Section 97 of the

https://ictd.portal.gov.bd/sites/default/files/files/ictd.portal.gov.bd/page/6c9773a2_7556_4395_b

bec_f132b9d819f0/Data%20Protection%20Bill%20en%20V13%20Unofficial%20Working%20 Draft%2016.07.22.pdf

⁶¹⁷ Nilesh Christopher, *Bangladesh's New Data Protection Law Grants More Power to the State than Its People, Rest of World* (Aug. 24, 2022), https://restofworld.org/2022/newsletter-south-asia-bangladeshs-data-protection-law/

⁶¹⁸ Harisur Rohoman, *Data Protection Act 2022: More Questions than Answers*, Dhaka Tribune (Oct.16, 2022), https://www.dhakatribune.com/op-ed/2022/10/17/data-protection-act-2022-more-questions-than-answers

⁶¹⁹ Amnesty International, *Bangladesh: New Data Protection Bill Threatens People's Right to Privacy* (Apr. 27, 2022), https://www.amnesty.org/en/latest/news/2022/04/bangladesh-new-data-protection-bill-threatens-peoples-right-to-privacy/

⁶²⁰ Dhaka Tribune, *Cabinet Gives In-Principle Approval to Draft Personal Data Protection Act* (Nov. 27, 2023), https://www.dhakatribune.com/bangladesh/government-affairs/332341/cabinet-gives-in-principle-approval-to-draft

⁶²¹ Atlantic Council South Asia Center, *Bangladesh Draft Data Protection Act 2023: Potential and Pitfalls* (May 8, 2023), https://www.atlanticcouncil.org/wp-content/uploads/2023/05/Bangladesh-Draft-Data-Protection-Act-2023-Potential-and-Pitfalls.pdf

⁶²² Bangladesh Telecommunication Regulatory Commission, *The Bangladesh Telecommunications Act 2001* (Apr. 16, 2001), https://btrc.gov.bd/site/view/law/-

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Act, the government may ask the telecommunication operator to maintain records relating to the communications of a specific user under the broad definition of National Security and Public Interest.

The Information Communication Technology Act (2006) imposes responsibility on any individual or body corporate handling personal or sensitive data and requires them to maintain and implement reasonable security practices. 623 Section 46 of the Information Communication Technology Act states that the state can intercept, monitor, or decrypt data in the interest of:

- state sovereignty, integrity, or security
- relations with foreign states
- public order
- preventing the commission of or incitement to commit any offense relating to the above
- investigation of any offense

The Digital Security Act came into force in October 2018 and pertains to "offences committed through digital devices." 624 Section 26 of the Act provides for "punishment for unauthorized collection, use etc. of identity information." The Digital Security Act 2018 repealed 5 provisions of the Information Communication Technology Act 2006 including section 57, which was deemed to be in violation of rights protected under the Bangladesh Constitution. 625

Under the Digital Security Act two entities were formed "to carry out the purposes of the Act": the National Data Security Council (NDSC) and the Digital Security Agency (DSA). The NDSC under Section 13 of the Act "shall provide necessary direction and advice to the Agency" and the DSA shall have the power to "remove or block some data-information." The DSA will have a Digital Forensic Lab and an Emergency Response Team to: (a) "ensure the emergency security of the critical information infrastructure; (b) take immediate necessary measures for remedy if there is any cyber or digital attack and if the cyber or digital security is affected; (c) take necessary initiatives to prevent probable and imminent cyber or digital attack; (d) take overall co-operational initiatives, including exchange of information with any similar type of foreign team or [organization], for carrying out the purposes of this Act, with the prior approval of the Government; (e) do such other acts as may be prescribed by rules."

⁶²³ Bangladesh Computer Council, ICT Act 2006 (Updated Jan. 30. 2023), https://bcc.portal.gov.bd/site/page/8a843dba-4055-49af-83f5-58b5669c770d/-

⁶²⁴ Bangladesh e-Government Computer Incident Response Team, *Digital Security Act 2020* (Sept. 30, 2019), https://www.cirt.gov.bd/wp-content/uploads/2020/02/Digital-Security-Act-2020.pdf

⁶²⁵ Clooney Foundation for Justice and Center for Governance Studies (CGS), The Information and Communication Technology Act of 2006: Bangladesh's Zombie Cyber Law (Nov. 2024), https://cfj.org/wp-content/uploads/2024/11/Bangladesh-ICT-Act-Report November-2024-1.pdf

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In September 2023, Bangladesh's parliament passed the Cyber Security Act (CSA), replacing the Digital Security Act of 2018, to combat cybercrime and disinformation. The CSA outlines measures for detecting, preventing, and prosecuting crimes committed through digital or electronic means. Additionally, Section 5 of the Act establishes a National Cyber Security Agency, which will operate under the ICT Division to fulfill the Act's objectives, including supervising and coordinating with the National Computer Emergency Response Team, Computer Emergency Teams, or the Computer Incident Response Team.

The Cyber Security Act has largely been critiqued as a replication of the DSA. As Amnesty International reported, "The only changes the CSA makes are related to sentencing, which can be summarized as follows: lowering the maximum applicable prison sentence for eight [offenses], removing a sentence of imprisonment for two [offenses], increasing the maximum applicable fine for three [offenses] and removing the higher applicable penalty for all repeat [offenses]⁶²⁶

Algorithmic Transparency

While there is no explicit right to algorithmic transparency in Bangladeshi law, the government acknowledged the lack of transparency of machine learning. The national AI strategy explicitly stated: 627

- The EU General Data Protection Regulation (GDPR) can be a good solution to the challenge on rules about who will be responsible for an unwanted inversion.
- There should be a rule of "right to get an explanation" in every process.
- The impacts AI will bring to human physiology, dignity, and autonomy are a core challenge.
- A strong legal and ethical framework on how AI would be implemented in applications is a must.
- AI ethics should be righteous, fundamentally sound, assessable, reversible, and inclusive.

The draft National Artificial Intelligence Policy 2024 includes algorithmic transparency among the Key Principles for AI Implementation. Principle 3.2, Transparency and Accountability provides for "ensuring transparency and lines of accountability in the collection, storage, and usage of data in AI systems to ensure that the decision-making process is explainable and interpretable, allowing users and stakeholders to understand how AI arrives at decisions, and can challenge them."⁶²⁸

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⁶²⁶ Amnesty International, *Bangladesh: Open Letter to the Government: Feedback on Proposed 'Cyber Security Act* (Aug. 22, 2023), www.amnesty.org/en/documents/asa13/7125/2023/en/627 Ibid, pp. 47-48.

⁶²⁸ Ministry of Posts, Telecommunication, and Information Technology, Government of the People's Republic of Bangladesh, *National AI Policy*, p. 5 (Apr. 2024),

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Biometric Identification

Since 2008, the Election Commission of Bangladesh has issued a National Identity Card (NID) which is compulsory for every Bangladeshi citizen over the age of 18 for voting and for availing 22 types of services, including banking, taxpayer identity number (TIN), driving license, and passport. In 2016, the government started issuing a machine readable "smart NID card" with a chip that can store encrypted data such as biometric and identification data for enhancing security and reducing forgery. 629

In June 2023, the Bangladesh Home Ministry gained the authority to issue NID cards, transferring this responsibility from the Election Commission. This change is part of the National Identity Registration Act, which aims to streamline the issuance process and enhance efficiency in managing citizen identification.⁶³⁰

Environmental Impact of Al

The draft National AI Policy 2024 includes Sustainability as a Key Principle and defines the goal to develop AI technologies that "minimize their carbon footprint and promote green AI practices." The Policy also identifies Environment, Energy, and Climate Change as a priority sector for AI integration. The goal is to apply AI systems for environmental monitoring, resource management, energy production and distribution, and localized strategies for disaster and environmental recovery. 632

Lethal Autonomous Weapons

Bangladesh continues to engage actively in discussions surrounding lethal autonomous weapons systems (LAWS). The Group of Governmental Experts (GGE) on LAWS met twice in 2024, furthering discussions initiated by the UN

https://ictd.portal.gov.bd/sites/default/files/files/ictd.portal.gov.bd/page/6c9773a2_7556_4395_bbec_f132b9d819f0/National_AI_Policy_2024_DRAFT.pdf

times.com/story/515953/Bangladesh-launches-smart-national-ID-cards

https://ictd.portal.gov.bd/sites/default/files/files/ictd.portal.gov.bd/page/6c9773a2_7556_4395_b bec_f132b9d819f0/National_AI_Policy_2024_DRAFT.pdf

⁶²⁹ Mizan Rahman, *Bangladesh Launches Smart National ID Cards*, Gulf Times (Oct. 16, 2016), https://web.archive.org/web/20180517001739/http://www.gulf-

⁶³⁰ BiometricUpdate, *Home Affairs Dept to Become National ID-Issuing Authority in Bangladesh* (Jun. 15, 2023), https://www.biometricupdate.com/202306/home-affairs-dept-to-become-national-id-issuing-authority-in-bangladesh

⁶³¹ Ministry of Posts, Telecommunication, and Information Technology, Government of the People's Republic of Bangladesh, *National AI Policy*, p. 5 (Apr. 2024),

⁶³² Ibid, pp. 7–8

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General Assembly resolution passed in December 2023, which called for a legally binding instrument to regulate these systems by 2026.⁶³³

Bangladesh expressed its support for multilateral talks on lethal autonomous weapons systems at the UN General Assembly in October 2016.⁶³⁴ The country participated for the first time in the Convention on Certain Conventional Weapons (CCW)⁶³⁵ meetings on lethal autonomous weapons systems in 2019 but did not make any statements.

In October 2023, at the 78th UN General Assembly, Bangladesh voted in favor of resolution L.56, emphasizing the international community's need to address concerns regarding autonomous weapons. Bangladesh advocates for a comprehensive assessment of these systems' compliance with international law, including humanitarian and human rights laws. Additionally, Bangladesh supports negotiating a legally binding instrument on autonomous weapons and aligns with the Non-Aligned Movement (NAM) in this endeavor. The NAM emphasizes the urgency of regulating emerging technologies related to autonomous weapons systems through a legally binding instrument under the Convention.

Human Rights

In 2024, Freedom House report ranked Bangladesh as "partly free" with a score of 40/100 for political and civil rights.⁶³⁷ The report states that, "the ruling Awami League (AL) has consolidated political power through sustained harassment of the opposition and those perceived to be allied with it, as well as of critical media and voices in civil society. Corruption is a serious problem, and anticorruption efforts have been weakened by politicized enforcement. Due

<u>library.unoda.org/General Assembly First Committee -Seventy-Eighth session (2023)/Bangladesh.pdf</u>

⁶³³ UN Office for Disarmament Affairs, Convention on Certain Conventional Weapons – Group of Governmental Experts on Lethal Autonomous Weapons Systems (2024), https://meetings.unoda.org/meeting/71623

⁶³⁴Human Rights Watch, Mary Wareham, Human Rights Watch, Stopping Killer Robots: Country Positions on Banning Fully Autonomous Weapons and Retaining Human Control, Human Rights Watch (Apr. 2021), https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and# ftn34

positions-banning-fully-autonomous-weapons-and#_ftn34

635 United Nations, Statement under Thematic Discussion on "Conventional Weapons" in the First Committee of the 71st Session of the UN General Assembly (Oct. 21, 2016),

https://www.un.org/disarmament/wp-content/uploads/2016/10/21-Oct-Bangladesh-CW.pdf
636 United Nations, Statement by Mr. Toufiq Islam Shatil, Deputy Permanent Representative of
Bangladesh to the UN Thematic Debate: "Conventional Weapons" First Committee 78th Session
United Nations General (Oct. 2023), https://docs-

⁶³⁷ Freedom House, *Freedom in the World 2024: Bangladesh* (2024), https://freedomhouse.org/country/bangladesh/freedom-world/2024

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process guarantees are poorly upheld and security forces carry out a range of human right abuses with near impunity."638

In January 2024, UN experts urged the Government of Bangladesh to implement significant human rights reforms to address repressive trends and restore political dialogue and participation during its fourth consecutive term. Expressing alarm over widespread attacks and intimidation of civil society, human rights defenders, journalists, and political activists during recent general elections, the experts highlighted reports of arrests, violence, and lack of independent investigations.⁶³⁹

The authorities of Bangladesh "imprisoned 433 people under the Digital Security Act, the majority of whom were held on allegations of publishing "false or offensive information" under Section 25."⁶⁴⁰ Under this law, any kind of criticism of the ruling government would be considered an act of spreading false information. This represented a "21% year-on-year increase in the number of people detained under the Act. As of 11 July, the longest-serving prisoner detained under the Act had been held since 24 December 2018. Section 25 (publication of false or offensive information), Section 29 (publication of defamatory information) and Section 31 (offence and punishment for deteriorating law and order) of the Act were used systematically to target and harass dissenting voices, including those of journalists, activists and human rights defenders. The actions contravened Bangladesh's commitments under the ICCPR as well as its domestic constitutional obligations." ⁶⁴¹ Bangladesh authorities also arrested a 15-year-old for "defaming" Prime Minister Sheikh Hasina Wazed in a Facebook post. ⁶⁴²

The UN Office of the High Commissioner for Human Rights noted that security forces used excessive force against protesters, leading to allegations of extrajudicial killings and arbitrary arrests. The report calls for independent investigations into these incidents to ensure accountability.⁶⁴³

Protests-and-Unrest-in-Bangladesh-16082024 2.pdf

⁶³⁸Freedom House, *Freedom in the World 2022: Bangladesh* (2022), https://freedomhouse.org/country/bangladesh/freedom-world/2022

⁶³⁹ United Nations, *Bangladesh: Government Must Prioritise Human Rights in Its Fourth Term* (Jan. 24, 2024), https://www.ohchr.org/en/press-releases/2024/01/bangladesh-government-must-prioritise-human-rights-its-fourth-term

⁶⁴⁰ Amnesty International, *Universal Periodic Review of Bangladesh* (Sept. 2021), https://www.ohchr.org/sites/default/files/2021-11/AI_Bangladesh.pdf
⁶⁴¹Ibid, p. 2.

⁶⁴² Human Rights Watch Dispatch, *Bangladesh Arrests Teenage Child for Criticising Prime Minister* (Jun. 25, 2020), https://www.hrw.org/news/2020/06/26/bangladesh-arrests-teenage-child-criticizing-prime-minister

⁶⁴³ United Nations Office of the High Commissioner for Human Rights, *Preliminary Analysis of Recent Protests and Unrest in Bangladesh* (Aug. 16, 2024), https://www.ohchr.org/sites/default/files/2024-08/OHCHR-Preliminary-Analysis-of-Recent-

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OECD / G20 AI Principles

Bangladesh has not endorsed the OECD AI principles.

Council of Europe AI Treaty

Bangladesh has not endorsed the Council of Europe Framework Convention on AI and Human Rights, Democratic Values, and Rule of Law. 644

UNESCO Recommendation on Al Ethics

Bangladesh has endorsed the UNESCO Recommendation on the Ethics of Artificial Intelligence.⁶⁴⁵

UNESCO is collaborating with Bangladesh's ICT Ministry and Aspire to Innovate (a2i) to conduct the Readiness Assessment Methodology (RAM). RAM is a tool to evaluate a country's preparedness for implementing AI, including perspectives of social equity, public participation, public trust, and environment and sustainability. The RAM is in progress.⁶⁴⁶

Evaluation

Bangladesh has set out a national strategy for AI that recognizes the importance of AI ethics and endorsed the UNESCO Recommendation on the Ethics of AI. The data protection law is still in draft form and there is support in the national AI strategy for a GDPR-style law and for an explicit right of algorithmic transparency in the draft National AI Policy 2024. In view of the country's low credentials regarding human rights protection, Bangladesh's extensive biometric identification program through the national ID system remains concerning.

Belgium

In 2024, Belgium established a Federal Data and AI Ethics Committee to promote ethical AI use in public administration while the Flemish Region launched a project, with UNESCO, to ready public administration for AI use. Belgium's data protection authority also issued guidance to ensure algorithmic transparency and accountability as the EU AI Act came into force and interacted with data protection regulations.

⁶⁴⁴ Council of Europe, *Framework Convention on Artificial Intelligence, Signatories* (2025), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

⁶⁴⁵ UNESCO, Recommendation on the Ethics of Artificial Intelligence (Nov. 23, 2021), https://unesdoc.unesco.org/ark:/48223/pf0000381137

⁶⁴⁶ UNESCO, Global AI Ethics and Governance Observatory, *Global Hub, Country Profiles* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

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National AI Strategy

In October 2022, the Council of Ministers of the Belgian Federal Government approved a National Convergence Plan for the development of artificial intelligence. The plan aims to foster AI development while emphasizing that "fundamental rights, such as privacy and non-discrimination, are protected and that new technologies should be developed within an appropriate ethical and legal framework." The Plan aims to reduce the fragmentation of Belgian Regional AI strategies by establishing nine common objectives: (1) Promoting trustworthy AI; (2) Guaranteeing cybersecurity; (3) Strengthening the competitiveness and the attractiveness of Belgium through AI; (4) Developing a data-driven economy and a high-performance infrastructure; (5) Centralizing AI in healthcare; (6) Using AI for sustainable mobility; (7) Protecting the environment; (8) Providing better and life-long learning opportunities; (9) Offering citizens better service and protection.

The Convergence Plan also includes the establishment of a Governing Board to execute and coordinate it.⁶⁴⁸ The Convergence Plan explicitly refers to the need for transparency in AI design; preventing biased outcomes; assessing the societal impact of AI; ensuring system robustness and safety; and promoting diversity. It also advocates for AI that contributes to "the protection of fundamental rights, democracy, and the rule of law" and sees more representative and responsible data use as the key to prevent discrimination against women, minorities, the elderly, and other groups. In addition, the Convergence Plan envisions Belgium's "active participation in the development of norms, standards, and recommendations in international fora" and argues for clear rules on "accuracy, transparency, accountability, explainability, and equality."⁶⁴⁹

Belgium is a federal state. It has three regions as well as three communities, all of which have their own government, and many of which have also developed strategies and initiatives on digitalization or AI. "The Flemish Community, the French Community and the German-speaking Community are divided according to language and culture. They are responsible for language, culture, education, audiovisual media, and individual assistance such as specific parts of health policy and social welfare. The regions (the Flemish Region, the Brussels Capital Region and the Walloon Region) are divided based on territory." They are responsible

⁶⁴⁷ News.belgium.be, *Nationaal convergentieplan voor de ontwikkeling van artificiële intelligentie* (Oct. 2022), https://bosa.belgium.be/en/themes/digital-administration/digital-strategy-and-policy/national-convergence-plan-development

⁶⁴⁸ Ibid

⁶⁴⁹ Michel.belgium.be, *Nationaal convergentieplan voor de ontwikkeling van artificiële intelligentie* (Oct. 2022),

https://michel.belgium.be/sites/default/files/articles/Plan%20AI%20%28NL%29-compressed.pdf 650 Belgium.be, Belgian Federal Government, *Belgium, a federal state*, https://www.belgium.be/en/about_belgium/government/federale_staat

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for the economy, employment, housing, public works, energy transportation, environmental and spatial planning and have some things to say concerning international affairs. The Federal Government is responsible for foreign affairs, defense, justice, finance, social security, healthcare and internal affairs. ⁶⁵¹

The Flemish Region released the *Vlaanderen Radicaal Digitaal*, in 2019, which was renewed as the *Vlaanderen Radicaal Digitaal II* in 2021. This regional digital strategy aims to foster digital public services, data processing, and automation in the public sector.⁶⁵² In 2019 as well, the Flemish government approved the Flemish policy plan on AI. It focuses specifically on algorithmic transparency, privacy, explainability, and human-centered, safe, sustainable, and trustworthy AI.⁶⁵³ The plan also envisions the allocation of 5 million euros to initiatives related to AI ethics and education.⁶⁵⁴ The Flemish Reform Programme (FRP) 2024,⁶⁵⁵ per the FRP, for 2024 operating year, a recurrent increase of €1.25 million is envisaged for strengthening AI research.

In 2022, the Flemish government adopted a new strategy for data governance, which also comprises initiatives for ethical data use, privacy, transparency, and AI analytics for the public sector. In September 2024, in continuation of the Flemish Government's commitment to AI, a project to make Flemish Public Administration AI-ready was launched.

The Walloon government published the Digital Wallonia 2019–2024 strategy "based on values including a cross-disciplinary approach, transparency, coherence, openness and flexibility."⁶⁵⁸ In 2019, the Walloon government also launched the regional strategy DigitalWallonia4.ai. The strategy aims to accelerate

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⁶⁵¹ Thid

⁶⁵² Digitaal Vlaanderen, *Vlaanderen Radicaal Digitaal II*, https://www.vlaanderen.be/uw-overheid/werking-en-structuur/hoe-werkt-de-vlaamse-overheid/informatie-en-communicatie/vlaanderen-radicaal-digitaal-ii

⁶⁵³ De Vlaamse minister van Werk, Economie, Innovatie en Sport, *QUATERNOTA AAN DE VLAAMSE REGERING. Betreft: Vlaams Beleidsplan Artificiële Intelligentie* (2019), https://www.ewi-vlaanderen.be/sites/default/files/quaternota aan de vlaamse regering - vlaams beleidsplan artificiele intelligentie.pdf

⁶⁵⁴ Flanders: Department for Economy, Science and Innovation, *Vlaams actieplan Artificiële Intelligentie gelanceerd* (Mar. 22, 2019), https://www.ewi-vlaanderen.be/nieuws/vlaams-actieplan-artificiele-intelligentie-gelanceerd

⁶⁵⁵ Government of Flanders, *Flemish Reform Programme* (Mar. 29, 2024), https://flandersineu.be/sites/default/files/2024-

⁶⁵⁶ Digitaal Vlaanderen, Actieplan 2022: Vlaamse Datastrategie (Feb. 2022),

https://assets.vlaanderen.be/image/upload/v1647858968/Vlaamse_datastrategie_kacrph.pdf 657 UNESCO, *AI-Ready Flemish Public Administration* (Sept. 2024),

 $[\]underline{https://www.digitalwallonia.be/en/posts/digital-wallonia-2019-2024}$

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the development of the Walloon AI ecosystem and "sustainably include Wallonia in national and European AI initiatives in order to build a foundation of trust around transparent, ethical and responsible AI."⁶⁵⁹

In 2022, the Brussels Capital Region started a pilot project with the FARI Institute, a non-profit initiative led by Vrije Universiteit Brussel and Université Libre de Bruxelles, to develop an AI strategy for the region. In January 2023, FARI published outcomes from the 2022 Conference on AI, Data and Robotics in Cities, including recommendations from the Observer Committee for the Brussels Capital Region. The recommendations included raising AI awareness and literacy; governing with various stakeholders, including citizens; determining AI-related responsibilities; collaborating on multi- and interdisciplinary levels; (responsibly) enabling data flows; reusing and readapting the existing AI guidelines, principles, and regulations. In the adoption of the 2022 Convergence Plan was also preceded by several initiatives at national and European level.

At the beginning of 2024, Belgium launched a call for candidates to set up a Data and AI Ethics Advisory Committee for the federal administration. Its members were officially appointed by ministerial decree on May 8, 2024. The creation of this Committee has several objectives, including raising awareness among civil servants in relation to the use of data and AI and its ethical considerations; preserving human oversight; and respect for values such as human rights, democracy and the rule of law.

In 2019, the Information Report on the necessary cooperation between the Federal State and the federated entities regarding the impact, opportunities, possibilities and risks of the digital "smart society" was released by a working group created by the Belgian Senate that has been meeting since 2018.⁶⁶³ Their findings and recommendations are grouped in six chapters: governance, ethics and human rights, and legislation; economy, labor market and taxation; education and

ypeObj=application/pdf&MIvalObj=100664119

⁶⁵⁹ Digitalwallonia.be, *DigitalWallonia4.ai*: *Artificial intelligence at the service of citizens and companies in Wallonia* (Apr. 2019), https://www.digitalwallonia4-ai-artificial-intelligence-at-the-service-of-citizens-and-companies-in-wallonia/

⁶⁶⁰ FARI, *AI Strategy for the Brussels Region* (Sept. 2022), https://www.fari.brussels/research-and-innovation/project/ai-strategy-for-the-brussels-region

⁶⁶¹ FARI, Brussels Conference 2022: Summary and Recommendations, *What can the Brussel Capital Region do to foster responsible AI?* (Jan. 2023),

https://issuu.com/faribrussels/docs/en.fari conference summary 2022

⁶⁶² FPS BOSA, Appointment of the Data and AI Ethics Advisory Committee for the Federal Administration (May 8, 2024), https://bosa.belgium.be/en/news/appointment-data-and-ai-ethics-advisory-committee-federal-administration

⁶⁶³ Sénat de Belgique, Rapport d'information relatif à la nécessaire collaboration entre l'État fédéral et les entités fédérées en ce qui concerne les retombées, les opportunités, les potentialités et les risques de la « société intelligente » numérique (Mar. 2019), https://www.senate.be/www/webdriver?MItabObj=pdf&MIcolObj=pdf&MInamObj=pdfid&MIt

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training; attention economy: impact on people; privacy and cybersecurity; research and development. The report states that "The development and use of artificial intelligence shall be based on the following guiding principles: prudence, vigilance, loyalty, reliability, justification and transparency, accountability, limited autonomy, humanity, human integrity, and balancing of individual and collective interests." "Fundamental rights, in particular human dignity and freedom, and privacy, must be the basis and starting point for all actions and legislation in the field of artificial intelligence."

The Belgian government, along with thirteen other EU Member States, published a position paper on innovative and trustworthy AI in October 2020, ahead of the EU AI Act. This paper sets out two visions for the EU's development of AI: (1) promoting innovation, while managing risks through a clear framework and (2) establishing trustworthy AI as a competitive advantage. The countries call for a borderless single market for AI in the EU, arguing that "The main aim must be to create a common framework where trustworthy and human-centric AI goes hand in hand with innovation, economic growth, and competitiveness in order to protect our society, maintain our high-quality public service, and benefit our citizens and businesses. This can help the EU to protect and empower its citizens, stimulate innovation and progress in society, and ensure its values are protected."665

Public Opinion

A 2019 opinion survey by AI4Belgium examined the public perception of AI, its perceived impact, and the role the government should play in AI implementation. According to the survey, 76% of the respondents hold a positive attitude towards technological developments, while only 6% hold a negative attitude. Most respondents were worried about the loss of privacy, security and integrity of their personal information (85%), less use of human common sense (85%), less human interaction (83%) and the loss of trust and control over robots and artificial intelligence (77%).

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https://www.senate.be/www/webdriver?MItabObj=pdf&MIcolObj=pdf&MInamObj=pdfid&MItypeObj=application/pdf&MIvalObj=100664119

⁶⁶⁴ Sénat de Belgique, Rapport d'information relatif à la nécessaire collaboration entre l'État fédéral et les entités fédérées en ce qui concerne les retombées, les opportunités, les potentialités et les risques de la « société intelligente » numérique, (Mar. 2019), https://www.senate.be/www/webdriver?MItabObj=pdf&MIcolObj=pdf&MInamObj=pdfid&MIt

⁶⁶⁵ Non-paper - Innovative and trustworthy AI: two sides of the same coin, Position paper on behalf of Denmark, Belgium, the Czech Republic, Finland, France, Estonia, Ireland, Latvia, Luxembourg, the Netherlands, Poland, Portugal, Spain and Sweden on innovative and trustworthy AI (2020),

 $[\]frac{https://www.permanentrepresentations.nl/documents/publications/2020/10/8/non-paper---innovative-and-trustworthy-ai}{}$

⁶⁶⁶ AI4Belgium, *Perceptie Artificiële Intelligentie* (Feb. 2019), https://www.ai4belgium.be/wp-content/uploads/2019/04/enquete-en.pdf

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When asked which activity to prioritize, the highest priority concerned "the management of ethical risks around AI. For example, discrimination, privacy, etc." (74%). This was followed by "supporting employees and employers in the transition to AI in the workplace" (65%); "improving public service through AI" (58%); "supporting research and development (R & D) and innovation in the field of AI" (52%); "facilitating and supporting enterprise access to AI technologies" (48%); and "supporting start-ups engaged in AI" (45%). The majority of citizens suspect that AI will increase inequality between highly educated and low- or unskilled people (66%) and between persons with a privileged background and persons without one (60%).

Public Participation

As part of its Presidency of the Council of the European Union in the first half of 2024, Belgium launched a pioneering democratic initiative: a citizens' panel on artificial intelligence (AI).⁶⁶⁷ This initiative underlines the country's commitment to an inclusive and participatory approach towards the formulation of European policies in the field. The citizens' panel, which is made up of 60 people selected at random from over 16,000 invitations sent out across Belgium, brings together all strata of the population in terms of age, gender, levels of education, and other demographic criteria. This diversity will ensure that the discussions and recommendations reflect a wide range of perspectives and experiences rooted in people's lived experiences.

Belgian Minister of Foreign and European Affairs described the initiative as their determination "to put the Belgian people at the heart of the decision-making process.⁶⁶⁸ Civil society must be heard on issues as important as artificial intelligence and contribute towards ambitious policies that meet their expectations." The panel's conclusions were compiled into a report, which featured 9 key messages aimed at contributing to Belgian and EU policy on AI. These messages reflected citizens' aspirations for a responsible, ambitious, and beneficial approach to AI to ensure that AI serves the interests of all and leaves no one behind.⁶⁶⁹ On May 25, 2024, the report was presented and debated in Brussels,

⁶⁶⁷ Belgian Federal Government, *Belgium Launched AI Presidency Citizen Panel* (Feb. 27, 2024), https://belgian-presidency.consilium.europa.eu/en/news/launch-of-citizens-panel-on-artificial-intelligence/

⁶⁶⁸ Ibid

⁶⁶⁹ Belgium EU Presidency, *The Citizen's Panel on AI Issues Its Report* (May 22, 2024), https://wayback.archive-it.org/12710/20241018172535/https://belgian-presidency.consilium.europa.eu/en/news/the-citizens-panel-on-ai-issues-its-report/

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in the presence of Belgian and European politicians, representatives of civil society and tech companies. 670

EU Digital Services Act

As an EU member state, Belgium shall apply the EU Digital Services Act (DSA).⁶⁷¹ The DSA regulates online intermediaries and platforms. Its main objective is to prevent illegal and harmful activities online and the spread of disinformation.

As required by DSA, Belgium designated competent authorities to implement provisions of the DSA. As numerous competences are involved in the implementation of the DSA, at federal and community level, four competent authorities have been designated in Belgium.⁶⁷² The DSA plays a critical role in monitoring social, economic, and technological developments, particularly in relation to data protection. Rapid growth of AI technologies significantly effects how data is collected, processed, and utilized and these competent authorities will play a pivotal role in addressing challenges related to data privacy, transparency, and accountability.

A Bill to implement the DSA was introduced to the Belgian Chamber of Representatives on January 31, 2024. The Bill aims to harmonize Belgian legislation with the new requirements for digital services under the DSA. Key provisions include the designation of the Belgian Institute for Postal Services and Telecommunications (BIPT) as the competent authority to supervise the provisions of the DSA at the federal level, the issuance of decrees designating the competent authorities for federated entities, and the establishment of a cooperation agreement between the federal state and the communities. The Bill introduces additional obligations for providers of very large online platforms and search engines. These obligations include the management, assessment, and limitation of systemic risks and the implementation of crisis response mechanisms. They apply to platforms and search engines with an average monthly number of users in the EU of 45 million or more. The Bill also proposes changes to other aspects of

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⁶⁷⁰ Belgium EU Presidency, *Citizen Panels Presents Findings* (May 25, 2024), https://wayback.archive-it.org/12710/20240718214829/https://belgian-presidency.consilium.europa.eu/en/events/beeu-citizen-panel-closing-event/

⁶⁷¹ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act), (Oct. 21, 2022), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022R2065

⁶⁷² Belgian Institute for Postal Services and Telecommunications, *Digital Services Act: Belgium has designated its four competent authorities to enforce the provisions of the European regulation Brussels*, (May 24, 2024), https://www.bipt.be/consumers/publication/digital-services-act-belgium-has-designated-its-four-competent-authorities-to-enforce-the-provisions-of-the-european-regulation-brussels

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Belgian law to align with the DSA and introduces sanctions for non-compliance with orders issued by the competent authorities.⁶⁷³

EU AI Act

As an EU member State, Belgium is bound by the EU AI Act. ⁶⁷⁴ Member States had until November 2, 2024, to identify which authorities should be considered authorities protecting fundamental rights under Art. 77 of the EU AI Act. The European Commission shared an interpretative note to support compliance with Article 77 (2) AI Act with Member States. ⁶⁷⁵ The EU and Council of Europe also launched a project to tackle AI-driven discrimination in public administrations, with the equity bodies of Belgium (via Unia), Finland, and Portugal involved. Running from 2024 to 2026, the project's objective is to ensure that these bodies can effectively oversee AI implementation, prevent discrimination, and provide redress or compensation to users who may be adversely affected by discriminatory AI outcomes. ⁶⁷⁶

Data Protection

Since Belgium is an EU Member State, the General Data Protection Regulation (GDPR) is directly applicable in Belgium. Taking stock of the GDPR, the Belgium Privacy Commission was reformed in 2018.⁶⁷⁷ It is now called the Belgian Data Protection Authority (DPA) and aims to ensure compliance with the GDPR.⁶⁷⁸ The DPA has direct sanctioning powers as well as extended

⁶⁷³ La ChambreçBe, *Document parlementaire 55K3799*,

https://www.dekamer.be/kvvcr/showpage.cfm?section=/flwb&language=fr&cfm=/site/wwwcfm/flwb/flwbn.cfm?lang=N&legislat=55&dossierID=3799

 $\frac{https://www.europarl.europa.eu/RegData/seance_pleniere/textes_adoptes/definitif/2024/03-13/0138/P9_TA(2024)0138_EN.pdf$

https://www.eeas.europa.eu/delegations/council-europe/new-european-union-council-europe-joint-project-artificial-intelligence-and-discrimination en

⁶⁷⁴ European Parliament, Artificial Intelligence Act, European Parliament legislative resolution of 13 March 2024 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts (COM(2021)0206 – C9-0146/2021 – 2021/0106(COD)), P9 TA(2024)0138,

⁶⁷⁵ Mlex, European Commission Clarifies Fundamental Rights Supervisors' Role under EU's AI Act (Oct. 14, 2024), https://www.mlex.com/mlex/articles/2145360/european-commission-clarifies-fundamental-rights-supervisors-role-under-eu-s-ai-act

⁶⁷⁶ Council of Europe, *New European Union-Council of Europe joint project on Artificial Intelligence and Discrimination* (Sept. 30, 2024),

⁶⁷⁷ Hunton Andrews Kurth, *Belgium Adopts Law Reforming the Belgian Privacy Commission* (Jan. 18, 2018), https://www.huntonprivacyblog.com/2018/01/18/belgium-adopts-law-reforming-belgian-privacy-commission/

⁶⁷⁸ PWC Legal, *The new Belgian Data Protection Authority: who's who and how will it work* (Jan. 23, 2019), https://www.pwclegal.be/en/news/the-new-belgian-data-protection-authority-whos-who-and-how-wil.html

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enforcement capabilities. The Belgian DPA published guidance on the interplay between the GDPR and the AI Act on September 19, 2024.⁶⁷⁹

In March 2022, the DPA expressed concern over the Belgian draft legislation on amending the Act of December 3, 2017, establishing the Data Protection Authority. In particular, the DPA mentioned that the draft law jeopardizes its efficiency and independence.⁶⁸⁰ The draft legislation introduces parliamentary interference regarding the DPA internal organization and setting its priorities. The European Data Protection Board expressed similar concerns in its letter of April 2022 in support of the Belgian DPA.⁶⁸¹ The reform proposal of the DPA Act amending the law of December 3, 2017, was approved and entered into force on June 1, 2024.⁶⁸²

Belgium also established a Federal Data and AI Ethics Committee to promote ethical AI use in public administration, with objectives that include raising awareness among civil servants on data and AI ethics.⁶⁸³

Regarding the activities of law enforcement authorities, Belgium transposed⁶⁸⁴ the EU Data Protection Law Enforcement Directive (LED).⁶⁸⁵ The LED provides for the prohibition of any decision based solely on automated processing, unless it is provided by law, and of profiling that results in discrimination,⁶⁸⁶ and "will in particular ensure that the personal data of victims,

https://edpb.europa.eu/system/files/2022-04/edpb_letter_out_2022-

682 Data Protection Authority, *A new chapter for the APD – Amendment of the law and new ROI*, (May 31, 2024), https://www.autoriteprotectiondonnees.be/citoyen/actualites/2024/05/31/unnouveau-chapitre-pour-lapd-modification-de-la-loi-et-nouveau-roi

⁶⁸⁴ Act on the protection of natural persons with regard to the processing of personal data (July 30, 2018), https://www.dataprotectionauthority.be/publications/act-of-30-july-2018.pdf

⁶⁷⁹ Belgium DPA, *Artificial Intelligence Systems and the GDPR A Data Protection Perspective*, (Sep 19, 2024), https://www.gegevensbeschermingsautoriteit.be/publications/information-brochure-on-artificial-intelligence-systems-and-the-gdpr.pdf

⁶⁸⁰ Belgian Data Protection Authority, *A new draft law threatens the independence and functioning of the BE DPA* (Mar. 8, 2022), https://www.dataprotectionauthority.be/citizen/a-new-draft-law-threatens-the-independence-and-functioning-of-the-be-dpa

⁶⁸¹ European Data Protection Board letter (Apr. 6, 2022).

⁰⁰²² belgian draft legislation en.pdf

⁶⁸³ FPS BOSA, Appointment of the Data and AI Ethics Advisory Committee for the Federal Administration (May 8, 2024), https://bosa.belgium.be/en/news/appointment-data-and-ai-ethics-advisory-committee-federal-administration

⁶⁸⁵ Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

⁶⁸⁶ Article 11 (1) and (2) of the LED, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

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witnesses, and suspects of crime are duly protected and will facilitate cross-border cooperation in the fight against crime and terrorism."687

Following the transposition of the EU Law Enforcement Directive in Belgian law, the Supervisory Body for Police Information, "the oversight body which looks at how the police use information (COC) was reformed to function as an independent data protection body." It is intended to oversee how the police use data. 689

Both the DPA and the COC are members of the Global Privacy Assembly (GPA). The DPA co-sponsored the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence⁶⁹⁰ but did not endorse the 2020 Resolution on Accountability in the Development and Use of Artificial Intelligence,⁶⁹¹ 2022 GPA Resolution on Facial Recognition Technology,⁶⁹² or 2023 GPA Resolution on Generative AI Systems.⁶⁹³

Belgium is also a member of the Council of Europe and ratified the Council of Europe's Convention 108+ for the protection of individuals with regard to the processing of personal data.⁶⁹⁴

In 2019, a national human rights institution, the Federal Institute for the Protection and Promotion of Human Rights, was established. Its main goal is to facilitate cooperation between the existing human rights oversight mechanisms

content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

⁶⁸⁷ European Commission, *Data protection in the EU*, https://commission.europa.eu/law/law-topic/data-protection/data-protection-eu en

⁶⁸⁸ Algorithm Watch, *Automating Society Report 2020: Belgium* (2020), https://automatingsociety.algorithmwatch.org/report2020/belgium/

⁶⁸⁹ Supervisory Body for Police Information, https://www.controleorgaan.be/en/

⁶⁹⁰ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-

⁶⁹¹ Global Privacy Assembly, Resolution on Accountability in the Development and Use of Artificial Intelligence (Oct. 2020), https://globalprivacyassembly.org/wp-

⁶⁹² Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁶⁹³ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁶⁹⁴ Council of Europe, *Modernised Convention for the Protection of Individuals with Regard to the Processing of Personal Data* (May 18, 2018), https://www.coe.int/en/web/data-protection/convention108-and-protocol

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and fill the gaps in the existing landscape.⁶⁹⁵ More specifically, it "ensures that the use of new technologies and the digitalisation of society contribute to strengthening our rights rather than limiting them."⁶⁹⁶

Algorithmic Transparency

Belgium is subject to the GDPR and Convention 108+. Belgians have a general right to obtain access to information about automated decision-making and to the factors and logic of an algorithm.⁶⁹⁷ They also have the right to meaningful contestation.⁶⁹⁸

In 2019, the Federal Institute for the Protection and Promotion of Human Rights issued its first opinion on the use of algorithms and artificial intelligence by the administration and argued in favor of more transparency from public authorities. ⁶⁹⁹

In April 2021, Members of the Chamber of Representatives proposed a change to a 1994 law to make the use of algorithms by public administrations more transparent. Key points of the law are to "publish algorithmic processes online, specifically when used for individual decisions," to inform people of the algorithms used in making decisions on their cases, and to allow citizens to receive "comprehensible responses" to questions on algorithmic decisions.⁷⁰⁰ The amendment has not passed yet.⁷⁰¹

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https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

lutilisation-des-algorithmes-par-les-autorites

European Networks of National Human Rights Institutions, ENNHRI welcomes new law adopted on National Human Rights Institution in Belgium (May 9, 2019), http://ennhri.org/news-and-blog/ennhri-welcomes-new-law-adopted-on-national-human-rights-institution-in-belgium/696 Federal Institute for the Protection and Promotion of Human Rights, https://www.federalinstitutehumanrights.be/en/uw-rechten/themes/technology-digitalisation-and-human-rights

⁶⁹⁷ See Recital 63 and Article 22 of the GDPR. Article 9 c) of the Convention 108+ as well as Recital 77, *Explanatory Report, Convention 108*+, p. 24, https://rm.coe.int/convention-108-convention-for-the-protection-of-individuals-with-regar/16808b36f1

⁶⁹⁸ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020),

⁶⁹⁹ Federal Institute for the Protection and Promotion of Human Rights, *L'IFDH demande plus de transparence sur l'utilisation des algorithmes par les autorités* (Oct. 7, 2021), https://www.federalinstitutehumanrights.be/en/nieuws/lifdh-demande-plus-de-transparence-sur-

⁷⁰⁰ Kenniscentrum Data & Maatschappij, Federale overheid - Wetsvoorstel tot wijziging van de wet van 11 april 1994 betreffende de openbaarheid van bestuur, om meer transparantie te verschaffen over het gebruik van algoritmen door de overheid (Apr. 2021), https://data-en-maatschappij.ai/beleidsmonitor/federale-overheid-wetsvoorstel-tot-wijziging-van-de-wet-van-11-april-1994-gebruik-van-algoritmen-door-de-overheid

⁷⁰¹ DeKamer.be, Parlementair Document 55K1904, Wetsvoorstel tot wijziging van de wet van 11 april 1994 betreffende de openbaarheid van bestuur, om meer transparantie te verschaffen over het gebruik van algoritmen door de overheid (2021),

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In the meantime, in January 2023, Brussels, in collaboration with eight other cities across Europe and with the help of Eurocities' Digital Forum, adopted an algorithm register, the Algorithmic Transparency Standard. It will be used by the data officer for the Brussels Capital region. The aim is to provide more information for residents about the use of algorithm by municipalities and their impact. The register includes a range of information such as the type and purpose of an algorithm, the department using the algorithm, the geographical area and domain it relates to and a risk category. It also includes details on the data source and training data, any bias and mitigation, and human oversight. This initiative builds on similar algorithm registers launched in Amsterdam and Helsinki in September 2020.

According to André Sobczak, Secretary General, Eurocities, "The efforts undertaken by these cities aim to set a standard for the transparent and ethical use of algorithms while their use is still in its relative infancy across city administrations in Europe. In this way, they seek to offer both a safeguard for people whose data may be used by algorithms, and have created a validated model that other cities can use straight away, without having to invest further resources themselves." 702

AI in Public Administration

In July 2023, the Council of Ministers proposed the establishment of an Advisory Committee on Ethics on Data and Artificial Intelligence for the federal administration. To It will have the following objectives: a) empower civil servants in the use of data and AI, b) raise awareness among civil servants about the ethical aspects of data use, and c) show citizens that the Federal Administration is setting an example and dealing with digital technology in an ethical and innovative way.

In January 2024, Wallonia announced its aim to integrate AI into the public service sector. ⁷⁰⁴ To this end, Wallonia launched a public call for the development of a Proof of Concept (PoC) with public entities. ⁷⁰⁵ The Flemish region also initiated a project in 2024 to ensure the Flemish Public Administration AI-

https://www.dekamer.be/kvvcr/showpage.cfm?section=/flwb&language=nl&cfm=/site/wwwcfm/flwb/flwbn.cfm?legislist=legisnr&dossierID=1904

⁷⁰² Eurocities, *Nine cities set standards for the transparent use of Artificial Intelligence* (Jan. 23, 2023), https://eurocities.eu/latest/nine-cities-set-standards-for-the-transparent-use-of-artificial-intelligence/

⁷⁰³ News.belgium, *Création d'un comité consultatif d'éthique des données et de l'intelligence artificielle* (Jul. 7, 2023), https://news.belgium.be/fr/creation-dun-comite-consultatif-dethique-des-donnees-et-de-lintelligence-artificielle

⁷⁰⁴ Wallonia Regional Government of Belgium, *Wallonia to integrate AI into public services* (Jan 7, 2024), https://www.digitalwallonia.be/fr/publications/ia-services-publics/
⁷⁰⁵ Ibid

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ready.⁷⁰⁶ This project is funded by the European Commission's Directorate-General for Structural Reform Support. UNESCO's Ethics of AI Unit, Social and Human Sciences Sector, is tasked with implementing the project, which will leverage UNESCO's Readiness Assessment Methodology (RAM).

Facial Recognition

According to AlgorithmWatch, facial recognition has been used at the Brussels Airport, football matches, for school registration and for healthcare. A "smart" video surveillance system is also in use to locate criminals, solve theft cases and collect statistical information.⁷⁰⁷ AlgorithmWatch stressed that there is no legal framework governing this activity by the police.

Additionally, Belgium's involvement in the Prüm Convention facilitates the sharing of biometric data, including facial recognition images, across European borders. In March 2024, Belgium signed the Prüm II expansion, which includes provisions for cross-border facial recognition technology. This expansion underscores the need for Belgium to implement robust data protection measures and clear guidelines to ensure that cross-border use of Facial Recognition Technology (FRT) aligns with privacy standards.⁷⁰⁸

The COC has criticized the use of facial recognition at the Brussels airport, stating that there is "too little information about the implementation and risks of the technology as there was no clear policy or data protection impact assessment conducted to come to a conclusion or offer advice." In a 2022 report, the COC reiterated "the lack of legal basis for the use of facial recognition technology by the Brussels airport police" and noted that it took "corrective action" in order to halt the pilot project. The COC also reported that Belgian police had used the controversial facial recognition system Clearview AI without a legal basis and advised Belgian police to cease this activity."

In January 2022, the Belgian Minister of Internal Affairs expressed the objective of "creating an ethical advisory board on safety that will evaluate the ethical and efficient use of technology and methods for investigation and

https://www.unesco.org/en/artificial-intelligence/recommendation-ethics/flemish-government

⁷⁰⁷ AlgorithmWatch, Automating Society 2020 (Oct. 2020),

https://automatingsociety.algorithmwatch.org/report2020/belgium/

⁷⁰⁸ EUCRIM, *Prüm II Regulation Enters into Force* (2024), https://eucrim.eu/news/prum-ii-regulation-enters-into-force/

⁷⁰⁹ Controleorgaan.be, Advies betreffende een voorstel van resolutie over een driejarig moratorium op het gebruik van gezichtsherkenningssoftware en – algoritmen in vaste of mobiele beveiligingscamera's in openbare en privéplaatsen (Jan. 2022), https://www.controleorgaan.be/files/DA210029 Advies N.pdf

⁷¹⁰ Controleorgaan.be, *toezichtrapport van het controleorgaan op de politionele informatie met betrekking tot het gebruik van clearview ai door de geïntegreerde politie* (Feb. 2022), https://www.controleorgaan.be/files/DIO21006 Toezichtrapport Clearview N 00050443.pdf

⁷⁰⁶ UNESCO, AI-Ready Flemish Public Administration (Sept. 2024),

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intervention."⁷¹¹ As of November 2024, there has been no official update on the formation or activities of the proposed ethical advisory board intended to oversee the use of advanced technologies, including facial recognition, within law enforcement."

Regulatory Sandboxes

In Belgium, the Flemish and Walloon regions have both developed regulatory sandboxes aimed at creating self-contained, low-regulation environments where software developers can experiment with innovative solutions without taking on significant risks. In Flanders, the Sandbox Flanders project is coordinated through the Flemish government agency for digitalization, Digital Flanders. Sandbox Flanders is designed to develop innovative solutions for the public sector by "matching" start-ups with government agencies and departments. The project also aims to be a "permanent marketplace" for ideas without a profit motive. Many of the projects in question use AI systems to solve practical issues in particular "challenges," such as predicting exam enrollments and automated policy impact assessments. In the Walloon case, a private entity (LUDEBO) coordinates the sandbox ecosystem together with Digital Wallonia and the blockchain startup-collective Walchain, but the goal of this regulatory sandbox is only to foster blockchain technology development.

Starting in July 2023, regional authorities commenced sectorial AI testing under the Digital Europe Program.⁷¹⁵ The Testing and Experimentation Facilities (TEFs) are poised to aid in the implementation of the EU AI Act, particularly by supporting regulatory sandboxes in collaboration with national authorities. This initiative encompasses a facility spearheaded by Digitaal Vlaanderen, focused on smart cities and communities, with the objective of ensuring AI technologies align with European values prior to market introduction.

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https://www.digitalwallonia.be/en/cartography/sandbox-wallonia/

⁷¹¹ Controleorgaan.be, Advies betreffende een voorstel van resolutie over een driejarig moratorium op het gebruik van gezichtsherkenningssoftware en – algoritmen in vaste of mobiele beveiligingscamera's in openbare en privéplaatsen (Jan. 2022), https://www.controleorgaan.be/files/DA210029 Advies N.pdf

⁷¹² Digitaal Vlaanderen, *Sandbox Vlaanderen: ruimte voor innovatie en experiment*, https://www.vlaanderen.be/digitaal-vlaanderen/onze-oplossingen/sandbox-vlaanderen-ruimte-voor-innovatie-en-experiment

⁷¹³ Digitaal Vlaanderen, *Challenges Sandbox Vlaanderen*, https://www.vlaanderen.be/digitaal-vlaanderen/onze-diensten-en-platformen/sandbox-vlaanderen-ruimte-voor-innovatie-en-experiment/experimenten-sandbox-vlaanderen

⁷¹⁴ Digitalwallonia.be, *Sandbox Wallonia (SBW)*,

⁷¹⁵ Agentschap Digitaal Vlaanderen, *Digitaal Vlaanderen bouwt mee aan Europese testfaciliteiten voor AI-oplossingen* (Jul. 17, 2023), https://www.vlaanderen.be/digitaal-vlaanderen-bouwt-mee-aan-europese-testfaciliteiten-voor-ai-oplossingen

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In 2024, the Brussels-Capital Region launched a mobility data and AI regulatory sandbox as part of the European AI Testing and Experimentation Facility for Smart and Sustainable Cities and Communities. Coordinated by Digitaal Vlaanderen, this initiative supports Belgian startups in developing AI solutions by providing access to real data and controlled testing environments. The sandbox specifically focuses on AI applications in the mobility sector, offering a structured environment for experimentation that ensures compliance with European standards. This project underscores Belgium's commitment to fostering AI innovation while aligning with EU regulatory standards for safe and ethical AI development.⁷¹⁶

Medical Data

The use of AI in healthcare is one of the cornerstones of Belgium's AI strategy. An entire chapter of its national convergence plan is devoted to "centralizing AI in healthcare" and the plan states that "the creation of a healthcare data agency reflects the importance and the necessity of facilitating the re-use of healthcare for research and innovation." The national strategy also emphasizes the "perspective of the user" in that it aims to stimulate human-centric use of AI in healthcare, while acknowledging the necessity of clear accountability rules, attention to data bias and privacy, and giving patients agency over their own data. ⁷¹⁸

In 2024, the Belgian EBCP (Evidence-Based Care Policies) mirror group released a policy brief focused on enhancing AI applications in healthcare, particularly in cancer care. The brief identifies critical areas for improvement, including data access, IT infrastructure, and legal and ethical frameworks, while emphasizing the importance of building public trust in AI applications. The brief also highlights Belgium's active role in EU initiatives, such as the European Health Data Space (EHDS) and the EU Cancer Imaging Infrastructure (EUCAIM), advocating for continued investments to align with European data-sharing and healthcare innovation standards.

⁷¹⁶ Gegevensbeschermingsautoriteit, *Presentatie van Karl-Filip Coenegrachts – CITCOM.AI: A Brussels Mobility Data Project* (2024),

 $[\]underline{https://www.gegevensbeschermingsautoriteit.be/publications/presentatie-van-karl-filip-coenegrachts---citcom.ai---a-brussels-mobility-data-project.pdf}$

⁷¹⁷ Michel.belgium.be, *Nationaal convergentieplan voor de ontwikkeling van artificiële intelligentie* (Oct. 2022),

https://michel.belgium.be/sites/default/files/articles/Plan%20AI%20%28NL%29-compressed.pdf 718 Ibid

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Environmental Impact of AI

Belgium's Convergence Plan for developing AI includes protecting the environment among the main objectives.⁷¹⁹ However, there are no specific action steps to ensure that AI development is sustainable. The EU AI Act, for example, has been criticized for emphasizing AI *for* sustainability over AI that *is* sustainable.⁷²⁰

Lethal Autonomous Weapons Systems

In 2018, the Belgian Parliament passed a Resolution to prohibit use, by the Belgian Defense, of killer robots and armed drones.⁷²¹ In this resolution, the Parliament states that Belgium should:

- Participate in international working groups within the framework of the United Nations and the Convention on Certain Conventional Weapons (CCW) in particular to work towards an internationally recognized definition of killer robots and to determine which types of weapons will fall into this category in the future
- Advocate in international fora, together with like-minded countries, for a global ban on the use of killer robots and fully automated armed drones
- Ensure that the Belgian Defense never deploys killer robots in military operations
- Support the development and use of robotic technology for civilian purposes.

The culmination of Belgium's efforts, which began in 2018 to ban lethal autonomous weapons, was marked by the Belgian Defense Committee's approval of a bill to this effect. Consequently, in January 2023, Belgium became one of the first countries in the world to implement an outright ban on lethal autonomous weapons.

Belgium has taken a relatively central role in putting Lethal Autonomous Weapons Systems (LAWS) on the international agenda. During its chairmanship of the Group of Governmental Experts (GGE) on Lethal Autonomous Weapons

⁷¹⁹ News.belgium.be, *Nationaal convergentieplan voor de ontwikkeling van artificiële intelligentie* (Oct. 2022), https://bosa.belgium.be/en/themes/digital-administration/digital-strategy-and-policy/national-convergence-plan-development

https://www.brusselstimes.com/350980/belgium-upholds-decision-to-ban-killer-robots

⁷²⁰ Zuzanna Warso and Kris Shrishak, *Hope: The AI Act's Approach to Address the Environmental Impact of AI*, Tech Policy Press (May 21, 2024), <a href="https://www.techpolicy.press/hope-the-ai-acts-approach-to-address-the-environmental-impact-of-decomposition-decomposition-to-address-the-environmental-impact-of-decomposition-decompos

ai/
721 Chambre des représentants de Belgique [Belgian Chamber of Representatives], *Proposition de résolution relative à la création d'un agenda robonumérique inclusif et durable* [Proposal for a

Resolution Regarding the Creation of an Inclusive and Sustainable Robo-Digital Agenda] (Jul. 27, 2017), https://www.lachambre.be/doc/flwb/pdf/54/2643/54k2643001.pdf

⁷²² Nick Amies, Belgium upholds decision to ban 'killer robots',

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Systems, Belgium aimed to "find consensus in relation to the clarification, consideration, and development of aspects of the normative and operational framework on emerging technologies in the area of LAWS."⁷²³

Belgium was one of the 70 countries that endorsed a joint statement on autonomous weapons systems at the 2022 United Nations General Assembly. The joint statement urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law, including through maintaining human responsibility and accountability in the use of force." ⁷²⁴

In February 2023, Belgium participated in an international summit on the responsible application of artificial intelligence in the military domain hosted by the Netherlands. At the end of the Summit, Belgium endorsed a joint call for action on the responsible development, deployment and use of artificial intelligence in the military domain. This joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." Belgium also endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023.

The second REAIM summit was hosted by the Republic of Korea in 2024.⁷²⁷ Belgium endorsed the outcome document, Blueprint for Action, which

 $\frac{https://www.government.nl/documents/speeches/2024/02/27/speech-by-minister-hanke-bruins-slot-at-the-conference-on-disarmament}{}$

⁷²³ Delegation of the European Union to the UN and other international organisations in Geneva, EU lines to take: Group of Governmental Experts on emerging technologies in the area of Lethal Autonomous Weapons Systems (Mar. 2022), https://www.eeas.europa.eu/eeas/eu-lines-take-group-governmental-experts-emerging-technologies-area-lethal-autonomous-weapons-en?s=62; Dig.watch, GGE on lethal autonomous weapons systems, https://dig.watch/processes/gge-laws
⁷²⁴ United Nations (UN) General Assembly, First Committee, Joint Statement on Lethal Autonomous Weapons Systems First Committee, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

 $[\]frac{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm_en.pdf}{}$

⁷²⁵ Government of Netherlands, *Call to action on responsible use of AI in the military domain*, Press Release (Feb.16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action

⁷²⁶ US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Feb. 12, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

⁷²⁷ Government of the Netherlands, *Speech by Minister Hanke Bruins Slot at the High Level Segment of the Conference on Disarmament* (Feb. 27, 2024),

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translated the principles agreed upon at REAIM 2023 into action steps endorsees committed to ahead of the next summit.⁷²⁸

At the 78th UN General Assembly First Committee in 2023, Belgium voted in favor⁷²⁹ of resolution L.56⁷³⁰ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems.

Belgium endorsed the Chair's Summary of the Vienna conference Humanity at the Crossroads: Autonomous Weapons Systems and the Challenge of Regulation, in April 2024, affirming its commitment to work urgently towards an international legal instrument to regulate autonomous weapons systems.⁷³¹

Human Rights

Belgium is a signatory to many international human rights treaties and conventions. In 2024, Belgium received a rating of "Free" with a score of 96/100 in the Freedom House report. Freedom House reported that "Belgium is a stable electoral democracy with a long record of peaceful transfers of power. Political rights and civil liberties are legally guaranteed and largely respected. Major concerns in recent years have included the threat of terrorism, corruption scandals, and rising right-wing nationalism and xenophobia."⁷³²

In a 2020 Recommendation to member States on the human rights impacts of algorithmic systems, the Council of Europe Committee of Ministers clarified that Member States' commitment to "ensuring the rights and freedoms enshrined in the Convention for the Protection of Human Rights and Fundamental Freedoms to everyone within their jurisdiction" required them to "ensure that any design, development and ongoing deployment of algorithmic systems occur in compliance with human rights and fundamental freedoms, which are universal, indivisible,

https://reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163&shareBbsMngNo=10 264&shareMenuId=11613&shareTabMenuId=

fora/1com/1com23/resolutions/L56.pdf

⁷²⁸ REAIM 2024, Blueprint for Action (Sept. 11, 2024),

⁷²⁹ Stop Killer Robots, *164 states vote against the machine at the UN General Assembly*, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

⁷³⁰ General Assembly, *Lethal Autonomous Weapons*, Resolution L56 (Oct.12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-

⁷³¹ UN General Assembly, *General and Complete Disarmament: Lethal Autonomous Weapons Systems* (Oct. 18, 2024), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/24/resolutions/L77.pdf

⁷³² Freedom House, *Freedom in the World 2024: Belgium* (2024), https://freedomhouse.org/country/belgium/freedom-world/2024

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inter-dependent and interrelated, with a view to amplifying positive effects and preventing or minimising possible adverse effects."⁷³³

OECD / G20 AI Principles

Belgium has endorsed the OECD/G20 AI Principles. In its 2021 survey, the OECD noted several examples of implementation of the AI Principles by Belgium, including the establishment of an AI Observatory, providing financial and non-financial support to retrain and attract top AI talent, development of an AI self-assessment tool, and the resolution to prohibit the use of lethal autonomous weapons by local armed forces.⁷³⁴

Belgium is a member of the Global Partnership for AI, a multi-stakeholder initiative that aims to foster international cooperation on AI research and applied activities and is "built around a shared commitment to the OECD Recommendation on Artificial Intelligence."⁷³⁵

Belgium's 2022 national AI strategy covers all the OECD AI principles: inclusive growth, sustainable development and well-being; human-centered values and fairness, transparency and explainability; robustness, security and safety; and accountability.⁷³⁶ However, the strategy does not explicitly mention the OECD as the basis for its common objectives.⁷³⁷

UNESCO Recommendation on AI Ethics

Belgium is a signatory to the UNESCO Recommendation on the Ethics of Artificial Intelligence. The 2022 convergence strategy does not explicitly refer to the UNESCO Recommendation.⁷³⁸ However, the Flemish region is collaborating with UNESCO on project to ready the public administration for AI systems.⁷³⁹

⁷³³ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020),

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

⁷³⁴ OECD, State of Implementation of the OECD AI Principles: Insights from National AI Policies, pp. 10, 14, 29, 30 (June 2021), https://www.oecd.org/digital/state-of-implementation-of-the-oecd-ai-principles-1cd40c44-en.htm

⁷³⁵ Government of Canada, Canada concludes inaugural plenary of the Global Partnership on Artificial Intelligence with international counterparts in Montreal (Dec. 4, 2020), https://www.globalprivacyblog.com/legislative-regulatory-developments/uae-publishes-first-federal-data-protection-law/.

⁷³⁶ OECD, OECD AI Principles overview, https://oecd.ai/en/ai-principles

⁷³⁷ Michel.belgium.be, *Nationaal convergentieplan voor de ontwikkeling van artificiële intelligentie* (Oct. 2022),

https://michel.belgium.be/sites/default/files/articles/Plan%20AI%20%28NL%29-compressed.pdf ⁷³⁸ Michel.belgium.be, *Nationaal convergentieplan voor de ontwikkeling van artificiële intelligentie* (Oct. 2022),

https://michel.belgium.be/sites/default/files/articles/Plan%20AI%20%28NL%29-compressed.pdf 739 UNESCO, *AI-Ready Flemish Public Administration* (Sept. 2024),

https://www.unesco.org/en/artificial-intelligence/recommendation-ethics/flemish-government

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UNESCO's Ethics of AI Unit, Social and Human Sciences Sector, will leverage the Readiness Assessment Methodology (RAM) as part of the implementation.

Council of Europe AI Treaty

Belgium contributed as a Council of Europe and EU Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of law. The Committee on AI approved the Draft Framework Convention during its 10th Plenary session in March 2024. Pelgium is party to the Convention through the European Commission signature on September 5, 2024. However, Belgium has not taken individual action to endorse or ratify the treaty.

Evaluation

In 2022, Belgium adopted a national AI strategy with a strong focus on AI ethics that should ensure coherence among the regional AI strategies and align toward common objectives. Regional AI policy innovation has been strengthened to align with the UNESCO recommendations on AI ethics. Belgium also established a Federal Data and AI Ethics Committee within its Federal Public Service (FPS) to enhance AI oversight and educate civil servants on data ethics, human oversight, and fundamental rights.

However, some crucial points are still awaiting action, such as national action on the Council of Europe treaty and the establishment of an independent national supervisory agency under the EU AI Act.

Brazil

In 2024, Brazil presented a new AI Plan for 2024–2028 intended to strengthen alignment between national priorities and the AI strategy. The Superior Electoral Court approved a resolution prohibiting deep fakes and providing harsh sanctions for the use of fake content in elections. The problem of widespread use of real-time facial recognition in public security remains. Brazil led projects for digital inclusion and AI for sustainable development as the presidency of the G20.

National AI Strategy

Then-President Jair Bolsonaro declared before the United Nations General Assembly in September 2020 that Brazil is "open for the development of state-of-

⁷⁴⁰ Council of Europe, *Draft Framework Convention on AI, human rights, democracy and the rule of law* (Mar. 2024),

https://search.coe.int/cm/pages/result_details.aspx?objectid=0900001680aee411

⁷⁴¹ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 20, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

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the-art technology and innovation efforts, such as 4.0 Industry, artificial intelligence, nanotechnology, and 5G technology, with all partners who respect our sovereignty and cherish freedom and data protection."⁷⁴²

The Brazilian government adopted a national AI strategy, *Estratégia Brasileira de Inteligência Artificial* (EBIA) in 2021,⁷⁴³ following on the Digital Transformation Strategy (E-Digital) released in 2018.⁷⁴⁴ Release of the EBIA followed restructuring of the Ministry of Science, Technology, Information, and Communications, which was divided into the Ministry of Science, Technology, and Information (MCTI) and the Ministry of Communication (MCom). AI is now the responsibility of a broad Directorate on Science and Digital Innovation under the Secretary of Entrepreneurship and Innovation of MCTI.⁷⁴⁵

The EBIA sets out six key objectives: develop ethical principles that guide responsible use of AI; remove barriers to innovation; improve collaboration between government, the private sector, and researchers; develop AI skills; promote investment in technologies; and advance Brazilian technological innovation and involvement at the international level.⁷⁴⁶

The Governance Committee of the Brazilian AI Strategy published the Working Plan for EBIA for 2022.⁷⁴⁷ The Governance Committee is composed of members from the public sector and government, companies and associations, NGOs and civil society, and centers for education and research. The Working Plan mentions which actions will be prioritized within the scope of the EBIA for 2022. It is structured around 9 axes: (1) Legislation, regulation, and ethical use; (2) AI

mcti/transformacaodigital/arquivosinteligenciaartificial/ia_estrategia_portaria_mcti_4-979_2021_anexo1.pdf

mcti/transformacaodigital/arquivosinteligenciaartificial/ia estrategia portaria mcti 4-979 2021 anexo1.pdf

⁷⁴² President Jair Bolsonaro, *Remarks at the General Debate of the 75th Session of the United Nations General Assembly* (Sept. 22, 2020), https://www.gov.br/mre/en/content-centers/speeches-articles-and-interviews/president-of-the-federative-republic-of-brazil/speeches/remarks-by-president-jair-bolsonaro-at-the-general-debate-of-the-75th-session-of-the-united-nations-general-assembly-september-22-2020

⁷⁴³ Government of Brazil, *Brazilian Strategy for Digital Transformation* (Jul. 13, 2021), https://www.gov.br/mcti/pt-br/acompanhe-o-

⁷⁴⁴ OECD AI Policy Observatory, *Brazilian Strategy for Digital Transformation* (2018), https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faipo.oecd.org%2F2021-data-policyInitiatives-24273

⁷⁴⁵ MCTI, *Organization Chart* (2021), https://www.gov.br/mcti/pt-br/imagens/organograma/sempi.pdf

⁷⁴⁶ Government of Brazil, *Brazilian Strategy for Digital Transformation*, pp. 3–4 (Jul. 13, 2021), https://www.gov.br/mcti/pt-br/acompanhe-o-

⁷⁴⁷ MCTI, *EBIA—Working Plan 2022* (May 12, 2022), https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/transformacaodigital/arquivosinteligenciaartificial/ebia-plano-de-trabalho-2022.pdf/view

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governance; (3) International aspects; (4) Qualifications for a digital future; (5) Workforce and training; (6) Research, development, innovation, and entrepreneurship; (7) Application in productive sectors; (8) Application in public power; (9) Public security.

The actions set forth in the Working Plan encompass: (1) Encouraging public agencies that will make use of AI for public security to submit data protection impact assessment prior to implementation; (2) Development of a framework with recommendations for an ethical AI, with mitigation of risks and biases; (3) Development of a dynamic repository of legislation and revision of regulatory model/sandboxes for active monitoring of the Bills in progress, with timely submission of multi-sectoral positioning; (4) Creation of an Artificial Intelligence observatory in Brazil, which can cooperate with other international observatories; (5) Preparation of an annual report with initiatives focused on international aspects; and (6) Expanding the offer of undergraduate and graduate courses related to Artificial Intelligence.

The Governance Committee of the Brazilian AI Strategy had two meetings in 2022. The first one, in February, focused on the revision of the Brazilian Strategy for Digital Transformation to be conducted by MCTI. MCTI published the new Brazilian Strategy for Digital Transformation in November 2022. The second meeting was in August and set to evaluate the activities already conducted by the Committee and to plan the next steps.

Regarding the governance of the Brazilian AI strategy, Belli, Curzi and Gaspar, ⁷⁴⁹ analyzing the Committees' meetings from 2021, highlighted the lack of transparency regarding the institutions taking part in the Governance Committee meetings as well as the criteria used to choose them, as they were invited by the MCTI to participate in the Committee. They also identified that, throughout the meetings, there was a constant majority of private sector associations compared to academia and civil society, which might result in biased results for the implementation of the EBIA.

The federal government launched the proposal for the Brazilian Artificial Intelligence Plan 2024–2028 (PBIA) in July 2024. The new plan reassesses objectives and actions in the country's AI strategy and seeks to better align them with national interests and priorities.⁷⁵⁰ The plan outlines Brazil's vision for a

mcti/transformacaodigital/arquivosestrategiadigital/e-digital ciclo 2022-2026.pdf

749 Belli, Curzi and Gaspar, AI Regulation in Brazil: Advancements, Flows, and Need to Learn

⁷⁴⁸ MCTI, *Brazilian Strategy for Digital Transformation (E-Digital), Ciclo 2022–2026* (Dec. 21, 2022), https://www.gov.br/mcti/pt-br/acompanhe-o-

from the Data Protection Experience, Computer Law & Security Review, p. 105767 (Feb. 2023), https://cyberbrics.info/wp-content/uploads/2023/02/AI-Regulation-in-Brazil-Belli-Gaspar-Curzi.pdf

⁷⁵⁰ MCTI, *Plano Brasileiro de Inteligência Artificial (PBIA), 2024-2028* (Jul. 29, 2024), https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/noticias/2024/07/plano-brasileiro-de-ia-tera-

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human-centered AI, promoting national autonomy, international cooperation, and alignment with the Sustainable Development Goals (SDGs). It emphasizes ethical standards, bias prevention, data sovereignty, and inclusivity in AI applications, aiming to position Brazil as a pioneer in socially responsible AI development.

The total budget for the plan is estimated at R\$23.03 billion. The plan considers both Immediate Impact Actions and Structuring Actions. The document details 31 Immediate Impact Actions focusing on specific problems in priority areas like health, agriculture, environment, social development, public service management, industry, commerce, services, and education. These actions aim at using existing technologies and databases to deliver quick, measurable, scalable, and impactful results. The document also includes 54 Structural Actions, long-term, foundational projects meant to establish the infrastructure, knowledge base, and regulatory environment needed for sustainable AI development The Structural Actions are organized around five core pillars, each with distinct programs and funding allocations: (i) Infrastructure and AI Development, (ii) Diffusion, Training, and Workforce Development, (iii), Improvement of Public Services, (iv) AI for Business Innovation, (v) Support for AI Regulation and Governance.

Under the guidance of PBIA, Brazil's AI Observatory (OBIA) was launched in September 2024⁷⁵¹ to monitor AI implementation nationwide, promoting transparency and fairness on key sectors like healthcare, thereby complementing Senate guidance on ethical AI policies.

AI Legislation

On September 29, 2021, the House of Representatives approved the draft Bill No. 21/2020 establishing the Legal Framework for Artificial Intelligence in Brazil (*Marco Legal da Inteligência Artificial*).⁷⁵² After approval in the House of Representatives, the draft Bill proceeded to the Federal Senate for joint analysis with two other legislative proposals: Bill No. 5051/2019 establishing the principles for the use of AI in Brazil and Bill No. 872/2021 providing for the ethical framework and guidelines that underline the development and use of AI in Brazil.

The aim of draft Bill No. 21/2020 is to create a legal framework for the development and use of AI by the government, companies, various entities and

supercomputador-e-investimento-de-r-23-bilhoes-em-quatro-anos/ia para o bem de todos.pdf/view

⁷⁵¹ Network Information Center, *Brazilian Artificial Intelligence Observatory Will Be Launched this Tuesday* (Sept. 2, 2024), https://www.nic.br/noticia/na-midia/observatorio-brasileiro-de-inteligencia-artificial-sera-lancado-nesta-terca-feira/

⁷⁵² Brazilian House of Representatives, *House Approves Project that Regulates the Use of Artificial Intelligence* (Sept. 29, 2021), https://www.camara.leg.br/noticias/811702-camara-aprova-projeto-que-regulamenta-uso-da-inteligencia-artificial/

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individuals.⁷⁵³ AI agents, those who develop, deploy or use an AI system, will have a series of obligations, such as answering legally for decisions made by an artificial intelligence system and ensuring that the data used respects the Brazilian General Data Protection Law (LGPD).⁷⁵⁴ The processing of personal data of customers and users of companies in both the public and private sector is covered.

Academics and NGOs have criticized the draft Bill 21/2020, warning that the bill "may help perpetuate recent cases of algorithmic discrimination through provisions that hinder accountability for AI-induced errors and restrict the scope of the rights established in the LGPD and in the Brazilian Constitution."⁷⁵⁵ According to critics, the legislation favors a regime of subjective responsibility (requiring proof of a fault), which not only results in imposing the costs of developing AI applications on citizens —"in a patent inversion of the constitutional values"—but also fails to establish the necessary incentives for the adoption of appropriate safeguards against the risks of AI.⁷⁵⁶ The non-discrimination principle "merely mitigates the possibility of applying systems for illicit or abusive discriminatory purposes." As for the principle of neutrality, its "pursuit" creates no binding obligation. The Brazilian AI Bill "gravely undermines the exercise of fundamental rights such as data protection, freedom of expression, and equality."

In response to these criticisms, in March 2022, the Federal Senate appointed a temporary Commission of Jurists (*Comissão de Juristas*, "CJSUBIA") chaired by Justice Ricardo Villas Bôas Cueva from the Superior Court of Justice (*Superior Tribunal de Justiça*, STJ) and with renowned academic Laura Schertel Ferreira Mendes as the Rapporteur. The Commission was charged with analyzing the three draft AI bills and consolidating them into a proposal for a new Brazilian AI Act.

The work of the Commission of Jurists was developed in three stages. The first stage was to establish public participation mechanisms to ensure the

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⁷⁵³ Brazilian House of Representatives, *Project Creates Legal Framework for the Use of Artificial Intelligence in Brazil* (Mar. 4, 2020), https://www.camara.leg.br/noticias/641927-projeto-cria-marco-legal-para-uso-de-inteligencia-artificial-no-brasil/

⁷⁵⁴ Presidency of the Republic, Sub-General Secretariat for Legal Affairs, *General Law on Protection of Personal Data (LGPD)* (Aug. 14, 2020),

http://www.planalto.gov.br/ccivil 03/ ato2015-2018/2018/Lei/L13709.htm; Katitza Rodriguez and Veridiana Alimonti, *A Look-Back and Ahead on Data Protection in Latin America and Spain* (Sept. 21, 2020), https://www.eff.org/deeplinks/2020/09/look-back-and-ahead-data-protection-latin-america-and-spain

⁷⁵⁵ José Renato Laranjeira de Pereira and Thiago Guimarães Moraes, *Promoting Irresponsible AI: Lessons from a Brazilian Bill*, Heinrich Böll Stiftung (Feb. 14, 2022, https://eu.boell.org/en/2022/02/14/promoting-irresponsible-ai-lessons-brazilian-bill

⁷⁵⁶ Change.org, *Open Letter from Jurists to the Federal Senate against Article 6, Item VI of PL 21–A/2020* (Oct. 26, 2021), https://www.change.org/p/senado-federal-carta-aberta-de-juristas-ao-senado-federal-contra-o-artigo-6o-inciso-vi-do-pl-21-a-2020

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participation of society and obtain technical and multidisciplinary contributions. The second phase consisted in conducting ordinary working meetings and an international seminar with legal AI experts across the world, such as Alessandro Mantelero, Marc Rotenberg, Mireille Hildebrandt, and Maria Paz Canales, with the aim to gather further feedback.

The third phase was dedicated to the writing and consolidation of the inputs obtained for the elaboration of the proposal for a new Brazilian AI Act. In the third phase, 5 subgroups were created to develop the writing: 1) Concepts, fundamentals, and principles (headed by Clara Iglesias Keller); 2) Rights and Governance Rules (headed by Miriam Wimmer); 3) Risk categorization and algorithmic impact assessment (headed by Bruno Bioni); 4) Measures to support innovation (headed by Mariana Valente; and 5) Supervision and Oversight.⁷⁵⁷

The Commission of Jurists finalized its work⁷⁵⁸ and submitted a draft legal framework to the Federal Senate on December 6, 2022.⁷⁵⁹ The explanatory statement of the report stresses "Therefore, this substitute bill is based on the premise that there is no trade-off—a mutually exclusive choice—between protection of fundamental rights and freedoms, appreciation of work and dignity of the human person in the face of the economic order and the creation of new value chains. [...] Its normative objective is to conciliate an approach based on risks with a regulatory model based on rights [...] weight of regulation is dynamically calibrated according to the potential risks of the technology application context."

The proposal has 45 articles, divided into 9 chapters: 1) Preliminary provisions, 2) Rights, 3) Risk Categorization, 4) Governance of AI Systems, V) Civil Liability, VI) Codes of Good Practice and Governance, VII) Reporting Serious Incidents, VIII) Supervision and Enforcement, IX) Final Provisions. It has two different regulatory approaches. Overall, it is risk-based approach, imposing different obligations depending on the level of risk of the AI system. However, it also brings a rights-based approach, since there are rights recognized for all individuals affected by AI systems, regardless of their risk levels.

The rights for all affected individuals include right to prior information before interacting with AI systems, right to explanation, right to challenge decisions or predictions made by AI, right to human participation in decisions in

⁷⁵⁷ Federal Senate, CJSUBIA—Commission of Jurists Responsible for Elaboration of Substitute on Artificial Intelligence in Brazil (2022),

https://legis.senado.leg.br/comissoes/comissao?codcol=2504

⁷⁵⁸ Federal Senate, *Jurists Commission Concludes Text of the Legal Framework for Artificial Intelligence* (Dec. 6, 2022), https://www12.senado.leg.br/noticias/materias/2022/12/06/comissao-conclui-texto-sobre-regulacao-da-inteligencia-artificial-no-brasil

⁷⁵⁹ Federal Senate, *Jurists Commission Concludes Text of the Legal Framework for Artificial Intelligence* (Dec. 6, 2022), https://www12.senado.leg.br/noticias/materias/2022/12/06/comissao-conclui-texto-sobre-regulacao-da-inteligencia-artificial-no-brasil

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AI systems, right to non-discrimination, and right to privacy and protection of personal data.

Chapter 3 describes the risk categorization of AI systems. Prior to being placed on market or used in service, the supplier of the AI system must complete a preliminary evaluation to classify its degree of risk, according to the criteria set forth in the law. For high-risk artificial intelligence systems, it will be mandatory to conduct an algorithmic impact assessment and publicized the conclusions, with the protection of industrial and trade secrets when necessary. Artificial Intelligence systems classified as excessive risk are prohibited to be used or implemented, and there is a non-exhaustive list of such in the law. The law also proposes a regulation to restrict the use of remote biometric identification systems in public security.

A controversial theme since draft Bill No. 21/2020 was Civil Liability for damages caused by AI systems. The proposal defines that in the case of high risk or excessive risk of the AI systems, the supplier or operator is objectively liable for the damage caused. Otherwise, the liability will be presumed and there will be a reversal of the burden of proof in favor of the victim.

To enforce the new legislation the competent authority would be a body or entity of the Federal Government, still to be defined.

In 2023, this text was presented in the form of a bill (Bill 2338/2023). To address this matter and others related to the topic of AI in the Senate, an Internal Temporary Committee on Artificial Intelligence (CTIA) was established.

In October, the Internal Temporary Committee concluded a cycle of 10 public hearings, marked by criticisms from technology sector companies and academics regarding the "negative" bias of the project, with concerns about inhibiting innovation. On the other hand, jurists advocated for a risk-based approach, rejecting the idea of preventing innovations. There were also disagreements regarding the authority responsible for overseeing AI applications.

After further amendments and a supplemental vote document⁷⁶⁰ to update a June 2024 report that recommended the approval of Bill 2338/2023,⁷⁶¹ the Senate approved Bill 2338 in December 2024.⁷⁶² The Bill had a significant focus on characterizing the risk profile of AI systems and applications as presenting "excessive risk"; "high risk"; or other. Developers, suppliers, or operators are

⁷⁶¹ Senate Agency, *Report on AI Presented this Tuesday Includes Protection of Work and Identity* (Jun. 18, 2024), https://www12.senado.leg.br/noticias/materias/2024/06/18/relatorio-sobre-ia-apresentado-nesta-terca-inclui-protecao-ao-trabalho-e-a-identidade

⁷⁶⁰ Senate Agency, *Rapporteur Presents Updated Report on AI Regulation* (Jul. 4, 2024). https://www12.senado.leg.br/noticias/materias/2024/07/04/relator-apresenta-relatorio-atualizado-sobre-regulamentacao-da-ia

⁷⁶² Senate Agency, *Senate Approves Regulation of Artificial Intelligence; Text Goes to the House* (Dec. 10, 2024), https://www12.senado.leg.br/noticias/materias/2024/12/10/senado-aprova-regulamentacao-da-inteligencia-artificial-texto-vai-a-camara

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responsible for conducting a preliminary assessment on an AI system to determine the risk level. Updates to Bill on the floor, however, make these assessments optional, though "considered a measure of good practice" for systems that are not general-purpose and not generative. The Bill also exempts social media from high-risk classification.

Some examples of AI applications classified as excessive risk include autonomous weapons and biometric identification systems for use in public safety or Justice. These applications will be prohibited in the proposed legislation. High-risk systems will be subject to rules that are more lenient than excessive risk, but stricter than common AI systems. The bill will consider control measures such as records of the operations performed and reliability tests. The parties responsible for these systems and applications should, for example, make an algorithmic impact assessment, and be responsible for introducing preventive, mitigating, and reversing measures of the identified negative effects of the AI system.

If the bill becomes law, the National Data Protection Authority (ANPD) will coordinate oversight under a supervisory agency, the National System of Regulation and Governance of Artificial Intelligence (SIA). In addition to the state agencies, the project also provides incentives for self-regulation in the form of voluntary association of companies and through stamps and certificates of good practice.

However, since the publication of this supplemental vote document dozens of additional suggested amendments have been introduced and in turn CTIA's work has been extended further to consider these suggested changes.⁷⁶⁴

The State of Ceará adopted Law No. 17/611 in August 2021, establishing obligations and guidelines for the implementation and use of AI systems within the state. This law establishes that AI systems must be designed in a safe way, based on ethics and in accordance with this law and Brazilian laws more generally. The law defines an AI system as computer science technologies that enable computers to interact with humans, through technological mechanisms that enable the simulation of human reasoning.

State Law No. 17/611 set some obligations for AI systems and the companies that develop them:

⁷⁶⁴ Senate Agency, Experts Defend Changes in the Project that Regulates AI (Sept. 5, 2024), https://www12.senado.leg.br/noticias/materias/2024/09/05/especialistas-defendem-mudancas-no-projeto-que-regulamenta-ia

⁷⁶³ Senate Agency, *Rapporteur Presents Updated Report on AI Regulation* (Jul. 4, 2024). https://www12.senado.leg.br/noticias/materias/2024/07/04/relator-apresenta-relatorio-atualizado-sobre-regulamentacao-da-ia

⁷⁶⁵ Legislative Assembly of the State of Ceará, *Ordinary Law No. 17.611, Establishes Responsibilities and Guidelines for Artificial Intelligence Systems within the State of Ceará* (Aug. 11, 2021), https://www2.al.ce.gov.br/legislativo/legislacao5/leis2021/17611.htm

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- 1. establish secure mechanisms and algorithms, capable of protecting and ensuring the privacy and inviolability of users' data
- 2. respect for human dignity and equal treatment for all users, non-discrimination
- 3. enable users to have control over their personal data and how they are being used
- 4. ensure that the systems are always managed by humans and submitted to them, and maintain human autonomy and supervision
- 5. promote social well-being and not incite hatred and violence
- 6. respect freedom of expression, as long as it does not contradict the previous items.

In addition, State Law No. 17/611 states that companies headquartered in the State of Ceará, or that have their artificial intelligence systems in use and operation in the State of Ceará, must be responsible for how their systems operate, being liable for any damages in accordance with the law.

Public Participation

The Ministry of Science, Technology, Innovations, and Communications (MCTIC) organized an online public consultation between December 2019 and February 2020 to gather inputs for "a National Artificial Intelligence Strategy that allows to enhance the benefits of AI for the country, mitigating any negative impacts." According to the terms of the public consultation, "the objective of the strategy is to solve concrete problems in the country, identifying priority areas in the development and use of AI-related technologies in which there is greater potential for obtaining benefits. It is envisaged that AI can bring gains in promoting competitiveness and increasing Brazilian productivity, in providing public services, in improving people's quality of life and in reducing social inequalities, among others." ⁷⁶⁷

The consultation addressed thematic areas related to AI and focused on the government's role regarding the impact of AI technologies on society. Relevant documents to artificial intelligence were made available on the consultation website. The consultation collected about 1,000 contributions in total, which were considered for the development of the strategy proposal. ⁷⁶⁸

On the other hand, Academics and NGOs have stated that the debate on Bill No. 21/2020 lacked public participation. According to José Renato Laranjeira de Pereira and Thiago Guimarães Moraes, "The debate on the bill ignored the

⁷⁶⁶ Participate Brazil, Ministério da Ciência, Tecnologia, Inovações e Comunicações, *Brazilian Artificial Intelligence Strategy, Public Consultation Presentation and Instructions*, http://participa.br/estrategia-brasileira-de-inteligencia-artificial/blog/apresentacao-e-instrucoes

⁷⁶⁸ OECD AI Policy Observatory, *Policy Initiatives for Brazil, Brazilian AI Strategy* (Sept. 6, 2022), https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faipo.oecd.org%2F2021-data-policyInitiatives-27104

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claims of experts and civil society organisations to address the high risks of the technology regarding fundamental rights. In contrast, Members of Congress delivered favorable speeches on the positive impacts of AI in society, especially as a tool for efficiency and innovation."⁷⁶⁹

As indicated above, the Federal Senate responded to these criticisms by establishing a Commission of Jurists to prepare a new consolidated proposal for a Brazilian AI Act, the preparation of which involved the establishment of public participation mechanisms. The Commission of Jurists initiated the organization of meetings, seminars, and public hearings divided into thematic axes, with the participation of experts and national and international representatives. 12 thematic panels were created and the Commission of Jurists received 102 statements from civil society entities, consolidated in the report submitted to the Federal Senate.⁷⁷⁰

Data Protection

Brazil's President signed the new data protection law, *Lei Geral de Proteção de Dados Pessoais* (LGPD), in September 2020.⁷⁷¹ The LGPD is the first comprehensive data protection law in Brazil and mirrors the European Union's GDPR.⁷⁷² The LGPD is relevant to the processing of personal data in relation to AI applications.⁷⁷³

The LGPD established the National Data Protection Authority (ANDP) to oversee data protection and privacy in the country. A new law in 2022 modified the LGPD to transform the ANDP into an independent agency, apart from the executive, with its own budget.⁷⁷⁴ The ANPD is guaranteed technical and decision-

⁷⁶⁹ José Renato Laranjeira de Pereira and Thiago Guimarães Moraes, *Promoting Irresponsible AI: Lessons from a Brazilian Bill*, Heinrich Böll Stiftung (Feb. 14, 2022), https://eu.boell.org/en/2022/02/14/promoting-irresponsible-ai-lessons-brazilian-bill

⁷⁷⁰ Federal Senate, *Jurists Commission Concludes Text of the Legal Framework for Artificial Intelligence* (Dec. 6, 2022), https://www12.senado.leg.br/noticias/materias/2022/12/06/comissao-conclui-texto-sobre-regulacao-da-inteligencia-artificial-no-brasil

⁷⁷¹ Presidency of the Republic, Sub-General Secretariat for Legal Affairs, *General Law on Protection of Personal Data (LGPD)* (Aug. 14, 2020),

http://www.planalto.gov.br/ccivil 03/ ato2015-2018/2018/Lei/L13709.htm; Katitza Rodriguez, Veridiana Alimonti, *A Look-Back and Ahead on Data Protection in Latin America and Spain* (Sept. 21, 2020), https://www.eff.org/deeplinks/2020/09/look-back-and-ahead-data-protection-latin-america-and-spain

⁷⁷² Hogan Lovells Engage, *Brazil Creates a Data Protection Authority* (Jan. 11, 2019), https://www.engage.hoganlovells.com/knowledgeservices/news/brazil-creates-a-data-protection-authority

⁷⁷³ Lexology, *An Interview with Demarest Advogados Discussing Artificial Intelligence in Brazil* (Nov. 27, 2020), https://www.lexology.com/library/detail.aspx?g=70705701-b4c6-4aa7-8a8a-344dd757f578

⁷⁷⁴ Presidency of the Republic, Law No. 14.460, Transforms the National Data Protection Authority into a Sovereign Entity (Oct. 25, 2022),

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making autonomy,⁷⁷⁵ and is given important attributions related to the LGPD interpretation, application and enforcement.⁷⁷⁶

Among other powers, the National Data Protection Authority (1) regulates the General Data Protection Law; (2) supervises compliance with personal data protection legislation, with a view to protecting the fundamental rights of freedom, privacy and the free development of the natural person's personality; (3) develops the guidelines of the National Data Protection Plan in order to protect the fundamental rights of freedom, privacy and the free development of the personality of the natural person; and (4) applies administrative sanctions.⁷⁷⁷

Seven principles underpin the protection of personal data in the LGPD: (1) respect for privacy; (2) informed self-determination; (3) freedom of expression, information, communication, and opinion; (4) the inviolability of intimacy, honor, and image; (5) economic and technological development and innovation; (6) free enterprise, free competition, and consumer protection; and (7) human rights, the free development of personality, dignity, and the exercise of citizenship by natural persons.

The Brazilian Congress enacted Constitutional Amendment (EC) 115, which establishes personal data protection as a fundamental right in February 2022.⁷⁷⁸ EC 115 also gives the Federal Government exclusive jurisdiction to legislate on personal data protection and processing.

The amendment establishes the competence of the highest court within Brazil's judiciary, the Federal Supreme Court (*Supremo Tribunal Federal*, STF), to adjudicate legal issues involving personal data. Previously, the STF had examined related cases based on other constitutional guarantees, such as the inviolability of intimacy and individuals' private life.

Brazil's alignment with international data protection trends is also reflected in EC 115. Personal data protection is recognized as a fundamental right by numerous other democratic states and international organizations, and, as an

(LGPD) (Apr. 17, 2020), https://www.huntonprivacyblog.com/wp-content/uploads/sites/28/2020/08/encipl-

idp paper on the role of the anpd under the lgpd 04.16.pdf

⁷⁷⁵ Presidency of the Republic, *General Law on Protection of Personal Data* (LGPD), Article 55-B (Aug. 14, 2020), http://www.planalto.gov.br/ccivil_03/ ato2015-2018/2018/Lei/L13709.htm
⁷⁷⁶ Ibid, Art. 55-J LGPD; Centre for Information Policy Leadership (CIPL) and Centro de Direito, Internet e Sociedade of Instituto Brasiliense de Direito Público (CEDIS-IDP), *The Role of the Brazilian Data Protection Authority (ANPD) under Brazil's New Data Protection Law*

⁷⁷⁷ Article 55-J LGPD, https://www.gov.br/secretariageral/pt-br/noticias/2020/agosto/governo-federal-publica-a-estrutura-regimental-da-autoridade-nacional-de-protecao-de-dados

⁷⁷⁸ Federal Senate, *Constitutional Amendment on Protection of Personal Data Adopted* (Feb. 10, 2022), https://www12.senado.leg.br/noticias/materias/2022/02/10/promulgada-emenda-constitucional-de-protecao-de-dados

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example, is established in Article 8 of the Charter of Fundamental Rights of the European Union.

Entities that process personal data in compliance with the Brazilian legislation are set to benefit from greater legal certainty with the passing of EC 115. By giving Brazil's federal government exclusive jurisdiction over data protection legislation, EC 115 prevents alternative, and possibly incompatible, regulations on the subject from being enacted at state or municipal level.⁷⁷⁹

The ANPD published Resolution 19/2024 approving the regulation on international data transfers and the content of standard contractual clauses in August 2024.⁷⁸⁰ The regulation implements the international data transfer framework under the LGPD.⁷⁸¹ International data transfers from Brazil to a third country are permitted if: (i) the ANPD recognizes the third country as providing adequate protection for personal data; (ii) the data exporter and data importer enter into standard contractual clauses (SCCs), binding corporate rules, or special contractual clauses; or (iii) one of the specific cases listed in the LGPD applies. Publication of the regulation comes amid discussions of creating a "sovereign cloud" to ensure government data is stored within national borders as part of Brazil's Artificial Intelligence Plan.⁷⁸²

The National Council for the Rights of Children and Adolescents (CONANDA) published Resolution No. 245/2024 that addresses children and adolescents' rights in virtual environments. For the purposes of Resolution No. 245/2024, "virtual environments" means any information or communication technology, such as digital networks, content, services and applications available on the Internet; devices and connected environments; virtual and augmented reality; artificial intelligence; robotics; and automated systems, biometrics, algorithmic systems, and data analysis. Resolution No. 245/2024 establishes specific data protection requirements such as the prohibition of processing minors'

⁷⁷⁹ Mattos Filho, *Personal Data Protection Recognized as Fundamental Right in Brazil* (Feb. 10, 2022), https://www.mattosfilho.com.br/en/unico/protecao-dados-direito-fundamental/

⁷⁸⁰ Official Journal of the Union, *Resolution CD/ANDP No. 19*, of August 23, 2024 (Aug. 23, 2024), https://www.in.gov.br/en/web/dou/-/resolucao-cd/anpd-n-19-de-23-de-agosto-de-2024-580095396

⁷⁸¹ ANPD, ANPD Approves Regulation on International Data Transfers (Aug. 23, 2024), https://www.gov.br/anpd/pt-br/assuntos/noticias/resolucao-normatiza-transferencia-internacional-de-dados

⁷⁸² MCTI, *Plano Brasileiro de Inteligência Artificial (PBIA), 2024-2028* (Jul. 29, 2024), https://www.gov.br/lncc/pt-br/assuntos/noticias/ultimas-noticias-1/plano-brasileiro-de-inteligencia-artificial-pbia-2024-2028

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personal data for commercial purposes including targeted advertisement and profiling in connection with consumption, behavior, and market segmentation.⁷⁸³

AI Oversight

The ANPD adopted Resolution No. 10 in December 2023, which emphasized the need to strengthen data protection and oversight concerning AI applications.⁷⁸⁴

As a member of the Ibero-American Network for the Protection of Personal Data (RIPD, Red Ibero-Americano de Protección de Datos), the ANPD endorsed the General Recommendations for the Processing of Personal Data in Artificial Intelligence⁷⁸⁵ and the accompanying Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects.⁷⁸⁶ Both have been framed in accordance with the RIPD Standards for Personal Data Protection for Ibero-American States.⁷⁸⁷ With the adoption of the Standards, a series of guiding principles and rights for the protection of personal data were recognized that can be adopted and developed by the Ibero-American States in their national legislation to guarantee proper treatment of personal data and to have homogeneous rules in the region. The guiding principles of personal data protection are legitimation, lawfulness, loyalty, transparency, purpose, proportionality, quality, responsibility, safety and confidentiality. Controllers must also guarantee the exercise of the following rights by data subjects: right of access, right to correction, right to cancellation, right to opposition, right not to be subject to automated individual decisions, right to portability of personal data, and right to the limitation of treatment of personal data.

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⁷⁸³ Official Diary of the Union, *Resolution No. 245 of April 5, 2024, Providing for the Rights of Children and Adolescents in the Digital Environment* (Apr. 5, 2024), https://www.gov.br/participamaisbrasil/https-wwwgovbr-participamaisbrasil-blob-baixar-7359

ANPD, Resolution CD/ANPD No 10, of December 5, 2023, https://www.gov.br/anpd/pt-br/documentos-e-publicacoes/documentos-de-publicacoes/nota-tecnica-no-19-2023-fis-cgf-anpd.pdf

⁷⁸⁵ Ibero-American Network for the Protection of Personal Data (RIPD), *General Recommendations for the Processing of Personal Data in Artificial Intelligence* (Jun. 2019), https://www.redipd.org/sites/default/files/2020-02/guide-general-recommendations-processing-personal-data-ai.pdf

⁷⁸⁶ Ibero-American Network for the Protection of Personal Data (RIPD), *Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects* (Jun. 2019), https://www.redipd.org/en/documents/guide-specific-guidelines-ai-projects

⁷⁸⁷ Ibero-American Network for the Protection of Personal Data (RIPD), *Standards for Personal Data Protection for Ibero-American States* (2017),

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In May 2023, the RIPD data protection authorities initiated a coordinated action regarding ChatGPT, developed by OpenAI, on the basis that it may entail risks for the rights and freedoms of users in relation to the processing of their personal data. Concerns centered on the risk of misinformation: "ChatGPT does not have knowledge and/or experience in a specific domain, so the precision and depth of the response may vary in each case, and/or generate responses with cultural, racial or gender biases, as well as false ones."⁷⁸⁸

The ANPD is not a member of the Global Privacy Assembly (GPA). It has observer status since October 2021. The ANPD has not endorsed the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence, ⁷⁸⁹ the 2020 GPA Resolution on AI Accountability, ⁷⁹⁰ the 2022 GPA Resolution on Facial Recognition Technology, ⁷⁹¹ or the 2023 GPA Resolution on Generative AI Systems. ⁷⁹²

In September 2020, the Federal Government published a decree establishing the rules governing the ANPD with the objective of giving effect to the LGPD and enabling sanctions in case of non-compliance.⁷⁹³

The ANDP's regulatory agenda for 2023–2024 aimed to provide greater predictability, publicity, transparency, and efficiency to its regulatory process. In addition to ensuring the proper application of the LGPD, Article 20, which deals with the right of the data subject to request the review of automated decisions, the

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⁷⁸⁸ Ibero-American Network for the Protection of Personal Data (RIPD), *Authorities of the Ibero-American Network for the Protection of Personal Data Initiate a Coordinated Action in Relation to the Service ChatGPT* (May 8, 2023), https://www.redipd.org/noticias/autoridades-red-iberoamericana-de-proteccion-de-datos-personales-inician-accion-chatgpt

⁷⁸⁹ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

⁷⁹⁰ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-use-of-AI-EN-1.pdf

⁷⁹¹ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁷⁹² Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁷⁹³ Government of Brazil, Federal Government Publishes the Regulatory Structure of the National Data Protection Authority: Measure Complies with the General Personal Data Protection Law and Provides Conditions for the Operationalization of Personal Data Protection in Brazil (Sept. 2, 2020), https://www.gov.br/secretariageral/pt-br/noticias/2020/agosto/governofederal-publica-a-estrutura-regimental-da-autoridade-nacional-de-protecao-de-dados

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ANPD can better address the issue of AI by means of guidance documents (such as guides and technical studies). The ANPD states that it is essential that it studies and monitors the subject from the perspective of personal data protection, and particularly the application of the LGPD, since these guidelines will serve as a basis for the development of other rules that may be necessary for the discipline of AI systems.⁷⁹⁴

As part of Axis 5 of the National AI Strategy, Brazil established the National Center for Algorithmic Transparency and Reliable AI in 2024. This center is dedicated to conducting research on AI risks, enhancing transparency, and ensuring the integrity and reliability of AI systems. Additionally, the ANPD launched a series of Brazilian Guides for Responsible AI tailored to Brazil's national context, promoting ethical AI usage and building public trust in AI technologies.⁷⁹⁵

Should the House pass the Senate-approved AI Bill from December 2024, the ANDP would facilitate AI oversight through SIA.

Algorithmic Transparency

Article 20 of the LGPD establishes the right of any individual "to request the review of decisions taken solely on the basis of automated processing of personal data that affect his interests, including decisions designed to define his personal, professional, consumer and credit profile or aspects of his personality."

As a result, "the controller shall provide, whenever requested, clear and adequate information regarding the criteria and procedures used for the automated decision, observing the commercial and industrial secrets." Where the information is not provided due to the observance of commercial and industrial secrecy, the national data protection authority "may perform audits to verify discriminatory aspects in automated processing of personal data."

⁷⁹⁴ Autoridade Nacional de Proteção de Dados, ANPD, *Regulatory Agenda*, 2023–2024 (Nov. 4, 2022), https://www.gov.br/anpd/pt-br/assuntos/noticias/anpd-publica-agenda-regulatoria-2023-2024/AgendaRegulatria20232024.pdf/view

⁷⁹⁵ MCTI, *Plano Brasileiro de Inteligência Artificial (PBIA), 2024-2028* (Jul. 29, 2024), https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/noticias/2024/07/plano-brasileiro-de-inteligencia-artificial-ia_para_o_bem_de_todos.pdf/view

⁷⁹⁶ Presidency of the Republic, Sub-General Secretariat for Legal Affairs, *General Law on Protection of Personal Data (LGPD)* (Aug. 14, 2020),

http://www.planalto.gov.br/ccivil_03/_ato2015-2018/2018/Lei/L13709.html; Katitza Rodriguez, Veridiana Alimonti, *A Look-Back and Ahead on Data Protection in Latin America and Spain* (Sept. 21, 2020), https://www.eff.org/deeplinks/2020/09/look-back-and-ahead-data-protection-latin-america-and-spain

⁷⁹⁷ Article 20.1 LGPD

⁷⁹⁸ Article 20.2 LGPD

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Some Brazilian researchers and judicial advocates, including Prof. Renato Leite Monteiro and entities like the Brazilian Institute of Consumer Protection (IDEC), assert that a comprehensive interpretation of the LGPD, in conjunction with the Constitution, consumer law, and other legal provisions, guarantees the existence of a right to explanation in Brazil. However, this position demands greater judicial consolidation.⁷⁹⁹

The national AI strategy heavily features algorithmic transparency as a goal for the development of AI capabilities and policies in Brazil. One of the critical strategic actions delineated in the EBIA is "Encouraging transparency and responsible disclosure actions regarding the use of AI systems, and promoting compliance by such systems with human rights, democratic values and diversity." The EBIA also outlined algorithmic transparency as a critical theme to be pursued in AI research. The strategy outlined transparency as a critical element of AI governance both regarding explainability of decisions taken by autonomous systems and the transparency of methodologies used in the development of AI systems, including data sources and project procedures. ⁸⁰¹

With regard to the transparency principle, the RIPD Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects provide, "The information provided regarding the logic of the AI model must include at least basic aspects of its operation, as well as the weighting and correlation of the data, written in a clear, simple and easily understood language, it will not be necessary to provide a complete explanation of the algorithms used or even to include them. The above always looking not to affect the user experience." 802

Use of AI in Public Administration

As a member of the Latin American Centre for Development Administration (CLAD), Brazil approved the Ibero American Charter on Artificial Intelligence in Civil Service in November 2023.803 The Charter aims to provide a

⁷⁹⁹ Institute for Research on Internet and Society, *Automated Decisions and Algorithmic Transparency* (Nov. 16, 2019), https://irisbh.com.br/en/automated-decisions-and-algorithmic-transparency/

MCTI, Estratégia Brasileira de Inteligência Artificial, p. 23 (Jul. 13, 2021),
 https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/transformacaodigital/arquivosinteligenciaartificial/ebia-diagramacao_4-979_2021.pdf
 Ibid., p. 25

⁸⁰² Ibero-American Network for the Protection of Personal Data (RIPD), *Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects*, p. 17 (Jun. 2019), https://www.redipd.org/sites/default/files/2020-02/guide-specific-guidelines-ai-projects.pdf

⁸⁰³ Latin American Centre for Development Administration (CLAD), *Ibero American Charter on Artificial Intelligence in Civil Service* (Nov. 2023), https://clad.org/wp-content/uploads/2024/03/CIIA-EN-03-2024.pdf

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roadmap and common framework for CLAD member states to learn about the challenges and opportunities involved in the implementation of AI in public administration and adapt their AI policy strategies and laws accordingly. The guiding principles are human autonomy; transparency, traceability and explainability; accountability, liability and auditability; security and technical robustness; reliability, accuracy, and reproducibility; confidence, proportionality, and prevention of damage; privacy and protection of personal data; data quality and safety; fairness, inclusiveness, and non-discrimination; human-centering, public value, and social responsibility; and sustainability and environmental protection.

In addition to common principles, the Charter recommends specific tools for monitoring AI impact as well as a risk classification mechanism that guardrails for high-risk use cases and prohibitions against uses that violate human rights. Prohibited uses include facial recognition systems; systems aimed at behavior and cognitive manipulation of specific individuals or vulnerable groups (children or the elderly); and social ranking systems based on certain personality traits, individual behaviors, socio-demographic features, or economic status.⁸⁰⁴

The third axis of the proposal for the Brazilian Artificial Intelligence Plan 2024–2028 focuses on the use of AI to improve public services. The plan includes 19 suggested actions to foster the use of AI in the public sector to improve the delivery of public services and enhance impact on development and social inclusion. The plan outlines investments of R\$1.76 billion divided among an AI Nucleus for the Federal Government, a National Data Infrastructure, and a Program of AI Solutions for Public Services. Some of the areas targeted for proposed AI solutions to improve public services include procurement, management of human resources, management of educational resources, cybersecurity, management of assets, and prevention of extreme climate events. 805

Algorithm-Based Advertising

The Brazilian Advertising Self-Regulation Council (CONAR), a nongovernmental organization that acts as a tribunal in the advertising industry to ensure advertising practices are lawful and ethical, ⁸⁰⁶ decided a case involving algorithm-based advertising in December 2021. ⁸⁰⁷ The ruling was issued with regard to a complaint filed by a consumer against a streaming platform, alleging that an ad did not reflect the actual content of the platform. In its defense, the

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⁸⁰⁴ Ibid, p. 21

⁸⁰⁵ MCTI, *Plano Brasileiro de Inteligência Artificial (PBIA), 2024-2028* (Jul. 29, 2024), https://www.gov.br/lncc/pt-br/assuntos/noticias/ultimas-noticias-1/plano-brasileiro-de-inteligencia-artificial-pbia-2024-2028

⁸⁰⁶ CONAR, About CONAR, http://www.conar.org.br/

⁸⁰⁷ CONAR, *Complaint No. 203/21, Ruling Issued on 7 Dec. 2021*, Conar Gazette: Ethics in Practice, Issue 222, pp. 6–7 (Jan. 2022), http://www.conar.org.br/pdf/conar222.pdf

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streaming platform clarified that its ads are created automatically through algorithms, which, having identified the consumer's interest in the film, would have then used the film to increase the consumer's engagement with the ad. CONAR did not consider that the streaming platform had committed any irregularities through this practice. However, it warned that advertisers should be cautious when using algorithm-based advertising, as those may hinder consumers from obtaining the solutions they seek.

In 2024, CONAR extended guidelines around algorithm-based advertising to encompass influencer marketing, requiring that all paid promotions be clearly labeled to avoid consumer confusion. These updates reflect Brazil's alignment with international trends prioritizing transparency and consumer protection. ⁸⁰⁸

EdTech

The EdTech apps Descomplica and Stoodi used in Sao Paulo were part of a 2022 global study conducted by Human Rights Watch on education technology endorsed by 49 governments, including Brazil, during the pandemic. Based on technical and policy analysis of these EdTech products, Human Rights Watch found that Brazil's endorsement of these online learning platforms put at risk or directly violated children's rights.

Human Rights Watch found that both Descomplica and Stoodi have "the ability to collect their users' advertising IDs. This allowed these apps to tag children and identify their devices for the sole purpose of advertising to them." According to Human Rights Watch, in line with child data protection principles as well as corporations' human rights responsibilities outlined in the United Nations Guiding Principles on Business and Human Rights, EdTech and AdTech companies should not collect and process children's data for advertising. The report noted steps companies should take to protect children's rights, including working with governments to define clear retention and deletion rules for children's data collected during the pandemic. Furthermore, governments should develop, refine, and enforce modern child data protection laws and standards and ensure that children who want to learn are not compelled to give up their other rights to do so.⁸⁰⁹

In March 2024, Human Rights Watch submitted recommendations to the UN Committee on the Rights of the Child urging the ANPD to seek actionable steps against the EdTech companies to protect children and adolescents' data privacy. Human Rights Watch also recommended that ANPD build on the current

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⁸⁰⁸ International Chamber of Commerce (ICC), *11th Edition of the ICC Advertising and Marketing Communications Code* (Sept. 19, 2024), https://iccwbo.org/wp-content/uploads/sites/3/2024/09/ICC_2024_MarketingCode_2024.pdf

Human Rights Watch, *How Dare They Peep into My Private Life* (May 25, 2022), https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rights-violations-governments

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"case law and Supreme court rulings protecting children's right in educational settings" when addressing online education. 810

Medical Data

According to a 2020 OECD report for the G20 Digital Economy Task Force, Brazil is in the process of establishing regulation in the area of privacy and personal data protection in health systems consistent with existing legislation, including the LGPD. To this end, the country is developing a national electronic health records system, which aims to provide a robust database for current medical use, as well as for technology development and innovation.⁸¹¹

On March 24, 2022, the Brazilian Health Regulatory Agency (ANVISA)⁸¹² published a Resolution about the regularization of Software as a Medical Device (SaMD), which went into force in July 2022.⁸¹³ ANVISA clarified that the purpose of the device must be respected. There is currently no provision for specific regulation of SaMD that includes AI or ML technology; however, manufacturers of SaMD using this type of technology should submit, at the time of regularization, a description of the databases used for AI learning, training, and verification activities; information regarding the origin, the amount, and a description of the data used; and a report containing justification for the AI technique applied, the size of the databases used, and the training history. The absence of such information at the time of submission of the device regularization may lead to a negative outcome, for lack of sufficient explanation regarding the technology applied to the product, as required in the medical device regulation.⁸¹⁴

ANVISA's 2024–2025 regulatory agenda does not explicitly mention AI or machine learning. However, reviewing the SaMD regulation is among its priorities.⁸¹⁵

https://www.hrw.org/news/2024/03/27/brazil-submission-un-committee-rights-child

813 Brazilian Government, *Resolution No. 657* (Mar. 24, 2022),

https://www.in.gov.br/en/web/dou/-/resolucao-de-diretoria-colegiada-rdc-n-657-de-24-de-marco-de-2022-389603457

⁸¹⁰ Human Rights Watch, *Brazil: Submission to the UN Committee on the Rights of the Child, 98th Pre-Sessional Working Group* (Mar. 27, 2024),

⁸¹¹ OECD, Examples of AI National Policies: Report for the G20 Digital Economy Task Force (2020), https://www.mcit.gov.sa/sites/default/files/examples-of-ai-national-policies.pdf

 $^{^{812}}$ Brazilian Government, Brazilian Health Regulatory Agency – ANVISA,

https://www.gov.br/anvisa/pt-br/english

⁸¹⁴ ANVISA, *Perguntas e Respostas*, pp. 40-41 (2022), https://www.gov.br/anvisa/pt-br/assuntos/noticias-anvisa/2022/software-como-dispositivo-medico-perguntas-e-respostas/perguntas-respostas-rdc-657-de-2022-v1-01-09-2022.pdf

⁸¹⁵ Luiz Levy, Priscila Sanada, and Evangeline Loh, *Brazil ANVISA Announces Priorities for the 2024–2025 Year* (Feb. 16, 2024), https://www.emergobyul.com/news/brazil-anvisa-announces-priorities-2024-2025-year

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Use of AI in Courts

With a current backlog of 78 million lawsuits, the Brazilian judicial system operates with substantial challenges in case flow management. The lack of resources to meet this demand⁸¹⁶ has led to numerous initiatives involving Artificial Intelligence.

In this context, the President of the National Council of Justice (CNJ), a judicial agency responsible for the administrative and financial control of the judiciary and the supervision of judges, 817 published in August 2020 a Resolution on ethics, transparency and governance in the production and use of artificial Intelligence in the Judiciary. 818 The NCJ Resolution addresses AI-related requirements such as respect for human rights; preservation of equality, non-discrimination, plurality, and solidarity; transparency (from disclosure to explainability); data security; user control; and accountability.

The Attorney General of the Union (AGU) began using artificial intelligence tools in the production of legal documents in 2024. Federal lawyers and prosecutors may use generative AI tools through the institutional document management system known as Super Sapiens to make summaries of extensive texts, classify and sort documents, extract data from a process, or obtain suggestions for petition models.⁸¹⁹

The Public Prosecutor's Office of the State of Rio de Janeiro reportedly invested in data science and AI to expedite investigations and prevent crimes.⁸²⁰ The system has allowed information from different sources and bodies to be collected as well as real-time data to be collected from suspected criminals.

⁸¹⁶ SIPA, *The Future of AI in the Brazilian Judicial System: AI Mapping, Integration, and Governance* (Jun. 2020), https://itsrio.org/wp-content/uploads/2020/06/SIPA-Capstone-The-Future-of-AI-in-the-Brazilian-Judicial-System-1.pdf

⁸¹⁷ US Law Library of Congress, *Brazil, Legal Research Guide: The Judicial Branch* (2011), https://www.loc.gov/item/2019671039/

⁸¹⁸ National Council of Justice, *Resolution No. 332 Provides for Ethics, Transparency and Governance in the Production and Use of Artificial Intelligence in the Judiciary and Provides Other Measures* (Aug. 21, 2020), https://atos.cnj.jus.br/atos/detalhar/3429

⁸¹⁹ Attorney General of the Union, *AGU Starts Using Artificial Intelligence Tools in the Production of Legal Documents* (Sept. 24, 2024), https://www.gov.br/agu/pt-br/comunicacao/noticias/agu-passa-a-utilizar-ferramentas-de-inteligencia-artificial-na-producao-de-documentos-juridicos

⁸²⁰ Felipe Grandin and Marco Antônio Martins, *MPRJ Bets on Artificial Intelligence to Speed Up Investigations in Rio*, O Globo, G1 (Oct. 1, 2018), https://gl.globo.com/rj/rio-de-janeiro/noticia/2018/10/01/mp-aposta-em-inteligencia-artificial-para-agilizar-investigacoes-no-rj.ghtml

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Likewise, Brazil's federal and state police are using AI applications such as military drones⁸²¹ and crime prediction software.⁸²²

Similar to the EU GDPR, the LGPD (Art. 4) excludes "the processing of data for the purposes of public security" from its scope and states that such processing "shall be governed by specific legislation, which shall provide proportional and strictly necessary measures in order to serve the public interest." However, such specific legislation does not yet exist in Brazil. 823

Computational Propaganda

According to Freedom House's Freedom on the Net report, Brazil is only "partly free" because of the prevalence of manipulated content online and the "notable proliferation of disinformation during the 2018 and 2022 election campaigns."824 Several studies⁸²⁵ have pointed out the use of bots on online gatekeepers in the electoral context. Misinformation campaigns in Brazil have consisted in "pro-government and pro-party propaganda"; "attacking the opposition or mounting smear campaigns"; "suppressing participation through trolling and harassment"; and social media campaigns that "drive division and polarize citizens."826

⁸²¹ ISTOE, Against Organized Crime, PF Puts Unmanned Aerial Vehicle in the Amazon (Aug. 20, 2016), https://istoe.com.br/contra-o-crime-organizado-pf-poe-veiculo-aereo-nao-tripulado-na-amazonia/

⁸²² Sarah Griffiths, *CrimeRadar Is Using Machine Learning to Predict Crime in Rio*, Wired UK (Aug. 18, 2016), https://www.wired.co.uk/article/crimeradar-rio-app-predict-crime; United for Smart Sustainable Cities, *Crime Prediction for More Agile Policing in Cities, Rio de Janeiro*, *Brazil: Case Study of the U4SSC City Science Application Framework* (Oct. 2019), https://igarape.org.br/wp-content/uploads/2019/10/460154 Case-study-Crime-prediction-formore-agile-policing-in-cities.pdf

⁸²³ Mariana Canto, Submission to the UN Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression: The Surveillance Industry (Feb. 2019), https://ohchr.org/Documents/Issues/Opinion/Surveillance/MARIANA%20CANTO.pdf
824 Freedom House, Freedom on the Net 2022: Brazil (2022),

https://freedomhouse.org/country/brazil/freedom-net/2022

⁸²⁵ Samantha Bradshaw, Hannah Bailey, Philip N. Howard, Industrialized Disinformation: 2020 Global Inventory of Organized Social Media Manipulation, Oxford Internet Institute (2021), https://demtech.oii.ox.ac.uk/wp-content/uploads/sites/12/2021/02/CyberTroop-Report20-Draft9.pdf; Joao Guilherme Bastos dos Santos, Arthur Ituassu, Sergio Lifschitz, Thayane Guimaraes, Diego Cerqueira, Debora Albu, Redson Fernando, Julia Hellen Ferreira, Maria Luiza Mondelli, From Digital Militias to Coordinated Behavior: Interdisciplinary Methods of Analysis and Analysis and Identification of Bots in Brazilian Elections, Sociedade Brasileira de Computação, Annals of the X Brazilian Workshop on Social Network Analysis and Mining, pp. 187–192 (2021), https://doi.org/10.5753/brasnam.2021.16138

⁸²⁶ Samantha Bradshaw, Hannah Bailey, and Philip N. Howard, *Industrialized Disinformation*: 2020 Global Inventory of Organized Social Media Manipulation, Oxford Internet Institute, p. 13 (2021), https://demtech.oii.ox.ac.uk/wp-content/uploads/sites/12/2021/02/CyberTroop-Report20-Draft9.pdf

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Global Voice also reported that "in February 2022, the Federal Police delivered a partial report to the Supreme Court in which it further detailed the structure of these "digital militias" charged with coordinating attacks against rival politicians, democratic institutions, and the dissemination of "false news." This report was part of a Supreme Court probe (dubbed "the digital militias probe") opened in 2021.827

In 2024, the Brazilian Judiciary responded to these challenges—primarily through the Superior Electoral Court and the Federal Supreme Court—by implementing innovative measures to mitigate the harmful effects of disinformation and ensure the integrity of the electoral process.⁸²⁸ In February, the Superior Electoral Court approved a resolution⁸²⁹ that addressed several threats related to artificial intelligence. The resolution included prohibition of deep fakes; obligation to warning about the use of AI in electoral propaganda; restriction of the use of "robots" to mediate contact with the voter (the campaign cannot simulate dialogue with a candidate or anyone else); and accountability of "big techs" that do not immediately remove content that violates these guidelines from their platforms. The violation of this norm carries strict punishment for candidates. Article 9c highlights that a candidate can have their registration or mandate canceled for infringing on the norm and Article 9-E establishes the joint and severe liability of the providers, in a civil and administrative way, if they do not immediately remove certain content and/or accounts that violate these guidelines during the electoral period.

Facial Recognition

Facial recognition is implemented in both the public and private sectors in Brazil. According to Instituto Igarapé, a Brazilian think tank, there were at least 48 facial recognition applications throughout 16 Federal States between 2011 to

⁸²⁷ Lais Martins, *Under Bolsonaro*, *Political Attacks Gain Institutional Legitimacy in Brazil*, Global Voices (Oct. 2, 2022), https://advox.globalvoices.org/2022/10/02/under-bolsonaro-political-attacks-gain-institutional-legitimacy-in-brazil/

⁸²⁸ Gustavo Borges, Wilson Center, *Combating Disinformation by the Brazilian Judiciary: Initiatives for the 2024 Municipal Elections*, Brazil Builds blog (Oct. 25, 2024),
https://www.wilsoncenter.org/blog-post/combating-disinformation-brazilian-judiciary-initiatives-2024-municipal-elections

⁸²⁹ Superior Electoral Court (Tribunal Superior Eleitoral), TSE Prohibits the Use of Artificial Intelligence to Create and Spread Fake Content in the Elections (Feb. 28, 2024), https://www.tse.jus.br/comunicacao/noticias/2024/Fevereiro/tse-proibe-uso-de-inteligencia-artificial-para-criar-e-propagar-conteudos-falsos-nas-eleicoes

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2019.830 The main use sectors are public security, border control, transportation, and education.831

In August 2018, the Brazilian Institute for Consumer Protection (IDEC) brought a civil public class action⁸³² before the Court of Justice of Sao Paulo for breach of privacy and consumer legislation against the São Paulo Metro operator, regarding an AI crowd analytics system that claimed to predict the emotion, age, and gender of metro passengers without processing personal data.⁸³³ In May 2021, the São Paulo 37th Civil Court ordered the company to pay compensation for passengers' data collection without their consent and prohibited the company from continuing the implementation and use of cameras that recognized human presence or identified emotion, gender, and age groups.⁸³⁴

Another monitoring system with built-in facial recognition installed in the São Paulo subway network was challenged in Court. In early 2020, the operating company was requested to provide clarification on the risks and impact assessment expected from the implementation of the new technology, on how personal data will be processed, on technical databases and security systems issues, and on actions to mitigate the potential risk of a data breach. ⁸³⁵ In March 2022, the 6th Public Treasury Court of São Paulo delivered a preliminary injunction ordering the operating company to suspend the deployment and use of the facial recognition system in the São Paulo metro stations. ⁸³⁶ In April 2022, the preliminary injunction

⁸³⁰ Instituto Igarapé, *Facial Recognition in Brazil*, https://igarape.org.br/infografico-reconhecimento-facial-no-brasil/

⁸³¹ Thiago Moraes, *Facial Recognition in Brazil*, Wired (Nov. 20, 2019), https://medium.com/@lapinbr/face-recognition-in-brazil-f2a23217f5f7

⁸³² Instituto Brasileiro de Defesa do Consumidor, *ViaQuatro* (Aug. 30, 2018),

https://idec.org.br/sites/default/files/acp_viaquatro.pdf

⁸³³ AccessNow, Facial Recognition on Trial: Emotion and Gender "Detection" under Scrutiny in a Court Case in Brazil (Jun. 29, 2020), https://www.accessnow.org/facial-recognition-on-trial-emotion-and-gender-detection-under-scrutiny-in-a-court-case-in-brazil/

⁸³⁴ Tribunal de Justicia do Estado de São Paulo, 37th Civil Court, *IDEC v. ViaQuatro* (May 7, 2021), https://idec.org.br/sites/default/files/75432prot_sentenca-viaquatro.pdf

⁸³⁵ Tribunal de Justicia do Estado de São Paulo, 1st Public Treasury Court of São Paulo, *Public Defenders Office of the State of Sao Paulo and Others v. Company of the Metropolitan of Sao Paulo, METRO* (Feb. 12, 2020), https://idec.org.br/sites/default/files/doc_76725029_1.pdf; Tozzini Freire, *Facial Recognition Is Disputed in Court* (Feb. 14, 2020),

https://tozzinifreire.com.br/en/boletins/facial-recognition-is-disputed-in-court

⁸³⁶ Court of Justice of the State of São Paulo, 6th Public Treasury Court of São Paulo, *Public Defenders Office of the State of Sao Paulo and Others v. Company of the Metropolitan of Sao Paulo, METRO* (Mar. 22, 2022), https://images.jota.info/wp-content/uploads/2022/03/liminar-metro-reconhecimento-facial.pdf

Angelica Mari, *São Paulo Subway Ordered to Suspend Use of Facial Recognition* (Mar. 25, 2022), https://www.zdnet.com/article/sao-paulo-subway-ordered-to-suspend-use-of-facial-recognition/

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was confirmed in appeal by the São Paulo 5th Public Law Chamber. 837 However, in October 2022, the same Chamber ruled that the operating company was entitled to deploy and use facial recognition technology on the grounds that the LGPD allows such use for public security purposes. Governor Rodrigo Garcia officially inaugurated the facial recognition system the following month. The aim is for 5,000 biometric cameras to be deployed in transit stations over the next 30 months. 838

In July 2023, the government of São Paulo introduced the Muralha Paulista system, a security network that interconnects cameras and radars in different cities to the Metropolitan Region of São José do Rio Preto.⁸³⁹ The Muralha Paulista system has since been used by football clubs to identify perpetrators of violence or harassment at large sporting events, specifically to flag people with open warrants or judicial restrictions.⁸⁴⁰

In November 2023, Brazil's ANDP issued a technical note that sheds light on the legal waters of using facial recognition technology in sports stadiums. Amid controversies about striking a balance between enhancing public safety and safeguarding individual privacy, the note lays down concrete suggestions to ensure compliance with the General Data Protection Law. Key among these suggestions is the call for comprehensive Data Protection Impact Assessments that specifically address the processing of biometric data. The note outlines critical guidelines for avoiding legal pitfalls and details the consequences of failing to adhere to these standards, marking a step forward in the ongoing discussions around ethical deployment of AI technologies in public spaces.⁸⁴¹

The Brazilian police have also been using live facial recognition for Carnival and has plans to use the technology in events involving crowds to find

838 Biometric Update, *Brazil Deploys ISS Facial Recognition to Secure São Paulo Metro* (Dec. 9, 2022), https://www.biometricupdate.com/202212/brazil-deploys-iss-facial-recognition-to-secure-sao-paulo-metro

⁸³⁹ O Globo, g1, What Is the Electric Wall, a Security System that Will Be Implemented in 17 Cities of the Valley (Jul. 21, 2023), https://g1.globo.com/sp/vale-do-paraiba-regiao/noticia/2023/07/21/o-que-e-a-muralha-eletronica-sistema-de-seguranca-que-sera-implantado-em-17-cidades-do-vale-do-paraiba.ghtml

Reuters, *Palmeiras' Facial Recognition on Match Tickets Helps Police Arrest Criminals* (Sept. 23, 2023), https://www.reuters.com/sports/soccer/palmeiras-facial-recognition-match-tickets-helps-police-arrest-criminals-2023-09-23/

⁸⁴¹ Autoridade Nacional de Proteção de Dados Coordenação-Geral de Fiscalização, *Technical Note No. 175/2023/CGF/ANPD* (Nov. 2023), https://www.gov.br/anpd/pt-br/documentos-e-publicacoes/nota-tecnica-no-175-2023-cgf-anpd-acordo-de-cooperacao-mjsp-e-cbf.pdf

⁸³⁷ Court of Justice of the State of São Paulo, 5th Public Law Chamber (Appeal), *Public Defenders Office of the State of Sao Paulo and Others v. Company of the Metropolitan of Sao Paulo, METRO* (Apr. 12, 2022), https://internetlab.org.br/wp-content/uploads/2022/04/doc 429164790.pdf

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wanted criminals. In 2020, police forces rolled out facial recognition in six capitals across the country. When announcing the use of live facial recognition, the São Paulo police said they would create a "situation room," where they would monitor the images from the cameras, which would then be compared with a database managed by a biometrics lab. According to the police, the aim is to reduce the likelihood of mistakes, such as wrongful arrests.⁸⁴²

In 2021, Brazil rolled out end-to-end biometric identification technologies by IDEMIA, a technology solution provider, for use in passenger identification at several airports, including domestic airports in São Paulo and Rio de Janeiro.⁸⁴³ Many have voiced concern at the government's embrace of facial recognition technology, especially surrounding issues of racial bias, given that the LGPD does not address these technologies.⁸⁴⁴

In the first quarter of 2022, several campaigns started in Brazil opposing the widespread use of facial recognition technologies in public spaces.

One of them is called *Sai da minha cara* (Get off my face) and is led by civil society organizations, including the IDEC.⁸⁴⁵ A localized campaign with several states and cities, *Sai da minha cara* advocates for laws to ban facial recognition. Including bills to restrict the use of facial recognition by public authorities before the State Legislative Assembly of São Paulo⁸⁴⁶ and before the City Council in Porto Alegre, the capital of the state of Rio Grande do Sul. ⁸⁴⁷ A

⁸⁴² Angelica Mari, *Brazilian Police Introduces Live Facial Recognition for Carnival*, Brazil Tech (Feb. 25, 2020), https://www.zdnet.com/article/brazilian-police-introduces-live-facial-recognition-for-carnival/

⁸⁴³ Angelica Mari, *Brazilian Airports Expand Facial Recognition Trials*, ZDNet (Nov. 22, 2021), https://www.zdnet.com/article/brazilian-airports-expand-facial-recognition-trials/; Chris Burt, *Brazil's Pilot of IDEMIA Face Biometrics Advances to Simultaneous Operation at Capital Airports*, Biometric Update (Jun. 16, 2021), https://www.biometricupdate.com/202106/brazils-pilot-of-idemia-face-biometrics-advances-to-simultaneous-operation-at-capital-airports
844 Charlotte Peet, *Brazil's Embrace of Facial Recognition Worries Black Communities*, Rest of World (Oct. 22, 2021), https://restofworld.org/2021/brazil-facial-recognition-surveillance-black-communities/; Leaders League, *The Controversial Use of Facial Recognition in Brazil and Europe* (Aug. 12, 2021), https://www.leadersleague.com/fr/news/the-controversial-use-of-facial-recognition-in-brazil-and-europe

⁸⁴⁵ IDEC, Lawmakers from All Regions of Brazil Present Bills to Ban Facial Recognition in Public Spaces (Jun. 20, 2022), https://idec.org.br/release/parlamentares-de-todas-regioes-do-brasil-apresentam-projetos-de-lei-pelo-banimento-do

⁸⁴⁶ São Paulo Legislative Assembly, *State Law Proposal No. 385/2022* (Jun. 23, 2022), https://www.al.sp.gov.br/propositura/?id=1000448817

⁸⁴⁷ Porto Alegre City Council, *Process No. 00499/22* (Jun. 21, 2022), https://www.camarapoa.rs.gov.br/processos/137992

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bill before the City Council in Curitiba, capital city of the state of Paraná, would restrict the use of facial recognition for mass surveillance by public authorities.⁸⁴⁸

Another campaign started in May 2022 under the name "Tire o Meu Rosto da Sua Mira" (Get My Face Out of Your Sight). 849 Civil society organizations demand a total ban on the use of facial recognition technologies for public security purposes in Brazil. According to the campaign's open letter, in Brazil, a country with the third largest incarcerated population in the world, the use of facial recognition technologies for public security purposes would lead to the worsening of racist practices.

A Federal Law proposal seeking to regulate the use of facial recognition technologies in Brazil both for the private and public sectors was submitted to the Brazilian House of Representatives in August 2022. 850 The legislative process began that October and the proposed legislation was forwarded to the responsible commissions.

A new study published by the Center for Security and Citizenship Studies (CESeC) in March 2024 showed that 67.4 million Brazilians, close to a third of the population, are potentially under surveillance by facial recognition cameras. In updates in January 2025, the CESeC cited 337 facial recognition projects in the country and more than 81 million people surveilled. 851

The banning of the use of facial recognition systems for public security purposes was one of the key points that emerged during the public hearings promoted by the Commission of Jurists that elaborated the proposal for the regulation of artificial intelligence in Brazil.⁸⁵² Several Brazilian rights organizations called for a ban on facial recognition by law enforcement during discussions around the proposed AI regulation bill.⁸⁵³ For example, the Coalition Rights on the Net (*Coalizão Direitos na Rede*) cited several examples of arrests

⁸⁴⁹ Tire Meu Rostro da Sua Mira, A Call for a General Ban on the Use of Facial Recognition Technologies in Public Security, https://tiremeurostodasuamira.org.br

⁸⁵⁰ Brazilian House of Representatives, *Federal Law Proposal No. 2392/2022* (Aug, 31, 2022), https://www.camara.leg.br/proposicoesWeb/fichadetramitacao?idProposicao=2334803

⁸⁴⁸ Curitiba City Council, *Law Proposal No. 005.00138.2022* (Jul. 1, 2022), https://www.cmc.pr.gov.br/wspl/sistema/ProposicaoDetalhesForm.do?select_action=&pro_id=45

Rechnology in the Public Security of Brazil (Jan. 27, 2025), https://www.opanoptico.com.br/
Rechnology in the Public Security of Brazil (Jan. 27, 2025), https://www.opanoptico.com.br/
Respectively (May 18, 2022), https://www12.senado.leg.br/noticias/materias/2022/05/18/debates-apontam-para-fim-do-reconhecimento-facial-na-seguranca-publica

⁸⁵³ Masha Borak, *As Brazil Debates AI Bill, Calls for Racial Recognition Bans Emerge* (Jul. 8, 2024), https://www.biometricupdate.com/202407/as-brazil-debates-ai-bill-calls-for-facial-recognition-bans-emerge

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after mistaken identity in their open letter advocating for the Brazilian AI regulation to ban facial recognition technologies.⁸⁵⁴

Environmental Impact of AI

Brazil's 2024 National AI Strategy (PBIA) recognized the environmental implications of AI technologies, focusing on integrating sustainability within AI development. The strategy includes the monitoring of AI's carbon footprint, advocating for energy-efficient AI systems, and promoting best practices to reduce environmental damage. The policy also encourages the creation of regulatory sandboxes for AI, which allow for controlled testing of AI technologies with an emphasis on minimizing their environmental impact, particularly in terms of energy consumption and e-waste. Brazil is also aligning its AI policies with global climate goals, supporting AI's potential to address challenges related to climate change and sustainable development.⁸⁵⁵ In addition, the Brazilian government announced a "new global initiative focused on information integrity, with particular attention to climate change." This is in line with the G20 and the 30th UN Framework Convention on Climate Change (COP 30), expected to take place in Brazil in 2025 with support from UNESCO.⁸⁵⁶

Lethal Autonomous Weapons

During the 2018 discussions of the Group of Governmental Experts (GGE) on lethal autonomous weapons (LAWS), Brazil issued a joint statement with Austria and Chile that proposed to establish an open-ended GGE to negotiate a legally binding instrument to ensure meaningful human control over critical functions in LAWS.⁸⁵⁷

At the 77th UN General Assembly First Committee meeting in October 2022, Brazil's representative emphasized the need for a regulation that recognizes the centrality of human control in the development and use of autonomous

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⁸⁵⁴ Coalizão Direitos Na Rede (Coalition Rights on the Net), *Open Letter: Advocating for Brazilian AI Regulation that Protects Human Rights* (Jul. 8, 2024), https://direitosnarede.org.br/2024/07/08/open-letter-advocating-for-brazilian-ai-regulation-that-protects-human-rights/

⁸⁵⁵ MCTI, *Plano Brasileiro de Inteligência Artificial (PBIA), 2024-2028* (Jul. 29, 2024), https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/noticias/2024/07/plano-brasileiro-de-inteligencia-artificial-ia para o bem de todos.pdf/view

⁸⁵⁶ G20 Brasil, UNESCO Offers Recommendations for Regulation and National Policies on AI (Sept. 12, 2024), https://www.g20.org/en/news/unesco-offers-recommendations-for-regulation-and-national-policies-on-ai

⁸⁵⁷ GGE LAWS, *Proposal for a Mandate to Negotiate a Legally-Binding Instrument that Addresses the Legal, Humanitarian and Ethical Concerns Posed by Emerging Technologies in the Area of Lethal Autonomous Weapons Systems (LAWS)*, U.N. Doc. CCW/ GGE.2/2018/WP.7 (Aug. 30, 2018), https://documents-dds-

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systems, in line with international humanitarian law. 858 However, Brazil was not among the 70 countries that endorsed a joint statement on autonomous weapons systems at the October UN General Assembly meeting. In this joint statement, States urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law ("IHL"), including through maintaining human responsibility and accountability in the use of force."

In February 2023, Brazil endorsed, along with more than 30 other Latin American and Caribbean states, the Belén Communiqué, 860 which calls for "urgent negotiation" of a binding international treaty to regulate and prohibit the use of autonomous weapons to address the grave concerns raised by removing human control from the use of force.

Human Rights

Brazil is a signatory to many international human rights treaties and conventions and is considered as a free country in the world for the protection of human rights and transparency. Ref In 2024, Freedom House rated Brazil as "free" with a score of 72/100 for political rights and civil liberties. According to Freedom House, Brazil is "a democracy that holds competitive elections, and the political arena, though polarized, is characterized by vibrant public debate. However, independent journalists and civil society activists risk harassment and violent attack, and the government has struggled to address high rates of violent crime and disproportionate violence against and economic exclusion of minorities."

⁸⁵⁸ UN press release, *Enough Bullets Made Each Year to Kill 'Twice the Number of Planet's Inhabitants'*, First Committee Hears during Debate on Conventional Weapons (Oct. 21, 2022), https://press.un.org/en/2022/gadis3695.doc.htm

⁸⁵⁹ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee, 77th United Nations General Assembly Thematic Debate – Conventional Weapons* (Oct. 21, 2022),

 $[\]frac{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm_en.pdf}{}$

⁸⁶⁰ Latin American and the Caribbean Conference of Social and Humanitarian Impact of Autonomous Weapons, *Communiqué* (Feb. 24, 2023),

https://www.rree.go.cr/files/includes/files.php?id=2261&tipo=documentos

⁸⁶¹ Freedom House, Freedom in the World 2024: Brazil (2024),

https://freedomhouse.org/country/brazil/freedom-world/2024

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Al Safety Summit

Brazil participated in the first AI Safety Summit in 2023 and endorsed the Bletchley Declaration. ⁸⁶³ Brazil thus committed to participate in international cooperation on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible." Brazilian representatives did not attend the 2024 in Seoul, ⁸⁶⁴ in part because of the country's commitments in the G20.⁸⁶⁵

OECD / G20 AI Principles

Brazil has endorsed the OECD AI Principles and the G20 AI Guidelines and referred to the OECD Principles as important guidance for the development of its national AI strategy. Brazil has also joined the Global Partnership on AI, a multi-stakeholder initiative that aims to foster international cooperation on AI research and applied activities. The GPAI is "built around a shared commitment to the OECD Recommendation on Artificial Intelligence." 867

With the G20 Presidency in 2024, Brazil led progress on the realization of the G20 AI Guidelines. The G20 Digital Economy ministers, led by Brazil,

⁸⁶³ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, Prime Minister's Office, *The Bletchley Declaration by Countries Attending the AI Safety Summit* (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration/the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

⁸⁶⁴ Department for Science, Innovation & Technology, *AI Seoul Summit: Participants List, Governments and Organizations* (Jun. 13, 2024),

 $[\]frac{https://www.gov.uk/government/publications/ai-seoul-summit-programme/ai-seoul-summit-participants-list-governments-and-organisations}{}$

⁸⁶⁵ Martin Coulter, *Second Global AI Safety Summit Faces Tough Questions, Lower Turnout*, Reuters (Apr. 29, 2024), https://www.reuters.com/technology/second-global-ai-safety-summit-faces-tough-questions-lower-turnout-2024-04-29/

⁸⁶⁶ OECD AI Policy Observatory, OECD AI Principles Overview, Countries Adhering to the AI Principles (2025), https://oecd.ai/en/ai-principles

⁸⁶⁷ Government of Canada, Canada Concludes Inaugural Plenary of the Global Partnership on Artificial Intelligence with International Counterparts in Montreal (Dec. 4, 2020), https://www.canada.ca/en/innovation-science-economic-development/news/2020/12/canada-concludes-inaugural-plenary-of-the-global-partnership-on-artificial-intelligence-with-international-counterparts-in-montreal.html

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endorsed principles for digital inclusion, AI for inclusive sustainable development and inequality reduction, and combating disinformation.868

Council of Europe AI Treaty

Brazil did not participate in the negotiations for the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law and has not signed the treaty.⁸⁶⁹

UNESCO Recommendation on AI Ethics

Brazil has endorsed the UNESCO Recommendation on the Ethics of AI and recognizes its obligation to implement the framework. On May 11, 2022, UNESCO, in cooperation with the Regional Centre for Information Society Development Studies (CETIC.br), held an event to launch the Portuguese version of the UNESCO AI Recommendation, which aimed to "discuss and promote this subject in Brazilian society."870 In 2019, Brazil hosted the UNESCO Latin American AI forum organized by CETIC.br involving different UNESCO members and officers. According to Marlova Noleto, director and UNESCO representative in Brazil, the country was actively engaged in the preparation of the UNESCO AI Recommendation and aligned with the contents thereof even before formal adoption.871

The Brazilian Ambassador to UNESCO and president of UNESCO's 41st General Conference, Santiago Mourão, emphasized that the UNESCO AI Recommendations fully align with the Brazilian government's guidelines and actions on AI themes. He highlighted that the importance Brazil gives AI ethics is reflected in its engagement in intergovernmental negotiations, as well as in the inclusion of the theme in the Brazilian Strategy for AI.⁸⁷²CAF, the development bank of Latin America, and UNESCO signed a letter of intent to collaborate on the implementation of the Recommendation on AI Ethics in Latin America and the Caribbean.⁸⁷³ They established a Regional Council comprising national and

⁸⁶⁸ G20 Digital Economy Ministers, *G20 DEWG Maceio Ministerial Declaration* (Sept. 13, 2024), https://g7g20-documents.org/database/document/2024-g20-brazil-sherpa-track-digital-economy-ministers-ministers-language-g20-dewg-maceio-ministerial-declaration

⁸⁶⁹ Council of Europe, *Framework Convention on Artificial Intelligence* (2025), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

⁸⁷⁰ UNESCO, *UNESCO Launches Portuguese Version of Publication of Artificial Intelligence*, launch video (May 11, 2022), https://brasil.un.org/pt-br/181308-unesco-lanca-versao-em-portugues-de-publicacao-sobre-inteligencia-artificial

⁸⁷¹ Ibid

⁸⁷² Ibid

⁸⁷³ Ángel Melguizo and Gabriela Ramos, *Ethical and Responsible Artificial Intelligence: From Words to Actions and Rights*, Somos Ibero-America (Feb. 1, 2023),

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local governments from Latin America and the Caribbean, including Brazil, and convened for the inaugural meeting in October 2023.874

Brazil also signed the resulting 2023 Santiago Declaration to Promote Ethical Artificial Intelligence.⁸⁷⁵ The Santiago Declaration reflects UNESCO's Recommendation on the Ethics of AI and establishes fundamental principles that should guide public policy on AI. These include proportionality, security, fairness, non-discrimination, gender equality, accessibility, sustainability, privacy and data protection.

Brazil was one of the first countries to complete the UNESCO Readiness Assessment Methodology (RAM), a tool to support the effective implementation of the Recommendation.⁸⁷⁶ The RAM helps countries and UNESCO identify and address any institutional and regulatory gaps.⁸⁷⁷

In 2024, initiatives in Brazil sought to highlight how marginalized groups such as the indigenous community are excluded from AI debates under UNESCO's Recommendation on the Ethics of AI.⁸⁷⁸

Evaluation

Brazil has developed a robust national strategy for AI and has established a comprehensive law for data protection that includes algorithmic transparency. The federal government's proposal for the Brazilian Artificial Intelligence Plan 2024-2028 (PBIA), which reassesses objectives and actions in the country's AI strategy and seeks to better align them with national interests and priorities, marks significant progress. ANPD has also progressed on data protection in the context of the proposed AI plan. However, AI legislation was slow to pass the Senate and awaits debate in the House. While there have been initiatives to tackle

 $\underline{https://www.somosiberoamerica.org/pt-br/tribunas/inteligencia-artificial-etica-e-responsavel-das-palavras-aos-fatos-e-direitos/$

 $\frac{https://www.unesco.org/en/articles/chile-will-host-first-latin-american-and-caribbean-ministerial-and-high-level-summit-ethics}{}$

palavras-aos-fatos-e-direitos/

874 UNESCO, Chile Will Host the First Latin American and Caribbean Ministerial and High
Level Summit on the Ethics of Artificial Intelligence (Sept. 25, 2023),

Ministerial and High Level Summit of Latin America and the Caribbean, Santiago Declaration "To Promote Ethical Artificial Intelligence in Latin America and the Caribbean" (Oct. 2023), https://minciencia.gob.cl/uploads/filer-public/40/2a/402a35a0-1222-4dab-b090-5c81bbf34237/declaracion-de-santiago.pdf

⁸⁷⁶ UNESCO Global AI Ethics and Governance Observatory, *Country Profiles* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

⁸⁷⁷ UNESCO Global AI Ethics and Governance Observatory, *Readiness Assessment Methodology* (2023), https://www.unesco.org/ethics-ai/en/ram

⁸⁷⁸ Edson Prestes, Lutiana Valadares Fernandes Barbosa, Viviane Ceolin Dallasta Del Grossi, Cynthia Picolo Gonzaga de Azevedo, Gustavo Macedo, Renan Maffei, *AI and Brazil's Indigenous Populations: A Call for Participation* (Jul. 31, 2024),

https://www.unesco.org/en/articles/ai-and-brazils-indigenous-populations-call-participation

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disinformation, facial recognition has not been adequately addressed, leaving human rights groups continuing to call for bans.

Brazil has emerged as an international leader in championing inclusive and more ethical AI. Brazil led on implementation of the UNESCO Recommendation through completion of the RAM and participation in regional discussions of best practices. Brazil's leadership in furthering digital inclusion in AI and beyond in the G20 is also noteworthy. Addressing national concerns in areas such as facial recognition could make Brazil a model for implementing international frameworks.

Canada

In 2024, Canada funded an AI Safety Institute and integrated into strategies for the Privacy Commissioner and public service. Canada also participated in negotiations for the Council of Europe AI treaty and signed the Convention in February 2025.

National AI Strategy

Canada's national AI Strategy has focused on the use of AI in government and public services. The Canadian government stated "Artificial intelligence (AI) technologies offer promise for improving how the Government of Canada serves Canadians. As we explore the use of AI in government programs and services, we are ensuring it is governed by clear values, ethics, and laws." Canada has set out Guiding Principles to ensure the "effective and ethical use of AI." The government has committed to "understand and measure" impacts, be transparent about use, "provide meaningful explanations" for AI decision-making, "be as open as we can be," and provide sufficient training."

The Canadian government commenced the process for its first AI strategy for the federal public service in 2024.881 The strategy focused on accelerating responsible AI adoption throughout the federal public service, leveraging AI

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⁸⁷⁹ Government of Canada, *Responsible Use of Artificial Intelligence in Government* (Mar. 4, 2025), https://www.canada.ca/en/government/system/digital-government/digital-government/digital-government/digital-government/digital-government/innovations/responsible-use-ai.html

⁸⁸⁰ Government of Canada, *Responsible Use of Artificial Intelligence in Government, Guiding Principles* (Mar. 4, 2025), https://www.canada.ca/en/government/system/digital-government-innovations/responsible-use-ai/principles.html

⁸⁸¹ Treasury Board of Canada Secretariat, *Minister Anand Hosts AI Roundtable to Inform the First-Ever Artificial Intelligence Strategy for the Federal Public Service* (May 27, 2024), https://www.canada.ca/en/treasury-board-secretariat/news/2024/05/minister-anand-hosts-ai-roundtable-to-inform-the-first-ever-artificial-intelligence-strategy-for-the-federal-public-service.html

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within the Government of Canada to enhance productivity, enhance capacity in science and research, and deliver improved digital services.882

The government of Canada and the government of Quebec announced a joint undertaking to "advance the responsible development of AI" in 2020. 883 The establishment of the Centre of Expertise in Montréal for the Advancement of Artificial Intelligence (ICEMAI), 884 "enables Quebec to highlight the important role of its AI ecosystem, specifically in the area of responsible development of AI, and to take its place internationally as an essential partner and subject-matter expert."

Directive on Automated Decision-Making

The Government of Canada's Treasury Board Secretariat (TBS) established a Directive on Automated Decision-Making to ensure that administrative decisions are "compatible with core administrative law principles such as transparency, accountability, legality, and procedural fairness." Canada has developed a questionnaire for an Algorithmic Impact Assessment to "assess and mitigate the risks associated with deploying an automated decision system" and to comply with the Directive. The Directive took effect on April 1, 2019, with compliance required by no later than April 1, 2020.

The TBS completed the third review of the Directive on Automated Decision-Making in 2022. "The review takes stock of the current state of the directive and identifies risks and challenges to the government's commitment to responsible artificial intelligence (AI) in the federal public service." 887

⁸⁸² Treasury Board of Canada Secretariat, *Minister Anand Launches Public Consultations on Canada's First Artificial Intelligence Strategy for the Federal Public Service* (Sept. 16, 2024), https://www.canada.ca/en/treasury-board-secretariat/news/2024/09/minister-anand-launches-public-consultations-on-canadas-first-artificial-intelligence-ai-strategy-for-the-federal-public-service.html

⁸⁸³ Government of Canada, *The Governments of Canada and Quebec and the International Community Join Forces to Advance the Responsible Development of Artificial Intelligence* (Jun. 15, 2020), https://www.canada.ca/en/innovation-science-economic-development/news/2020/06/the-governments-of-canada-and-quebec-and-the-international-community-join-forces-to-advance-the-responsible-development-of-artificial-intelligence.html

⁸⁸⁵ Government of Canada, *Directive on Automated Decision-Making*, (May. 2, 2019), https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32592

⁸⁸⁶ Government of Canada, *Algorithmic Impact Assessment (AIA*), (July. 28, 2020), https://www.canada.ca/en/government/system/digital-government/digital-government-innovations/responsible-use-ai/algorithmic-impact-assessment.html.

⁸⁸⁷ Government of Canada, *The Third Review of Directive on Automated Decision-Making*, 2022. <a href="https://wiki.gccollab.ca/Third Review of the Directive on Automated Decision-Making?utm_source=Nutshell&utm_campaign=Next_Steps_on_TBSs_Consultation_on_the_Directive_on_Automated_Decision_Making&utm_medium=email&utm_content=Council_Debrief_July_2021.

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The TBS issued the Guide on the Scope of the Directive on Automated Decision-Making in 2024 to clarify the conditions for exception and applicability of the Directive to National Security Systems. The guide itemized five key elements for applicability: used by a department; developed after April 1, 2020; used in an administrative decision-making process; replaces or assists judgment; and used in a production environment. provides.

In a parallel effort to support the Directive, the TBS worked with Public Services and Procurement Canada (PSPC) to establish a Pre-qualified AI Vendor procurement program to streamline the procurement of AI solutions and services in the government. This new AI public procurement program was used to help government departments and agencies build awareness of the solutions offered by AI. It also provided small and medium AI companies with an opportunity to provide their services to the government. ⁸⁸⁹ The Government of Canda posted a tender for companies to qualify for the AI source list in October 2024. The procurement aims to "establish a pre-qualified list of suppliers [...] who meet all the mandatory criteria to provide Canada with responsible and effective AI services, solutions and products." ⁸⁹⁰

Digital Charter Implementation Act

Bill C-27, the Digital Charter Implementation Act (DCIA), represented Canada's first comprehensive Ai legislation, introduced in June 2022. ⁸⁹¹ The Bill, which comprised three separate pieces of legislation: the Consumer Privacy Protection Act (CPPA), Personal Information and Data Protection Tribunal Act (PIDPTA), and the Artificial Intelligence and Data Act (AIDA), ⁸⁹² faced public criticism because of what was perceived as a insufficient protections and inadequate public consultation.

Amendments incorporating some of the public feedback in November 2023893 failed to earn public trust in AIDA as an effective, adaptable regulatory

889 OECD (2021), State of implementation of the OECD AI Principles: Insights from national AI policies (Jun. 18, 2021), https://doi.org/10.1787/1cd40c44-en

⁸⁸⁸ Treasury Board of Canada Secretariat, *Guide on the Scope of the Directive on Automated Decision-Making* (Jun. 27, 2024), https://www.canada.ca/en/government/system/digital-government-innovations/responsible-use-ai/guide-scope-directive-automated-decision-making.html#toc2

⁸⁹⁰ Government of Canada, *Invitation to Qualify to Artificial Intelligence Source List* (Oct. 8, 2024), https://canadabuys.canada.ca/en/tender-opportunities/tender-notice/ws4286933967-doc4822970058

 ⁸⁹¹ Parliament of Canada, 44th Parliament, 1st Session, *Digital Charter Implementation Act*, 2022
 (Jan. 6, 2025), https://www.parl.ca/legisinfo/en/bill/44-1/c-27
 ⁸⁹² Ibid

⁸⁹³ Francois-Phillippe Champagne, *Minister of Science, Innovation & Industry Letter to Standing Committee on Industry & Technology, House of Commons* (Nov. 28, 2023),

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framework for AI. The Canadian Civil Liberties Association, Privacy and Access Council of Canada, Amnesty International Canada, and several experts, academics, and other organizations sent a joint letter to the Minister of Innovation, Science and Industry in April 2024⁸⁹⁴ calling for the withdrawal of AIDA from parliamentary consideration and "consultation with Indigenous rights-holders, civil society, the private sector, and other stakeholders that should have taken place prior to AIDA's introduction" before reintroducing it in revised form.

AIDA expired in a parliamentary committee, leaving the future of AI legislation in Canada uncertain.⁸⁹⁵ The Digital Charter Implementation Act also expired in Committee.⁸⁹⁶

Public Participation

In 2019, Canada established an Advisory Council on Artificial Intelligence to "inform the long-term vision for Canada on AI both domestically and internationally." Composed of researchers, academics, and business leaders, the Council advises the Government of Canada on how to build on Canada's AI strengths to support entrepreneurship, drive economic growth and job creation and build public trust in AI. The Council created two working groups to date, one on Commercialization and another one on Public Awareness. Public awareness is a key area for the Council that emphasized that policy design, including sectoral priorities, require the trust and support of the public to succeed. 898

Canada's AI Advisory Council created its public engagement and consultation processes using both consultation and deliberation. The national survey elicited an array of citizens' input on AI use in different sectors. Online workshops aimed to find ways to address ethical concerns raised by citizens via

https://www.ourcommons.ca/content/Committee/441/INDU/WebDoc/WD12751351/12751351/MinisterOfInnovationScienceAndIndustry-2023-11-28-Combined-e.pdf

⁸⁹⁴ Canadian Civil Liberties Association, *CCLA Joins Call from Civil Society to Withdraw AIDA from Bill C-27* (Apr. 25, 2024), https://openmedia.org/assets/AIDA_joint_letter.pdf

⁸⁹⁵ Blair Attard-Frost, *The Death of Canada's Artificial Intelligence and Data Act: What Happened, and What's Next for AI Regulation in Canada*, Op-Ed, Montreal AI Ethics Institute (Jan. 17, 2025), https://montrealethics.ai/the-death-of-canadas-artificial-intelligence-and-data-act-what-happened-and-whats-next-for-ai-regulation-in-canada/

⁸⁹⁶ Parliament of Canada, 44th Parliament, 1st Session, *C-27 An Act to Enact the Consumer Privacy Protection Act, the Personal Information and Data Protection Tribunal Act and the Artificial Intelligence and Data Act and to Make Consequential and Related Amendments to Other Acts [Digital Charter Implementation Act, 2022]* (Jan. 6, 2025), https://www.parl.ca/legisinfo/en/bill/44-1/c-27

⁸⁹⁷ Government of Canada, *Protecting and Promoting Privacy Rights*, https://www.priv.gc.ca/en
898 Public Awareness Working Group, Innovation Science and Economic Development Canada, https://ised-isde.canada.ca/site/advisory-council-artificial-intelligence/en/public-awareness-working-group

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the survey. Among the goals of the deliberative process is to shape a new set of guidelines and recommendations for the development of AI.⁸⁹⁹

The government of Canada published a public consultation in 2023 to gather insights on the ongoing negotiations on the Council of Europe Convention on AI, Human Rights, Democracy and the Rule of Law. Officially, the role of Canada in the negotiations is to help shape "the treaty to reflect Canadian values and interests, while promoting Canadian objectives on AI in the context of potential risks to human rights, democracy and the rule of law."900

The Minister of Innovation, Science and Industry launched a public consultation to help inform the design and implementation of a new AI Compute Access Fund and a Canadian AI Sovereign Compute Strategy proposed in Budget 2024. The consultation was aimed at researchers, innovators, civil societies, Indigenous groups, and businesses through various means including online.⁹⁰¹

Data Protection

The Office of the Privacy Commissioner (OPC) of Canada provides advice and information for individuals about protecting personal information. The agency also enforces two federal privacy laws that set out the rules for how federal government institutions and certain businesses must handle personal information. The Privacy Act regulates the collection and use of personal data by the federal government. The Personal Information Protection and Electronic Documents Act (PIPEDA) applies to personal data collected by private companies.

First in November 2020, and then in November 2022, after an extensive period of consultation, the Privacy Commissioner issued proposals on regulating

⁹⁰¹ Innovation, Science and Economic Development Canada, *Government of Canada Launches Public Consultation on Artificial Intelligence Computing Infrastructure* (Jun. 26, 2024), https://www.canada.ca/en/innovation-science-economic-

 $\underline{development/news/2024/06/government-of\text{-}canada\text{-}launches\text{-}public\text{-}consultation\text{-}on\text{-}artificial-}\underline{intelligence\text{-}computing\text{-}infrastructure.html}}$

⁸⁹⁹ OECD (2021), State of implementation of the OECD AI Principles: Insights from national AI policies (Jun 18, 2021), https://doi.org/10.1787/1cd40c44-en; OECD, AI Policy Observatory (2020), https://oecd.ai/dashboards/countries/Canada

⁹⁰⁰ Global Affairs Canada, Share Your Thoughts: Canada's Participation in Treaty Negotiations on Artificial Intelligence at the Council of Europe, (Nov. 27 2023),

 $[\]underline{https://international.canada.ca/en/global-affairs/consultations/foreign-affairs/2023-11-27-artificial-intelligence}$

⁹⁰² Office of the Privacy Commissioner of Canada, *The Privacy Act in Brief* (Aug. 2019), https://www.priv.gc.ca/en/privacy-topics/privacy-laws-in-canada/the-privacy-act/pa_brief/

⁹⁰⁴ Office of the Privacy Commissioner of Canada, *PIPEDA in brief* (May 2019), https://www.priv.gc.ca/en/privacy-topics/privacy-laws-in-canada/the-personal-information-protection-and-electronic-documents-act-pipeda/pipeda_brief/

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artificial intelligence.⁹⁰⁵ The recommendations "aim to allow for responsible AI innovation and socially beneficial uses while protecting human rights." The Commissioner recommended amending PIPEDA to:

- allow personal information to be used for new purposes towards responsible AI innovation and for societal benefits
- authorize these uses within a rights-based framework that would entrench privacy as a human right and a necessary element for the exercise of other fundamental rights
- create a right to meaningful explanation for automated decisions and a right to contest those decisions to ensure they are made fairly and accurately
- strengthen accountability by requiring a demonstration of privacy compliance upon request by the regulator
- empower the OPC to issue binding orders and proportional financial penalties to incentivize compliance with the law
- require organizations to design AI systems from their conception in a way that protects privacy and human rights.

The Commissioner also highlighted a public consultation initiated by the OPC that received 86 comments from industry, academia, civil society, and the legal community, among others. Those inputs were incorporated in a separate report, which informs the recommendations for law reform.⁹⁰⁶

Federal, provincial and territorial privacy commissioners published the principles for responsible, trustworthy and privacy-protective generative AI technologies in December 2023. The objective is to help organizations that are developing, providing or using generative AI to be compliant with fundamental rights and privacy legislation.⁹⁰⁷

The Office of the Privacy Commissioner of Canada published the Strategic Plan considering its role in the development of AI in Canada. The OPC considered governing and developing AI among its three priorities for 2024–2027. The plan outlines how the OPC will maximize its impact in fully and effectively promoting and protecting the fundamental right to privacy, addressing and advocating for

intelligence (Nov. 12, 2022), https://www.priv.gc.ca/en/about-the-opc/what-we-do/consultations/completed-consultations/consultation-ai/reg-fw_202011/

906 Office of the Privacy Commissioner of Canada, *Policy Proposals for PIPEDA Reform to*

⁹⁰⁵ Office of the Privacy Commissioner of Canada, *Commissioner issues proposals on regulating artificial intelligence* (Nov. 2020), https://www.priv.gc.ca/en/opc-news/news-and-announcements/2020/nr-c_201112/; *Commissioner issues proposals on regulating artificial intelligence* (Nov. 12, 2022), https://www.priv.gc.ca/en/about-the-opc-what-we-

Address Artificial Intelligence Report (Nov. 2020), https://www.priv.gc.ca/en/about-the-opc/what-we-do/consultations/completed-consultations/consultation-ai/pol-ai_202011/.

⁹⁰⁷ Office of the Privacy Commissioner of Canada, *Principles for Responsible, Trustworthy and Privacy-Protective Generative AI Technologies* (Dec. 7, 2023), https://www.priv.gc.ca/en/privacy-topics/technology/artificial-intelligence/gd principles ai/

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privacy in this time of technological change, and championing children's privacy rights. 908

The Privacy Commissioner of Canada is an accredited member of the Global Privacy Assembly (GPA) since 2002. The Privacy Commissioner has endorsed the 2018 GPA Resolution on AI and Ethics, the 2020 GPA Resolution on Facial Recognition, the 2022 GPA Resolution on AI and Accountability, and the 2023 GPA Resolution on Generative AI Systems.

Algorithmic Transparency

The PIPEDA includes strong rights for individual access concerning automated decisions. The PIPEDA Reform Report for AI builds on public consultations and proposes to "Provide individuals with a right to explanation and increased transparency when they interact with, or are subject to, automated processing." The Cofone Report on the reform also explains that "the right to explanation is connected to the principles of privacy, accountability, fairness, non-discrimination, safety, security, and transparency. The effort to guarantee these rights supports the need for a right to explanation."

⁹⁰⁸ Office of the Privacy Commissioner of Canada, Office of the Privacy Commissioner of Canada Strategic Plan 2024-27: A roadmap for trust, innovation and protecting the fundamental right to privacy in the digital age, (Jan. 22, 2024), https://www.priv.gc.ca/media/6112/strategic-plan-2024-27.pdf

⁹⁰⁹ Global Privacy Assembly, List of Accredited Members (2024),

https://globalprivacyassembly.org/participation-in-the-assembly/list-of-accredited-members/910 International Conference on Data, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 2018), https://globalprivacyassembly.org/wp-

content/uploads/2018/10/20180922_ICDPPC-40th_AI-Declaration_ADOPTED.pdf

⁹¹¹ Global Privacy Assembly, *Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

⁹¹² Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁹¹³ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁹¹⁴ Office of the Privacy Commissioner, *PIPEDA Fair Information Principle 9 – Individual Access* (Aug. 2020), https://www.priv.gc.ca/en/privacy-topics/privacy-laws-in-canada/the-personal-information-protection-and-electronic-documents-act-pipeda/p-principles/p-access/

⁹¹⁵ Professor Ignacio Cofone, *Policy Proposals for PIPEDA Reform to Address Artificial Intelligence Report* (Nov. 2020), https://www.priv.gc.ca/en/about-the-opc/what-we-do/consultations/completed-consultations/consultation-ai/pol-ai_202011/

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In the last Open Algorithms Network meeting that was co-chaired by the Government of Canada, with participation from the Governments of Estonia, Norway, the United Kingdom, and Scotland as well as civil society respondents, the participants started considering issues of "equality, bias, and discrimination in their algorithmic commitments in Open Government Partnership (OGP) action plans and across government AI strategies." "Many of these commitments are grounded in the idea that opening data and design of algorithms is an avenue to reduce bias and discrimination, and that the process of collecting data or design is as important as the outcome." Algorithmic transparency sis an emerging commitment of the strategies of the s

Data Scraping

The Office of the Privacy Commissioner alongside the data protection authorities of 16 countries, issued a statement in October 2024 calling for more protection of fundamental rights in mass data scraping and for AI model training. 920 This was a follow up to the joint statement issued in August 2023, based on engagement with social media companies (SMCs) and other industry stakeholders. This follow-up joint statement lays out further expectations for organizations including deploying safeguarding measures; regular review and updating to keep pace with technological advancement; ensuring without limitation, that they have a lawful basis for data scraping; are transparent about the scraping they allow; and obtaining consent where required by law. Organizations that permit scraping of personal data for any purpose, including commercial and socially beneficial purposes, must be compliant with applicable data protection and privacy laws. Furthermore, SMCs and other organizations that use scraped datasets and/or use data from their own platforms to train AI, such as Large Language Models, must comply with data protection and privacy laws as well as any AI-specific laws where those exist.

Facial Recognition

Canada continues to ensure that facial recognition technologies do not threaten the rights of its citizens. Canada took decisive action against Clearview

⁹¹⁶ Open Government Partnership, *Three Recommendations for More Inclusive and Equitable AI in the Public Sector* (Jan. 2023), https://www.opengovpartnership.org/stories/three-recommendations-for-more-inclusive-and-equitable-ai-in-the-public-sector/

⁹¹⁸ Open Government Partnership, *Glossary: Transparency* (Sept. 7, 2025), https://www.opengovpartnership.org/glossary/transparency/

⁹¹⁹ Open Government Partnership, *Glossary: Commitment* (Sept. 6, 2025),

https://www.opengovpartnership.org/glossary/commitment/

⁹¹⁷ Ibid

⁹²⁰ Office of the Privacy Commissioner of Canada, *Concluding Joint Statement on Data Scraping and the Protection of Privacy* (Oct. 28, 2024), https://www.priv.gc.ca/en/opc-news/speeches-and-statements/2024/js-dc 20241028/

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AI in 2021, after discovering the organization had scraped billions of images of people from across the Internet, in clear violation of Canadians' privacy rights.⁹²¹

Following the Clearview action, the privacy commissioners of Canada, Ontario, and Québec issued a joint statement recommending the creation of a legal regulatory framework for the use of facial recognition technology by police. The recommendation identifies four requirements:⁹²²

- 1. Clear and explicit definitions for the appropriate and prohibited use of facial recognition technologies by law enforcement. This should include 'no-go' zones and the prohibition of mass surveillance.
- 2. Restricting the use of such technologies based on strict necessity and proportionality,
- 3. The use of strong independent oversight that are based on proactive engagement including program pre-authorization and advanced notice before initiating initiatives based on facial recognition technology
- 4. Privacy rights protection that limits the risk to individuals including limitations on the duration of information retention and measures to ensure that data is accurate

Following public consultation, the commissioners also indicated that federal and provincial agencies will be provided with specific advances based on specific implementation cases.

AI in Defense and Nuclear Policies

The Canadian Department of National Defence (DND) and Canadian Armed Forces (CAF) released their first-ever Artificial Intelligence Strategy in March 2024. The strategy focuses on five key areas: 1) Identifying and fielding capabilities required by DND and the CAF; 2) Creating a culture supportive of AI innovation; 3) Establishing principles, processes and practices to ensure that the use of AI is ethical, legal, inclusive, safe and trusted; 4) Managing talent and training to meet workforce needs; 5) Deepening strategic partnerships internally and externally with allies, industries and academia. The strategy "commits the Defence Team to becoming AI enabled by 2030." 923

⁹²² Office of Privacy Commissioner of Canada, *Joint Statement by Federal, Provincial and Territorial Privacy Commissioners* (May 2, 2022), https://www.priv.gc.ca/en/opc-actions-and-decisions/advice-to-parliament/2022/s-d prov 20220502/

⁹²¹ Government of Canada, Office of the Privacy Commissioner, *Clearview AI's Unlawful Practices Represented Mass Surveillance of Canadians, Commissioners Say* (Feb. 3, 2021), https://www.priv.gc.ca/en/opc-news/news-and-announcements/2021/nr-c_210203/?=february-2-2021

⁹²³ Department of National Defence, *DM/CDS Message: Launch of the DND/CAF Artificial Intelligence Strategy* (Mar. 7, 2024), https://www.canada.ca/en/department-national-defence/maple-leaf/defence/2024/03/dm-cds-message-launch-dnd-caf-artificia-intelligence-strategy.html

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The Canadian Nuclear Safety Commission (CNSC) joined the United Kingdom's Office for Nuclear Regulation (UK ONR) and the United States Nuclear Regulatory Commission (U.S. NRC) to establish high-level principles for the safe and effective integration of AI technologies in nuclear operations. The group jointly published the Trilateral Principles Paper on the Deployment of Artificial Intelligence in Nuclear Activities on September 5, 2024. Developed through a collaborative trilateral relationship formed in 2022, the paper addresses critical aspects such as safety and security engineering, human and organizational factors, AI system architecture, lifecycle management, and the documentation of safety measures. Highlighting the importance of data quality, the paper emphasizes that the performance of AI systems hinges on the quality of the data they process. The paper also identifies security challenges unique to AI, noting their potentially greater significance compared to conventional software issues. By providing this framework, the paper seeks to advance the responsible and secure use of AI within regulated nuclear activities.

Lethal Autonomous Weapons

Canadian academics urged Prime Minister Justin Trudeau to oppose Autonomous Weapon Systems in 2017 as part of the #BanKillerAI campaign. 925

Trudeau included "Advance international efforts to ban the development and use of fully autonomous weapons systems," in the mandate he charged to Foreign Affairs Minister François Philippe Champagne in December 2019. However, this mandate has not been fulfilled. Canada CCW members who delivered a 2022 proposal on Principles and Good Practices on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems. Page 1927

Canada agreed to the joint call to action on the responsible development, deployment, and use of artificial intelligence (AI) in the military domain as part

⁹²⁴ Canadian Nuclear Safety Commission, *Trilateral Principles Paper on the Deployment of Artificial Intelligence in Nuclear Activities* (Sept. 27, 2024), https://www.cnsc-ccsn.gc.ca/eng/resources/research/technical-papers-and-articles/2024/canukus-ai-principles-paper/

⁹²⁵ Ian Kerr, Weaponized AI Would Have Deadly, Catastrophic Consequences. Where Will Canada Side? The Globe and Mail (Nov. 6, 2017),

https://www.theglobeandmail.com/opinion/weaponized-ai-would-have-deadly-catastrophic-consequences-where-will-canada-side/article36841036/

⁹²⁶ Minister of Foreign Affairs, *Mandate Letter* (Dec. 13, 2019), https://walterdorn.net/home/281-mfa-mandate-letter-2019

⁹²⁷ Delegation of Japan to the Conference on Disarmament, Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects ("the Convention" or "CCW"), Principles and Good Practices on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems (Mar. 7, 2022), https://www.disarm.emb-japan.go.jp/Final%20proposal%20-%20laws%20principles%20and%20good%20practices%20-%20March%207%202022.pdf

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of the REAIM Summit in 2023 in the Netherlands. 928 Canada also endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023.929

The second REAIM summit was held in South Korea. At the summit, 61 countries, including Canada,930 signed a Blueprint for Action for the ethical and human-centric use of AI in the military.931 The blueprint identifies the standards for AI in the military domain including the principles and framework for future governance, compliance with international law, holding humans responsible, ensuring reliability and trustworthiness of AI, maintaining an appropriate human involvement and improving the ability to explain AI.932 At the 78th UN General Assembly First Committee in 2023, Canada voted in favor⁹³³ of resolution L56934 on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems.

EdTech

In May 2022, Human Rights Watch published a global investigative report on the education technology (EdTech) endorsed by 49 governments, including Canada, for children's education during the pandemic. One of the case studies concerned "CBC Kids," offered by the Canadian Broadcasting Corporation and recommended by Canada's Quebec Education Ministry for pre-primary and primary school-aged children's learning. Based on technical and policy analysis

fora/1com/1com23/resolutions/L56.pdf

⁹²⁸ Government of Netherlands, Call to action on responsible use of AI in the military domain, (Feb. 16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action. 929 US Department of State, Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy (Nov. 9, 2023), Endorsing States (Nov. 12, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-

⁹³⁰ Woojoo Hong, U.S.-China Competition Looms Large at Seoul Summit on Use of AI in Military, Asia Pacific Foundation of Canada (Oct. 9, 2024)

https://www.asiapacific.ca/publication/us-china-competition-looms-large-seoul-summit-use-ai 931 REAIM2024, Blueprint for Action (Sept. 11, 2024),

https://www.reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163&shareBbsMng No=10264&shareMenuId=11613&shareTabMenuId=

⁹³² Ministry of Foreign Affairs, Republic of Korea, Outcome of Responsible AI in Military Domain (REAIM) Summit 2024 (Sep. 10, 2024),

https://overseas.mofa.go.kr/eng/brd/m 5676/view.do?seg=322676

⁹³³ Stop Killer Robots, 164 states vote against the machine at the UN General Assembly (Nov. 1, 2023), https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

⁹³⁴ General Assembly, *Lethal Autonomous Weapons*, Resolution L56 (Oct. 12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-

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of this EdTech product, Human Rights Watch found that the endorsement of this online learning platforms put at risk or directly violated children's rights, due to its tracking and profiling practices for advertising purposes. The report called on governments to develop, refine, and enforce modern child data protection laws and standards and ensure that children who want to learn are not compelled to give up their other rights to do so. 935

The Canadian Teachers Federation released a policy brief in September 2024, calling for urgent action to regulate the use of AI in Canadian K-12 public education. 936 The Teachers' Federation requested that the Federal Government and the Council of Ministers of Education, Canada (CMEC) develop and implement policies that safeguard the rights of educators and students as AI systems proliferate in public education across the country.

Human Rights

Canada consistently ranks "Free" and among the top ten nations in the world for the protection of human rights and transparency on the Freedom House Freedom in the World Report. Canada's score dropped one point to 97 in 2024.937 Freedom House reported that, "Canada has a strong history of respect for political rights and civil liberties, though in recent years citizens have been concerned about laws related to the administration of fair elections, government transparency, the treatment of inmates in prisons, and restrictions on public sector employees wearing religious symbols. While Black, Indigenous, and other marginalized Canadians still face discrimination and economic, social, and political challenges, the federal government has acknowledged these problems and made some moves to address them."938

The Law Commission of Ontario and Ontario Human Rights Commission, representing Canada's most populous province, jointly created an AI impact assessment tool in November 2024 to provide organizations a method to assess AI systems for compliance with human rights obligations.939 The human rights AI impact assessment (HRIA) assists developers and administrators of AI systems to

⁹³⁵ Human Rights Watch, How Dare They Peep into My Private Life (May 25, 2022), https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rightsviolations-government

⁹³⁶ Canadian Teachers Federation, Towards a Responsible Use of Artificial Intelligence in Canadian Public Education (Sept. 30, 2024), https://www.ctf-fce.ca/blog-perspectives/towardsa-responsible-use-of-artificial-intelligence-in-canadian-public-education/

⁹³⁷ Freedom House, Freedom in the World 2024: Canada (2024), https://freedomhouse.org/country/canada/freedom-world/2024

⁹³⁹ Law Commission of Ontario, Ontario Human Rights Commission, Human Rights AI Impact Assessment (Nov. 2024), https://www.lco-cdo.org/wp-content/uploads/2024/11/LCO-Human-Rights-AI-Impact-Assessment-EN.pdf

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identify, assess, minimize, or avoid discrimination and uphold human rights obligations throughout the lifecycle of an AI system by providing guidelines for when and how to conduct impact assessments. The HRIA is intended to: "Strengthen knowledge and understanding of human rights impacts; Provide practical guidance on specific human rights impacts, particularly in relation to non-discrimination and equality of treatment; and Identify practical mitigation strategies and remedies to address bias and discrimination from AI systems." ⁹⁴⁰

OECD / G20 AI Principles

Canada endorsed the OECD and the G20 AI Principles, including the principles updated in May 2024.941

In 2020, Canada and France, and a dozen other countries announced the Global Partnership on Artificial Intelligence to "support the responsible and human-centric development and use of AI in a manner consistent with human rights, fundamental freedoms, and our shared democratic values." According to the statement, the "GPAI will be supported by a Secretariat, to be hosted by the OECD in Paris, as well as by two Centres of Expertise—one each in Montréal and Paris."

Canada and the European Union announced in 2020 that they were collaborating to leverage AI to help the international community respond to COVID-19. The initiative included the GPAI's group on AI and Pandemic Response and the annual EU-Canada Digital Dialogue.⁹⁴³

Al Safety Summit

Canada participated in the first AI Safety Summit and endorsed the Bletchley Declaration in 2023.944 Canada thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms,

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⁹⁴⁰ Ibid, p. 3

⁹⁴¹ OECD AI Policy Observatory, *OECD AI Principles Overview, Countries Adhering to the Principles* (2025), https://oecd.ai/en/ai-principles

⁹⁴² Government of Canada, *Joint Statement from Founding Members of the Global Partnership on Artificial Intelligence* (Jun. 15, 2020), https://www.canada.ca/en/innovation-science-economic-development/news/2020/06/joint-statement-from-founding-members-of-the-global-partnership-on-artificial-intelligence.html

⁹⁴³ European Union, *Joint Press Release Following the European Union-Canada Ministerial Meeting* (Sept. 9, 2020), https://eeas.europa.eu/headquarters/headquarters-homepage/84921/joint-press-release-following-european-union-canada-ministerial-meeting en.

⁹⁴⁴ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, *Prime Minister's Office, The Bletchley Declaration by Countries Attending the AI Safety Summit* (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration/the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

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and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible."

The formation of the International Network of AI Safety Institutes was announced at the AI Seoul Summit in May 2024. As a founding member of the Network, Canada will seek to actively coordinate efforts with international partners and collaborate on joint projects, including the development of guidance on AI safety.⁹⁴⁵

Canada launched the Canadian AI Safety Institute (CAISI) in November 2024. CAISI "is part of the Government of Canada's plan to support the safe and responsible development and deployment of artificial intelligence (AI). CAISI aims "to advance the science of AI safety, in collaboration with international partners, in order to ensure that governments are well-positioned to understand and act on the risks of advanced AI systems. These include risks posed by synthetic content, including impersonation and fraud, as well as risks posed by the development or deployment of systems that may be dangerous or hinder human oversight."

UNESCO Recommendation on AI Ethics

Canada is a signatory of the UNESCO Recommendation on the Ethics of Artificial Intelligence. 947 Canada's principles for AI, directive on automated decision-making, and support of Impact Assessment tools reflect a commitment to the Recommendations in public deployment while guidelines for public procurement offer a means to extend those guidelines to the private sector. 948

Council of Europe AI Treaty

Canada contributed as an Observer State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy, and the Rule of Law. The Committee of Ministers adopted the Framework during the 2024

⁹⁴⁵ Department for Science, Innovation & Technology, *Policy Paper: Seoul Statement of Intent toward International Cooperation on AI Safety Science, AI Seoul Summit 2024 (Annex)* (May 21, 2024), https://www.gov.uk/government/publications/seoul-declaration-for-safe-innovative-and-inclusive-ai-ai-seoul-summit-2024/seoul-statement-of-intent-toward-international-cooperation-on-ai-safety-science-ai-seoul-summit-2024-annex

⁹⁴⁶ Innovation, Science and Economic Development Canada, *Canadian Artificial Intelligence Safety Institute* (Nov. 2024), https://ised-isde.canada.ca/site/ised/en/canadian-artificial-intelligence-safety-institute

⁹⁴⁷ UNESCO, *Recommendation on the Ethics of Artificial Intelligence* (Nov. 23, 2021), https://unesdoc.unesco.org/ark:/48223/pf0000381137.

⁹⁴⁸ Government of Canada, *Responsible Use of Artificial Intelligence in Government* (Mar. 4, 2025), https://www.canada.ca/en/government/system/digital-government/digital-government/innovations/responsible-use-ai.html#toc1

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ministerial meeting⁹⁴⁹ and it opened for signature in September 2024. Canada signed this first international AI Treaty on February 11, 2025. ⁹⁵⁰

Evaluation

Canada is among the leaders in creating policies and guidelines for AI. In addition to endorsing the OECD/G20 AI Principles and establishing the GPAI with France, Canada has taken steps to establish model practices for the use of AI across government agencies. Canada has a solid record on human rights and is now working to update its national privacy law to address the challenges of AI. The failure of the Digital Charter Implementation Act including the AIDA and data protection updates raises the possibility that Canada will remain without a comprehensive AI policy.

Chile

In 2024, Chile released an update to the National AI Policy based on findings from the UNESCO Readiness Assessment Methodology and public consultation and roundtables. The country also introduced a series of bill to encourage the responsible and ethical development and use of AI, including a AI Bill, amendments to the data protection law, and recommendation on algorithmic transparency.

National AI Strategy

The Chilean government launched an updated National AI Policy that integrated recommendations from UNESCO's AI Readiness Assessment Report in May 2024. This report followed Chile's milestone as the first country globally to apply and complete UNESCO's AI Readiness Assessment Methodology (RAM). The updated policy builds on the initial National AI Policy, published in October 2021. The focus of the updated policy was to bring the

⁹⁴⁹ Council of Europe, *The Framework Convention on Artificial Intelligence* (2025), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

⁹⁵⁰ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 4, 2025), https://www.coe.int/en/web/Conventions/full-list/?module=signatures-by-treaty&treatynum=225

⁹⁵¹ Ministry of Science, Technology, Knowledge and Innovation (MinCiencia), With More than 100 Actions Committed for 2026, Minister of Science Presents New Artificial Intelligence Policy (May 2, 2024), https://minciencia.gob.cl/noticias/con-mas-de-100-acciones-comprometidas-para-2026-ministra-de-ciencia-presenta-nueva-politica-de-inteligencia-artificial/

⁹⁵² Government of Chile, *Chile Presents the First National Policy on Artificial Intelligence* (Oct. 28, 2021), https://www.gob.cl/en/news/chile-presents-first-national-policy-artificial-intelligence/

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Ethics and Governance axis in alignment with recent governance developments rather than formulate a new policy.⁹⁵³

The original National AI Policy identifies a main objective, four transversal AI policy principles, and three interdependent axes. The axes address current opportunities and gaps in AI regulation by defining the scope of actions for relevant actors to achieve AI policy objectives by 2031. The National AI Policy is complemented by an AI Action Plan, which combines around 70 priority tasks in the areas of education, product development, talent management and others. The AI Action Plan also deals with accountability and establishes timelines for priority tasks implementation. However, the AI Policy does not provide for implementation deadlines, possible funding mechanisms or monitoring instruments, which could be beneficial for the implementation of the AI Action Plan. Plan.

The main AI Policy objective for Chile is "to place the country at the forefront of AI research, development, and innovation, with an ecosystem that creates new capacities in various sectors." Such an ecosystem should be designed according to transversal concepts of opportunity and responsibility, contribute to sustainable development, and improve the quality of life. 957

To achieve this, the AI Policy provides for the following transversal principles:⁹⁵⁸

• AI with a focus on the well-being of people, respect for human rights and security with activities targeted at improving people's quality of life by capitalizing on the benefits of AI while taking into account its risks and potential negative outcomes, in the light of human rights protection norms.

⁹⁵³ Ministry of Science, Technology, Knowledge and Innovation, *Ministry of Science Opens Citizen Consultation to Update the National Artificial Intelligence Policy* (Jan. 19, 2024), https://www.minciencia.gob.cl/noticias/ministerio-de-ciencia-abre-consulta-ciudadana-para-actualizar-politica-nacional-de-inteligencia-artificial/

⁹⁵⁴ Ministry of Science, Technology, Knowledge and Innovation, *National AI Policy [Politica Nacional de Inteligencia Artificial]*, p. 16 (Oct. 2021),

https://www.minciencia.gob.cl/uploads/filer_public/bc/38/bc389daf-4514-4306-867c-760ae7686e2c/documento_politica_ia_digital_.pdf

⁹⁵⁵ OECD Public Governance Reviews, *The Strategic and Responsible Use of Artificial Intelligence in the Public Sector of Latin America and the Caribbean*, Chapter 2, LAC Artificial Intelligence Strategies (Mar. 22, 2022), https://www.oecd-ilibrary.org/governance/the-strategic-and-responsible-use-of-artificial-intelligence-in-the-public-sector-of-latin-america-and-the-caribbean_1f334543-en

⁹⁵⁶ Ministry of Science, Technology, Knowledge and Innovation, *National AI Policy [Política Nacional de Inteligencia Artificial]*, p. 18 (Oct. 2021),

https://www.minciencia.gob.cl/uploads/filer_public/bc/38/bc389daf-4514-4306-867c-760ae7686e2c/documento_politica_ia_digital_.pdf

⁹⁵⁷ Ibid.

⁹⁵⁸ Ibid.

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Both the algorithms and the data used for training automated systems should be trustworthy.

- AI for sustainable development with actions to promote AI use and development, and the inclusion of AI in Chile's sustainable development efforts.
- Inclusive AI with actions emphasizing integrity and data quality to address biases. Chile will ensure that AI does not discriminate based on gender, sexual orientation, and among vulnerable groups, including indigenous peoples, people with disabilities, etc.
- AI and globalization with initiatives developed in alignment with international
 efforts in the field of AI. These initiatives will be consistent with the principles
 and agreements Chile has already signed, such as the OECD AI Principles, and
 will be updated in accordance with any further international commitments the
 country makes.⁹⁵⁹

The National AI Policy also provides for an AI Action Plan and its implementation. The first axis, "Enabling Factors," refers to the structural components of AI design and deployment, such as talent development, technology infrastructure, and data. 960 The second axis, "Development and Adoption," covers Chile's targets regarding fundamental and applied research, technology transfer, innovation, entrepreneurship, public service improvement, and technology-based economic growth, as well as the participation of various actors in these processes, such as academia, government, private sector and civil society. 961 The third axis, Ethics, Regulatory Aspects, and Socioeconomic Impacts, tackles human-machine interaction and the socio-technical system, considering several important issues identified during the consultations: AI in consumer protection, intellectual property, cybersecurity, AI influence on the labor market and gender dimension, explainability and transparency of the algorithms, etc. 962 Thus, throughout its AI Policy, Chile stresses the importance of international standards for AI regulation and the protection of fundamental rights and the rule of law in AI use and deployment.

Chile is also actively working to build regional cooperation through the LATAM 4.0,963 which was launched in November of 2022. Its purpose is to regionalize AI development to exchange best practices among Latam countries, unify governance criteria, as well to promote regional integration. Moreover, institutionalizing Digital Rights Protection Treaties is one of the key regional strategies envisioned in the LATAM 4.0 regional coalition.

⁹⁶⁰ Ibid, pp. 24–39

⁹⁵⁹ Ibid, pp. 18–20

⁹⁶¹ Ibid, pp. 40-48

⁹⁶² Ibid, pp. 50-67

⁹⁶³ LATAM 4.0, https://www.genia.ai/latam-4-0

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After discussing a draft Bill modeled on EU AI Act in 2023,964 the Chilean Parliament officially introduced a bill to promote the ethical development of AI, safeguard fundamental rights, and ensure consumer protection in the Chamber of Deputies in May 2024.⁹⁶⁵

Public Participation

The Chilean Ministry of Science, Technology, Knowledge, and Innovation (MinCiencia) opened a public consultation on the National Artificial Intelligence Policy 2024 in January, 966 which remained accessible for three months. The consultation seeks to gather citizen feedback on proposed revisions to the 2021 National Artificial Intelligence Policy with a focus on ensuring ethical AI usage in the public sector and fostering international collaboration, particularly within Latin America. This consultation formed part of the ongoing update of the Ethics and Governance axis of the policy.

The drafting of the initial National AI Policy was marked by an effort to ensure wide and inclusive participation across the industry, academia, civil society and the public at large. The core team was composed of 12 experts in the field.⁹⁶⁷ Virtual and in-person AI seminars, discussion groups and workshops were held across the country, including the regions, where inputs for the AI Policy were collected.⁹⁶⁸ After the first draft of the AI Policy was produced, a citizens'

https://www.camara.cl/verDOC.aspx?prmID=72777&prmTipo=FICHAPARLAMENTARIA&pr mFICHATIPO=DIP&prmLOCAL=0

https://minciencia.gob.cl/uploads/filer public/6c/c1/6cc17cd7-ae58-48f0-ada1-

⁹⁶⁴ DigWatch, Chile Takes the First Steps toward AI Legislation (Jun. 20, 2023),

https://dig.watch/updates/chile-takes-the-first-steps-toward-ai-legislation; House of Deputies, Regulating AI Systems, Robotics, and Technological Connections in their Distinctive Application Environments [Regula los systemas de inteligencia artifical, la robotica y las tecnologias conexas, en sus distintos ambitos de aplicacion] (Apr. 26, 2023),

⁹⁶⁵ Chamber of Deputies, Legislature 372: Regulation of Artificial Intelligence Systems [Spanish only] (May 7, 2024),

https://www.camara.cl/legislacion/ProyectosDeLey/tramitacion.aspx?prmID=17429&prmBOLE TIN=16821-19; for an overview in English, see Guillermo Carey, José Ignacio Mercado, and Ricardo Alonso, Bill to Regulate Artificial Intelligence Systems Is Introduced to the Chilean Chamber of Deputies, Carey, https://www.carey.cl/en/bill-to-regulate-artificial-intelligencesystems-is-introduced-to-the-chilean-chamber-of-deputies/

⁹⁶⁶ Ministry of Science, Technology, Knowledge and Innovation (MinCiencia), National Policy on Artificial Intelligence (2024), https://minciencia.gob.cl/areas/inteligencia-artificial/politicanacional-de-inteligencia-artificial/

⁹⁶⁷ Ministry of Science, Technology, Knowledge and Innovation, *Public Consultation on* Artificial Intelligence: Report of Results (Oct. 2021),

d33a3e6e8958/informe consulta publica ia 1.pdf

⁹⁶⁸ Government of Chile, Ministry of Science Opens Participatory Process for the National Artificial Intelligence Policy (Feb. 3, 2020), https://www.gob.cl/noticias/ministerio-de-cienciaabre-proceso-participativo-para-la-politica-nacional-de-inteligencia-artificial/

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consultation was held to collect their views. Overall, a total of more than 9,000 people participated in the process. The civil society expressed criticism regarding the lack of transparency regarding the output of regional and online workshops and difficulties accessing meeting minutes. The inclusivity of the process was also called into question as only 21% of respondents to the second stage consultation were female and a consultation questionnaire was available only in Spanish. The inclusivity of the second stage consultation were female and a consultation questionnaire was available only in Spanish.

The updated policies were also informed by a series of roundtables. A report published by the Library of the National Congress on one such roundtable on Public Policies on Artificial Intelligence in 2023 noted that the discussions allowed "the exchange of information and opinions from [participants] with diverse professional experiences and areas of focus" to inform the design of public policies in the country. 972

Data Protection

Article 19 of Chile's Constitution (*Constitución Política de la República de Chile*) of 1980 protects the right to private life.⁹⁷³ In 2018, the constitutional guarantee was extended to explicitly protect personal data.⁹⁷⁴

The Law on Protection of Private Life (*Ley sobre Protección de la Vida Privada*) (LPPL) of 1999 regulates the processing of personal data in public and private databases.⁹⁷⁵ In addition to LPPL, the processing of personal data in the financial and healthcare sectors is regulated by relevant sectoral laws.⁹⁷⁶ Legal actions regarding the violations of the constitutionally protected right to personal data can be brought before courts.⁹⁷⁷ Limited supervisory powers are shared

977 Ibid

⁹⁶⁹ OECD AI Policy Observatory, *AI in Chile: Chilean Participation Process on AI* (2020), https://oecd.ai/en/dashboards/countries/Chile

⁹⁷⁰ Velasco (Derechos Digitales), *The National Artificial Intelligence Policy of Chile and a Process for Citizen Participation* (Nov. 5, 2021), https://www.derechosdigitales.org/17010/la-politica-nacional-de-inteligencia-artificial-chilena-y-su-proceso-de-participacion-ciudadana/
⁹⁷¹ Ibid

⁹⁷² Library of the National Congress, *Public Policies and Artificial Intelligence Roundtable Report* (Dec. 11, 2023),

https://obtienearchivo.bcn.cl/obtienearchivo?id=repositorio/10221/35618/1/Informe 27 23 Informe Submesa Politicas Publicas e Inteligencia Artificial.pdf

⁹⁷³ Constitution of the Republic of Chile, 24 October 1980, Article 19 para 4 (Mar. 11, 2022), https://www.bcn.cl/leychile/navegar?idNorma=242302.

⁹⁷⁴ Library of the National Congress of Chile, *Law No 21096 Concerning the Right to Protection of Personal Data* (Jun. 16, 2018),

https://www.leychile.cl/Navegar?idLey=21096&tipoVersion=0.

⁹⁷⁵ Library of the National Congress of Chile, *Law No 19628 on Protection of Private Life* (Feb. 28, 2020), https://www.bcn.cl/leychile/navegar?idNorma=141599

⁹⁷⁶ Ibid

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between two authorities. The Transparency Council (*Consejo para la Transparencia*) is an independent oversight agency which, as a part of its mandate, monitors compliance with the data protection law by the organs of the state administration. The Transparency Council does not have the power to impose fines. ⁹⁷⁸

Since December 2021, a consumer protection agency SERNAC (*Servicio Nacional del Consumidor*) has had a competency to monitor data protection compliance in consumer matters. It cannot impose fines but may initiate and participate in judicial proceedings and collective voluntary proceedings. ⁹⁷⁹

The Chilean government introduced draft bill No. 11144-07 Regulating the Processing and Protection of Personal Data and Creating the Personal Data Protection Agency in 2017. The bill takes the EU GDPR as a model and would establish an independent body to oversee data rights. The Joint Commission, National Congress, Senate, and Chamber of Deputies approved a later version of the Bill in August 2024. The bill is pending final review and approval by the Constitutional Court before it can be officially enacted by the President of the Republic.

Chile's Transparency Council endorsed the Ibero-American Network for the Protection of Personal Data (RIPD) standards and guidelines and committed to integrated the principles of legitimation, lawfulness, loyalty, transparency, purpose, proportionality, quality, responsibility, safety and confidentiality in national policies. ⁹⁸¹ The 16 data protection authorities representing 12 countries initiated a coordinated action on ChatGPT, developed by OpenAI, in May 2023 on the basis that ChatGPT may entail risks for the rights and freedoms of users in the processing of their personal data because of the potential for "responses with cultural, racial or gender biases, as well as false ones." ⁹⁸²

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⁹⁷⁸ Ibid

⁹⁷⁹ DLA Piper, Data Protection Laws of the World: Chile (Jan. 24, 2022),

 $[\]underline{\underline{https://www.dlapiperdataprotection.com/index.html?t=law\&c=CL}}$

⁹⁸⁰ Chamber of Deputies, *Bill: Regulating the Protection and Processing of Personal Data and Creating the Personal Data Protection Agency [Projecto de Ley: Regula la protección y el tratamiento de los datos personales y crea la Agencia de Protección de Datos Personales], No. 509/SEC/24* (Nov. 18, 2024),

 $[\]frac{https://www.camara.cl/legislacion/ProyectosDeLey/tramitacion.aspx?prmID=11661\≺}{https://www.carey.cl/wp-content/uploads/2024/08/Texto-ley-inglesclean.pdf}$

⁹⁸¹ Ibero-American Network for the Protection of Personal Data (RIPD), Standards for Personal Data Protection for Ibero-American States (2017),

 $[\]underline{https://www.redipd.org/sites/default/files/2022-04/standars-for-personal-data.pdf}$

⁹⁸² Ibero-American Network for the Protection of Personal Data (RIPD), *Authorities from the Ibero-American Network for the Protection of Personal Initiate a Coordinated Action against the ChatGPT Service* [Spanish] (May 8, 2023), https://www.redipd.org/es/noticias/autoridades-red-iberoamericana-de-proteccion-de-datos-personales-inician-accion-chatgpt

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The Transparency Council has been a member of the Global Privacy Assembly (GPA) since 2019. 983 The Transparency Council has not endorsed any AI-related GPA Resolutions 984 or the related ICDPPC Declaration on Ethics and Data Protection in Artificial Intelligence (2018). 985

Algorithmic Transparency

There is currently no legally established right to algorithmic transparency in Chile, and the LPPL does not provide for individual rights related to automated decision-making (ADM).

Article 8 of the new PPPD Bill introduces a "right to object and not be subject to decisions based on the automated processing of their personal data, including profiling, which produces legal effects concerning them or significantly affects them" unless the decision is necessary for the conclusion or execution of a contract, based on data subject's consent, or provided for by law. 986 In all decisions made based on automated processing, the data controller must take necessary measures to ensure the rights and freedoms of data subjects, their right to information and transparency, to obtain explanation and human intervention, to express their point of view, and to request a review of the decision. 987

With regard to the transparency principle, the RIPD Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects, endorsed by the Transparency Council, provide, "The information provided regarding the logic of the AI model must

https://globalprivacyassembly.org/participation-in-the-assembly/list-of-accredited-members/
global Privacy Assembly, Resolution on Accountability in the Development and Use of
Artificial Intelligence (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf; Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf; Global Privacy Assembly, Resolution on Generative Artificial Intelligence
Systems (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.Resolution-on-Generative-AI-Systems-101023.pdf

⁹⁸⁵ 40th International Conference of Data Protection and Privacy Commissioners, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), http://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-

Declaration ADOPTED.pdf

⁹⁸³ Global Privacy Assembly, List of Accredited Members (2023),

⁹⁸⁶ Chamber of Deputies, *Bill: Regulating the Protection and Processing of Personal Data and Creating the Personal Data Protection Agency [Projecto de Ley: Regula la protección y el tratamiento de los datos personales y crea la Agencia de Protección de Datos Personales], No. 509/SEC/24*, Art. 8-bis (Nov. 18, 2024),

https://www.camara.cl/legislacion/ProyectosDeLey/tramitacion.aspx?prmID=11661&pr 987 Ibid

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include at least basic aspects of its operation, as well as the weighting and correlation of the data, written in a clear, simple and easily understood language, it will not be necessary to provide a complete explanation of the algorithms used or even to include them. The above always looking not to affect the user experience." 988

In October 2022, the Transparency Council initiated efforts to draft a General Instruction on Algorithmic Transparency. The analysis of algorithmic transparency in the public sector carried out by the public innovation lab GobLab UAI and the Transparency Council shows that although information about processing activities and algorithmic logic is sometimes available, it is frequently fragmented and dispersed across different sources. The researchers pointed to the considerable effort required to collect, systematize and present the information in a manner understandable to the recipient.

The survey of 74 companies selling IoT devices carried out by SERNAC in February 2022 showed a widespread lack of knowledge regarding the use of AI and algorithmic technologies within the private sector. Many companies were not aware if manufacturers had employed such technologies in the products they were selling or distributing. This is aggravated by the lack of understanding about what data categories are collected by the IoT devices and the absence of privacy policies explaining processing to the consumers.

Use of AI in Public Administration

Chile's government published a circular entitled Guidelines for the use of AI tools in the public sector in December 2023. The circular addresses key themes such as human-centric AI, transparency and explainability, privacy, and data use. The guidelines came into effect on January 1, 2024, and the circular was distributed to all public services.⁹⁹³

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⁹⁸⁸ Ibero-American Network for the Protection of Personal Data (RIPD), *Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects*, p. 17 (Jun. 2019), https://www.redipd.org/en/document/guide-specific-guidelines-ai-projects-en.pdf

⁹⁸⁹ María Paz Hermosilla and Ana María Muñoz, *Chile's Road to Algorithmic Transparency:* Setting New Standards in Latin America, Observatory of Public Sector Innovation (May 30, 2023), https://oecd-opsi.org/blog/chile-algorithmic-transparency/

⁹⁹⁰ GobLab UAI and Transparency Council, *Algorithmic Transparency in the Public Sector* (Oct. 2021), p. 19, https://directus.thegovlab.com/uploads/ai-ethics/originals/2e9f6394-7a3a-4034-a7cb-071923a32ae0.pdf

⁹⁹¹ Ibid

⁹⁹² SERNAC, Exploratory study on the risks of use of IoT devices in Chile (Feb. 25, 2022), https://www.sernac.cl/portal/619/w3-article-64912.html.

⁹⁹³ Ministry of Science, Technology, Knowledge and Innovation, *Government Publishes Circular* for the Responsible Use of AI in Public Services (Dec. 14, 2023),

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As a member of the Latin American Centre for Development Administration (CLAD), Chile approved the principles in the Ibero American Charter on Artificial Intelligence in Civil Service in late 2023. 994 The guiding principles include: human autonomy; transparency, traceability and explainability; accountability, liability and auditability; security and technical robustness; reliability, accuracy, and reproducibility; confidence, proportionality, and prevention of damage; privacy and protection of personal data; data quality and safety; fairness, inclusiveness, and non-discrimination; human-centering, public value, and social responsibility; and sustainability and environmental protection.

The Charter calls on member states to create policies and laws to require the assessment of the impact of AI systems on human rights and freedoms and the registration of algorithms to "anticipate risks, prevent undesirable effects and ensure its proper implementation." The Charter also proposes a risk classification mechanism that would require guardrails for middle-risk uses and prohibitions against high-risk applications. Prohibited uses include facial recognition systems; systems aimed at behavior and cognitive manipulation of specific individuals or vulnerable groups (children or the elderly); and social ranking systems based on certain personality traits, individual behaviors, sociodemographic features or economic status.

Chile's AI Bill introduced in May 2024 aligns with the Charter's principles and outlines a comprehensive risk classification system for AI applications in public administration.⁹⁹⁷ This system mandates public agencies to conduct thorough assessments of the potential risks associated with the AI technologies they develop or procure.

Facial Recognition

In 2019, a group of 28 civil society organizations and nearly 70 experts have issued a public statement rejecting President Piñera's Mobile Surveillance

https://www.minciencia.gob.cl/noticias/gobierno-publica-circular-para-un-uso-responsable-de-la-ia-en-los-servicios-publicos/

⁹⁹⁴ Latin American Centre for Development Administration (CLAD), *Ibero American Charter on Artificial Intelligence in Civil Service* (Nov. 2023), https://clad.org/wp-content/uploads/2024/03/CIIA-EN-03-2024.pdf

⁹⁹⁵ Ibid, p. 10

⁹⁹⁶ Ibid, p. 21

⁹⁹⁷ Chamber of Deputies, *Legislature 372: Regulation of Artificial Intelligence Systems* [Spanish only] (May 7, 2024),

https://www.camara.cl/legislacion/ProyectosDeLey/tramitacion.aspx?prmID=17429&prmBOLE TIN=16821-19; for an overview in English, see Guillermo Carey, José Ignacio Mercado, and Ricardo Alonso, *Bill to Regulate Artificial Intelligence Systems Is Introduced to the Chilean Chamber of Deputies*, Carey, https://www.carey.cl/en/bill-to-regulate-artificial-intelligence-systems-is-introduced-to-the-chilean-chamber-of-deputies/

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System deployed the same year. 998 The system was created under Chile's Safe Street (Calle Segura) plan and used drones equipped with high-definition cameras and facial recognition technology to monitor public areas to fight crime and improve coordination of security agencies. Despite the criticism, the surveillance system which started with a fleet of 8 drones was expanded and new public procurements were ongoing at the time of the writing.⁹⁹⁹

A number of cases recorded in Chile demonstrated errors, false positives, and a general lack of effectiveness in publicly funded and invasive facial recognition systems. The facial recognition system deployed in one of Santiago's shopping malls and used to cross-reference images with the Investigative Police database of wanted suspects, for example, was reported to result in a 90% rate of false positives. 1000 The Transparency Council criticized the system for being disproportionate and intrusive from a privacy perspective. 1001

Inadequate results and widespread errors were also reported when using IDEMIA's real-time image analysis and facial recognition software in the municipality of Las Condes¹⁰⁰² and the facial recognition system implemented by the Civil Registry. 1003 No regulatory initiatives banning mass deployment of facial recognition technology have yet been registered.

Regulation DAN-151 issued by the General Directorate of Civil Aeronautics (DGAC), however, establishes conditions for drone use with an explicit reference to the requirement of respect to people's rights to privacy and intimacy in the operation of drones. 1004

capitalino-es-desproporcionado-para-el-fin-que-persigue/.

⁹⁹⁸ Civicus Monitor, New Mass Surveillance System Concerns Chilean Civil Society (Jul. 22, 2019), https://monitor.civicus.org/explore/new-mass-surveillance-system-chile/; Derechos Digitales, Against Mass Surveillance in Public Spaces of the "Mobile Tele-Surveillance System" (Apr. 2, 2019), https://www.derechosdigitales.org/12919/contra-la-vigilancia-masiva-en-losespacios-publicos-del-sistema-de-televigilancia-movil/

⁹⁹⁹ Garcia, N., Chile will lease drone flight hours for the surveillance of the Metropolitan Region (March 9, 2022), https://www.infodefensa.com/texto-diario/mostrar/3483902/chile-arrendarahoras-vuelo-drones-vigilancia-region-metropolitana.

¹⁰⁰⁰ Transparency Council, CPLT insists that facial recognition in the capital's mall is "disproportionate to the purpose it pursues" (March 14, 2019), https://www.consejotransparencia.cl/cplt-insiste-en-que-reconocimiento-facial-en-mall-

¹⁰⁰¹ Ibid

¹⁰⁰² Garay, (Derechos Digitales), Which is worse: a facial recognition system that doesn't work or one that does? (Sept. 10, 2021), .https://www.derechosdigitales.org/16728/que-es-peor-unsistema-de-reconocimiento-facial-que-no-funciona-o-uno-que-si-lo-hace/

¹⁰⁰³ University of Chile, Pandemic and technology: the risks of facial recognition and data management (March. 31, 2020), https://www.uchile.cl/noticias/162239/pandemia-v-tecnologialos-riesgos-del-reconocimiento-facial.

¹⁰⁰⁴ Directorate General of Civil Aviation (DGAC), DAN 151 (May 27, 2024), https://www.dgac.gob.cl/wp-content/uploads/2024/05/DAN-151-ED3-27MAY2024.pdf

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EdTech

As part of a global investigative report on the education technology (EdTech) endorsed by 49 governments, including Chile, during the pandemic, Human Rights Watch found that Aprendo in Linea in Chile put at risk or directly violated children's rights. The EdTech product sent children's data to AdTech companies. According to Human Rights Watch, in line with child data protection principles as well as corporations' human rights responsibilities outlined in the United Nations Guiding Principles on Business and Human Rights, EdTech and AdTech companies should not collect and process children's data for advertising. The report recommended that governments develop, refine, and enforce modern child data protection laws and standards and ensure that children who want to learn are not compelled to give up their other rights to do so. 1005

Key stakeholders, including policymakers, international organizations, private sector representatives, and academia, participated in discussions on the skills needed to meet the challenges and opportunities presented by artificial intelligence in education at a roundtable on Education and Skills in the Age of Artificial Intelligence hosted by the UNESCO Regional Office in Santiago in October 2023. 1006 Stakeholders highlighted the need for continuous training for teachers and school leaders regarding the ethical use of AI technologies. The discussion also emphasized the collaborative roles of various sectors in adapting education to current technological advancements. Valtencir Mendes, Head of Education at UNESCO Santiago, concluded by stressing the need to protect students' rights while adapting the educational system to technological advancements.

Chile was among the 16 countries from Latin America and the Caribbean that committed to the promotion of ethical AI education as part of their endorsement of the Cartagena de Indias Declaration in August 2024. 1007 The declaration stresses the need for collaboration to foster ethical and inclusive AI development and commits the countries to enhancing digital education and sharing best practices while ensuring AI governance frameworks uphold human rights and promote innovation.

¹⁰⁰⁵ Human Rights Watch, How Dare They Peep into My Private Life (May 25, 2022), https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rightsviolations-governments

¹⁰⁰⁶ UNESCO, The Future of Education: UNESCO and Experts Debate the Role of Artificial Intelligence in Chile (Oct. 11, 2024), https://www.unesco.org/en/articles/future-educationunesco-and-experts-debate-role-artificial-intelligence-chile

¹⁰⁰⁷ Ministry of Science, Technology, Knowledge and Innovation (MinCiencia), *Undersecretary* Gainza at AI Summit in Colombia (Aug. 9, 2024),

https://www.minciencia.gob.cl/noticias/subsecretaria-gainza-en-cumbre-de-ia-en-colombia-lagobernanza-no-es-solo-regulacion-v-marcos-legales-sino-que-principalmente-tiene-que-ver-conperspectivas-y-principios/

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AI and Neurotechnology

Chile became the first country in the world to provide constitutional protection for neuro-rights in 2021. Neuro-rights are recognized as a subset of human rights aimed at balancing the potentially adverse effects of neurotechnology. 1008 Article 19 of the Chilean Constitution was amended by introducing the provision that "Scientific and technological development will be at the service of people and will be carried out with respect for life and physical and psychological integrity. The law will regulate the requirements, conditions and restrictions for its use on people, especially safeguarding brain activity, as well as the information derived from it." This guarantee is especially relevant in light of advances in the area of neuroscience and AI, such as brain-computer interfaces. 1010

Chile introduced a on the protection of neuro-rights and mental integrity and the development of research and neurotechnologies in October 2020. 1011 The bill, which is currently in the second constitutional procedure of the legislative process, 1012 aims to regulate neurotechnologies while preserving rights and data regarding brain activity and mental integrity.

Environmental Impact of Al

Chile's National AI Policy states that it will establish incentives for developers and deployers of AI systems to focus on energy efficiency and develop guidelines for environmentally responsible use in the public and private sectors. 1013

¹⁰⁰⁸ McCay, A. Neurorights: The Chilean Constitutional Change, AI & Soc (2022), https://doi.org/10.1007/s00146-022-01396-0

¹⁰⁰⁶ Library of the National Congress, Law No 21383: Amendments to the Fundamental Rights Charter to establish scientific and technological development at the service of people (Oct. 25,

https://www.bcn.cl/leychile/navegar?idNorma=1166983&idParte=10278855&idVersion=2021-10-25

¹⁰¹⁰ Rafael Yuste et al., Four Ethical Priorities for Neurotechnologies and AI, Nature 551, pp. 159–163 (2017). https://doi.org/10.1038/551159a

¹⁰¹¹ Chamber of Deputies, No. 13828-19: Bill on the Protection of Neuro-Rights and Mental *Integrity, and the Development of Research and Neurotechnologies* (Oct. 7, 2020), https://www.camara.cl/legislacion/ProyectosDeLey/tramitacion.aspx?prmID=14385&prmBOLE TIN=13828-19

¹⁰¹² Chamber of Deputies, No. 13828-19: Bill on the Protection of Neuro-Rights and Mental Integrity, and the Development of Research and Neurotechnologies, Processing (Oct. 7, 2024), https://www.camara.cl/legislacion/ProyectosDeLey/tramitacion.aspx?prmID=14385&prmBOLE TIN=13828-19

¹⁰¹³ Ministry of Science, Technology, Knowledge and Innovation (MinCiencia), National Artificial Intelligence Policy (May 2, 2024), https://www.minciencia.gob.cl/areas/intelligenciaartificial/politica-nacional-de-inteligencia-artificial/

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Lethal Autonomous Weapons

During the 2018 discussions of the Group of Governmental Experts (GGE) on lethal autonomous weapons systems (LAWS), ¹⁰¹⁴ Chile issued a joint statement with Austria and Brazil that proposed to establish an open-ended GGE to negotiate a legally binding instrument to ensure meaningful human control over critical functions in LAWS. ¹⁰¹⁵ In 2020, Chile also joined eight other CCW parties and reiterated the call for the development of a "normative and operational framework" for ensuring human control of LAWS. ¹⁰¹⁶

Chile was one of 70 states that endorsed a joint statement on autonomous weapons systems at the United Nations General Assembly in October 2022. The statement called for the recognition of the dangers of autonomous weapons systems, acknowledged the need for human oversight and accountability, and emphasized the importance of an international framework of rules and constraints. In this joint statement, States declared that they "are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law ("IHL"), including through maintaining human responsibility and accountability in the use of force." In the statement of the stat

¹⁰¹⁴ Organization of the work of the Group of Governmental Experts (UN), *Group of Governmental Experts on emerging technologies in the area of lethal autonomous weapons systems (GGE LAWS) of the High Contracting Parties to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects* (Mar. 19, 2018), https://docs-library.unoda.org/Convention on Certain Conventional Weapons -

Group of Governmental Experts (2018)/CCW GGE.1 2018 2.pdf

https://reachingcriticalwill.org/images/documents/Disarmament-

fora/ccw/2018/gge/documents/29August_Proposal_Mandate_ABC.pdf

https://documents.unoda.org/wp-content/uploads/2020/09/GGE20200901-Austria-Belgium-

Brazil-Chile-Ireland-Germany-Luxembourg-Mexico-and-New-Zealand.pdf

¹⁰¹⁵ Austria, Brazil, and Chile, *Proposal for a Mandate to Negotiate a Legally-Binding Instrument that Addresses the Legal, Humanitarian and Ethical Concerns Posed by Emerging Technologies in the Area of Lethal Autonomous Weapons Systems (LAWS)*, U.N. Doc. CCW/GGE.2/2018/WP.7 (Aug. 30, 2018),

¹⁰¹⁶ Austria, Belgium, Brazil, Chile, Ireland, Germany, Luxembourg, Mexico, and New Zealand, *Joint Commentary on Guiding Principles A, B, C and D (Sept. 1, 2020)*,

¹⁰¹⁷ Stop Killer Robots, 70 States Deliver Joint Statement on Autonomous Weapons Systems at UN General Assembly (2022), https://www.stopkillerrobots.org/news/70-states-deliver-joint-statement-on-autonomous-weapons-systems-at-un-general-assembly/

¹⁰¹⁸ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm en.pdf

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At the 78th UN General Assembly First Committee in 2023, Chile voted in favor¹⁰¹⁹ of resolution L.56¹⁰²⁰ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems.

Chile endorsed the Belén Communiqué in February 2023, 1021 which calls for "urgent negotiation" of a binding international treaty to regulate and prohibit the use of autonomous weapons to address the grave concerns raised by removing human control from the use of force.

Chile also participated in the international summit on the responsible application of artificial intelligence in the military domain hosted by the Netherlands in February 2023. At the end of the REAIM 2023, Chile, together with other countries, agreed on a joint call for action on the responsible development, deployment and use of artificial intelligence in the military domain. 1022 In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." States also "stress the importance of a holistic, inclusive and comprehensive approach in addressing the possible impacts, opportunities and challenges of the use of AI in the military domain and the need for all stakeholders, including states, private sector, civil society and academia, to collaborate and exchange information on responsible AI in the military domain."1023

¹⁰¹⁹ Isabelle Jones, 164 States Vote against the Machine at the UN General Assembly, Stop Killer Robots (Nov. 1, 2023), https://www.stopkillerrobots.org/news/164-states-vote-against-themachine/

¹⁰²⁰ UN General Assembly, Resolution L56: Lethal Autonomous Weapons (Oct.12, 2023), https://reachingcriticalwill.org/images/documents/Disarmamentfora/1com/1com23/resolutions/L56.pdf

¹⁰²¹ Latin American and the Caribbean Conference on the Social and Humanitarian Impact of Autonomous Weapons, Official Communique (Feb. 24, 2023),

https://conferenciaawscostarica2023.com/communique/?lang=en

¹⁰²² Government of Netherlands, Call to Action on Responsible Use of AI in the Military Domain (Feb. 16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action ¹⁰²³ Dutch Ministry of Foreign Affairs and Ministry of Defence, REAIM 2023 Call to Action (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023call-to-action

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Human Rights

Chile ranked as "Free" with a score of 94/100 in the Freedom in the World report, 1024 with 38/40 for political rights and 56/60 for civil liberties.

The government of Chile has continued to demonstrate progress on improving the protection of human rights related to AI by updating the Ethics and Governance axis of the 2021 version of its National AI Policy¹⁰²⁵ in line with input from various stakeholder groups gathered during a 2-month public consultation period. The new AI bill¹⁰²⁷ aimed at regulating AI development in a way that safeguards and promotes democratic principles, the rule of law, and citizens' fundamental human rights will also ensure the ethical and responsible implementation of AI.

Despite Chile's ratification of several human rights instruments, ¹⁰²⁸ some lingering issues remain with regard to human rights protection. Chile still has problems with incarceration conditions in detention facilities, and experiences cases of torture and brutality by law enforcement. ¹⁰²⁹ There are also reported cases of arbitrary or unlawful murders, as well as issues with the protection of the rights of women, indigenous populations, LGBTQI+, migrants, and refugees. ¹⁰³⁰ In October 2020, following a series of protests and clashes with law enforcement authorities, more than 70% of citizens voted in favor of forming a constituent

1024 Freedom House, *Freedom in the World 2024: Chile* (2024), https://freedomhouse.org/country/chile/freedom-world/2024

¹⁰²⁵ Ministry of Science, Technology, Knowledge and Innovation (MinCiencia), *National Policy on Artificial Intelligence* (May 2, 2024), https://minciencia.gob.cl/areas/inteligencia-artificial/

Ministry of Science, Technology, Knowledge and Innovation (MinCiencia), *Public Consultation: National Policy on Artificial Intelligence: Results Report 2024* (2024), https://www.minciencia.gob.cl/areas/inteligencia-artificial/

¹⁰²⁷ Chamber of Deputies, Legislature 372: Regulation of Artificial Intelligence Systems [Spanish only] (May 7, 2024),

https://www.camara.cl/legislacion/ProyectosDeLey/tramitacion.aspx?prmID=17429&prmBOLE <u>TIN=16821-19</u>; for an overview in English, see Guillermo Carey, José Ignacio Mercado, and Ricardo Alonso, *Bill to Regulate Artificial Intelligence Systems Is Introduced to the Chilean Chamber of Deputies*, Carey, https://www.carey.cl/en/bill-to-regulate-artificial-intelligence-systems-is-introduced-to-the-chilean-chamber-of-deputies/

1028 UN Treaty Body Database, Ratification Status for Chile (2025),

 $\underline{https://tbinternet.ohchr.org/_layouts/15/TreatyBodyExternal/Treaty.aspx?CountryID=35\&Lang=EN.$

Human Rights Watch, *World Report 2022*, https://www.hrw.org/world-report/2022/country-chapters/chile

¹⁰³⁰ U.S. Department of State, Bureau of Democracy, Human Rights, and Labor, *2020 Country Reports on Human Rights Practices: Chile* (Mar. 20, 2021), https://www.state.gov/reports/2020-country-reports-on-human-rights-practices/chile/

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assembly to rewrite the constitution, which has remained unchanged since the dictatorship that officially ended in 1990.

Al Safety Summit

Chile participated in the first AI Safety Summit and endorsed the Bletchley Declaration in November 2023. Chile thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible."

Chile did not participate in the AI Seoul Summit in May 2024. 1032

OECD / G20 AI Principles

As an OECD member, Chile endorsed the OECD Al Principles,¹⁰³³ directly referencing them on several occasions in its Al-related documents, including in its National Al Policy.¹⁰³⁴ The May 2024 update to the National Al Policy strongly emphasizes responsible Al development, ethical Al deployment, and the importance of international collaboration on Al governance.

The OECD has noted Chile's AI policy efforts across various dimensions, ¹⁰³⁵ including its promotion of societal dialogues on Al, its creation of partnerships with the private sector for human capacity development, its willingness for international cooperation on AI governance.

Chile's AI policy vision also echoes several principles of the OECD AI Guidelines, including the principles of transparency and explainability, human-

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¹⁰³¹ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, *Prime Minister's Office, The Bletchley Declaration by Countries Attending the AI Safety Summit*, (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

 ¹⁰³² UK Department for Science, Innovation & Technology, AI Seoul Summit: Participants List (Governments and Organizations) (Jun. 2024), https://www.gov.uk/government/publications/ai-seoul-summit-programme/ai-seoul-summit-participants-list-governments-and-organisations
 1033 OECD Legal Instruments, OECD/LEGAL/0449: Recommendation of the Council on Artificial Intelligence (May 3, 2024), https://legalinstruments.oecd.org/en/instruments/oecd-

¹⁰³⁴ Ministry of Science, Technology, Knowledge and Innovation (MinCiencia), *National Artificial Intelligence Policy* (May 2, 2024), https://www.minciencia.gob.cl/areas/inteligencia-artificial/

¹⁰³⁵ OECD AI Policy Observatory, *AI Policies in Chile* (2025), https://oecd.ai/en/dashboards/countries/Chile

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centered AI, and building human capacity for AI.¹⁰³⁶ The Chilean Council for Transparency's recommendations on algorithmic transparency¹⁰³⁷ published in August 2024 align with OECD guidelines to promote accountability and the ethical use of algorithms in public services by introducing guidelines for proactive transparency, effective monitoring, and use of clear language in the delivery of information about automated and semi-automated decision-making systems.

Council of Europe AI Treaty

Chile has not signed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law, the first legally binding international AI treaty.¹⁰³⁸

UNESCO Recommendation on AI Ethics

Chile is a UNESCO member and adopted the UNESCO Recommendation on the Ethics of AI during the 41st General Conference in November 2021. 1039

In 2022, CAF, the development bank of Latin America, and UNESCO signed a letter of intent to collaborate on the implementation of the UNESCO Recommendation in Latin America and the Caribbean. They pledged to create a Regional Council composed of national and local governments in the region which will support their implementation efforts.

Chile's Ministry of Science, in partnership with UNESCO and CAF, convened the first Regional Forum on AI Ethics in November 2023. The aim of the event was to shape a collective strategy among Latin American and Caribbean

¹⁰³⁶ Chamber of Deputies, *Legislature 372: Regulation of Artificial Intelligence Systems* [Spanish only] (May 7, 2024),

https://www.camara.cl/legislacion/ProyectosDeLey/tramitacion.aspx?prmID=17429&prmBOLE TIN=16821-19; for an overview in English, see Guillermo Carey, José Ignacio Mercado, and Ricardo Alonso, *Bill to Regulate Artificial Intelligence Systems Is Introduced to the Chilean Chamber of Deputies*, Carey, https://www.carey.cl/en/bill-to-regulate-artificial-intelligence-systems-is-introduced-to-the-chilean-chamber-of-deputies/

Tourcil for Transparency (CPLT), Resolution No. 372: Approval Text of the Council for Transparency's Recommendations on Algorithmic Transparency, Official Journal of the Republic of Chile, Ministry of the Interior and Public Safety (Aug. 30, 2024), https://www.consejotransparencia.cl/wp-content/uploads/instruccion/2024/09/Informe-recomendaciones-congreso-CPLT.pdf

To Council of Europe Treaty Office, Chart of Signatures and Ratifications of Treaty 225 (Mar. 5, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

¹⁰³⁹ UNESCO, *Recommendations on Ethics of AI* (2021), https://www.unesco.org/en/artificial-intelligence/recommendation-ethics

¹⁰⁴⁰ Ángel Melguizo and Gabriela Ramos, *Ethical and Responsible Artificial Intelligence: From Words to Actions and Rights*, Somos Iberoamérica (Feb. 1, 2023), https://www.somosiberoamerica.org/pt-br/tribunas/inteligencia-artificial-etica-e-responsavel-das-palavras-aos-fatos-e-direitos/

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(LAC) countries aligned with the UNESCO Recommendation. Chile signed the resulting Santiago Declaration to Promote Ethical Artificial Intelligence. 1041 It establishes fundamental principles that should guide public policy on AI. These include proportionality, security, fairness, non-discrimination, gender equality, accessibility, sustainability, privacy and data protection. The Declaration also constitutes a milestone towards establishing a Regional Council on AI for the LAC region. Chile will preside over the working group created to this end. 1042

Chile was also one of the first countries to complete the UNESCO Readiness Assessment Methodology (RAM), a tool to support the effective implementation of the Recommendation.¹⁰⁴³ The RAM helps countries and UNESCO identify and address any institutional and regulatory gaps.¹⁰⁴⁴

Chile became the first country in the world to implement the RAM with the launch of an updated National AI Policy and action plan in May 2024. 1045 Chile also proposed a new bill aimed at regulating the ethical and responsible development of AI based on the recommendations from UNESCO's RAM. 1046

Evaluation

Chile has made considerable progress toward developing legislative and policy frameworks in data protection and AI and aligning them with international standards, particularly the UNESCO Recommendation on the Ethics of AI. Chile's continual efforts toward refining its National Al Policy in accordance with international Al governance standards and best practices—demonstrated, for

¹⁰⁴¹ Cumbre Ministerial y de Altas Autoridades de América Latina y el Caribe, *Declaracion de Santiago "Para promover una inteligencia artificial ética en América Latina y el Caribe"* (Oct. 2023), https://minciencia.gob.cl/uploads/filer_public/40/2a/402a35a0-1222-4dab-b090-5c81bbf34237/declaracion_de_santiago.pdf.

¹⁰⁴² UNESCO, *UNESCO and Leading Ministry in Santiago de Chile host Milestone Regional LAC Forum on Ethics of AI* (Dec. 5, 2023), https://www.unesco.org/en/articles/unesco-and-leading-ministry-santiago-de-chile-host-milestone-regional-lac-forum-ethics-ai?hub=387.

¹⁰⁴³ UNESCO Global AI Ethics and Governance Observatory, *Country Profiles: Chile* (Oct. 2024), https://www.unesco.org/ethics-ai/en/chile

¹⁰⁴⁴ UNESCO Global AI Ethics and Governance Observatory, *Readiness Assessment Methodology* (2025), https://www.unesco.org/ethics-ai/en/ram

¹⁰⁴⁵ UNESCO, *Chile Launches National AI Policy and Introduces AI Bill following UNESCO's Recommendations* (May 4, 2024), https://www.unesco.org/en/articles/chile-launches-national-ai-policy-and-introduces-ai-bill-following-unescos-recommendations

¹⁰⁴⁶ Chamber of Deputies, *Legislature 372: Regulation of Artificial Intelligence Systems* [Spanish only] (May 7, 2024),

https://www.camara.cl/legislacion/ProyectosDeLey/tramitacion.aspx?prmID=17429&prmBOLE TIN=16821-19; for an overview in English, see Guillermo Carey, José Ignacio Mercado, and Ricardo Alonso, *Bill to Regulate Artificial Intelligence Systems Is Introduced to the Chilean Chamber of Deputies*, Carey, https://www.carey.cl/en/bill-to-regulate-artificial-intelligence-systems-is-introduced-to-the-chilean-chamber-of-deputies/

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example, by the decision to promote more open dialogue with civil society and the public about Al's potential risks and opportunities—are to be commended.

Chile has made in improvement in finalizing updates to the Chile's data protection law, establishing a regulatory oversight agency with adequate enforcement powers, and implementing enforceable standards in algorithmic transparency. The new AI Bill¹⁰⁴⁷ currently under deliberation addresses the issue of regulatory oversight and includes provisions for the establishment of a National Commission on Artificial Intelligence, ¹⁰⁴⁸ which will enforce and monitor compliance with the legislation. The recently updated data protection bill, ¹⁰⁴⁹ complemented by the Chilean Council for Transparency's recommendations on algorithmic transparency, 1050 have also made significant progress toward algorithmic transparency protections similar to those established under GDPR.

Though it is encouraging to see that Chile is employing public consultations to gather multi-stakeholder input for their National AI Policy updates, 1051 some of the timelines (such as 2 months) may prevent all affected stakeholders to be able to meaningfully share their perspectives on such complex issues. The proliferation of intrusive facial recognition technologies in public spaces could undermine Chile's ambitious AI agenda based on respect for human rights.

¹⁰⁴⁷ Chamber of Deputies, Legislature 372: Regulation of Artificial Intelligence Systems [Spanish only] (May 7, 2024),

https://www.camara.cl/legislacion/ProyectosDeLey/tramitacion.aspx?prmID=17429&prmBOLE TIN=16821-19; for an overview in English, see Guillermo Carey, José Ignacio Mercado, and Ricardo Alonso, Bill to Regulate Artificial Intelligence Systems Is Introduced to the Chilean Chamber of Deputies, Carey, https://www.carey.cl/en/bill-to-regulate-artificial-intelligencesystems-is-introduced-to-the-chilean-chamber-of-deputies/

¹⁰⁴⁸ Digital Policy Alert, Chile: Establishment of National Commission on Artificial Intelligence in Bill to Regulate AI systems, Robotics, and Related Technologies (Bill 15869-19) (Apr. 26, 2023), https://digitalpolicyalert.org/change/8827-establishment-of-national-commission-onartificial-intelligence-in-chile-nr-15869-19

¹⁰⁴⁹ Chamber of Deputies, Law 19.628 on Personal Data Protection, (Aug 29, 2024), https://www.carey.cl/wp-content/uploads/2024/08/Consolidado-PDL-datos-personales-aprobado-29.Aug .2024.pdf; unofficial English translation, https://www.carey.cl/wpcontent/uploads/2024/08/Texto-ley-ingles-clean.pdf

¹⁰⁵⁰ Council for Transparency (CPLT), Resolution No. 372: Approval Text of the Council for Transparency's Recommendations on Algorithmic Transparency, Official Journal of the Republic of Chile, Ministry of the Interior and Public Safety [Spanish] (Aug. 30, 2024), https://www.consejotransparencia.cl/wp-content/uploads/instruccion/2024/09/Informerecomendaciones-congreso-CPLT.pdf

¹⁰⁵¹ Ministry of Science, Technology, Knowledge and Innovation (MinCiencia), *Public* Consultation: National Policy on Artificial Intelligence: Results Report 2024 (2024), https://www.minciencia.gob.cl/areas/inteligencia-artificial/politica-nacional-de-inteligenciaartificial/

China

In 2024, China completed public consultation on measures for identifying synthetic AI-generated content and adopted the AI Safety Governance Framework. The country also adopted the G20 Ministerial Declaration promoting ethical AI for inclusive sustainable development in September.

National AI Strategy

Since 2013, the Chinese government has published several national-level policies, guidelines, and action plans, which reflect the intention to develop, deploy, and integrate AI in various sectors. In 2015, Prime Minister Li Keqiang launched the "Made in China" (MIC 2025) initiative aimed at turning the country into a production hub for high-tech products within the next few decades. 1052 In the same year, the State Council released guidelines on China's Internet + Action plan. 1053 It sought to integrate the internet into all elements of the economy and society. The document emphasized the importance of cultivating emerging AI industries and investing in research and development. The Central Committee of the Communist Party of China's 13th 5-year plan is another notable example. The document mentioned AI as one of the six critical areas for developing the country's emerging industries and as an essential factor in stimulating economic growth. 1054 The Robot Industry Development Plan, 1055 Special Action of Innovation and Development of Smart Hardware Industry, 1056 and Artificial Intelligence Innovation Action Plan for Higher Institutions 1057 illustrate detailed action plans and guidelines concerning specific sectors.

Most notable of all is the New Generation Artificial Intelligence Development Plan (AIDP) – an ambitious strategy to make China the world leader in AI by 2030 and the most transparent and influential indication of China's AI strategy's driving forces. China's State Council issued the AIDP in 2017. According to the Plan, AI should be used in a broad range of sectors, including

1052 State Council [国务院], Circular of the State Council on the issuance of Made in China 2025 [国务院关于印发《中国制造2025》的通知] (May 8, 2015),

https://www.gov.cn/zhengce/content/2015-05/19/content 9784.htm

https://www.gov.cn/zhengce/content/2015-07/04/content 10002.htm

https://en.ndrc.gov.cn/policies/202105/P020210527785800103339.pdf

1055 机器人产业发展规划 (2016-2020年)

https://www.ndrc.gov.cn/xxgk/zcfb/ghwb/201604/t20160427 962181.html

1056 智能硬件产业创新发展专项行动 (2016-2018 年) http://www.gov.cn/xinwen/2016-

09/21/content 5110439.htm

http://www.moe.gov.cn/jyb_xwfb/xw_fbh/moe_2069/xwfbh_2018n/xwfb_20180608/201806/t20180608_338911.html

¹⁰⁵³ State Council, China Unveils "Internet Plus Action Plan" to Fuel Growth (Jul. 4, 2015),

¹⁰⁵⁴ The Central Committee of the CPC, *The 13th Five Year Plan* (2016),

¹⁰⁵⁷ 高等学校人工智能创新行动计划

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defense and social welfare. The AIDP also indicates the need to develop standards and ethical norms for the use of AI. The actual innovation and transformation are expected to be driven by the private sector and local governments. The Chinese government has handpicked three major tech giants to focus on developing specific sectors of AI: Baidu, Alibaba, and Tencent. In return, these companies receive preferential contract bidding, more convenient access to finance, and sometimes market share protection.

Following the AIDP, the Ministry of Science and Technology published the New Generation Artificial Intelligence Development Code of Ethics (Code of Ethics). 1060 The New Generation AI Governance Professional Committee, consisting of experts from academics and the industry, 1061 created the Code of Ethics and is responsible for its implementation. The Code of Ethics aims to "thoroughly implement the AIDP, refine the principles of AIDP, enhance society's awareness and behavioural consciousness of AI ethics, actively guide responsible AI research, development, and application activities, as well as promote the healthy development of AI." The Code of Ethics highlights six fundamental ethical requirements: (1) "improving human well-being," (2) "promoting fairness and justice," (3) "protecting privacy and security," (4) "ensuring controllability, and trustworthiness," (5) "strengthening responsibility," and (6) "improving ethical literacy," taking ethical issues like privacy, biases, discrimination, and fairness into consideration. 1062 Thus, the Code of Ethics marks a step forward at the national level to develop ethical guidelines and principles for Artificial Intelligence.

On July 3rd, 2024, the Chinese government released official guidelines for a National Comprehensive Standardization System for the AI industry, marking

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¹⁰⁵⁸ 3-year plan promoting the AIDP (2018–2020) emphasizes coordination between provinces and local governments.

Meng Jing and Sarah Dai, *China recruits Baidu, Alibaba and Tencent to AI 'national team,'* South China Morning Post (Nov. 21, 2017), https://www.scmp.com/tech/china-tech/article/2120913/china-recruits-baidu-alibaba-and-tencent-ai-national-team

¹⁰⁶⁰ Ministry of Science and Technology of the People's Republic of China, *New Generation Artificial Intelligence Development Code of Ethics* [Chinese] (Sept. 26, 2021), https://perma.cc/RC4V-Q2FX; Center for Security and Emerging Technology, *Ethical Norms for New Generation Artificial Intelligence Released* [English translation] (Oct. 12, 2021), https://cset.georgetown.edu/wp-content/uploads/t0400 AI ethical norms EN.pdf

¹⁰⁶¹ Intelligent Hardware, *The National Artificial Intelligence Governance Professional Committee Was Established, Composed of Academic and Business Personnel* (Jun. 9, 2020), https://www.21ic.com/article/775428.html

¹⁰⁶² Ministry of Science and Technology of the People's Republic of China, *New Generation Artificial Intelligence Development Code of Ethics* [Chinese] (Sept. 26, 2021), https://perma.cc/RC4V-Q2FX; Center for Security and Emerging Technology, *Ethical Norms for New Generation Artificial Intelligence Released* [English translation] (Oct. 12, 2021), https://cset.georgetown.edu/wp-content/uploads/t0400 AI ethical norms EN.pdf

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yet another such step forward. The guidelines were released—after a draft release and public consultation period—by China's Cyberspace Administration, in partnership with several other technology-focused administrations, including the National Development & Reform Commission and the National Standardization Administration. The Standards are arranged into a complex set of primary standards and secondary standards. The primary standards are:

- 1. Basic Common Standards
- 2. Basic Support Standards
- 3. Key Technical Standards
- 4. Standards for Smart Products and Services
- 5. Enabling New Industrialization Standards
- 6. Industry Application Standards
- 7. Security/Governance Standards.

It is important to note that none of the Standards are substantive, leaving room for further developments. The entire Standardization System is therefore more of a strict framework or roadmap. This intricate series of standards represents China's new approach to regulating Artificial Intelligence at the National Level. 1063

The National Development and Reform Commission issued guidelines for a National Data Standards System in 2024 to activate data's potential, an adjacent but important area for AI strategy. These guidelines build on the National Artificial Intelligence Industry Comprehensive Standardization System by expanding upon different expectations of several of the previous categories. Among the processes set to be standardized by this set of guidelines are Data aggregation technical standards and 5G data transmission network standards. Given the recent release of these Data Standards, it remains to be seen how they will be implemented. 1064

Regarding local governments, there is a system of incentives for fulfilling national government policy aims. For this reason, local governments often become a testing ground for the central government's policies. Chinese cities and provinces, as well as regional administrations, compete for the new AI incentives. Large metropolises, such as Tianjin and Shanghai, have already launched multi-

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¹⁰⁶³ Cyberspace Administration of China, Notice of four departments on issuing the Guidelines for the Construction of the National Artificial Intelligence Industry Comprehensive Standardization System (2024 Edition) [四部门关于印发国家人工智能产业综合标准化体系

建设指南 (2024版) 的通知 J (Jul. 3, 2024), https://www.cac.gov.cn/2024-07/03/c 1721686809220407.htm

To64 Cyberspace Administration of China, Notice of the National Development and Reform Commission and other departments on issuing the "Guidelines for the Construction of the National Data Standards System [国家发展改革委等部门关于印发《国家数据标准体系建设指南》的通知] (Oct. 11, 2024), https://www.cac.gov.cn/2024-10/11/c 1730337907916423.htm

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billion-dollar AI city Venture Capital funds and converted entire districts and islands for new AI companies. Shenzhen and Shanghai have taken the lead to create policies and standards for the Artificial Intelligence industry in China at the provincial level. Coming into effect on November 1, 2022, the Regulations on the Promotion of Artificial Intelligence Industry in Shenzhen, in particular, marked the birth of the country's first regulation on the AI industry. Shanghai, in the meantime, published Regulations of Shanghai on Promoting the Development of Artificial Intelligence Industry, coming into effect on October 1, 2022. The two Regulations aim to promote the innovation and development of the AI industry in their provinces for the benefit of citizens, society, and the economy. Both Regulations establish mechanisms and Committees of AI Ethics to develop AI ethics policy and standards as well as provide guidance on AI ethics.

The establishment of the New Generational AI Governance Professional Committee at the national level and Committees of AI Ethics at the provincial level embodies the creation of a monitoring regime for the guidance and supervision of AI and AI ethics. The impact of the oversight of AI in policy implementation processes as well as the level of independence of these mechanisms remains unclear.

Management of Algorithmic Recommendations

China has started to adopt a comprehensive set of regulations on AI. The Provisions on the Management of Algorithmic Recommendations in Internet Information Services came into force in March 2022. 1067 The Provisions apply to any entity that uses algorithm recommendation technologies to provide Internet information services within Mainland China. The Provisions require companies to register algorithms to an online database to the extent that the algorithm has public opinion properties or social mobilization capabilities. Companies shall also complete an algorithm security self-assessment report. Users shall have the right to opt out of recommendation algorithms. The use of recommendation algorithms for illegal or harmful purposes is prohibited.

http://www.szrd.gov.cn/rdlv/chwgg/content/post_834228.html

¹⁰⁶⁵ Shenzhen Municipal People's Congress Standing Committee, *Regulations on the Promotion of Artificial Intelligence Industry in Shenzhen* (Sept. 5, 2022),

¹⁰⁶⁶ Shanghai Municipal People's Congress Standing Committee, Regulations of Shanghai on Promoting the Development of Artificial Intelligence (Sept. 22, 2022), http://www.shrd.gov.cn/n8347/n8467/u1ai248931.html

¹⁰⁶⁷ The Cyber Administration of China, the Ministry of Information and Industry Technology, the Ministry of Public Security of the People's Republic of China, and State Administration for Market Regulation, *Provisions on the Management of Algorithmic Recommendations in Internet Information Services* (Dec. 31, 2021), http://www.cac.gov.cn/2022-01/04/c 1642894606364259.htm

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Deep Synthesis Regulations

In January 2023, the Cyberspace Administration of China (CAC) introduced new regulations regarding deepfake content. The regulations were formulated in order to "carry forward the core Socialist value vision, to safeguard national security and the societal public interest." It prohibits the production of deepfakes without user consent and requires specific identification that the content had been generated using AI. Any content that was created using an AI system must be clearly labeled with a watermark i.e., text or image visually superimposed on the video indicating that the content had been edited. Deep synthesis services cannot use the technology to disseminate fake news. Content that goes against existing laws is prohibited, as is content that endangers national security and interests, damages the national image or disrupts the economy. 1068 The Cyberspace Administration of China published a draft on Measures for the Identification of Synthetic Content Generated by AI in September 2024. This instrument aims to standardize the labeling of AI-generated content by internet information service providers with requirements for production, display, and distribution. Service providers must embed explicit labels in files containing AI-generated content and include implicit labels with production details as per regulatory standards. If services include downloading, reproducing, or exporting generated synthetic content, service providers "shall ensure that the files contain explicit labels that satisfy these requirements." Additionally, service providers are required to inform users of labeling specifications in service agreements. The draft was open for public comments, after which the final version will be published. 1069

Generative Al Measures

The Provisional Administrative Measures of Generative Artificial Intelligence Services (Generative AI Measures) were published by the Cyberspace Administration of China (CAC), together with six other authorities, on 13 July 2023 and took effect on 15 August 2023. The Generative AI Measures apply to "the use of generative AI technology to provide services for generating text, pictures, sounds, videos and other content within the territory of China". They will

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https://digichina.stanford.edu/work/translation-internet-information-service-deep-synthesis-management-provisions-draft-for-comment-jan-2022/

https://www.tc260.org.cn/upload/2024-09-14/1726290836419027596.pdf

¹⁰⁶⁸ Cyberspace Administration of China, *Regulations on the In-depth Synthesis Management of Internet Information Services*, (December 22, 2022), http://www.cac.gov.cn/2022-12/11/c 1672221949318230.htm; Stanford University, *Translation*,

¹⁰⁶⁹TC260, Cybersecurity technology—Labeling method for content generated by artificial intelligence [网络安全技术人工智能生成合成内容标识方法] (Sept. 20, 2024),

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apply to domestic companies and to overseas generative AI service providers offering AI services in China to the public."1070

AI Ethics

The AIDP goes as far as to outline a specific desire for China to become a world leader in defining ethical norms and standards for AI.¹⁰⁷¹ There has been a recent wave of attempts to define ethical standards by both government bodies and private companies.

In 2017, China's Artificial Intelligence Industry Alliance (AIIA), released a draft "joint pledge" on self-discipline in the AI industry—emphasizing AI ethics, safety, standardization, and international engagement. ¹⁰⁷²

In 2019, the Beijing Academy of Artificial Intelligence (BAAI) released the Beijing AI Principles¹⁰⁷³ to be followed for the research and development, use, and governance of AI. The Beijing Principles are centered around doing good for humanity, using AI "properly," and having the foresight to predict and adapt to future threats. But just like other principles presented, they are still very vague.

In line with these principles, Governance Principles for Developing Responsible Artificial Intelligence¹⁰⁷⁴ was prepared in 2019, by the National New Generation Artificial Intelligence Governance Expert Committee which was established by China's Ministry of Science and Technology. This document outlines eight principles for the governance of AI: harmony and friendliness, fairness and justice, inclusivity, and sharing, respect for human rights and privacy, security, shared responsibility, open collaboration, and agility to deal with new and emerging risks. Above all else, AI development should begin by enhancing the common well-being of humanity, states the document.

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¹⁰⁷⁰ Cyberspace Administration of China. *Interim Measures for Generative Artificial Intelligence Service Management* (Jul. 13,2023), http://www.cac.gov.cn/2023-07/13/c 1690898327029107.htm

¹⁰⁷¹ China's New Generation Artificial Intelligence Development Plan [English translation] (Jul. 20, 2017), https://www.newamerica.org/cybersecurity-initiative/digichina/blog/full-translation-chinas-new-generation-artificial-intelligence-development-plan-2017/

¹⁰⁷² Chinese AI Alliance Drafts Self-Discipline 'Joint Pledge' [English translation] (Jun. 17, 2019), https://www.newamerica.org/cybersecurity-initiative/digichina/blog/translation-chinese-ai-alliance-drafts-self-discipline-joint-pledge/

¹⁰⁷³ State Council, *Beiing Publishes AI Ethical Standards, Calls for Intl Cooperation* (May 27, 2019), https://english.www.gov.cn/news/top_news/2019/05/27/content_281476683735418.htm; https://english.www.gov.cn/news/top_news/2019/05/27/content_281476683735418.htm; https://eichics-and-governance.institute/beijing-artificial-intelligence-principles/

¹⁰⁷⁴ Chinese Expert Group Offers 'Governance Principles' for 'Responsible AI' [English translation] (Jun. 17, 2019), https://www.newamerica.org/cybersecurity-initiative/digichina/blog/translation-chinese-expert-group-offers-governance-principles-responsible-ai/

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Another important document is a white paper on AI standards¹⁰⁷⁵ released in 2018 by the Standardization Administration of the People's Republic of China, the national-level body responsible for developing technical standards. Three key principles for setting the ethical requirements of AI technologies are (1) the ultimate goal of AI is to benefit human welfare; (2) transparency and the need to establish accountability as a requirement for both the development and the deployment of AI systems and solutions; (3) protection of intellectual property.

In April 2022, China published "Opinions on Strengthening the Management of Science and Technology Ethics,¹⁰⁷⁶ which is the first national policy on tech ethics. The document proposes five principles to supervise and review technology ethics. It calls for the establishment of the China Science and Technology Ethics Society and ethical supervision in AI research.

It is apparent that these principles bear some similarities to the OECD AI Principles. Nevertheless, the principles established in China place a greater emphasis on social responsibility, community relations, national security, and economic growth, with relatively less focus on individual rights. However, establishing ethical AI principles can be viewed as a first step and a signal that China wishes to become engaged in a dialogue with international partners.

Public Participation

There is a growing concern in China about the misuse of personal data and the risk of data breaches. In a 2018 survey by the Internet Society of China, 54% of respondents stated that they considered the problem of personal data breaches as "severe." The World Economic Forum suggests that 2018-2019 "could be viewed as the time when the Chinese public woke up to privacy." According to the WEF, a controversy arose in 2019 when the Zao app, using AI and machine learning techniques, allowed users to swap faces with celebrities in movies or TV shows. 1078 "It went viral as a tool for creating deepfakes, but concerns soon arose as people noticed that Zao's user agreement gave the app the global rights to use any image or video created on the platform for free." The company later clarified

¹⁰⁷⁵ Jeffrey Ding and Paul Triolo, *Translation: Excerpts from China's 'White Paper on Artificial Intelligence Standardization*,' New America (Jun. 20, 2018),

https://www.newamerica.org/cybersecurity-initiative/digichina/blog/translation-excerpts-chinas-white-paper-artificial-intelligence-standardization/

¹⁰⁷⁶ General Office of the CPC Central Committee General Office of the State Council, *Opinions on Strengthening the Management of Science and Technology Ethics* (Mar. 20, 2022), http://www.gov.cn/gongbao/content/2022/content/5683838.htm

¹⁰⁷⁷ Technology Review, *China's citizens do care about their data privacy, actually* (Mar. 28, 2018), https://www.technologyreview.com/2018/03/28/67113/chinas-citizens-do-care-about-their-data-privacy-actually/

¹⁰⁷⁸ World Economic Forum, *China is waking up to data protection and privacy. Here's why that matters* (Nov. 12, 2019), https://www.weforum.org/agenda/2019/11/china-data-privacy-laws-guideline/

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that the app would not store any user's facial information. Chinese consumers also challenged Alibaba when they learned that they had been enrolled in a credit scoring system by default and without consent. "Under pressure, Alibaba apologized."

At the 2022 World Artificial Intelligence Conference, the Shanghai Artificial Intelligence Laboratory Governance Research Center, Tsinghua University, and Fudan University jointly launched an open platform for artificial intelligence ethics – OpenEGLab. ¹⁰⁷⁹ There are five major sections in the platform including rule sets, governance maps, risk displays, evaluation frameworks, and industry solutions. The rule set is dedicated to building a global governance knowledge base. Currently, about 1,500 marked rule documents have been included, including ethical principles, policy strategies, laws, regulations, and standards.

All recently adopted regulations, from those tackling Deepfake to those addressing facial recognition, have been opened for comments.

Data Protection

In recent years, China has introduced a number of major data protection laws, including the Personal Information Protection Law (PIPL) (effective from November 1, 2021) and the Data Security Law (DSL) (effective from September 1, 2021), together with a series of implementation regulations and administrative rules. The PIPL¹⁰⁸⁰ establishes a new comprehensive regulatory framework for personal information protection in China, requiring consents as its principal basis for data collection and handling, introducing provisions with extraterritorial effect, restricting cross border data transfers and imposing significant revenue-based fines for non-compliant conduct. The law is modeled after the EU GDPR¹⁰⁸¹ however the law places a greater emphasis on how private companies may collect and use data rather than the use of data by authorities. For instance, Article 26 on personal images and facial recognition allows the collection of unlimited amounts of personal data so long as it is done "for the purpose of safeguarding public

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¹⁰⁷⁹ Sina Finance, "Dandelion" artificial intelligence governance open platform OpenEGLab unveiled at the World Artificial Intelligence Conference (Sept. 0, 2022), https://finance.sina.com.cn/jjxw/2022-09-02/doc-imizmscv8823494.shtml?cref=cj

¹⁰⁸⁰ The PRC Personal Information Protection Law (Final): A Full Translation, China Briefing (Aug. 24, 2021), https://www.china-briefing.com/news/the-prc-personal-information-protection-law-final-a-full-translation/

¹⁰⁸¹ Gabriela Zanfir-Fortuna, *China's Draft Personal Information Protection Law in 13 Key Points*, The StartUp (Nov. 3, 2020), https://medium.com/swlh/chinas-draft-personal-information-protection-law-in-13-key-points-5a9b9cdcf02c; Gil Zhang and Kate Yin, *A look at China's draft of Personal Data Protection Law*, IAPP (Oct. 26, 2020), https://iapp.org/news/a/a-look-at-chinas-draft-of-personal-data-protection-law/

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security."¹⁰⁸² That is to say, the law does not limit the government's ability to collect or store biometric data obtained through facial recognition. In contrast, the EU GDPR sees personal images as sensitive biometric data and requires Data Protection Impact Assessment (DPIA) for facial recognition technology. Finally, the law does not assign responsibilities when it comes to government entities that collect personal data, and who will be held responsible when it leaks. This becomes increasingly important with the rise of recent incidents of government leaks of the personal information of its citizens.¹⁰⁸³ Nevertheless, as the big data industry has been rapidly growing in China, the law provides more protection to users against unwanted data collection by private companies.

In March 2023, China's Ministry of Science and Technology established the National Data Administration (NDA). The NDA will be "responsible for the coordination and advancement of building the data factor system; for overall planning of the integrated sharing and development and use of data resources; for overall planning and advancement of Digital China, digital economy; and digital society plans and construction". The new regulator will have responsibilities that were previously performed by the Cyberspace Administration of China and by the National Development and Reform Commission. 1085

Algorithmic Transparency

Article 4 of the Interim Measures for Generative Artificial Intelligence Services refers to "effective measures to increase transparency in generative AI services and to increase the accuracy and reliability of generated content" based on the "service type." The National Information Security Standardization Technical Committee (T260) then released the Basic Requirements for Security of Generative Artificial Intelligence Service¹⁰⁸⁶ with specific requirements for

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¹⁰⁸² The PRC Personal Information Protection Law (Final): A Full Translation, China Briefing (Aug. 24, 2021), https://www.china-briefing.com/news/the-prc-personal-information-protection-law-final-a-full-translation/

¹⁰⁸³ China, coronavirus and surveillance: the messy reality of personal data, Financial Times (Apr. 2, 2020), https://www.ft.com/content/760142e6-740e-11ea-95fe-fcd274e920ca; Paul Mozur, China, Desperate to Stop Coronavirus, Turns Neighbor Against Neighbor, New York Times (Feb. 3, 2020), https://www.nytimes.com/2020/02/03/business/china-coronavirus-wuhan-surveillance.html; Personal data leaks spread along with coronavirus panic, TechNode, https://technode.com/2020/02/03/wuhan-data-leak-coronavirus/

¹⁰⁸⁴ Graham Webster, *Translation: Establishing the National Data Administration* (Mar. 7, 2023), https://digichina.stanford.edu/work/translation-establishing-the-national-data-administration-march-2023/

¹⁰⁸⁵ Matt Sheehan, *China's AI Regulations and How They Get Made* (July 10, 2023), https://carnegieendowment.org/2023/07/10/china-s-ai-regulations-and-how-they-get-made-pub-90117

¹⁰⁸⁶ TC260, *Basic Security Requirements for Generative Artificial Intelligence Service* [Chinese] (Feb 29, 2024),

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providing users with information about the service and its functioning. Enforcement of those requirements is currently rolled out as an AI-content oversight campaign by Cyberspace Administration of China (CAC)¹⁰⁸⁷ and might be further aided via emerging AI standardization guidelines. The Ministry of Industry and Information Technology's target is that at least 60% of these prospective standards will be implemented in "general key technologies and application development projects," with over 1,000 Chinese companies championing early adoption. 1088

The Provisions on the Management of Algorithmic Recommendations in Internet Information Services¹⁰⁸⁹ highlight the principles of "openness" and "transparency" while establishing legal liabilities for violations of these principles. Article 4 Chapter I emphasizes that "the provision of algorithm recommendation services shall comply with laws and regulations, respect social morality and ethics, abide by business ethics and professional ethics, and follow the principles of fairness, openness and transparency, scientific reasonableness, and good faith." Companies shall be transparent regarding how their recommendation algorithms are trained and deployed, including which datasets the algorithm is trained on. Article 12 states, "Algorithmic recommendation service providers are encouraged to [...] optimize the transparency and understandability of search, ranking, selection, push notification, display, and other such norms, to avoid creating

https://r20.rs6.net/tn.jsp?f=001pj3d7jmlz5jl_zRd0E6YkD4VVMiysn72vz_KvsRIRLU6SqstlRy8zNaTHgLb2iJBNdLmegrk4Pc-

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¹⁰⁸⁷ Global Times, *China's cyberspace regulator launches campaign to oversee AI-generated content* (Mar. 15, 2024), https://www.ecns.cn/news/sci-tech/2024-03-15/detail-ihcyptyk0579386.shtml

Ministry of Industry and Information Technology of the People's Republic of China, Guidelines for the Construction of a National Comprehensive Standardization System for the Artificial Intelligence Industry (Draft Open for Public Comments) (Jan. 17, 2024), https://www.miit.gov.cn/jgsj/kjs/gzdt/art/2024/art_956f95c93db8432e824b5e68dcc7d2fc.html; https://www.miit.gov.cn/cms_files/filemanager/1226211233/attach/202311/7240bd43f3fc4b598351f9b135e68e4a.pdf

[5] Josh Ye, *China issues draft guidelines for standardising AI industry* (Jan. 18, 2024), https://www.reuters.com/technology/china-issues-draft-guidelines-standardising-ai-industry-2024-01-17/

¹⁰⁸⁹ The Cyber Administration of China, the Ministry of Information and Industry Technology, the Ministry of Public Security of the People's Republic of China, and State Administration for Market Regulation, *Provisions on the Management of Algorithmic Recommendations in Internet Information Services* (Dec. 31, 2021) http://www.cac.gov.cn/2022-01/04/c 1642894606364259.htm

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harmful influence on users, and prevent or reduce controversies or disputes." Chapter V establishes clear legal liability for non-compliance to and violation of the Provisions, including "the suspension of information updates and a fine of between 10,000 and 10,000 RMB, administration punishments or sanctions such as ordering the closure of websites, revoking relevant business permits, or revoking business licenses."

Article 24 Chapter II, Section 1 of the PIPL provides, "Where personal information processors use personal information to make automatic decisions, the transparency of decision-making and the fairness and justice of the results shall be ensured, and shall not impose unreasonable differential treatment on individuals in terms of transaction price and other transaction conditions.

Where business marketing and information push are carried out through automatic decision-making, options not based on his/her personal characteristics shall be provided at the same time, or a convenient way for individuals to reject shall be provided.

Where automatic decision-making has a significant impact on individual's rights and interests, he/she has the right to require the personal information processor to give an explanation, and to reject the decision made by the personal information processor only through automatic decision-making." ¹⁰⁹⁰

Social Governance

Social governance is another area in which AI is promoted as a strategic opportunity for China. The Chinese authorities focus on AI as a way of overcoming social problems and improving the welfare of citizens. ¹⁰⁹¹ Specifically, in seeking to further the following goals on healthcare reform, ¹⁰⁹² environmental protection ¹⁰⁹³, the administration of justice, ¹⁰⁹⁴ and the

¹⁰⁹⁰ *The PRC Personal Information Protection Law (Final): A Full Translation*, China Briefing (Aug. 24, 2021), https://www.china-briefing.com/news/the-prc-personal-information-protection-law-final-a-full-translation/

¹⁰⁹¹ Heilmann, *Big data reshapes China's approach to governance*, Financial Times (2017), https://www.ft.com/content/43170fd2-a46d-11e7-b797-b61809486fe2

Andy Ho, *AI can solve China's doctor shortage. Here's how*, World Economic Forum (2018), https://www.weforum.org/agenda/2018/09/ai-can-solve-china-s-doctor-shortage-here-s-how/

¹⁰⁹³ Genia Kostka and Chunman Zhang, *Tightening the grip: environmental governance under Xi Jinping*, Environ Politics, 27(5):769–781(2018),

https://doi.org/10.1080/09644016.2018.1491116; AI-powered Waste management underway in China, People's Daily Online (2019), http://en.people.cn/n3/2019/0226/c98649-9549956.html

1094 Susan Finder, China's master plan for remaking its courts, The Diplomat (Mar. 26, 2015), https://thediplomat.com/2015/03/chinas-master-plan-for-remaking-its-courts/; Anthony H.F. Li, Centralization of power in the pursuit of law-based governance: legal reform in China under the Xi Administration, China Prospect (2016),

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implementation of the Social Credit System or Social Score. Another concrete example of how China is using AI in social governance can be seen in the sphere of internal security and policing. China has been at the forefront of the development of smart cities equipped with surveillance technologies, such as facial recognition and cloud computing. A recent proposal for the southwestern Chinese city of Chongqing would put "AI in charge." Today half of the world's smart cities are located in China. This exemplifies the Chinese government's intent to rely on AI technology for social governance and also to control the behavior of its citizens. 1097

Facial Recognition

As early as the 2008 Beijing Olympics, China began to deploy new technologies for mass surveillance. China put in place more than two million CCTV cameras in Shenzen, making it the most-watched city in the world. In recent years, the techniques for mass surveillance have expanded rapidly, most notably in Shenzen, also to oversee the Muslim minority group the Uyghurs, and in Hong Kong. Modern systems for mass surveillance rely on AI techniques for such activities as facial recognition, communications analysis, and location tracking. As one industry publication has reported, In the world of surveillance, no country invests more in its AI-fueled startups and growth-stage businesses than China. And no technology epitomizes this investment more than facial recognition—a technology that courts more controversy than almost any other. Torbes continues, But a thriving domestic tech base has done nothing to quell the concerns of citizens. China is held up as a Big Brother example of

https://www.proquest.com/openview/90decf000a9bb78a34628047caad47b0/1.pdf?cbl=2030684 &loginDisplay=true&pq-origsite=gscholar

¹⁰⁹⁵ Severine Arsene, China's Social Credit System: A Chimera with Real Claws, Asie Visions (2019),

https://www.ifri.org/sites/default/files/atoms/files/arsene_china_social_credit_system_2019.pdf
1096 Umberto Bacchi, 'I know your favorite drink': Chinese smart city to put AI in charge, Reuters (Dec. 5, 2020), https://www.reuters.com/article/technology/i-know-your-favourite-drink-chinese-smart-city-to-put-ai-in-charge-idUSL8N2IJ24L/

¹⁰⁹⁷ Statista, *Smart Cities – China*, https://www.statista.com/outlook/tmo/internet-of-things/smart-cities/china

Laws and Developments (Report on People's Republic of China) (2006),

http://www.worldlii.org/int/journals/EPICPrivHR/2006/PHR2006-People s.html Naomi Wolf, *China's All-Seeing Eye*, Rolling Stone (May 15, 2018),

https://www.commondreams.org/views/2008/05/15/chinas-all-seeing-eye

¹¹⁰⁰ Zak Doffman, *Hong Kong Exposes Both Sides Of China's Relentless Facial Recognition Machine*, Forbes (Aug. 26, 2019), https://www.forbes.com/sites/zakdoffman/2019/08/26/hong-kong-exposes-both-sides-of-chinas-relentless-facial-recognition-machine/

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what should be avoided by campaigners in the West, but that doesn't help people living in China."

However, the Supreme People's Court of the People's Republic of China adopted and released the Provisions on Several Issues Concerning the Application of Law in the Trial of Civil Cases Relating to the Use of Facial Recognition Technology to Process Personal Information, which came into effect on August 1, 2021. The Provisions aim to "hear civil cases relating to the use of facial recognition technology in processing personal information, protect the lawful rights and interests of litigants, and promote the healthy development of the digital economy," in accordance with "Provisions of the Civil Code of the People's Republic of China, the Cybersecurity Law of the People's Republic of China, the Law of the People's Republic of China on the Protection of Consumer Rights and Interests, the E-Commerce Law of the People's Republic of China, and other laws, and in conjunction with trial practice."

In particular, the Supreme People's Court highlights that the Provisions apply to civil cases arising from violations of the provisions of laws, administrative regulations, or the agreement of both parties to process facial information, which refers to biometrics information or facial information generated through facial recognition technologies. In this regard, the Provisions establish civil liabilities for the infringement of the rights and interests of natural persons in the process of biometrics data and information in the application of facial recognition technologies, which was republished and redistributed by local People's Courts. Before the enforcement of the Provisions regulating facial recognition technology, the China Academy for Information and Communications Technology (CAICT), a national think tank administrated by the Ministry of Industry and Information Technology, initiated the Trustworthy Facial Recognition Protection Plan in response to issues including "privacy leakage, technology abuse, biases and discrimination" in the

^{**}Initial The Supreme People's Court of the People's Republic of China (中华人民共和国最高人民 法院), Provisions on Several Issues Concerning the Application of Law in the Trial of Civil Cases Relating to the Use of Facial Recognition Technology to Process Personal Information (Jul. 27, 2021), http://gongbao.court.gov.cn/Details/118ff4e615bc74154664ceaef3bf39.html Ibid

¹¹⁰³ Henan Provincial Higher People's Court, Provisions of the Supreme People's Court on Several Issues Concerning the Application of Law in the Trial of Civil Cases Related to the Use of Facial Recognition Technology to Process Personal Information (Jan. 29, 2022), http://pdszhfy.hncourt.gov.cn/public/detail.php?id=3181; Panshan County People's Court of Liaoning Province, Provisions of the Supreme People's Court on Several Issues Concerning the Application of Law in the Trial of Civil Cases Related to the Use of Facial Recognition Technology to Process Personal Information (Oct. 29, 2021), http://pips.lncourt.gov.cn/article/detail/2021/10/id/6337395.shtml

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development and application of facial recognition technologies while encouraging self-discipline of the industry. 1104

There are many reports on China's use of facial recognition technology against ethnic minorities. The discriminatory ways in which state organs, companies, and academics have researched, developed, and implemented facial recognition in China would seem not to comply with the OECD AI Principles or the Governance Principles for the New Generation Artificial Intelligence. The deployment of facial recognition has also provoked opposition within China. This gap between stated ethical principles and on-the-ground applications of AI demonstrates the weakness of unenforceable ethics statements. 1107

In September 2019, China's information-technology ministry announced that telecom carriers must scan the face of anyone applying for mobile and internet service. There are over 850 million mobile Internet users in China. Meanwhile, the Hong Kong government invoked emergency powers in October 2019 to ban demonstrators from wearing face masks. 1109

Protests in Hong Kong over the use of facial surveillance are widespread. Umbrellas once used to deflect pepper spray, are now deployed to shield protester activities from the digital eyes of cameras. ¹¹¹⁰ It is notable that the battle over the use of facial surveillance in Hong Kong began with widespread public protests about a national security law that extended police authority over the semi-autonomous region. ¹¹¹¹ According to the AP, "Young Hong Kong residents protesting a proposed extradition law that would allow suspects to be sent to China for the trial are seeking to safeguard their identities from potential retaliation by

¹¹⁰⁴ Biometric Update, *Telpo Joins Chinese Facial Recognition Best Practices Group* (Feb. 14, 2022), https://www.biometricupdate.com/202202/telpo-joins-chinese-facial-recognition-best-practices-group

¹¹⁰⁵ Joi Ito, My talk at the MIT-Harvard Conference on the Uyghur Human Rights Crisis (May 2, 2019), https://doi.org/10.31859/20190502.0901

Seungha Lee, *Coming into Focus: China's Facial Recognition Regulations*, Center for Strategic and International Studies (May 4, 2020), https://www.csis.org/blogs/trustee-china-hand/coming-focus-chinas-facial-recognition-regulations

¹¹⁰⁷ See the section of this country report, AI and Surveillance.

¹¹⁰⁸ Jane Li, *Getting a new mobile number in China will involve a facial-recognition test*, Quartz (Oct. 3, 2019), https://qz.com/1720832/china-introduces-facial-recognition-step-to-get-new-mobile-number/

¹¹⁰⁹ Ilara Maria Sala, *Hong Kong is turning to a 1922 law that was used to quell a seamen's strike to ban face masks*, Quartz (Oct. 4, 2019), https://qz.com/1721951/anti-mask-law-the-1922-origins-of-hong-kongs-emergency-powers/

¹¹¹⁰ Paul Mozur and Lin Qiqing, *Hong Kong Takes Symbolic Stand Against China's High-Tech Controls*, New York Times (Oct. 3, 2019),

https://www.nytimes.com/2019/10/03/technology/hong-kong-china-tech-surveillance.html BBC, *Hong Kong security law: What is it and is it worrying*? (Jun. 30, 2020), https://www.bbc.com/news/world-asia-china-52765838

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authorities employing mass data collection and sophisticated facial recognition technology."1112

China is also exporting the model of mass surveillance by facial recognition to other parts of the world. A detailed report, published in *The Atlantic* in September 2020, stated that "Xi Jinping is using artificial intelligence to enhance his government's totalitarian control—and he's exporting this technology to regimes around the globe." According to *The Atlantic*, "Xi's pronouncements on AI have a sinister edge. Artificial intelligence has applications in nearly every human domain, from the instant translation of spoken language to early viral outbreak detection. But Xi also wants to use AI's awesome analytical powers to push China to the cutting edge of surveillance. He wants to build an all-seeing digital system of social control, patrolled by precog algorithms that identify potential dissenters in real-time."

In September 2020, the United States State Department issued voluntary guidelines for American companies "to prevent their products or services (...) from being misused by government end-users to commit human rights abuses." ¹¹¹⁴ The report came amid growing concern that China is rapidly exporting its own surveillance capabilities to authoritarian regimes around the world, as part of its Belt and Road Initiative (BRI). ¹¹¹⁵ But the Washington Post highlighted the ongoing role of US-made technology in the sweeping surveillance of China, and notably the Uighur Muslim minority. ¹¹¹⁶ The Washington Post explained that "the aim is to monitor cars, phones, and faces—putting together patterns of behavior for 'predictive policing' that justifies snatching people off the street for imprisonment or so-called reeducation. This complex opened four years ago, and

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¹¹¹² Christopher Bodeen, *Hong Kong protesters wary of Chinese surveillance technology* (Jun.

^{13, 2019),} https://apnews.com/article/028636932a874675a3a5749b7a533969

¹¹¹³ Ross Anderson, *The Panopticon is Already Here*, The Atlantic (Sept. 2020), https://www.theatlantic.com/magazine/archive/2020/09/china-ai-surveillance/614197/

¹¹¹⁴ U.S. Department of State, Bureau of Democracy, Human Rights, and Labor, *U.S. Department of State Guidance on Implementing the "UN Guiding Principles" for Transactions Linked to Foreign Government End-Users for Products or Services with Surveillance Capabilities* (Sept. 30, 2020), https://2017-2021.state.gov/key-topics-bureau-of-democracy-human-rights-and-labor/due-diligence-guidance

¹¹¹⁵ Abhijnan Rej, US Issues Human Rights Guidelines for Exporters of Surveillance Tech: The directions to American businesses come amid growing concern around China's export of advanced mass-surveillance capabilities to more than 60 countries, The Diplomat (Oct. 2, 2020), https://thediplomat.com/2020/10/us-issues-human-rights-guidelines-for-exporters-of-surveillance-tech/

¹¹¹⁶ The Washington Post, Editorial, *U.S.-made technologies are aiding China's surveillance of Uighurs. How should Washington respond?* (Nov. 28, 2020),

https://www.washingtonpost.com/opinions/us-made-technologies-are-aiding-chinas-surveillance-of-uighurs-how-should-washington-respond/2020/11/26/0218bbb4-2dc9-11eb-bae0-50bb17126614 story.html

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it operates on the power of chips manufactured by U.S. supercomputer companies Intel and Nvidia." The Post editorial followed a New York Times investigation which found extensive involvement by U.S. firms in the Chinese surveillance industry. 1117

Facial recognition technology will also be pushed forward with the development of humanoid robots to be deployed across all sectors of social life by 2025. The draft Shenzhen Accelerates High-level Application Action Plan for Promoting the High-quality Development of Artificial Intelligence (2023–2024) released in May 2023 mentions the deployment of "general-purpose embodied intelligent robots" and "large-scale application of humanoid robots".

In August 2023, the Cyberspace Administration of China also released a draft of regulation for facial recognition technology. Article 4 states that "facial recognition technology may only be used to handle facial information where there are specified purposes and sufficient need, and where strict protective measures are employed. Where other non-biometric identification schemes exist that can realize the same goals or achieve the same operational requirements, priority shall be given to the non-biometric identification schemes." Regulations impose a necessity for full informed and individual consent and transparency in use of this technology in public spaces and compliance with data protection regulations.¹¹²⁰

AI and Public Health

In China, the ultimate ambition of AI is to liberate data for public health purposes. The AIDP outlines the ambition to use AI to "strengthen epidemic intelligence monitoring, prevention and control," and to "achieve breakthroughs in big data analysis, Internet of Things, and other key technologies" for the

Recognition Technology Applications (Trial) (Draft for Comments), (Aug. 2023), http://www.cac.gov.cn/2023-08/08/c_1693064670537413.htm; [English Translation] https://www.chinalawtranslate.com/en/facial-recognition-draft

¹¹¹⁷ Paul Mazur and Don Clark, *China's Surveillance State Sucks Up Data. U.S. Tech Is Key to Sorting It: Intel and Nvidia chips power a supercomputing center that tracks people in a place where government suppresses minorities, raising questions about the tech industry's responsibility* (Nov. 22, 2020), https://www.nytimes.com/2020/11/22/technology/china-intel-nvidia-xinjiang.html

¹¹¹⁸ Ministry of Industry and Information Technology, *Guiding Opinions on the Innovation and Development of Humanoid Robots [English Interpretation]* (Nov. 2, 2023), https://www.miit.gov.cn/zwgk/zcjd/art/2023/art_e3f5686c2f0d49f9968b7ae011d558e1.html

General Office of the Shenzhen Municipal Committee of the Communist Party of China and the General Office of the Shenzhen Municipal People's Government, *Shenzhen Action Plan to Accelerate the High-Quality Development and High-level Application of Artificial Intelligence (2023-2024)*, (May 31, 2023), http://sz.people.com.cn/n2/2023/0531/c202846-40438647.html

The development of China, *Regulations on Security Management of Facial Proceedings of China (Text) (Development and China (Development and China) (Apr. 2023)*

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purpose of strengthening intelligent health management.¹¹²¹ The State Council's 2016 official notice on the development and use of big data in the healthcare sector also explicitly states that health and medical big data sets are a national resource and that their development should be seen as a national priority to improve the nation's health.¹¹²² However, there is a rising concern that relaxed privacy rules and the transfer of personal data between government bodies will promote the collection and aggregation of health data without the need for individual consent.¹¹²³

Beijing Municipal Health Commission strictly prohibited the use of AI for automatically generating medical prescriptions and regulated various online healthcare activities with the draft set of 41 rules (open for public comment), with the goal that AI "shall not replace the doctors to provide diagnosis and treatment services." 1124

Use of AI in COVID-19 Response

In June 2020, the State Council released a White Paper, entitled "Fighting COVID-19: China in Action," which provides that China has "fully utilized" artificial intelligence to not only research, analyze, and forecast COVID-19 trends and developments, but also to track infected persons, identify risk groups, and facilitate the resumption of normal business operations." During the pandemic, China has used AI for surveillance of infected individuals and medical imaging. China also sought to reduce human interaction by using computers and robots for various purposes and has proven to be very effective in reducing exposure, providing necessary services such as assistance for healthcare professionals, improving efficiency in hospitals, and precautionary measures for returning to normal business operations. 126

https://www.gov.cn/zhengce/content/2017-07/20/content 5211996.htm

¹¹²¹ State Council, *China's Next Generation Artificial Intelligence Development Plan* [国**务**院关于印**发** 新一代人工智能**发**展**规**划的通知] (Jul. 8, 2017),

Thiang Zhihao, China to focus on innovation to boost economy, lives, China Daily (Sept. 1, 2018), https://www.chinadaily.com.cn/a/201801/09/WS5a543bd5a31008cf16da5fa9.html
Huw Roberts, Josh Cowls, Jessica Morley, Mariarosaria Taddeo, Vincent Wang, Luciano Floridi, The Chinese approach to artificial intelligence: an analysis of policy, ethics, and regulation, AI and Society (Jun. 17, 2020), https://link.springer.com/article/10.1007/s00146-020-00992-2

¹¹²⁴ OECD, *Beijing Drafts Regulations to Limit Use of A.I. in Health Care* (Aug. 25, 2023), https://oecd.ai/en/incidents/39033

¹¹²⁵ Full Text: Fighting COVID-19: China in Action," Xinhua News via the State Council (June 7, 2020), https://archive.vn/NYJQg

¹¹²⁶ Emily Weinstain, *China's use of AI in its Covid-19 Response*, the Center for Security and Emerging Technology (Aug. 2020), https://cset.georgetown.edu/research/chinas-use-of-ai-in-its-covid-19-response/

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Environmental Impact of AI

As of the end of 2024, there are no clear national policy actions addressing the environmental impact of AI. Note that the National Comprehensive Standardization System for the AI Industry, which was released in 2024, provides guidelines including a stated commitment to Sustainability Standards. Listed priorities include regulating the carbon emissions of private AI-focused enterprises, setting rules for assessing different AI systems' energy efficiencies, and a focus on balancing industrial development with environmental health.¹¹²⁷ On July 4th, 2024, China's Ministry of Foreign Affairs released an English Language version of the "Shanghai Declaration on Global AI Governance". In that declaration China again affirmed its commitment to protecting the health of the environment while pursuing its National AI Strategy. 1128

Lethal Autonomous Weapons

The AIDP states that "the development of AI [is] a major strategy to enhance national competitiveness and protect national security" and that China will "[p]romote all kinds of AI technology to become quickly embedded in the field of national defense innovation."1129

At the 8th Beijing Xiangshan Forum (BXF), 1130 China's major platform for international security and defense dialogue, Major General Ding Xiangrong, Deputy Director of the General Office of China's Central Military Commission, stated that China's military goals are to use AI to advance Chinese military. 1131 Zeng Yi, a senior executive at China's third-largest defense company, predicted that by 2025 lethal autonomous weapons, and military command decision-making would be commonplace. He also mentioned that the ever-increasing military use

建设指南 (2024版) 的通知] (Jul. 3, 2024), https://www.cac.gov.cn/2024-

07/03/c 1721686809220407.htm

1128 Chinese Ministry of Foreign Affairs, Full Text: Shanghai Declaration on Global AI Governance (Jul. 4, 2024),

https://www.mfa.gov.cn/eng/xw/zyxw/202407/t20240704 11448351.html

https://www.gov.cn/zhengce/content/2017-07/20/content 5211996.htm

¹¹²⁷ Cyberspace Administration of China, Notice of four departments on issuing the Guidelines for the Construction of the National Artificial Intelligence Industry Comprehensive Standardization System (2024 Edition) [四部门关于印发国家人工智能产业综合标准化体系

¹¹²⁹ State Council, China's Next Generation Artificial Intelligence Development Plan [国务院关 于印发 新一代人工智能发展规划的通知](Jul. 8, 2017),

¹¹³⁰ Rajeev Ranjan Chaturvedy, Beijing Xiangshan Forum and the new global security landscape, EastAsiaForum (Dec. 1, 2018), https://www.eastasiaforum.org/2018/12/01/beijing-xiangshanforum-and-the-new-global-security-landscape/

¹¹³¹ Elsa Kania, AlphaGo and Beyond: The Chinese Military Looks to Future 'Intelligentized' Warfare, Lawfare (Jun. 5, 2017), https://www.lawfaremedia.org/article/alphago-and-beyondchinese-military-looks-future-intelligentized-warfare

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of AI is "inevitable." He emphasized that military AI would replace the human brain and exercise independent judgment. "AI may completely change the current command structure, which is dominated by humans" to one that is dominated by an "AI cluster." These sentiments are shared by academics from the People's Liberation Army (PLA) who believe that AI will be used to predict battlefield situations and outpace human decision-making. 1132

In 2018, China's Ministry of National Defense established two major research organizations focused on AI and unmanned systems: the Unmanned Systems Research Center (USRC) and the Artificial Intelligence Research Center (AIRC). 1133 According to some experts, China is pursuing the most aggressive strategy for developing AI for military uses among the major military powers. 1134 In the spring of 2017, a civilian Chinese university with ties to the military demonstrated an AI-enabled swarm of 1,000 uninhabited aerial vehicles at an airshow. A media report released after the fact showed a computer simulation of a similar swarm formation finding and destroying a missile launcher. Open-source publications indicate that China is also developing a suite of AI tools for cyber operations.

With regard to its official position on Lethal Autonomous Weapons, China maintains that both the common security and the dignity of mankind should be safeguarded. In the discussion of the 2022 Group of Governmental Experts on Lethal Autonomous Weapons Systems (LAWS), China published the Working Paper of the People's Republic of China on Lethal Autonomous Weapons Systems. The Working Paper highlights the need for balancing both "national security" and "humanitarian concerns" in regulating the use of LAWS. The Working Paper also points out that "military applications of AI should be conducive to improving the humanitarian situation on the modern battlefields" and that countries should "ensure that relevant weapon systems and their means of

¹¹³² Kania, 杀手锏 and 跨越发展: *Trump cards and Leapfrogging*, Strategy Bridge (2017), https://thestrategybridge.org/the-bridge/2017/9/5/-and-trump-cards-and-leapfrogging

¹¹³³ Gregory C. Allen, *Understanding China's AI Strategy: Clues to Chinese Strategic Thinking on Artificial Intelligence and National Security* 4-9, Center for a New American Security (Feb. 6, 2019), https://www.cnas.org/publications/reports/understanding-chinas-ai-strategy

¹¹³⁴ Adrian Pecotic, *Whoever Predicts the Future Will Win the AI Arms Race*, Foreign Policy (Mar. 5, 2019), https://foreignpolicy.com/2019/03/05/whoever-predicts-the-future-correctly-will-win-the-ai-arms-race-russia-china-united-states-artificial-intelligence-defense/

¹¹³⁵ United Nations Office of Disarmament, Convention on Certain Conventional Weapons – Group of Governmental Experts on Lethal Autonomous Weapons Systems (2022), https://meetings.unoda.org/ccw/convention-certain-conventional-weapons-group-governmental-experts-2022

¹¹³⁶ China, *Working Paper of the People's Republic of China on Lethal Autonomous Weapons Systems* (Jul. 1, 2022), https://documents.unoda.org/wp-content/uploads/2022/07/Working-Paper-of-the-Peoples-Republic-of-China-on-Lethal-Autonomous-Weapons-Systems%EF%BC%88English%EF%BC%89.pdf

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warfare comply with international humanitarian law and other applicable international law."¹¹³⁷

China attended the first summit on Responsible AI in the Military Domain—REAIM 2023 hosted by the Netherlands. The summit provided a platform for all stakeholders (governments, industry, civil society, academia, and think tanks) to forge a common understanding of the opportunities, dilemmas, and vulnerabilities associated with military AI. China is one of the 57 endorsing countries that underlined the need to put the responsible use of AI higher on the political agenda and to further promote initiatives that make a contribution to this respect.

The second REAIM summit was hosted by the Republic of Korea in September 2024.¹¹³⁹ In this summit, China did not endorse the "Blueprint for AI Action" to govern responsible use of artificial intelligence in the military¹¹⁴⁰ that was supported by 61 countries. In contrast to the previous blueprint that was based on common understandings, the 2024 blueprint "lays out a roadmap for establishing norms of AI in the military domain."¹¹⁴¹

At the 78th UN General Assembly First Committee in 2023, China was one of 8 states that abstained from voting on resolution L.56¹¹⁴² on autonomous weapons systems. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. The report was published in 2024 and analyzes ways to address the challenges and concerns autonomous weapon systems raise

Systems%EF%BC%88English%EF%BC%89.pdf

1138 REAIM 2023 Endorsing Countries (Feb. 15-16, 2023),

https://www.government.nl/documents/publications/2023/02/16/reaim-2023-endorsing-countries 1139 REAIM, Responsible AI in the Military domain Summit (2024),

https://www.reaim2024.kr/reaimeng/index.do

Reuters, *Sixty countries endorse 'blueprint' for AI use in military; China opts out* (Sept. 10, 2024), https://www.reuters.com/technology/artificial-intelligence/south-korea-summit-announces-blueprint-using-ai-military-2024-09-10/

1142 General Assembly, *Lethal Autonomous Weapons*, *Resolution L56* (Oct.12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

¹¹³⁷ China, Working Paper of the People's Republic of China on Lethal Autonomous Weapons Systems (Jul. 1, 2022), https://documents.unoda.org/wp-content/uploads/2022/07/Working-Paper-of-the-Peoples-Republic-of-China-on-Lethal-Autonomous-Weapons-

Ministry of Foreign Affairs Republic of Korea, *Outcome of Responsible AI in Military Domain (REAIM) Summit 2024* (Sept. 10, 2024), https://overseas.mofa.go.kr/eng/brd/m 5676/view.do?seq=322676

¹¹⁴³ Stop Killer Robots, *164 states vote against the machine at the UN General Assembly*, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

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from humanitarian, legal, security, technological and ethical perspectives and reflect on the role of humans in the use of force. In its submission, China stated that "all parties should seek to prevent a new arms race and should abide by the principle of equal, common and universal security" when dealing with LAWS. It further suggested the need for all parties to reach "an agreed understanding on key elements and technical characteristics" of LAWS to "formulate targeted measures and negotiate a legally binding international instrument."¹¹⁴⁴

The Chinese Ambassador, Shen Jian, during the Debate on Conventional Weapons during the 78th Session of UNGA First Committee asserted that China "support(s), when conditions are ready, the negotiation of a legally binding instrument to prohibit fully autonomous weapons system, if all parties could reach consensus on issues such as definition and characterization of LAWS. Meanwhile, China encourages countries to combine the guiding principles with its domestic situation, adopt further measures, including industrial norms, ethical declarations, action guides, etc. to guide and regulate the development of technologies within the framework of existing laws and military management system." 1145

At the 79th UN General Assembly First Committee in 2024, China was one of the 165 countries in favor of a draft passed in the First Committee that encourages States "to pursue efforts at all levels to address related opportunities and challenges, including from humanitarian, legal, security, technological and ethical perspectives" and resolve divides on responsible AI in the military domain through cooperation in "providing assistance to and sharing knowledge with developing countries by exchanging good practices and lessons learned."¹¹⁴⁶

At the First Session of the 2024 CCW Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapon Systems, Ambassador Shen reiterated that China supports the negotiation of a legally binding instrument on LAWS "based on a common understanding of their characterization and definitions. [...] In the absence of clear characterization and definitions, we may exercise tiered management on autonomous weapon systems [...] China proposed five technical characteristics of "unacceptable LAWS," 1147

https://documents.un.org/doc/undoc/gen/n24/154/32/pdf/n2415432.pdf

¹¹⁴⁴ United Nations General Assembly, *Lethal autonomous weapons systems: Report of the Secretary-General* (Jul. 1, 2024),

¹¹⁴⁵ Chinese Ambassador Shen Jian, *Statement by H.E. Ambassador Shen Jian at the Thematic Debate on Conventional Weapons of the 78th Session of UNGA First Committee* (Oct. 25, 2023), http://geneva.china-mission.gov.cn/eng/dbtxwx/202310/t20231025_11167472.htm

¹¹⁴⁶ United Nations, Fourteen New Drafts, Including on Implications of Artificial Intelligence in Military Domain, Approved in First Committee by 34 Votes (Nov. 6, 2024), https://press.un.org/en/2024/gadis3757.doc.htm

¹¹⁴⁷ China, Working Paper of the People's Republic of China on Lethal Autonomous Weapons Systems (Jul. 1, 2022), https://documents.unoda.org/wp-content/uploads/2022/07/Working-

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and is ready to engage in further discussions." Then, Ambassador Shen asserted that "China believes that as a means and method of combat, LAWS are subject to the basic principles and stipulations of international humanitarian laws [...]Great uncertainties remain, nevertheless, as to whether current international humanitarian laws are adequate in responding to the challenge posed by LAWS."1148 China further reiterated the relevance of agreed understanding on key elements and technical characteristics" and a "tiered and categorized management" of LAWS to avoid "blanket bans or restrictions" that could "undermine States' legitimate defence capabilities" and "their right to the peaceful use of these technologies" in its submission to the UN General Assembly's 2024 report on Lethal autonomous weapons systems.¹¹⁴⁹

Human Rights

China has endorsed the Universal Declaration of Human Rights. As a party to the UDHR, China shall recognize "the inherent dignity" of all human beings and secure their fundamental rights to "privacy." Privacy rights are guaranteed to Chinese citizens under the Constitution. However, Article 40 of the Chinese constitution justifies the invasion of privacy "to meet the needs of State security." Furthermore, the provisions of the Constitution are not directly enforceable since there is neither a constitutional court nor any possibility to assert constitutional rights. 1150 Relatedly, problematic exemptions for the collection and use of data, when it is related to security, health, or the flexibly interpretable "significant public interests" 1151 contribute to weak data protection in China.

According to Freedom House, China is "Not Free" with a total score of 9/100.¹¹⁵² It even obtains a negative score of -2/40 for political rights. The 2024 Freedom House Report notes that "China's authoritarian regime has become increasingly repressive in recent years. The ruling Chinese Communist Party (CCP) continues to tighten control over all aspects of life and governance,

<u>Paper-of-the-Peoples-Republic-of-China-on-Lethal-Autonomous-Weapons-Systems%EF%BC%88English%EF%BC%89.pdf</u>

¹¹⁴⁸ Chinese Ambassador Shen Jian, *Remarks at the First Session of the 2024 CCW Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapon Systems (GGE on LAWS)* (Mar. 5, 2024), http://geneva.china-mission.gov.cn/eng/dbtxwx/202403/t20240305 11254009.htm

https://documents.un.org/doc/undoc/gen/n24/154/32/pdf/n2415432.pdf

¹¹⁴⁹ United Nations General Assembly, Lethal autonomous weapons systems: Report of the Secretary-General (Jul. 1, 2024),

¹¹⁵⁰ Greenleaf, *Data Privacy*, p. 196; Wang, *Redefining Privacy*, p. 110.

¹¹⁵¹ Samm Sacks, *New China Data Privacy Standard Looks More Far-Reaching than GDPR*, Center for Strategic and International Studies (2018), https://www.csis.org/analysis/new-china-data-privacy-standard-looks-more-far-reaching-gdpr

¹¹⁵² Freedom House, *Freedom in the World 2024: China* (2024), https://freedomhouse.org/country/china/freedom-world/2024

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including the state bureaucracy, the media, online speech, religious practice, universities, businesses, and civil society associations, and it has undermined an earlier series of modest rule-of-law reforms. The CCP leader and state president, Xi Jinping, has consolidated personal power to a degree not seen in China for decades. Following a multiyear crackdown on political dissent, independent nongovernmental organizations (NGOs), and human rights defenders, China's civil society has been largely decimated."

Global AI Governance

In October of 2023, China suggested the establishment of a Global AI Governance Initiative. 1153 In its announcement, the Ministry of Foreign Affairs called on countries to strengthen cooperation on the governance of AI. After stressing the "unpredictable risks and complicated challenges" posed by AI, the Ministry highlighted the need to "uphold a people-centered approach in developing AI," to "respect other countries' national sovereignty and strictly abide by their laws when providing them with AI products and services." The Ministry stated, "We oppose using AI technologies for the purposes of manipulating public opinion, spreading disinformation, intervening in other countries' internal affairs, social systems and social order, as well as jeopardizing the sovereignty of other states." The Ministry indirectly called out US restrictions regarding export controls on AI chips and chipmaking tools, 1154 "We oppose drawing ideological lines or forming exclusive groups to obstruct other countries from developing AI. We also oppose creating barriers and disrupting the global AI supply chain through technological monopolies and unilateral coercive measures. [...] We should increase the representation and voice of developing countries in global AI governance, and ensure equal rights, equal opportunities, and equal rules for all countries in AI development and governance".

The Ministry also emphasized the need to put "ethics first", establish and improve relevant laws, develop a testing and assessment system based on AI risk levels and implement agile governance. The National Cybersecurity Standardization Technical Committee 260 (or TC260) is a committee within the Chinese national standards body. In 2024, the TC260 adopted the AI Safety Governance Framework, a voluntary AI risk management framework that "outlines control measures to address different types of AI safety risks through technological and managerial strategies." The document stresses that "comprehensive AI safety and security risk governance mechanisms and

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¹¹⁵³ Chinese Ministry of Foreign Affairs, *Global AI Governance Initiative* (Oct. 20, 2023), https://www.mfa.gov.cn/eng/zy/gb/202405/t20240531 11367503.html

¹¹⁵⁴ See most recently, Reuters, *US updates export curbs on AI chips and tools to China* (Mar. 30, 2024), https://www.reuters.com/technology/us-commerce-updates-export-curbs-ai-chips-china-2024-03-29/

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regulations" should "engage multi-stakeholder participation, including technology R&D institutions, service providers, users, government authorities, industry associations, and social organizations." ¹¹⁵⁵

Al Safety Summit

In November 2023, China participated in the first AI Safety Summit and endorsed the Bletchley Declaration.¹¹⁵⁶ Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible." The next AI Safety Summit was held in France from 10–11 February 2025 and was rebranded as the AI Action Summit.¹¹⁵⁷

OECD / G20 AI Principles

As a member of the G20, China has endorsed the G20 AI Principles. On September 13, 2024, China also adopted the G20 Ministerial Declaration reaffirming its commitment to ethical AI for inclusive sustainable development, aiming to drive growth, reduce inequality, and mitigate risks.¹¹⁵⁸

Council of Europe AI Treaty

China has neither signed the Council of Europe AI Treaty, nor participated it participated in its elaboration.¹¹⁵⁹

UNESCO Recommendation on AI Ethics

As Member of the UNESCO Ad Hoc Expert Group on AI Ethics, Zeng Yi, Director of the Sino-British Research Centre for AI Ethics and Governance, Institute of Automation, at the Chinese Academy of Sciences as well as Member of the National New Generation AI Governance Professional Committee, actively participated in the drafting and formulation of the UNESCO Recommendation on

 $\frac{https://www.tc260.org.cn/upload/2024-09-09/1725849192841090989.pdf;}{https://perma.cc/JNQ9-AG59} archived at \\ \frac{https://perma.cc/JNQ9-AG59}{https://perma.cc/JNQ9-AG59} archived a$

¹¹⁵⁵ TC260, AI Safety Governance Framework (Sep. 6, 2024),

Tisé UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, *Prime Minister's Office, The Bletchley Declaration by Countries Attending the AI Safety Summit*, (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration/the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

¹¹⁵⁷ French Government, *Artificial Intelligence Action Summit* (2024), https://www.elysee.fr/en/sommet-pour-l-action-sur-l-ia

¹¹⁵⁸ G7G20 Documents Database, *G20 DEWG Maceio Ministerial Declaration* (Sept. 13, 2024), https://g7g20-documents.org/database/document/2024-g20-brazil-sherpa-track-digital-economy-ministers-language-g20-dewg-maceio-ministerial-declaration

¹¹⁵⁹ Council of Europe, *Chart of Signatures and Ratifications of Treaty 225*, https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

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the Ethics of AI.¹¹⁶⁰ According to Zeng Yi, "the Recommendation is the most widely reached consensus worldwide at the governmental level, which will become a benchmark for reference to the development of AI ethics related international standards and international law."¹¹⁶¹

The value of "harmonious coexistence," as Zeng Yi pointed out in the formulation of the Recommendation, contributes to the harmonious development of human society coexisting with AI technologies as well as the empowerment of human development, society, and ecology by AI.¹¹⁶² It was however, partially accepted as "peaceful coexistence" to reflect diverse values and interests of different cultures, countries, and organizations.

The idea of "harmonious coexistence" is reflected in China's New Generation Artificial Intelligence Governance Principles¹¹⁶³ (Governance Principles) and New Generation Artificial Intelligence Code of Ethics¹¹⁶⁴ (Code of Ethics) formulated by the National New Generation AI Governance Professional Committee, which shows similar visions with the Recommendation. Another shared vision concerns sustainable development. Zhang Yi's proposal for the sustainable development of AI was accepted by the Recommendation in the policy section, which provided suggestions for achieving sustainability through deploying AI in the field of environment. At the national level, both the Governance Principles and the Code of Ethics issued by China consider sustainable development as the overall vision and objective for the New Generation Artificial Intelligence.¹¹⁶⁵

The Chinese Academy of Science, Artificial Intelligence Ethics is on a New Journey towards a Global Consensus [人工智能伦理迈向全球共识新征程], (Chinese Journal of Science and

Technology 【中国科学报】 (Dec. 2, 2021),

https://www.cas.cn/cm/202112/t20211203_4817066.shtml

1162 Ibid

¹¹⁶³ Ministry of Science and Technology of the People's Republic of China, *Developing Responsible AI: Next Generation AI Governance Principles Released* (Jun. 17, 2019), https://www.most.gov.cn/kjbgz/201906/t20190617_147107.html

¹¹⁶⁰ Chinese Academy of Science, *Artificial Intelligence Ethics Is on a New Journey towards a Global Consensus*, Chinese Journal of Science and Technology (Dec. 2, 2021), https://www.cas.cn/cm/202112/t20211203 4817066.shtml

Artificial Intelligence Development Code of Ethics [Chinese] (Sept. 26, 2021), https://perma.cc/RC4V-Q2FX; Center for Security and Emerging Technology, Ethical Norms for New Generation Artificial Intelligence Released [English translation] (Oct. 12, 2021), https://cset.georgetown.edu/wp-content/uploads/t0400 AI ethical norms EN.pdf

¹¹⁶⁵ Chinese Academy of Science, *Artificial Intelligence Ethics is on a New Journey towards a Global Consensus*, Chinese Journal of Science and Technology (Dec. 2, 2021), https://www.cas.cn/cm/202112/t20211203 4817066.shtml

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Since the publication of the UNESCO Recommendation on AI Ethics, Chinese mainstream news media, think tanks, research institutions, and organizations actively interpreted, reposted, and communicated the Recommendation to the wider public in China. As of the time of writing, China has not implemented nor is in the process of implementing the UNESCO's Readiness Assessment Methodology (RAM).¹¹⁶⁶

Evaluation

China is one of the first AI superpowers implementing the ambitious plan of leading the world in AI by 2030. The country has also already endorsed principles on AI ethics, enforced a new law on data protection, and adopted a comprehensive set of regulations on AI. However, concerns exist that the main objective of China's legislative frenzy is not to protect human rights but to make sure that it controls and monitors the digital world as much as it does with the physical world. The validation of the use of facial recognition for public security purposes in the data protection law, the various enforcement mechanisms and sanction regimes put in place to regulate AI are some cases in point. The use of AI technology against minorities and dissidents is also of concern. Nevertheless, China's participation in international efforts to create an ethical AI framework such as the UNESCO Recommendation on the Ethics of AI might show its willingness to establish some common understandings in foreign relations. It is as much a sign of its international status as an AI superpower.

Colombia

In 2024, Colombia's National Council of Economic and Social Policy released a draft National Policy on Artificial Intelligence while the Constitutional Court issued a landmark ruling that emphasized the need for human judgement in court cases.

National AI Strategy

"In an increasingly digital world, artificial intelligence is presented as a fundamental tool that can positively shape the future of our nation. However, we recognize that this power must be guided by solid ethical principles and a strategic vision that guarantees the well-being of all Colombians" said the Minister of Science, Technology, and Innovation, Yesenia Olaya, during the launch of the AI

¹¹⁶⁶ UNESCO, *Global AI Ethics and Governance Observatory*, https://www.unesco.org/ethics-ai/en/global-hub

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Roadmap to ensure the ethical and sustainable adoption of AI in Colombia in February 2024.1167

The Roadmap identifies Ethics and Governance as a key theme. It suggests establishing and strengthening the legal and regulatory AI framework to tackle ethical challenges posed by AI. The Roadmap also identifies five strategic work environments: ethics and AI governance; AI education, research, and innovation; innovative and emerging AI industries; data and organizations AI; privacy, cybersecurity, and defense AI. The AI Roadmap not only promotes scientific integrity in the development of technological solutions but also seeks to establish effective governance structures that ensure its ethical application of artificial intelligence in solving social, economic, and environmental challenges at the national level.

The Roadmap serves as the basis 1168 for the adoption of the National AI Policy by the National Council of Economic and Social Policy, a draft of which was issued on August 6, 2024. 1169

The Ministry of Science, Technology, and Innovation is also in the process of constituting the first Committee of High-Level Experts on AI which will advise the government on AI policies.1170 More than 1,700 persons answered a call for applications launched by the Ministry. 1171

These policy initiatives are in line with the objectives and goals of the National Development Plan 2022-2026 "Colombia World Power of Life," adopted in May 2023¹¹⁷² and the National Digital Strategy 2023–2026, issued in February 2024.¹¹⁷³

https://minciencias.gov.co/sala de prensa/colombia-ya-cuenta-con-una-hoja-ruta-eninteligencia-artificial.

¹¹⁶⁷ Ministerio de Ciencia, Tecnologia e Innovacion, Colombia ya cuenta con una Hoja de Ryta en Inteligencia Artificial [Spanish] (Feb. 12, 2024),

¹¹⁶⁸ Ibid

¹¹⁶⁹ National Planning Department, A New National Policy for Artificial Intelligence Is Born [Spanish] (Aug. 7, 2024), https://www.dnp.gov.co/Prensa /Noticias/Paginas/nace-una-nuevapolitica-nacional-de-inteligencia-artificial-ia.aspx

¹¹⁷⁰ Ministry of Science, Technology, and Innovation, MinCiencias abre convocatoria para conformar Comité de Expertos de Alto Nivel en Inteligencia Artificial (Jan 13, 2024), https://minciencias.gov.co/sala de prensa/minciencias-abre-convocatoria-para-conformarcomite-expertos-alto-nivel-en

¹¹⁷¹ Ministerio de Ciencia, Tecnologia e Innovacion, 1.727 personas se postularon para hacer parte del Comité de Expertos de Alto Nivel en Inteligencia Artificial convocado por MinCiencias (Feb. 2, 2024), https://inteligenciaartificial.minciencias.gov.co/postulados-comite-expertos-ia/ ¹¹⁷² Luis Eudoro Vammejo Zamudio, *The national development plan 2022-2026: Columbia*, world power of life, Editorial, Apuntes del Cenes (Nov. 20, 2023), https://doi.org/10.19053/01203053.v42.n76.2023.16467

¹¹⁷³ National Planning Department, The Government of Change Presents the National Digital Strategy 2023–2026 [Spanish] (Feb. 7, 2024),

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Already in March 2022, Colombia issued its Ethical Framework for AI,¹¹⁷⁴ which, according to the President Iván Duque, provides "tools that strengthen the principle of democracy, free competition and equity."¹¹⁷⁵ It is with these considerations along with ethics, social aspects, economic development and technological concepts that Colombia developed its AI policy.

The National Planning Department of Colombia, through the National Development Plan for 2018–2022 was the first to encourage the inclusion of emerging technologies of the Fourth Industrial Revolution, such as AI, the Internet of Things (IoT) and robotics in the digital transformation of national entities and strategies across all sectors. 1176

Following this, the National Planning Department, the Ministry of Information and Communications Technologies (MinTIC), and the Office of the President launched the country's National AI Strategy, titled the National Policy for Digital Transformation and AI.¹¹⁷⁷ The Strategy introduced social and economic conditions that facilitate the development of AI by creating a flexible framework of principles and guidelines rather than a rule-based structure. While the Strategy acknowledges its adoption of the OECD AI principles, it sets out 14 additional principles with a focus on four aspects namely inclusive growth, sustainable development, and well-being; building human capacity and preparing for labor market transition; fostering a digital ecosystem for AI; and providing an enabling policy environment for AI. The Strategy also endorses the adoption of an ethical framework for the development of responsible and inclusive AI, utilization of data for the development of AI, and establishment of a market that uses AI productively and competitively.

https://www.dnp.gov.co/Prensa_/Noticias/Paginas/gobierno-del-cambio-presenta-estrategia-nacional-digital-2023-2026.aspx

https://mintic.gov.co/portal/inicio/Sala-de-prensa/Noticias/208109:Colombia-adopta-de-forma-temprana-recomendaciones-de-etica-en-Inteligencia-Artificial-de-la-Unesco-para-la-region

1175 Office of the President of the Republic of Colombia, With the Ethical Framework for Artificial Intelligence, Colombia is at the forefront in Latin America: Duque, Diario la Libertad (Nov. 25, 2020), https://diariolalibertad.com/sitio/2020/11/25/con-el-marco-etico-de-inteligencia-artificial-colombia-se-pone-a-la-vanguardia-en-america-latina-duque/

1176 Congress of the Republic of Colombia, *National Development Plan 2018–2022 'Pact for Colombia, Pact for Equity'* (2019), https://www.dnp.gov.co/plan-nacional-de-desarrollo-2018-2022.aspx

¹¹⁷⁴ Ministry of Technology of Information and Communications, *Colombia adopta de forma temprana recomendaciones de ética en Inteligencia Artificial de la Unesco para la region* (Mar. 9, 2022).

¹¹⁷⁷ Ministry of Information and Communications Technology (MinTIC), National Planning Department and the Office of the President, *National Policy for Digital Transformation and Artificial Intelligence (CONPES No. 3975)* (Nov. 8, 2019),

https://colaboracion.dnp.gov.co/CDT/Conpes/Econ%C3%B3micos/3975.pdf

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To ensure the sustainable execution and continuity of AI public policy, various entities were created to coordinate the development and implementation of the National AI Strategy and other AI policies in the country. This includes the Presidential Advisory for Economic Affairs and Digital Transformation (DAPRE), the AI Expert Mission and the International Council for AI. DAPRE coordinates the work of government functionaries in implementing digital transformation through various systems including AI-based ones, while advising the government on the development of a digital ecosystem, along with the formulation and implementation of related policy. 1178 The AI expert mission or task force serves as a bridge between regulators and experts. It includes experts from various professions who advise the government on policy formulation and assist them in developing a prospective roadmap for the implementation of AI policy, combining their technical and comprehensive vision.¹¹⁷⁹ The AI expert mission was launched with 10 experts. The International Council of AI was created to integrate international experts in the implementation and deployment of Colombia's national AI systems. 1180 The Council consists of six government officials and nine international experts as permanent guests to collectively analyze and present policy proposals that will impact the development and deployment of AI. The Council will also review and guide the implementation of AI policy, while studying Colombia's position in international AI indices to determine points of improvement that can be integrated into a roadmap for the future of AI. "The Mission ended on July 19, 2022, leaving the country with 2 major projects implemented, the Policy Lab: AI Public Policy Lab: Future of Work and Gender and the Empowerment Platform: AprendeIA. In addition, a document on AI and Sustainability was developed."1181

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¹¹⁷⁸ Office of the President of the Republic of Colombia, *Decree No. 1784 by which the structure of the Administrative Department of the Presidency of the Republic is modified* (Dec. 2019), https://dapre.presidencia.gov.co/normativa/normativa/Decreto-1784-4-octubre-2019-Estructura-DAPRE.pdf?TSPD_101_R0=08394a21d4ab20003f727b02568e37ed9413e3dc60e5f03854d633aaf19a8f757d44dda11f7b8f2d08d62f3098145000ed4da1b56f0e79a9b7616b71ed1784bc37956421835ed4cb13d9cec032d5bfa1027145897ac7552056195858d0dcf2ba87b0279da7fc6f115ca88fb782f5f55c8ffcf18f35b6127f82a2df4eed5e6382

¹¹⁷⁹ Office of the President of the Republic of Colombia and The Development Bank of Latin America (CAF), *Task force for the development and implementation of Artificial Intelligence in Colombia* (Nov. 2020), https://dapre.presidencia.gov.co/AtencionCiudadana/convocatorias-consultas/task-force

¹¹⁸⁰ Office of the President of the Republic of Colombia and The Development Bank of Latin America (CAF), *International Council of Artificial Intelligence for Colombia* (Mar. 2021), https://dapre.presidencia.gov.co/TD/INTERNATIONAL-COUNCIL-OF-ARTIFICIAL-INTELLIGENCE-FOR-COLOMBIA.pdf

¹¹⁸¹ Berkman Klein Center, *BKC Scholars Helped Guide Colombia's AI Policy Implementation as Part of the Country's 'AI Expert Mission'* (Aug 8, 2022), https://cyber.harvard.edu/story/2022-08/bkc-scholars-helped-guide-colombias-ai-policy-implementation-part-countrys-ai-expert

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There are various policy intelligence tools in place to monitor the implementation of AI policy. For instance, SisCONPES monitors the implementation of each action line of the National AI Strategy, by reporting to implementing authorities on progress made and obstacles that arise. 1182

In February 2023, the Colombian Government presented the National Development Plan for 2022–2026, which included public policies related to digital transformation and democratization of ICT. However, it does not include direct references or developments on any national AI public policy.¹¹⁸³ The presidency released the National Development Plan for 2022–2026 in May 2023.¹¹⁸⁴

Ethical Framework for Artificial Intelligence

In Colombia, the aim of the Ethical Framework for AI is to address concerns arising from the implementation of emerging technologies such as AI. 1185 The Ethical Framework for AI was developed around ethical principles that can serve as a criterion for evaluating the different uses and challenges that arise in this respect. The Ethical Framework for AI was developed as a tool that can be applied to different sectors taking into consideration the diversity of interests and opinions around the use of AI. The ten principles provided by the framework to guide the design, development, implementation and evaluation of AI systems include transparency, explainability, privacy, human oversight over AI decisions, security, responsibility, non-discrimination, inclusion, prevalence of the rights of children and adolescents, and social benefit. 1186

¹¹⁸² Office of the President of the Republic of Colombia, *Preparation and monitoring of CONPES documents*, https://dapre.presidencia.gov.co/dapre/DocumentosSIGEPRE/P-DE-12-Seguimiento-documentos-

CONPES.pdf?TSPD 101 R0=08394a21d4ab200004209e904b86fdf9e9cbbae173555d0377f467 284c1fd784b9e5fbfc8ff0c2d708a4b65841145000abad443adf4cd5180f46b356697e87786da6a73 5cd2aef1401375ce5d3b961f54912e6b660dee97058c006f3e87a81943f43c37039e1508f29bb0b15 a0b2aad3979c5d05a22737f129939f7db0e1b540

https://www.presidencia.gov.co/prensa/Paginas/Conozca-aqui-el-Plan-Nacional-de-Desarrollo-2022-2026-Colombia-potencia-mundial-de-la-vida-230510.aspx

https://www.caf.com/es/conocimiento/visiones/2021/09/por-que-colombia-se-ha-posicionado-como-lider-regional-en-inteligencia-artificial/

¹¹⁸³ National Planning Department, *Plan Nacional de Desarrollo 2022–2026* (Feb. 2023), https://www.dnp.gov.co/plan-nacional-desarrollo/pnd-2022-2026

President of Colombia, Conozca aquí el Plan Nacional de Desarrollo 2022–2026: Colombia, potencia mundial de la vida, (May 10, 2023),

¹¹⁸⁵ The Development Bank of Latin America (CAF), Why has Colombia positioned itself as a regional leader on Artificial Intelligence (Sept. 14, 2021),

¹¹⁸⁶ Office of the President of the Republic of Colombia and The Development Bank of Latin America (CAF), *Ethical Framework for Artificial Intelligence in Colombia* [English draft version] (Aug. 2020), https://cyber.harvard.edu/sites/default/files/2020-12/Colombia AI Ethical Framework.pdf

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The framework also proposes an ethical algorithm register in which entities periodically report what their AI project is about, how they are implementing the AI ethics principles, and the ethical risks to the use of AI in their project. The register allows for the monitoring of progress in the implementation of AI principles and reinforces citizen participation by inviting their comments or questions on policies, good practices and projects related to AI. The DAPRE and the Superintendency of Industry and Commerce (SIC) are responsible for monitoring AI projects. The Superintendency of Industry and Commerce monitors AI projects by carrying out the Data privacy regulatory Sandbox. The ethical algorithm register of Colombia is based on the models of Amsterdam and Helsinki.

Regulatory Sandboxes and Beaches

Colombia has adopted a smart regulation approach to AI through regulatory sandboxes and beaches. This controlled environment was set up to experiment and test AI systems in the local context, to identify technical and governance flaws while promoting innovation. Item 1991

At first, a Draft Model Concept for the Design of Regulatory Sandboxes and Beaches in AI was published in August 2020 with public comments received from various stakeholders. The purpose of this policy was to understand technology before trying to regulate it, by balancing precaution with

Til89 Center for Technology and Society Studies (CETyS) of the University of San Andrés, *The Colombian Case: Adopting collaborative governance as a path for implementing ethical artificial intelligence* (2021), https://repositorio.udesa.edu.ar/items/c2d4a6b9-0268-4d44-b348-6c84018b8c79

 $\frac{https://www.globalpolicyjournal.com/sites/default/files/pdf/Mu\%C3\%B1oz,\%20Uribe\%20and\%20Espa\%C3\%B1ol\%20-$

 $\frac{\%20 The \%20 Colombian \%20 Case, \%20 A \%20 New \%20 Path \%20 for \%20 Developing \%20 Countries }{\%20 Addressing \%20 the \%20 Risks \%20 of \%20 Artificial \%20 intelligence 0.pdf$

¹¹⁹² Armando Guío Español, Model Concept for the Design of Regulatory Sandboxes & Beaches in AI (Aug. 2020),

https://dapre.presidencia.gov.co/AtencionCiudadana/DocumentosConsulta/consulta-200820-MODELO-CONCEPTUAL-DISENO-REGULATORY-SANDBOXES-BEACHES-IA.pdf

Office of the President of the Republic of Colombia and The Development Bank of Latin America (CAF), *Ethical Framework for Artificial Intelligence in Colombia* [Spanish] (May 2021), https://minciencias.gov.co/sites/default/files/marco-etico-ia-colombia-2021.pdf
 Superintendency of Industry and Commerce, *Colombia*, https://www.sic.gov.co/sandbox-microsite

Regulatory sandboxes are a testbed for selected AI projects, where the regulatory framework is relaxed with some laws and regulations set aside while entities test their projects. Regulatory beaches are similar to regulatory sandboxes, but they are wider in scope. They allow a larger number of companies and sectors to participate in regulatory experimentation during extended amounts of time even longer than a year, with the goal of resolving industry problems.

¹¹⁹¹ The Global Policy Journal, *The Colombia Case: A New Path for Developing Countries Addressing the Risks of Artificial Intelligence* (May 2021),

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experimentation and learning. The document suggests a process of implementation that includes (1) defining a policy leadership to implement public policy; (2) defining emerging technologies and preliminary problems to be addressed; (3) completing a regulatory mapping of the impacted sector; (4) selecting a public entity to perform inspection and surveillance functions; (5) capacity building and training; (6) creating working groups; (7) designing a risk model and defining possible risks; (8) setting out a selection criteria for the risks; (9) designing the sandbox; (10) sharing the project for comment; (11) publishing and implementing; and (12) reporting on the findings and evidence. 1193

A policy proposing a regulatory sandbox for Privacy and AI was open for public comments by the DAPRE and the Superintendency of Industry and Commerce until November 30 2021Superintendency. The regulatory sandbox here is meant to be preventive, so AI systems related to e-commerce, advertising and marketing protect personal data from the stage of design to execution, using tools like privacy impact assessments and privacy by design. It proposes (1) criteria to ensure compliance with regulation on data processing in AI; (2) proper processing of personal data in all stages of an AI project; (3) creation of AI products that respects individual rights to personal data; (4) advice to companies on the protection of personal data in AI systems; (5) adoption of a preventive approach to protect human rights in AI projects; (6) suggestion of amendments or modifications to Colombian regulations on technological advances. 1194

The Superintendency of Industry and Commerce released a final document governing privacy by design and by default in AI projects in April 2021 and the government approved the first proposals under the sandbox program in August 2021.¹¹⁹⁵ The Superintendency of Industry and Commerce's sandbox for Privacy and AI started operating during 2021, and on January 2022, selected a first project.¹¹⁹⁶

Research & Development

The MinTIC released an Information and Communication Technology (ICT) Plan for 2018–2022 titled The Digital Future is for Everyone in July 2019. Highlighting the need to develop human capital, the ICT Plan proposes an AI Center of Excellence & Appropriation to generate innovative proposals that benefit the national system and serve as references internationally. 1197

¹¹⁹³ Ibid

¹¹⁹⁴ Superintendency of Industry and Commerce, *Sandbox on privacy by design and by default in Artificial Intelligence projects* (Apr. 2021), https://www.sic.gov.co/sandbox-microsite
https://www.sic.gov.co/sandbox-microsite
1195 Ibid

¹¹⁹⁶ Ibid

¹¹⁹⁷ Ministry of Information and Communications Technology (MinTIC), *ICT Plan 2018–2022* "The Digital Future is For Everyone" (2019),

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The ICT plan also emphasizes the importance of removing obstacles to the use of technology for digital businesses. In this respect, in April 2019, the World Economic Centre for the Fourth Industrial Revolution was launched in Medellín, bringing together governments, the private sector, civil society organizations, academia, and tech experts from across the globe. Together, these actors collaborate in designing, testing, and developing projects that prioritize policy and tech innovation on AI, the Internet of Things, blockchain, and robotics.

To boost innovative AI research, Colombia launched a start-up incubator and accelerator, C-Emprende. ¹²⁰⁰ In addition to scaling enterprises and mobilizing resources, C-Emprende facilitates the exchange of knowledge between national and international academia, private sector actors, investors, and government representatives.

Colombia's Ministry of Science, Technology, and Innovation has partnered with Presight, a leading big data analytics firm in the Middle East, for joint research and development efforts in AI, data analytics, and emerging technologies across sectors like smart cities, energy transition, and climate action. 1201

Public Participation

The Development Bank of Latin America (CAF) with the authorship of international expert, Armando Guío Español, has developed AI policy and implementation documents, including the ethical framework for AI, a model concept for the design of regulatory sandboxes and beaches in AI, a data governance model, a task force on the development and implementation of AI, and the outline of an international council for the implementation of AI policy. 1202

Draft AI policies and legislations of Colombia have been opened for public comment from academia, national, regional and international civil society actors, intergovernmental organizations and the private sector. These consultations have taken on various forms. Most recently, the Ministry of Science, Technology and Innovation (MinCiencias) conducted a public consultation on the Roadmap to

¹¹⁹⁸ World Economic Forum, *Centre for the Fourth Industrial Revolution*, https://centres.weforum.org/centre-for-the-fourth-industrial-revolution/home

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¹¹⁹⁹ Centre for the Fourth Industrial Revolution Colombia, *Homepage*, https://c4ir.co

¹²⁰⁰ C-Emprende, *Homepage*, https://innpulsacolombia.com/cemprende/quienes-somos

¹²⁰¹ Sindhu V. Kashyap, *Presight and Colombia Ink MoU to Boost AI and Big Data Collaboration* (Oct. 24, 2024), https://www.edgemiddleeast.com/ai/presight-and-colombia-ink-mou-to-boost-ai-and-big-data-collaboration

¹²⁰² Development Bank of Latin America, *Experience AI: Data and Artificial Intelligence in the Public Sector*, (2021), https://scioteca.caf.com/handle/123456789/1793

¹²⁰³ See for example, Berkman Klein Center for Internet and Society at Harvard University, Summary Report of Expert Roundtable on Colombia's Draft AI Ethical Framework (Jan. 2021), https://cyber.harvard.edu/sites/default/files/2021-01/Colombia Roundtable Report.pdf

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ensure the ethical and sustainable adoption of AI in Colombia¹²⁰⁴ and plans on organizing subsequent consultations to flesh it out further.¹²⁰⁵

Additionally, the Ethical Framework for AI and its ethical algorithm register promote public participation in the implementation of AI ethics principles, as the registry is publicly accessible and includes an interactive channel where citizens can ask questions or post comments on the ethical implementation of AI. The presence of regulatory sandboxes and beaches also allows the participation of the private sector and academic institutions in the development of AI technology.

The Chamber of Representatives held a public hearing¹²⁰⁷ for a statutory bill that would "define and regulate artificial intelligence; align to human rights standards; establish limits of the development, use and deployment [of AI], partially modify [the data protection law]" in September 2024. 1208

Data Protection

Data Protection in Colombia is governed by Article 15 of the Constitution. Colombia also regulates financial credit, commercial and services information, and personal data processing and databases.

Adopcion-Etica-y-Sostenible-de-Inteligencia-Artificial-Colombia-1.pdf

¹²⁰⁵ Ministerio de Ciencia, Tecnologia e Innovacion, *Colombia ya cuenta con una Hoja de Ruta en Inteligencia Artificial* (Feb. 12, 2024), https://minciencias.gov.co/sala_de_prensa/colombia-ya-cuenta-con-una-hoja-ruta-en-inteligencia-artificial.

¹²⁰⁶ Office of the President of the Republic of Colombia and The Development Bank of Latin America (CAF), *Ethical Framework for Artificial Intelligence in Colombia* (May 2021), https://dapre.presidencia.gov.co/TD/Marco-Etico-IA-Colombia-2021.pdf

¹²⁰⁷ Congress of Colombia, *Comisión Primera Constitucional Permanente Audiencia Pública - PLE 154/24 Cámara* (Sept. 2024), https://www.camara.gov.co/audiencia-publica-ple-15424-camara

https://www.camara.gov.co/sites/default/files/2024-08/PLE.154-2024C%20%28INTELIGENCIA%20ARTIFICIAL%29.doex

2024C%20%28INTELIGENCIA%20ARTIFICIAL%29.docx 1209 Congress of the Republic of Colombia, *Political Constitution of Colombia* (1991),

https://www.constituteproject.org/constitution/Colombia_2015.pdf?lang=en

¹²⁰⁴ Ministerio de Ciencia, Tecnologia e Innovacion, *Hoja de Ruta Para el Desarrollo y Aplicación de la Inteligencia Artificial en Colombia* (Feb. 2024), https://inteligenciaartificial.minciencias.gov.co/wp-content/uploads/2024/02/Hoja-de-Ruta-

¹²⁰⁸ Congress of Colombia, *Proyecto de Ley Estatutaria por la cual Se Define y Regula la Inteligencia Artificial, Se Ajusta A Estándares De Derechos Humanos, Se Establecen Límites Frente A Su Desarrollo, Uso e Implementación Se Modifica Parcialmente La Ley 1581 De 2012 y Se Dictan Otras Disposiciones* (Aug. 6, 2024),

data, credit records, and commercial information collected in Colombia or abroad [Spanish] (Dec. 31, 2008), http://www.secretariasenado.gov.co/senado/basedoc/ley_1266_2008.html
1211 Congress of the Republic of Colombia, Law 1581 of 2012 on the Protection of Personal Data (Oct. 17, 2012), https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=49981#

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For the implementation and monitoring of regulations regarding privacy, the Personal Data Authority (DPA) was established under the Division of Data Protection of the Superintendency of Industry and Commerce (SIC), according to Article 19 of Law 1581 of 2012. This authority functions as an oversight body, providing instructions and setting mandates, along with receiving complaints on the handling of data.

On automated decision-making, Law 1581 establishes that personal data processing must be for a legitimate purpose under the Constitution and other laws, it must be notified to the subject, and the purpose must be specific. As a result, if automated decision-making is the purpose of processing data, then it must be (1) legitimate as per the Constitution and other laws of Colombia, (2) specific in purpose, and (3) data subject should be informed of it. 1212

Secondary decrees, decisions, and regulations provide a better understanding of data protection, particularly regarding the application of automated mechanisms to databases. Databases have been defined under Article 3 of Law 1581 as an organized set of personal data which is treated in the same as personal data. Decree 886 that regulates Article 25 of Law 1581 explains this further by stating that, when automation is applied to databases containing personal data, it should be registered in the public directory of databases called the National Register of Databases. 1213 Drawing from the necessity to register information from databases and the protection of the right to habeas data, 1214 the Constitutional Court concluded that the administrator of a database has specific obligations regarding the quality of data being transmitted and allows data subjects to authorize how their information in an automated system is handled. 1215 Additionally, Article 26 of Decree 1377 establishes the principle of proven liability, according to which those responsible for handling personal data have an obligation to prove that they have taken sufficient and effective measures to abide by regulations, even when the data is processed by an automated method. 1216

1213 Office of the President of the Republic of Colombia, *Decree 886 of 2014* (2014), https://www.suin-juriscol.gov.co/viewDocument.asp?id=1184150

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¹²¹² Dejusticia, Accountability of Google and other businesses in Colombia: Personal Data Protection in the Digital Age (2019), https://www.dejusticia.org/wp-content/uploads/2019/01/Accountability-of-Google-and-other-Businesses-in-Colombia.pdf

¹²¹⁴ *Habeas data* is a fundamental right and tool to provide legal protection to owners of personal data, particularly when faced with undue or illegal processing of their personal data by databases, or public or private registries.

¹²¹⁵ Constitutional Court of Colombia, Sentence C-1011/08: Habeas Data in statutory law and the handling of information contained in personal databases (2008), https://www.corteconstitucional.gov.co/relatoria/2008/C-1011-08.htm

¹²¹⁶ Office of the President of the Republic of Colombia, *Decree 1377 of 2013* (2013) http://www.suin-juriscol.gov.co/viewDocument.asp?ruta=Decretos/1276081

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In July 2020, through Resolution 38281, the Superintendency of Industry and Commerce concluded that Law 1581 is thematically and technologically neutral. 1217 Thus, the provisions of Law 1581 apply to the processing of any data regardless of techniques or technologies used. The protection of personal data extends to all techniques and tools, including AI in its use for predictive dialing, robocalls and nuisance calls. Nelson Remolina, the Superintendent for the Protection of Personal Data, elaborated on this by stating that, while Colombian law allows for the creation, design, and use of technological innovations to process data, it must be done in a way that respects the legal system by complying with all the rules pertaining to the processing of personal data. 1218

Colombian data protection law differs in scope from the GDPR, since it only applies to data processing carried out by data processors and data controllers within the country or to those who have a legal obligation under international law and treaties. Unlike the GDPR, the Colombian privacy law does not set out conditions under which data profiling is allowed. However, Colombian privacy law protects individual privacy through habeas data rights, guaranteed by Article 15 of the Colombian Constitution. Article 15 is intended to protect an individual's right to know, update, and rectify information gathered about them in online files or databases. 1219

In January 2022, President Duque issued Decree 092, modifying the structure of the Superintendency of Industry and Commerce. The modifications include the creation of the Habeas Data Department, under the Deputy Superintendency for Personal Data Protection. The Decree tasks the Habeas Data Department with ensuring that all entities covered by the data protection regime comply with data protection law. The Habeas Data Department may also resolve any complaint or claim submitted by data subjects seeking to enforce their data rights. The Department may issue orders to enforce its statutory mandates. 1220

The Superintendency of Industry and Commerce, as a member of the Ibero-American Network for the Protection of Personal Data (RIPD), which comprises 16 data protection authorities from 12 countries, also endorsed the General

https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=176826

¹²¹⁷ Superintendency of Industry and Commerce, Resolution 38281 (Jul. 14, 2020), https://www.sic.gov.co/sites/default/files/files/Proteccion Datos/Res%2038281%20del%2014VI I2020%20Mervicol%20marcadores%20predictivos%20robocalls%20IA.pdf

¹²¹⁸ Ibero-American Data Protection Network (RIPD), Colombian data protection authority concluded that predictive dialing, robocalls and artificial intelligence must comply with regulation regarding the processing of personal data (Jul. 20, 2020),

https://www.redipd.org/en/news/colombian-data-protection-authority-concluded-predictivedialing-robocalls-and-artificial

¹²¹⁹ Privacy International, State of Privacy Colombia (Jan. 2019), https://privacyinternational.org/state-privacy/58/state-privacy-colombia

¹²²⁰ Government of Colombia, Decreto 092 de 2022,

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Recommendations for the Processing of Personal Data in Artificial Intelligence and the accompanying Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects. Projects. Projects. Protection for Ibero-American States. The adoption of the Standards signals Colombia's recognition of guiding principles and rights for the protection of personal data that RIPD members can adopted and developed in their national legislation to guarantee a proper treatment of personal data facilitate homogeneous rules in the region. The guiding principles of personal data protection are: legitimation, lawfulness, loyalty, transparency, purpose, proportionality, quality, responsibility, safety and confidentiality. Controllers must also guarantee the exercise of the following rights by data subjects: right of access, right to correction, right to cancellation, right to opposition, right not to be subject to automated individual decisions, right to portability of personal data and right to the limitation of treatment of personal data.

The RIPD data protection authorities initiated a coordinated action regarding ChatGPT, developed by OpenAI, in May 2023 over concerns regarding the risk of misinformation and harmful biases in responses.¹²²⁴

Colombia's Superintendency of Industry and Commerce also launched an independent investigation in May 2023 to assess whether the application ChatGPT complies with Colombian data protection law.¹²²⁵

The Superintendency of Industry and Commerce sponsored the 2020 GPA Resolution on Accountability in the Development and Use of Artificial

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¹²²¹ Ibero-American Network for the Protection of Personal Data (RIPD), General Recommendations for the Processing of Personal Data in Artificial Intelligence (Jun. 2019), https://www.redipd.org/documentos/guia-recomendaciones-generales-tratamiento-datos-ia
¹²²² Ibero-American Network for the Protection of Personal Data (RIPD), Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in

Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects (Jun. 2019), https://www.redipd.org/documentos/guia-orientaciones-especificas-proteccion-datos-ia

¹²²³ Ibero-American Network for the Protection of Personal Data (RIPD), Standards for Personal Data Protection for Ibero-American States (2017),

 $[\]underline{https://www.redipd.org/sites/default/files/2022-04/standars-for-personal-data.pdf}$

¹²²⁴ Ibero-American Network for the Protection of Personal Data (RIPD), Las autoridades de la Red Iberoamericana de Protección de Datos Personales inician una acción coordinada en relación con el servicio ChatGPT [Spanish] (May 8, 2023),

 $[\]frac{https://www.redipd.org/noticias/autoridades-red-iberoamericana-de-proteccion-de-datos-personales-inician-accion-chatgpt}{}$

Superintendency of Industry and Commerce, Sic Puts The Spotlight On The Application "Chat-Gpt" To Determine If It Complies With The Regulation Of Personal Data Protection (Jun. 9, 2023), https://www.sic.gov.co/noticias/sic-puts-spotlight-application-chat-gpt-determine-if-it-complies-regulation-personal-data-protection.

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Intelligence¹²²⁶ and co-sponsored the 2022 GPA Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology.¹²²⁷ However, the organization did not co-sponsor the 2020 GPA Declaration on Ethics and Data Protection in AI¹²²⁸ or the 2023 GPA Resolution on Generative AI.¹²²⁹

Algorithmic Transparency

Colombian data protection law does not provide for algorithmic transparency. However, the 2022 Ethical Framework for AI^{1230} provides for both transparency and explainability. The 2024 AI Roadmap also refers to algorithmic transparency.

A group of Colombian Senators introduced a Draft Bill 253 of 2022 to establish the guidelines for an AI policy in November 2022. If this piece of legislation were to pass, it would be the first one regarding this topic in Colombia and would enshrine algorithmic transparency in law.¹²³¹

The RIPD Specific Guidelines offers some clarity on the expectations for explainability as related to the transparency principle: "The information provided regarding the logic of the AI model must include at least basic aspects of its operation, as well as the weighting and correlation of the data, written in a clear, simple and easily understood language, it will not be necessary to provide a

content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf.

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¹²²⁶ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

¹²²⁷ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

¹²²⁸ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 20), http://globalprivacyassembly.org/wp-

¹²²⁹ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf.

¹²³⁰ Ministry of Technology of Information and Communications, *Colombia adopta de forma temprana recomendaciones de ética en Inteligencia Artificial de la Unesco para la region* (Mar. 9, 2022),

https://mintic.gov.co/portal/inicio/Sala-de-prensa/Noticias/208109:Colombia-adopta-de-forma-temprana-recomendaciones-de-etica-en-Inteligencia-Artificial-de-la-Unesco-para-la-region

1231 Draft Bill 253 of 2022, http://leyes.senado.gov.co/proyectos/index.php/proyectos-ley/cuatrenio-2022-2026/2022-2023/article/268-por-medio-de-la-cual-se-establecen-los-lineamientos-de-politica-publica-para-el-desarrollo-uso-e-implementacion-de-inteligencia-artificial-y-se-dictan-otras-disposiciones

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complete explanation of the algorithms used or even to include them. The above always looking not to affect the user experience."1232

The Colombian Constitutional Court made a landmark ruling emphasizing the need for human oversight in AI use within the judiciary. The ruling cited UNESCO's AI tools and guidelines, highlighting the importance of transparency, privacy, and human judgment in judicial processes. The court directed Colombia's Consejo de la Judicatura to develop comprehensive guidelines on AI use, aligning with best practices to ensure ethical application that respects human rights.

Data Infrastructure

Colombia facilitates data access for those designing and developing AI systems, achieved by removing unnecessary and unjustified barriers to access information. To facilitate such data access and to generate social and economic well-being, the Colombian government has developed data infrastructure policies with a shared dynamic and standardized resources across different actors. Thus, data infrastructure is used to strengthen institutional capacity to provide better quality services to citizens, to include citizens and the private sector in data governance, to drive innovation in governance, and to guide decision-making.

The first policy document on data infrastructure is the National Policy on Data Exploitation or CONPES No. 3920 of 2018, developed by the National Council on Economic and Social Policy, the National Planning Department, and the Office of the President. This policy uses data within a legal, ethical, and institutional framework to generate social and economic value; to increase the availability and interoperability of government data; to promote data culture in public entities, academia and the private sector; to promote data ethics and AI; and to provide test environments through data sandboxes, sandboxes on privacy and AI, and conceptual models for regulatory sandboxes and beaches in AI. To achieve this target, CONPES 3920 sets out 45 action steps with indicators, responsible parties, budgets and a timeline.

The second policy document is the National Data Infrastructure Plan (PNID) developed by MinTIC, the National Planning Department, and the Office

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¹²³² Ibero-American Network for the Protection of Personal Data (RED), *Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects* (Jun. 2019), p. 17, https://www.redipd.org/documentos/guia-orientaciones-especificas-proteccion-datos-ia

¹²³³ UNESCO, *AI in the Courtroom: Colombian Constitutional Court's Landmark Ruling Cites UNESCO's AI Tools* (Aug. 16, 2024), https://www.unesco.org/en/articles/ai-courtroom-colombian-constitutional-courts-landmark-ruling-cites-unescos-ai-tools

¹²³⁴ National Council on Economic and Social Policy, the National Planning Department, and the Office of the President, *National Policy on Data Exploitation (Big Data)* (Apr. 17, 2018), https://www.mindeporte.gov.co/recursos_user/2020/Jur%C3%ADdica/Julio/Conpes_3920.pdf

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of the President, with the support of the World Economic Centre for the Fourth Industrial Revolution.¹²³⁵ The draft of the PNID was shared for public comment until 17 September 2021. The PNID presents an approach to data as infrastructure, defines the components of data infrastructure, and provides a roadmap with concrete actions to implement data infrastructure in the country. This roadmap identifies 6 elements including governance, data, data leveraging, infrastructure interoperability, data security and privacy, as well as technical and technological input for data management.

For the successful integration of the PNID into the data regulation ecosystem, the government intends to create between 2022 and 2025 PNID guidelines. The aim is to identify priority data and create guidelines to ensure data quality; to develop a data infrastructure governance model; to identify indicators for monitoring; and to draw up a collaborative participation strategy for different actors in the data ecosystem.

The third policy document is the Data Infrastructure Governance Model for the Development of Emerging Technologies that was created by the DAPRE, the National Planning Department, and the CAF. CONPES 3920 and the PNID both emphasized the need to develop an institutional framework to accompany the development of data infrastructure. The governance model responds to this need. The governance model outlines five objectives to guide its design, including institutional coordination, private sector participation, confidence building, technical modelling, and international impact. Under each of these objectives, responsible parties or entities and specific tasks have been provided.

The Ministry of Information and Communications Technologies introduced a bill aimed at developing a data infrastructure to enhance data availability, usage, and exchange, improve decision-making, and foster a data-driven culture.¹²³⁷ The bill applies to public administration entities and individuals

¹²³⁵ Ministry of Information and Communications Technology (MinTIC), *National Planning Department and the Office of the President, National Data Infrastructure Plan (PNID)* (Sept. 2021), https://mintic.gov.co/portal/715/articles-179710 recurso 2.pdf

¹²³⁶ Presidential Advisory for Economic Affairs and Digital Transformation (DAPRE), National Planning Department and the Development Bank of Latin America (CAF), *Data Infrastructure Governance Model for the Development of Emerging Technologies* (Aug. 2020), https://dapre.presidencia.gov.co/dapre/SiteAssets/documentos/141020%20Data%20Infrastructure%20Governance%20Model.pdf?TSPD_101_R0=08394a21d4ab20003744902d978b282b466d085fad83471f2bda938b95610ffb4d38a1ef941e87a9085c2bbf1d145000ddb474437fc8ac738759ddc1056f5d95411e91e0e8af946480f3a96d4f1c16b3f3194cbc2cb7c9d9e02431bded914e8304036eb25941757a3dcd9429f69e8787412b09e630054b8a80670aebfa395e0a

¹²³⁷ El Congreso De Colombia, *Proyecto Ley por medio de la cual se dictan disposiciones para el suministro, intercambio y aprovechamiento de la infraestructura de datos del Estado colombiano (IDEC) y la interoperabilidad de los sistemas de información de las entidades públicas y se dictan otras disposiciones* (May 2024), https://www.camara.gov.co/sites/default/files/2024-05/PL.447-

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performing public functions, including the legislative, judicial, and control bodies. Key provisions include obligating public entities to implement recommendations from the National Data Committee, ensuring compliance with the Digital Government Policy for those using emerging technologies like AI, and guaranteeing interoperability among data infrastructure across public entities.

Data Scraping

Colombia's Superintendency of Industry and Commerce and international data protection and privacy counterparts released a follow-up joint statement laying out expectations for industry related to data scraping and privacy. The initial statement in August 2023 established that "[social media companies] and other websites are responsible for protecting personal information from unlawful scraping." The follow-up, which incorporates feedback from engagement with companies such as Alphabet (YouTube), X Corp (formerly Twitter), and Meta Platforms (Facebook, Instagram, WhatsApp), adds that organizations must "comply with privacy and data protection laws when using personal information, including from their own platforms, to develop AI large language models"; must regularly review and update privacy protection measures to keep pace with technological advances; and ensure that permissible data scraping, such as that for research, "is done lawfully and following strict contractual terms." 1240

Data scraping generally involves the automated extraction of data from the web. Data protection authorities are seeing increasing incidents involving data scraping, particularly from social media companies and the operators of other websites that host publicly accessible data. Scraped personal information can be exploited for targeted cyberattacks, identity fraud, monitoring, profiling and surveillance purposes, unauthorized political or intelligence gathering purposes, unwanted direct marketing or spam.

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2024C%20%28INFRAESTRUCTURA%20DE%20DATOS%20DEL%20ESTADO%20COLO MBIANO%29 0.pdf

¹²³⁸ UK Information Commissioner's Office, *Global Privacy Authorities Issue Follow-Up Joint Statement on Data Scraping after Industry Engagement* (Oct. 28, 2024), https://ico.org.uk/about-the-ico/media-centre/news-and-blogs/2024/10/global-privacy-authorities-issue-follow-up-joint-statement-on-data-scraping-after-industry-engagement/

Regulatory Supervision Information Commissioner's Office of the United Kingdom, *Joint Statement on Data Scraping and the Protection of Privacy* (Aug. 24, 2023), https://ico.org.uk/media/about-the-ico/documents/4026232/joint-statement-data-scraping-202308.pdf

¹²⁴⁰ Office of the Privacy Commissioner of Canada, *Concluding Joint Statement on Data Scraping and the Protection of Privacy* (Oct. 2024), https://ico.org.uk/about-the-ico/media-centre/news-and-blogs/2024/10/global-privacy-authorities-issue-follow-up-joint-statement-on-data-scraping-after-industry-engagement/

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Use of AI in Public Administration

As a member of the Latin American Centre for Development Administration (CLAD), ¹²⁴¹ Colombia approved the Ibero American Charter on Artificial Intelligence in Civil Service. The Charter aims to provide a roadmap and common framework for CLAD member states to adapt their AI policy strategies and laws for the challenges and opportunities involved in the implementation of AI in public administration. The guiding principles are human autonomy; transparency, traceability and explainability; accountability, liability and auditability; security and technical robustness; reliability, accuracy, and reproducibility; confidence, proportionality, and prevention of damage; privacy and protection of personal data; data quality and safety; fairness, inclusiveness, and non-discrimination; human-centering, public value, and social responsibility; and sustainability and environmental protection.

In addition to common principles, the Charter recommends specific tools for monitoring AI impact as well as a risk classification mechanism that guardrails for high-risk use cases and prohibitions against uses that violate human rights. Prohibited uses include facial recognition systems; systems aimed at behavior and cognitive manipulation of specific individuals or vulnerable groups (children or the elderly); and social ranking systems based on certain personality traits, individual behaviors, socio-demographic features, or economic status.¹²⁴²

Use of AI in Courts

The Colombian government introduced the use of technology in the administration of justice through Article 95 of Law 270 in 1996, while mandating protection of confidentiality, privacy, and security of personal data. 1243 As a result, several government entities use AI in judicial aspects of their work. This includes the Constitutional Court, the Office of the Attorney General, and the Superintendency of Companies.

Concerning the Constitutional Court of Colombia, where thousands of case documents are received daily, their processing has been expedited using an AI system called Prometea. Applying machine learning abilities, this system investigates, analyses, identifies and suggests priority cases on health-related aspects within a few minutes.¹²⁴⁴ Additionally, it produces statistical reports,

¹²⁴¹ CLAD, *Ibero American Charter on Artificial Intelligence in Civil Service* (2024), https://clad.org/wp-content/uploads/2024/03/CIIA-EN-03-2024.pdf

¹²⁴² Ibid, p. 21

¹²⁴³ Congress of Colombia, Law 270 of 1996 (Mar. 7, 1996),

https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=6548#:~:text=Expide%20la%20Ley%20Estatutaria%20de,las%20jurisdicciones%20y%20altas%20Cortes

¹²⁴⁴ Juan Camilo Rivandeniera, *Prometea, artificial intelligence for the revision of guardianships in the Constitutional Court* (Mar. 22, 2019),

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automates documentation, systematizes and synthesizes case law across the country, and improves security by integrating blockchain technology. This system that includes human oversight, improved the efficiency of case processing by 937%. ¹²⁴⁵

The Office of the Attorney General makes use of an AI system called Fiscal Watson, which consolidates criminal cases across different databases and regional offices to analyze similar evidentiary elements such as modus operandi, physical attributes, types of weapon and other aspects. ¹²⁴⁶ By accelerating the processing of case information, Fiscal Watson has helped connect and solve similar cases across the country. The Attorney General has also suggested that Fiscal Watson can be used to identify irregularities in government contracts made during the COVID-19 pandemic, since all data and documentation is available online. ¹²⁴⁷

The Superintendency of Companies, an administrative body, employs a robot assistant called Siarelis (System based on AI for the Resolution of Company Litigation) to exercise its discretionary judicial powers in corporate cases related for example to the piercing of the corporate veil or insolvency. Using Case Based Reasoning (CBR), Siarelis helps officials identify relevant case law for a specific case and also provides users with possible decisions that could be reached in their case. The outcome reached by the system is decided based on the judicial history and precedent relevant to a specific case.

https://www.ambitojuridico.com/noticias/informe/constitucional-y-derechos-humanos/prometea-inteligencia-artificial-para-la

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 $\underline{https://www.elpais.com.co/judicial/watson-el-investigador-inteligente-con-el-que-la-fiscalia-\underline{busca-cerrarle-el-paso-al-crimen.html}$

¹²⁴⁵ Juan Corvalan, *Prometea: Artificial Intelligence to Transform Justice and Public Organizations* (Apr. 13, 2020),

¹²⁴⁶ Pablo Medina Uribe and Luisa Fernanda Gomez, *Watson, the intelligent investigator with which the Prosecutor's Office seeks to block crime* (Jul. 25, 2020),

¹²⁴⁷ Vanguardia, *Fight against corruption in Santander will be done with Artificial Intelligence* (June 24, 2020), https://www.vanguardia.com/politica/lucha-contra-la-corrupcion-en-santander-se-hara-con-inteligencia-artificial-XC2532257

¹²⁴⁸ Center for Technology and Society Studies (CETyS) of the University of San Andrés, Readiness of the judicial sector for Artificial Intelligence in Latin America – Analytical and Exploratory Framework, Republic of Colombia (2021), https://cetys.lat/wp-content/uploads/2021/09/colombia-ENG.pdf

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Law 2213 of 2022¹²⁴⁹ and the General Procedure Code¹²⁵⁰ allow the use of different technologies in the different stages of Civil, Labor, Family, Administrative, Constitutional, Disciplinary and Criminal procedures in Colombia. The Law specifies that such technologies should only be used when they are suitable for the task. In this regard, Professor Gutierrez noted, "If ChatGPT and other LLMs currently available are evidently unreliable, since their outputs tend to include incorrect and false information, then judges would require significant time to check the validity of the AI-generated content, thereby undoing any significant "time savings". As it happens with AI in other areas, under the narrative of supposed "efficiencies", fundamental rights can be put at risk."¹²⁵¹

In 2023, ChatGPT was used in Colombian Courts in two different cases. The answers provided by ChatGPT were determinant in both cases. In the first case, the judge asked questions with regard to key legal issues, specific to the Colombian legal system. In the second case, the questions touched upon issues of access to justice and due process pertaining to carrying out a hearing in the metaverse. There was no evidence that the answers received by ChatGPT were corroborated by other sources. Professor Florez also raised the risk of overreliance on "the outputs of automated systems." 1252

These cases led the Constitutional Court of Colombia to issue a "landmark" ruling indicating that AI tools like ChatGPT may be used to assist with judicial tasks but cannot replace human judgment in legal decisions. The Court emphasized that while AI can help manage workload and draft documents, excessive reliance on these systems could threaten due process and judicial independence. The ruling established key principles including transparency, privacy protection, and the requirement for human oversight.

Law 2213 0j 2022

¹²⁴⁹ Law 2213 of 2022,

https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=187626

¹²⁵⁰ Public Function, Law 1564 of 2012, on Issuance of the General Procedure Code and Other Provisions (Jul. 12, 2012),

https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=48425

¹²⁵¹ Juan David Gutierrez, ChatGPT in Colombian Courts: Why we need to have a conversation about the digital literacy of the judiciary, Verfassungsblog (Feb. 23, 2023),

https://verfassungsblog.de/colombian-chatgpt/#104

¹²⁵² Maria Lorena Florez Rojas, *A judge in Cartagena (Colombia) claims to have use ChatGPT as a support tool to resolve a guardianship for health care neglect*, Foro Administracion, Gestion y Politica Publica (Feb. 2, 2023) https://forogpp.com/2023/02/03/a-judge-in-cartagena-colombia-claims-to-have-use-chatgpt-as-support-tool-to-resolve-a-guardianship-for-health-care-neglect/.

¹²⁵³ UNESCO, *AI in the Courtroom: Colombian Constitutional Court's Landmark Ruling Cites*

¹²⁵³ UNESCO, *AI in the Courtroom: Colombian Constitutional Court's Landmark Ruling Cite UNESCO's AI Tools* (Aug. 16, 2024), https://www.unesco.org/en/articles/ai-courtroom-colombian-constitutional-courts-landmark-ruling-cites-unescos-ai-tools

¹²⁵⁴ Constitutional Court of Colombia, Ruling T-323 of 2024 (Aug. 2, 2024),

 $[\]underline{https://forogpp.com/wp\text{-}content/uploads/2024/08/t_323_2024_t_9301656\text{-}caso\text{-}chatgpt-cartagena.pdf}$

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In addition, the Court required the issue of guidelines for the use of AI in courts within four months after the ruling. To this end, the Superior Council of the Judiciary established a partnership with UNESCO to tackle four areas: development of judicial AI guidelines, capacity building, algorithmic impact assessment, and transfer of knowledge. 1255

Facial Recognition

In Colombia, facial recognition technology is used extensively by the State. The Ministry of Transport is integrating a network of cameras with facial recognition technology throughout Bogota. The system, which is meant to prevent and reduce road accidents, has become operational in December 2021 and provides the location of cameras out of transparency. 1256 A facial recognition system to improve surveillance was also introduced by local authorities in September 2021 at a stadium in Barranquilla. This system combines cameras with access to unlimited databases to record and track individuals.¹²⁵⁷ The system will be used to identify and detain anyone with cases pending before the judicial system or any other relevant authority. The Atanasio Girardot stadium in Medellín also has 170 smart cameras installed for surveillance, since 2016. Expanding the reach of surveillance in the city, Medellín introduced 40 security robots with facial recognition capability and an integrated AI security system to patrol the city. 1259 The Border Control Agency located at El Dorado International Airport in Bogota uses the Iris recognition system, with the system expected to reach other airports in the country within the next few years.

Fundación Karisma, a civil society organization dedicated to supporting the responsible use of tech, highlights the pitfalls of these systems. In a report titled "Discreet Cameras," Fundacion Karisma points out that surveillance technology and biometric identification systems in Colombia only take into consideration

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¹²⁵⁵ UNESCO, *UNESCO and Colombia: Leaders in the Ethical and Responsible Use of AI in the Judiciary* (Oct. 10, 2024), https://www.unesco.org/en/articles/unesco-and-colombia-leaders-ethical-and-responsible-use-ai-judiciary

¹²⁵⁶ El Tiempo, *Do you agree with life-saving cameras recognizing your face?* (Aug. 2, 2021), https://www.eltiempo.com/bogota/camaras-salvavidas-tendrian-reconocimiento-facial-en-bogota-movilidad-607508

¹²⁵⁷ El Tiempo, *Colombia vs Chile match will have facial recognition system* (Sept. 9, 2021), https://www.eltiempo.com/colombia/barranquilla/el-metropolitano-cuenta-con-sistema-de-reconocimiento-facial-616845

NEC Corporation, Integrated Surveillance and Security System for Atanasio Girardot Stadium - Medellín (2017), https://www.nec.com/en/case/medellin/es/pdf/brochure.pdf
 El Tiempo, Mayor Daniel Quintero revealed robots to track crime in Medellín (Aug. 11, 2021), https://www.eltiempo.com/colombia/medellin/daniel-quintero-presento-robot-para-predecir-delitos-en-medellin-609912; El Tiempo, How is facial recognition done in Colombia? (May 17, 2019), https://www.eltiempo.com/tecnosfera/dispositivos/colombia-que-usos-de-reconocimiento-facial-hay-en-el-pais-362220

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technical and impact considerations while assessing systems. There is no analysis using necessity, proportionality or the possible effect of the technology on human rights. However, Colombia's co-sponsorship of the 2022 GPA Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology indicates a move towards official recognition of the importance of parameters such as reasonableness, necessity, proportionality, and the effect of the technology on human rights. Although the government tries to ensure transparency by sharing the location of video surveillance systems that use facial recognition technology, the right to privacy and other fundamental rights of individuals are still ignored. 1262

Use of AI during COVID-19 Pandemic

Despite this situation during the emergency of the COVID-19 the government released a mobile app named CoronApp.¹²⁶³ At first, CoronApp's main objective was to allow people to stay updated on the progression of the pandemic in Colombia. In the days that followed, however, the narrative around the app changed. Its purpose became more ambitious. It soon became a digital tool to keep the population informed and "save as many lives as possible".¹²⁶⁴

Concerns were raised about the app's data privacy implications, as it collected personal information such as location data and potentially exposes users to security risks. The Colombian government stated that the app is voluntary, and that users' data will be kept confidential, but it is important for individuals to carefully review the app's privacy policy and consider the potential risks before downloading and using it.

In response to these concerns, the Colombian human rights organization Dejusticia has called for greater transparency and accountability in the use of

 $\underline{https://www.minsalud.gov.co/English/paginas/coronapp---colombia,-the-application-to-follow-the-evolution-of-the-coronavirus-in-the-country.aspx}$

¹²⁶⁰ Fundación Karisma, *Discreet Cameras* (Feb. 2, 2018), https://web.karisma.org.co/camaras-indiscretas/

¹²⁶¹ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

¹²⁶² Fundación Karisma, *Discreet Cameras*, (Feb. 2, 2018), https://web.karisma.org.co/camaras-indiscretas/

¹²⁶³ Government of Colombia, Press Release No. 051, 2020,

¹²⁶⁴ Privacy International, *Under Surveillance: (Mis)use of Technologies in Emergency Responses. Global lessons from the Covid-19 pandemic* (Jan. 25, 2023. https://privacyinternational.org/report/5003/under-surveillance-misuse-technologies-emergency-responses-global-lessons-covid-19

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personal data collected through this app and another implemented in the future. ¹²⁶⁵ Dejusticia had also called for the government to implement strict measures to protect the privacy of individuals and ensure that their data is only used for the purposes that the app was created.

Dejusticia has also urged the government to establish clear guidelines for the collection, use, and storage of personal data, and to provide users with the ability to opt out of the app(s) at any time. Additionally, they have called for the government to establish a system of oversight and accountability to ensure that data collected through the app(s) is not misused or mishandled.

CoronApp had the potential to be a useful tool in guaranteeing the health of the population, but it is important that the government takes steps to ensure that the personal data of users is protected and used responsibly. In April 2022, the Constitutional Court reviewed and determined that the plaintiffs' rights to privacy should be respected, even during a national state of emergency. Furthermore, the Court declared that authorities had a duty to "avoid the abusive and arbitrary use of personal data" and the National Data Authority was ordered to erase the plaintiffs' data. 1266

Environmental Impact of AI

The growing adoption of AI technologies in Colombia has prompted concerns about their environmental impact, leading to the inclusion of sustainability considerations in recent AI policy proposals. Colombia's particular vulnerability to climate phenomena, coupled with its 70% dependence on hydroelectric power, makes environmental sustainability a critical aspect of AI governance. ¹²⁶⁷ In response, Colombia has proposed comprehensive frameworks addressing these challenges through both legislation and policy.

The national AI policy roadmap recognizes the need for robust measurement frameworks to understand and monitor AI's environmental impact, particularly regarding water resource usage, electrical energy capacity, and greenhouse gas emissions.

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 ¹²⁶⁵ Dejustica, New Report: Misuse of Technologies in Emergency Responses (Feb. 8, 2023),
 https://www.dejusticia.org/en/new-report-misuse-of-technologies-in-emergency-responses/
 1266 European Center for Not-for-Profit Law (ECNL), International Network of Civil Liberties
 Organizations, and Privacy International, Under Surveillance: (Mis)use of Technologies in Emergency Responses (Dec. 2022), https://ecnl.org/publications/under-surveillance-misuse-technologies-emergency-responses

¹²⁶⁷ National Council for Economic and Social Policy, *Colombia's National AI Policy Roadmap* (Aug. 2, .2024), https://colaboracion.dnp.gov.co/CDT/PublishingImages/Planeacion-ydesarrollo/2024/Septiembre/PDF/inteligencia-artificial.pdf

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A draft bill titled Law of Ethical and Sustainable Artificial Intelligence for Social Welfare issues in the Colombian Congress in July 2024¹²⁶⁸ would require AI developers to implement practices to reduce energy consumption, monitor CO2 emissions, and promote renewable energy adoption in AI infrastructure, with oversight from the Superintendency of Industry and Commerce in collaboration with the Ministry of Environment. This draft bill is in the early stages of discussions.

These policies reflect Colombia's approach to establish measurement and monitoring frameworks to ensure that development is sustainable before applying AI solutions.

Lethal Autonomous Weapons

During the 2015 meeting of the Group of Governmental Experts (GGE) on lethal autonomous weapons (LAWS), Colombia issued a statement calling for multilateral regulation to ensure human control over autonomous weapons at all times, so that no machine makes an autonomous decision. ¹²⁶⁹ Colombia has called for a pre-emptive ban on all LAWS¹²⁷⁰ and for an international treaty that will ensure meaningful human control over any use of force. ¹²⁷¹

Colombia was among the 70 countries that endorsed a joint statement on autonomous weapons systems at the 2022 UN General Assembly meeting. In this joint statement, States urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law ("IHL"), including through maintaining human responsibility and accountability in the use of force." 1272

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https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm en.pdf

¹²⁶⁸ Chamber of Representatives, *Draft Bill 005/2024: Law for Ethical and Sustainable Artificial Intelligence for the Social Good [Ley de Inteligencia Artificial Ética y Sostenible para el Bienestar Social]* (Jul. 20, 2024), https://www.camara.gov.co/ley-de-inteligencia-artificial-etica ¹²⁶⁹ Government of Colombia, *Statement at the Convention on Certain Convention Weapons – Informal meeting of experts on Lethal Autonomous Weapons Systems* (Apr. 2015), https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/ccw/2015/meeting-experts-laws/statements/17April Colombia.pdf

World Summit of Nobel Peace Laureates, *Final Declaration of the 16th World Summit of Nobel Peace Laureates* (Feb. 4, 2017), http://www.nobelpeacesummit.com/final-declaration-of-the-16th-world-summit-of-nobel-peace-laureates/

Territoria Government of Colombia, Statement at the Convention on Certain Conventional Weapons – Group of Government al Experts on Lethal Autonomous Weapons Systems (Apr. 13, 2018), https://documents.un.org/doc/undoc/gen/g18/323/29/pdf/g1832329.pdf

¹²⁷² United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

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In February 2023, Colombia endorsed, along with more than 30 other Latin American and Caribbean states, the Belén Communiqué, ¹²⁷³ which calls for "urgent negotiation" of a binding international treaty to regulate and prohibit the use of autonomous weapons to address the grave concerns raised by removing human control from the use of force.

At the 78th UN General Assembly First Committee in 2023, Colombia voted in favor¹²⁷⁴ of resolution L.56¹²⁷⁵ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. The report should analyze ways to address the challenges and concerns autonomous weapon systems raise from humanitarian, legal, security, technological and ethical perspectives and reflect on the role of humans in the use of force.

The Secretary-General issued the report in the 79th UN General Assembly and analyzed ways to address the challenges and concerns autonomous weapon systems raise from humanitarian, legal, security, technological and ethical perspectives and reflect on the role of humans in the use of force. Colombia contributed to statements from the Ibero-American states and as part of a group High Contracting Parties to the CCW. Both reports reiterated support for a legally binding instrument to prohibit the use of autonomous weapons outside human control and restrict other uses. The latter statement also proposed a draft protocol VI originally submitted to the GGE in July 2022 as a starting point for a legally binding instrument.

Human Rights

Colombia is a signatory to many international human rights treaties and conventions. After concerns over illegal surveillance operations by the state

¹²⁷³ Latin American and the Caribbean Conference of Social and Humanitarian Impact of Autonomous Weapons, *Communiqué*, La Ribera, Belén (Feb. 24, 2023), https://www.rree.go.cr/files/includes/files.php?id=2261&tipo=documentos

¹²⁷⁴ Isabelle Jones, *164 States Vote against the Machine at the UN General Assembly*, Stop Killer Robots (Nov. 1, 2023), https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

Test General Assembly, *Resolution L56: Lethal Autonomous Weapons* (Oct. 12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

¹²⁷⁶ UN General Assembly, 79th session, Lethal Autonomous Weapons Systems, Report of the Secretary-General (Jul. 1, 2024),

https://documents.un.org/doc/undoc/gen/n24/154/32/pdf/n2415432.pdf

¹²⁷⁷ Ibid, pp. 20–21

¹²⁷⁸ Ibid, pp. 34–36

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security forces in a 2021 Human Rights Watch report,¹²⁷⁹ Colombia has ranked as "free" in the Freedom in the World Report since 2023with a score of 70/100. ¹²⁸⁰ Lasting negotiations between the government armed groups led to government surveillance and concerns over corruption remain. ¹²⁸¹ Colombia ranks as "partly free" on Internet Freedom with a score of 65/100, in part because of violence against digital journalists and cyberattacks on media and government entities. ¹²⁸²

According to Article 93 of Colombia's Constitution, rights and duties in the national system are interpreted according to international treaties and conventions that have been ratified by its Congress. ¹²⁸³ Thus, Colombia has made powerful commitments backed by strong action that encourages legal certainty, with an entire implementation, regulatory and monitoring ecosystem for AI. This is strengthened by expert contributions and public participation at the national, regional and international level.

OECD / G20 AI Principles

Colombia has endorsed the OECD AI Principles. Colombia's Ethical Framework for AI introduced as a guideline for trustworthy AI, provides standards for the ethical use and governance of AI and is aligned with the OECD AI principles. Additionally, Colombia has developed policy intelligence tools and a follow up plan to monitor the implementation of the OECD AI Principles, while identifying good practices to determine if OECD's recommendations to Colombia have been implemented. However, Colombia has not joined the Global Partnership on AI (GPAI). 1285

https://freedomhouse.org/country/colombia

https://freedomhouse.org/country/colombia/freedom-net/2024

¹²⁷⁹ Human Rights Watch, *World Report 2021: Colombia* (2021), https://www.hrw.org/world-report/2021/country-chapters/colombia; Semana, *Strikes without Quarter: The Persecution of Semana* (Jan. 12, 2020), https://www.semana.com/nacion/articulo/persecucion-espionaje-y-amenazas-a-periodistas-de-la-revista-semana/647890/

¹²⁸⁰ Freedom House, Freedom in the World 2023: Colombia,

https://freedomhouse.org/country/colombia/freedom-world/2023

¹²⁸¹ Freedom House, Freedom in the World 2025: Colombia (2025),

¹²⁸² Freedom House, Freedom on the Net 2024: Colombia (2024),

¹²⁸³ Congress of the Republic of Colombia, *Political Constitution of Colombia* (1991), https://www.constituteproject.org/constitution/Colombia 2015.pdf?lang=en

¹²⁸⁴ Presidential Advisory for Economic Affairs and Digital Transformation (DAPRE), *Ethical Framework for Artificial Intelligence* (Aug. 2020),

https://dapre.presidencia.gov.co/dapre/SiteAssets/documentos/ETHICAL%20FRAMEWORK%20FOR%20ARTIFICIAL%20INTELLIGENCE%20IN%20COLOMBIA.pdf

¹²⁸⁵ Global Partnership on Artificial Intelligence (GPAI), *Community* (2024), https://www.gpai.ai/community/

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Council of Europe AI Treaty

Colombia is not a member of the Council of Europe and has not signed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law. 1286

UNESCO Recommendations on AI Ethics

Colombia endorsed the UNESCO Recommendation on the Ethics of AI in November 2021. Even before the UNESCO recommendation was completed, the Presidency cited the example of OECD and UNESCO principles of OECD and UNESCO to acknowledge "the importance of ethical considerations for the design, development, and implementation of artificial intelligence in Colombia and more precisely the need to adopt an Ethical Framework as a non-binding guide for the implementation of artificial intelligence in the country." 1287

CAF, the development bank of Latin America, and UNESCO signed a letter of intent to collaborate on the implementation of the UNESCO Recommendation in Latin America and the Caribbean in 2022. 1288 As part of that collaboration, they helped establish a Regional Council composed of national and local governments, which convened its inaugural meeting in October 2023. This initial meeting focused on the collaborative exchange and formulation of proposals, encompassing both political and technical perspectives, aimed at guiding the ethical development of Artificial Intelligence in the region. 1289

Colombia signed the resulting 2023 Santiago Declaration to Promote Ethical Artificial Intelligence. 1290 The Santiago Declaration reflects UNESCO's Recommendation on the Ethics of AI and establishes fundamental principles that should guide public policy on AI. These include proportionality, security, fairness,

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and-high-level-summit-ethics

¹²⁸⁶ Council of Europe, *Chart of Signatures and Ratifications of Treaty 225* (Nov. 14, 2024), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225
¹²⁸⁷ Government of Colombia, *Ethical Framework for Artificial Intelligence in Colombia*, version 1, p. 9 [Spanish version] (May 2021), https://minciencias.gov.co/sites/default/files/marco-etico-ia-colombia-2021.pdf

¹²⁸⁸ Ángel Melguizo and Gabriela Ramos, *Ethical and Responsible Artificial Intelligence: From Words to Actions and Rights*, Somos Iberoamérica (Feb. 1, 2023), https://www.somosiberoamerica.org/pt-br/tribunas/inteligencia-artificial-etica-e-responsavel-das-palavras-aos-fatos-e-direitos/

¹²⁸⁹ UNESCO, Chile Will Host the First Latin American and Caribbean Ministerial and High Level Summit on the Ethics of Artificial Intelligence (Sept. 25, 2023), https://www.unesco.org/en/articles/chile-will-host-first-latin-american-and-caribbean-ministerial-

¹²⁹⁰ Cumbre Ministerial y de Altas Autoridades de América Latina y el Caribe, *Declaracion de Santiago "Para promover una inteligencia artificial ética en América Latina y el Caribe"* (Oct. 2023), https://minciencia.gob.cl/uploads/filer-public/40/2a/402a35a0-1222-4dab-b090-5c81bbf34237/declaracion-de-santiago.pdf.

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non-discrimination, gender equality, accessibility, sustainability, privacy and data protection.

Colombia is in the process of conducting a Readiness Assessment Methodology (RAM) exercise, which is a tool to support Member States to implement the UNESCO Recommendation on the Ethics of AI. 1291

Evaluation

Colombia has anchored its AI policy in the Ethical Framework for Artificial Intelligence, which has influenced AI policies across Latin America. Colombia has recently drafted a National AI Policy that should guide it toward the adoption of a human-centric national AI strategy. Colombia is part of the Regional Council for the implementation of the UNESCO Recommendation on AI Ethics and has endorsed the Ibero-American Charter on AI in Civil Service.

The Constitution of Colombia established a right to data protection, and the country has a comprehensive data protection law and an active data protection agency. Draft bills for ethical and sustainable development and application of AI are being discussed in Congress. The Colombian data protection authority is the first in the region to have opened an investigation on OpenAI ChatGPT. However, Colombia's laws do not yet include algorithmic transparency. There are also growing concerns regarding the use of facial recognition systems and of AI in courts.

Costa Rica

In 2024, Costa Rica adopted a National AI Strategy following a public consultation. The country also continued to advocate in the UN General Assembly for a legally binding instrument on lethal autonomous weapons systems.

National AI Strategy

Costa Rica adopted its National Artificial Intelligence Strategy (*Estrategia Nacional de Inteligencia Artificial*, ENIA), developed by the Ministry of Science, Innovation, Technology, and Telecommunications (MICITT) in October 2024.¹²⁹² This initiative, drafted with UNESCO's support, ¹²⁹³ aims to align national efforts

¹²⁹¹ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

¹²⁹² Ministry of Science, Technology and Telecommunications, *National Artificial Intelligence Strategy 2024–2027* [Spanish] (Oct. 24, 2024), https://www.micitt.go.cr/sites/default/files/2024-10/Estrategia%20Nacional%20de%20Inteligencia%20Artificial%20de%20Costa%20Rica%20ESP.pdf

¹²⁹³ Mariana Álvarez, Costa Rica Will Be the First Country in Central America to have an Artificial intelligence Strategy, UNESCO (Feb. 28, 2023),

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toward a long-term vision for AI. ENIA's primary goals include fostering the ethical, safe, and responsible use, adoption, and development of AI technologies to maximize benefits for citizens while minimizing potential harm. The strategy outlines specific action areas to harness AI's advantages and to address associated ethical, social, and technical risks and challenges.¹²⁹⁴

Before the Strategy, two draft bills governing AI were proposed, both drafted with assistance from ChatGPT-4. The first, Draft Bill on Artificial Intelligence Regulation seeks to regulate the development, implementation, and use of AI in Costa Rica. ¹²⁹⁵ The second, Draft Bill Regulation for the Responsible Promotion of Artificial Intelligence was proposed in September 2023. ¹²⁹⁶ The Bill aims to promote the use, research, design, development, deployment, utilization, implementation, and application of artificial AI in Costa Rica, in accordance with the principles of ethics, responsibility, and human dignity. Both bills remain in the Science, Technology, and Education committee.

The country has also developed a general human-centered science, technology and innovation plan and a specific digital strategy that addresses issues related to AI technology. The National Plan on Science, Technology and Innovation 2022-2027 (Plan Nacional de Ciencia, Tecnología e Innovación 2022–2027, PNCTI) provides a general overview of the country's goals regarding the use of information and communication technologies for a sustainable, equitable and creative future. In this Plan, AI is one of several thematic areas. Regarding AI, the plan focuses on pursuing the following actions: i) the development of technical capabilities and competencies across STEM/STEAM curricula in schools and technical colleges, ii) the development of a program of study for technical certification in AI as offered by a collaboration between the Ministry of Public Education and technical colleges, iii) the development of understandable and accessible AI systems for all, and iv) the further support of the fAIr Latin America and Caribbean (LAC) initiative designed by the Inter-American Development Bank (IDB) to ensure the ethical and responsible adoption of AI. 1297

 $\underline{\text{https://www.unesco.org/en/articles/costa-rica-will-be-first-country-central-america-have-artificial-intelligence-strategy}$

¹²⁹⁴ Ministry of Science, Technology and Telecommunications, *National Artificial Intelligence Strategy 2024–2027* [Simplified, English version] (Feb. 3, 2025), https://www.micitt.go.cr/sites/default/files/2025-

^{02/}National%20Artificial%20Intelligence%20Strategy%20of%20Costa%20Rica.pdf

¹²⁹⁵ Legislative Assembly, Ex. 23771, Bill on the Regulation of Artificial Intelligence in Costa Rica [Spanish] (May 30, 2023), https://delfino.cr/asamblea/proyecto/23771

¹²⁹⁶ Ministry of Science, Technology and Telecommunications (6 Sep 2023),

https://delfino.cr/asamblea/proyecto/23919

¹²⁹⁷ Ministry of Science, Technology and Telecommunications, *Plan Nacional de Ciencia*, *Tecnología e Innovación 2022–2027 (Consulta Pública)* (2021),

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Costa Rica's science, innovation, technology and telecoms ministry presented an updated Digital Transformation Strategy 2023–2027 in August 2023. The Strategy focuses on two strategic axes: digital citizenship and good governance. The latter includes an action item on defining a National Strategy on Artificial Intelligence, which Costa Rica accomplished in 2024. The Digital Transformation Strategy frames the use of AI as a means to drive the country's economic competitiveness and productivity through innovation and value creation.

Another initiative specific to AI is Costa Rica's declared intention to build a National Laboratory for AI (*Laboratorio Nacional de Inteligencia Artificial*, LaNIA). 1298 MICITT, the National Center of High Technology (*Centro Nacional de Alta Tecnología*, CENAT), and the National Program (*Programa del Estado de la Nación*, PEN) signed a letter for cooperation in AI, science, and technology. The laboratory intends to search for cross-sector solutions to national problems with the support of AI and through international cooperation and interaction between the public and private sectors. This cooperation contributes to the goal to create an ecosystem, strengthen trust, and promote research and education in AI.

Public Participation

Citizen participation in Costa Rica has a vast and rich history that has given rise to a significant number of democratic innovations. The Constituent Assembly of 1949 was reintroduced into the constitutional text with instruments for citizen participation. With later reforms to the Constitution in 2002 and 2003, public participation was enhanced through the inclusion of the Referendum and the Popular Initiative. In 2003, Article 9 of the Constitution of Costa Rica was further amended, supplementing the various instruments of citizen participation that had already been incorporated into the Constitution. Costa Rica's democratic institutions provide a robust legal framework to support public participation.

The National Commission for Open Government is using its online platform to enable public consultations on relevant national policies. The MICITT

 $\underline{https://www.micitt.go.cr/consulta-publica-no-vinculante-plan-nacional-ciencia-tecnologia-e-innovacion-2022-2027}$

¹²⁹⁸ Ministry of Science, Technology and Telecommunications, *Transformación Digital:* potenciando las sinergías en campos como la Inteligencia Artificial dentro del Sistema Nacional de Ciencia y Tecnología (Jan. 27, 2020),

https://www.elindependiente.co.cr/2020/01/transformacion-digital-potenciando-las-sinergias-encampos-como-la-inteligencia-artificial-dentro-del-sistema-nacional-de-ciencia-y-tecnologia/.

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publishes all its public consultation opportunities on its website¹²⁹⁹ as well as on social media through its Facebook page. ¹³⁰⁰

Costa Rica has made important progress in aligning its regulations and practices regarding public participation with OECD standards. ¹³⁰¹ Costa Rica also takes part in the CoST initiative to implement the Infrastructure Transparency Index (ITI) for improving transparency and accountability across public infrastructures. These commitments consolidate the transformation of Costa Rica towards an open government. ¹³⁰²

Public participation opportunities were offered on the National Plan on Science, Technology and Innovation 2022–2027, ¹³⁰³ the creation of the High Level Commission of the Digital Government, ¹³⁰⁴ and more recently the National Strategy for Cybersecurity. ¹³⁰⁵

Costa Rica launched a public national consultation on its National Artificial Intelligence Strategy, inviting citizens to participate in shaping the country's approach to artificial intelligence on March 22, 2024. The consultation, which was open to April 11, 2024, sought input to promote the ethical, safe, and responsible adoption and development of AI in the nation. Participants were encouraged to review the National Artificial Intelligence Strategy document and submit feedback using a public consultation form via email.

https://infrastructuretransparency.org/where/cost-costa-rica/

https://www.micitt.go.cr/consulta-publica-no-vinculante-plan-nacional-ciencia-tecnologia-e-innovacion-2022-2027

¹²⁹⁹ Ministry of Science, Technology and Telecommunications, *Consultas Públicas*, https://www.micitt.go.cr/transparencia/consultas-publicas.

¹³⁰⁰ Ministerio de Ciencia, Tecnología y Telecomunicaciones de Costa Rica, https://www.facebook.com/miciter.

¹³⁰¹ OECD, Public Governance in Costa Rica (2021), https://www.oecd.org/costarica/costa-rica-public-governance-evaluation-accession-review.pdf; Costa Rica busca fortalecer la participación ciudadana con políticas de impacto regulatorio (Dec.8, 2017) Comunicados Desarrollo Social Economía, https://www.presidencia.go.cr/comunicados/2017/12/costa-rica-busca-fortalecer-la-participacion-ciudadana-con-politicas-de-impacto-regulatorio/

¹³⁰² CoST Costa Rica, CoST Infrastructure Transparency Initiative,

¹³⁰³ Ministry of Science, Technology and Telecommunications, *Consulta Pública No Vinculante Plan Nacional de Ciencia, Tecnología e Innovación 2022-2027* (2021),

¹³⁰⁴ Ministry of Science, Technology and Telecommunications, *Consulta Pública Propuesta Creación de la Comisión de Alto Nivel de Gobierno Digital* (2022), https://www.micitt.go.cr/decreto-comision-alto-nivel-gobierno-digital

¹³⁰⁵ Ministry of Science, Technology and Telecommunications, *Consulta Pública No Vinculante Estrategia Nacional de Ciberseguridad*, https://www.micitt.go.cr/consulta-publica-no-vinculante-estrategia-nacional-ciberseguridad-costa-rica

¹³⁰⁶ Ministry of Science, Technology and Telecommunications, *Estrategia Nacional de Inteligencia Artificial 2024-2027, Consulta Pública No Vinculante* (Mar. 22, 2024), https://www.micitt.go.cr/node/1574

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Data Protection

Costa Rica has two comprehensive laws that protect personal data. While under the Ministry of Justice and Peace, the entity in charge of compliance with data protection law, the Agency for the Protection of Citizen's Data (*Agencia de Protección de Datos de los Habitantes*, Prodhab) is fully independent. ¹³⁰⁷

Law No. 8968 protects the personal data handling of individuals. Law No. 7975, the Undisclosed Information Law, specifies that the unauthorized disclosure of confidential and/or personal information is a crime. These laws, together with their by-laws, were enacted to regulate activities of companies that administer databases containing personal information. The laws require data subjects' consent before the processing or use of their data. Consent must cover in particular the purpose for data collection and how the data will be processed. The identity of all recipients and parties with access to personal data must be disclosed. Transfer of personal data to third countries is also conditional upon data subjects' consent.

Additional laws include Costa Rica's Executive Decree No. 37554-JP for data breach and the General Telecommunications Law No. 8642 (Article 42) that protects the privacy of communications and personal information. The General Telecommunications Law is supplemented by administrative regulation N° 35205-MINAET that guarantees the secrecy of communications, the right to privacy, and the protection of personal data of subscribers and users. ¹³¹⁰

After proposed amendments to align the data protection law with the GDPR stalled, 1311 the legislative assembly is discussing a new proposed law (Project 23097) that would repeal Law 8968 and replace it. The proposed new legislation would establish a set of principles and rights for personal data protection to ensure proper handling of residents' personal data and enhance the level of protection for individuals regarding data processing. These revisions would align Costa Rica with international standards on data privacy in a society increasingly shaped by information and communication technologies. The proposed law also aims to promote the development of mechanisms for international cooperation among control authorities in Ibero-American states, non-

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¹³⁰⁷ Agencia de Protección de Datos de los Habitantes Prodhab, *Quiénes somos?* http://prodhab.go.cr/quienesomos/

¹³⁰⁸ Legislación Nacional-Costa Rica-Ley de Información No Divulgada 7975, http://www.sice.oas.org/int_prop/nat_leg/Costa/lind7975.asp

¹³⁰⁹ Protección de la Persona frente al tratamiento de sus datos personales No. 8968, http://www.pgrweb.go.cr/scij/Busqueda/Normativa/Normas/nrm_texto_completo.aspx?param1= NRTC&nValor1=1&nValor2=70975&nValor3=85989&strTipM=TC

¹³¹⁰ Sistema Costarricense de Información Jurídica, *Ley General de Telecomunicaciones*, https://www.pgrweb.go.cr/scij/Busqueda/Normativa/Normas/nrm_texto_completo.aspx?param1=NRTC&nValor1=1&nValor2=63431&nValor3=91176&strTipM=TC

¹³¹¹ Giró and Martínez, *Costa Rica: Towards a comprehensive reform on Data Privacy* (Feb. 2021), https://www.giromartinez.com/news/costa-rica-comprehensive-reform-on-data-privacy/

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regional control authorities, and international entities specializing in data protection. 1312

As a member of the Ibero-American Network for the Protection of Personal Data (RIPD) which comprises 16 data protection authorities from 12 countries, the Prodhab endorsed the General Recommendations for the Processing of Personal Data in Artificial Intelligence¹³¹³ and the accompanying Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects.¹³¹⁴ Both have been framed in accordance with the RIPD Standards for Personal Data Protection for Ibero-American States. 1315 By adopting the Standards, Costa Rica recognizes a series of guiding principles and rights for the protection of personal data that can be adopted and developed in national legislation to guarantee proper treatment of personal data, and to promote homogeneous rules in the region. The guiding principles of personal data protection are: legitimation, lawfulness, loyalty, transparency, purpose, proportionality, quality, responsibility, safety and confidentiality. Controllers must also guarantee the exercise of the following rights by data subjects: right of access, right to correction, right to cancellation, right to opposition, right not to be subject to automated individual decisions, right to portability of personal data and right to the limitation of treatment of personal data.

The RIPD authorities initiated a coordinated action regarding ChatGPT, developed by OpenAI, in May 2023 on the basis that it may entail risks for the rights and freedoms of users in relation to the processing of their personal data and because it may "generate responses with cultural, racial or gender biases, as well as false ones." ¹³¹⁶

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 ¹³¹² Ministry of Science, Technology and Telecommunications, Expediente 23097: Ley de Protección de Datos Personales (May 9, 2022), https://delfino.cr/asamblea/proyecto/23097
 ¹³¹³ Ibero-American Network for the Protection of Personal Data (RIPD), General Recommendations for the Processing of Personal Data in Artificial Intelligence (Jun. 2019), https://www.redipd.org/sites/default/files/2020-02/guide-general-recommendations-processing-personal-data-ai.pdf.

¹³¹⁴ Ibero-American Network for the Protection of Personal Data (RIPD), *Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects* (Jun. 2019), https://www.redipd.org/sites/default/files/2020-02/guide-specific-guidelines-ai-projects.pdf.

¹³¹⁵ Ibero-American Network for the Protection of Personal Data (RIPD), *Standards for Personal Data Protection for Ibero-American States* (2017),

https://www.redipd.org/sites/default/files/2022-04/standars-for-personal-data.pdf.

¹³¹⁶ Ibero-American Network for the Protection of Personal Data (RIPD), *Las autoridades de la Red Iberoamericana de Protección de Datos Personales inician una acción coordinada en relación con el servicio ChatGPT* [Spanish] (May 8, 2023),

 $[\]frac{https://www.redipd.org/es/noticias/autoridades-red-iberoamericana-de-proteccion-de-datos-personales-inician-accion-chatgpt$

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Despite being an accredited member of the Global Privacy Assembly (GPA) since 2012,¹³¹⁷ the Prodhab has not endorsed the 2018 GPA Resolution on AI and Ethics,¹³¹⁸ 2020 GPA Resolution on AI and Accountability,¹³¹⁹ 2022 GPA Resolution on AI and Accountability,¹³²⁰ or 2023 GPA Resolution on Generative AI Systems.¹³²¹

Algorithmic Transparency

The current data protection laws of Costa Rica are silent with regard to algorithmic transparency. However, Costa Rica's AI strategy emphasizes transparency in AI systems as necessary for building trust. The Strategy would require developers to ensure that AI processes are understandable and that automated decisions are explainable, especially in sensitive sectors like public administration. Regular audits and clear information on how AI algorithms work are recommended to avoid biases and maintain accountability, particularly for AI models impacting the public. 1322

The RIPD Specific Guidelines provide clarity on the definition and requirements of "transparency," noting: "The information provided regarding the logic of the AI model must include at least basic aspects of its operation, as well as the weighting and correlation of the data, written in a clear, simple and easily understood language, it will not be necessary to provide a complete explanation of the algorithms used or even to include them. The above always looking not to affect the user experience."¹³²³

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1318 International Conference on Data, Declaration on Ethics and Data Protection in Artificial Intelligence, (Oct. 2018), https://globalprivacyassembly.org/wp-

content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

https://www.micitt.go.cr/el-sector-informa/micitt-presento-estrategia-nacional-de-inteligencia-artificial-enia

¹³¹⁷ Global Privacy Assembly, *Resolution on Accreditation*, https://globalprivacyassembly.org/wp-content/uploads/2015/02/2-Accreditation-Resolution-Uruguay.pdf

¹³¹⁹ Global Privacy Assembly, *Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-use-of-AI-EN-1.pdf

^{1320 2020} GPA Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology, https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

¹³²¹ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023).

¹³²² MICITT, National AI Strategy (ENIA), pp. 38–77 (Oct. 27, 2024),

¹³²³ Ibero-American Network for the Protection of Personal Data (RED), Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in

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The Lisboa Declaration approved during the XXV International Congress for State Reform and Public Administration in November 2020, co-organized by the Latin American Center for Administration for Development (CLAD), proposed three AI-related actions for Costa Rica to accomplish in one to four years. First, the declaration promoted the assessment of algorithmic models by informing, documenting and publishing the results from pilot projects online. Second, the Declaration proposed further updates to the data protection law (No. 8968) to include algorithmic transparency. Finally, the Declaration urged the creation of a manual on the ethics of AI for the public administration to use as an instrument to measure and evaluate the impact of AI throughout Costa Rica. 1324

The proposed reform of Law 8968 does provide for algorithmic transparency. Transparency is also one of the key principles of the 2022 National Code of Digital Technologies. Table 1326

Use of AI in Public Administration

The ENIA highlights AI's potential to streamline public administration by automating tasks, improving public service delivery, and enhancing decision-making efficiency. For instance, AI is used to manage health services, such as the EDUS platform by Costa Rica's Social Security Fund, which leverages AI for chronic disease management and prevention. The document underlines the need for ethical standards and effective human oversight in these applications to align with national values and ensure responsible deployment.¹³²⁷

As a member of the Latin American Centre for Development Administration (CLAD), Costa Rica approved the Ibero American Charter on Artificial Intelligence in Civil Service in November 2023. The Charter aims to provide a roadmap and common framework for CLAD member states to learn about the challenges and opportunities involved in the implementation of AI and

Artificial Intelligence Projects, p. 17 (Jun. 2019), https://www.redipd.org/sites/default/files/2020-02/guide-specific-guidelines-ai-projects.pdf.

¹³²⁴ Centro Latinoamericano de Administración Para el Desarrollo, *Inteligencia Artificial y ética en la administración pública* (March 2021), https://clad.org/wp-content/uploads/2021/03/Libro-7-Inteligencia-artificial-y-ética-en-la-gestión-pública.pdf

¹³²⁵ Legislative Assembly, *Expediente 22388 Reforma integral a la ley de proteccion de la persona frente al tratamiento de sus datos personales* (actualized text, March 17, 2022), https://delfino.cr/asamblea/proyecto/22388

¹³²⁶ Ministry of Science, Technology and Telecommunications, *National Code of Digital Technologies* (2022), https://www.micitt.go.cr/wp-content/uploads/2022/04/cntd_v.3.0_-firmado digitalmente y marca de hora.pdf

¹³²⁷ MICITT, *National AI Strategy (ENIA)*, p. 39 (Oct. 27, 2024), https://www.micitt.go.cr/elsector-informa/micitt-presento-estrategia-nacional-de-inteligencia-artificial-enia

¹³²⁸ Latin American Centre for Development Administration (CLAD), *Ibero American Charter on Artificial Intelligence in Civil Service* (Nov. 2023), https://clad.org/wp-content/uploads/2024/03/CIIA-EN-03-2024.pdf.

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adapt their AI policy strategies and laws accordingly. The guiding principles are human autonomy; transparency, traceability and explainability; accountability, liability and auditability; security and technical robustness; reliability, accuracy, and reproducibility; confidence, proportionality, and prevention of damage; privacy and protection of personal data; data quality and safety; fairness, inclusiveness, and non-discrimination; human-centering, public value, and social responsibility; and sustainability and environmental protection.

In addition to common principles, the Charter recommends specific tools for monitoring AI impact as well as a risk classification mechanism that guardrails for high-risk use cases and prohibitions against uses that violate human rights. Prohibited uses include facial recognition systems; systems aimed at behavior and cognitive manipulation of specific individuals or vulnerable groups (children or the elderly); and social ranking systems based on certain personality traits, individual behaviors, socio-demographic features, or economic status.¹³²⁹

Use of AI in Courts

While Costa Rica's judiciary has not yet fully integrated AI, the ENIA envisions a future where AI could assist with case management, evidence analysis, and even support decision-making. The strategy stresses that any use of AI in the legal system must be transparent, accountable, and subject to human oversight to uphold justice and prevent discrimination or errors in judgment. 1330

A new AI system called Prometea developed by the Innovation and AI Laboratory of the School of Law of the University of Buenos Aires and the Public Prosecutor's Office of the Autonomous City of Buenos Aires, has been implemented in the judicial system of the Inter-American Court of Human Rights in Costa Rica. Regardless of whether judicial cases are simple (e.g. minor infractions, traffic accidents, and taxi license disputes) or complex (e.g. murder trials), controversy lies in the inevitable biases of the AI-enabled system and the lack of algorithmic transparency behind the decision-making process. Transparency of the AI system's algorithm, therefore, must be assured to protect due process and the rule of law. 1332

AI and Hiring

The use of data analytics and AI techniques for hiring, firing, and promoting employees in Costa Rica has also been very controversial due to AI

¹³³⁰ MICITT, *National AI Strategy (ENIA)*, (Oct. 27, 2024), p.78. https://www.micitt.go.cr/elsector-informa/micitt-presento-estrategia-nacional-de-inteligencia-artificial-enia

https://giswatch.org/ar/node/6178

¹³²⁹ Ibid, p. 21

¹³³¹ Morar, D. and Giandana, F. Victor *Frankenstein's responsibility? Determining AI legal liability in Latin America*, Global Information Society Watch (2019),

¹³³² Ibid

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systems' bias and lack of transparency. Companies recruiting in Costa Rica must adapt their recruiting processes to accommodate Costa Rican law, especially with regard to discrimination. However, controversy persists because Costa Rican law does not directly regulate the impact or effects of AI on recruitment.¹³³³

Costa Rica has piloted a skills and training platform that uses AI to "provide skill development suggestions to participants, based on their abilities, interests and experiences." ¹³³⁴

The ENIA addresses the role of AI in the hiring process, acknowledging its potential to make recruitment more efficient and objective. However, it also highlights the importance of preventing algorithmic biases that could affect vulnerable groups. Costa Rica's AI strategy encourages transparency in AI-driven hiring tools so applicants understand how decisions are made, and it supports providing opt-out capability to ensure ethical AI practices in employment. 1335

According to a September 2024 ManpowerGroup survey, Costa Rica ranks among the top countries with strong hiring intentions, with 36% of employers planning to increase their workforce. This positive outlook is partly driven by advancements in technology and the integration of AI in various sectors. 1336

Environmental Impact of AI

The recent collaboration between Costa Rica and the UNEP (United Nations Environmental Programme) Climate Technology Centre and Network (CTCN) at the 2024 Latin America and Caribbean (LAC) NDE Forum highlights Costa Rica's commitment to integrating artificial intelligence (AI) within its public administration to tackle climate challenges. This event, focused on AI for Climate Action, offered resources for AI capacity-building, including mapping the role of AI in climate action and learning about how AI technology can be applied to transform systems. The four-day event aimed to foster South-South and

¹³³³ Alvaro Aguilar, Aguilar Castillo Love, *Costa Rica - Artificial Intelligence Bias and Data Transparency in the Legal Workforce: The Use of Data Analytics for Hiring, Firing, and Promotion in Costa Rica* (Jun. 3, 2019),

https://www.americanbar.org/groups/labor_law/publications/ilelc_newsletters/issue-june-2019/artificial-intelligence-bias-and-data-transparency/

¹³³⁴ OECD Public Governance Reviews, *The Strategic and Responsible Use of Artificial Intelligence in the Public Sector of Latin America and the Caribbean* (2022), p. 51, https://oecd-opsi.org/wp-content/uploads/2022/03/lac-ai.pdf

¹³³⁵ MICITT, *National AI Strategy (ENIA)*, p. 43 (Oct. 27, 2024), https://www.micitt.go.cr/elsector-informa/micitt-presento-estrategia-nacional-de-inteligencia-artificial-enia

Reuters, *Global Hiring Intentions Hold Steady in Q4, ManpowerGroup Survey Shows* (Sept. 10, 2024), https://www.reuters.com/markets/global-hiring-intentions-hold-steady-q4-manpowergroup-survey-shows-2024-09-10/?utm-source=chatgpt.com

¹³³⁷ UN Climate Technology Centre & Network (CTCN), *LAC NDE Forum 2024 & Capacity Building Programme on AI4Climate Action* (Jan. 10, 2024), https://www.ctc-n.org/calendar/events/lac-nde-forum-2024-capacity-building-programme-ai4climate-action

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North-South collaboration on climate technology. A representative from Costa Rica's Ministry of Environment and Energy stressed "the importance of technology to contribute to the identification and implementation of innovative solutions for climate action, both in terms of mitigation and adaptation." He also highlighted Costa Rica's human capital prepared to "make full use" of these initiatives. 1338

Lethal Autonomous Weapons

Costa Rica is one of the 126 member states signatory to the Convention on Certain Conventional Weapons (CCW) and participated in CCW meetings. During the UN General Assembly in October 2013, Costa Rica proposed that critical functions of weapons systems be subject to meaningful human control highlighting the risks and harms identified with the use of armed drones and robotic weapons. In 2016 Costa Rica called for a preemptive ban on lethal autonomous weapons systems. 1339

Costa Rica has continued to advocate for the ban on lethal autonomous weapons. In 2020 the Ministry of Foreign Affairs, together with the Foundation for Peace and Democracy (FUNPADEM), called for the prohibition of the use of Lethal Autonomous Weapons (LAWs). Still in 2020, while intervening as a member of the Group of Governmental Experts (GGE) on emerging technologies in the area of LAWS, Costa Rica advocated for the development of international legally binding agreements providing for prohibitions and regulations on autonomous weapons systems. 1341

Costa Rica was among the 70 countries that endorsed a joint statement on autonomous weapons systems at the 2022 UN General Assembly meeting. In this joint statement, States urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International

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¹³³⁸ UN Climate Technology Centre & Network (CTCN), *Costa Rica and UNEP CTCN Co-Host Climate Officials and Technology Experts for Capacity Building and AI Training* (Oct. 1, 2024), https://www.ctc-

n.org/sites/default/files/Press%20Release %20LAC%20NDE%20Forum%202024 Eng.pdf ¹³³⁹ Human Right Watch, *Stopping Killer Robots: Country Positions on Banning Fully Autonomous Weapons and Retaining Human Control* (2020),

https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and#:~:text=Costa%20Rica,-

 $[\]underline{At\%20the\%20UN\&text=\%5B74\%5D\%20It\%20called\%20for\%20a,killer\%20robots\%20in\%202}\\\underline{016\%2D2019}.$

¹³⁴⁰ Fundación Arias y Cancillería de Costa Rica firman Convenio de Cooperación sobre el TCA y POA, https://att-assistance.org/es/node/6601

¹³⁴¹ Intervention from Costa Rica (September. 21, 2022), https://documents.unoda.org/wp-content/uploads/2020/09/Intervention-of-Costa-Rica-GGE-Laws-21.09.2020-ENG-PDF.pdf.

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Law, in particular International Humanitarian Law (IHL), including through maintaining human responsibility and accountability in the use of force." ¹³⁴²

In February 2023, the Costa Rican Ministry of Foreign Relations, together with the Foundation for Peace and Democracy, organized the Latin American and Caribbean Conference on the social and humanitarian impact of autonomous weapons. The Conference resulted in the endorsement by Costa Rica and more than 30 other Latin American and Caribbean states, of the Belén Communiqué. ¹³⁴³ The Belén Communiqué calls for "urgent negotiation" of a binding international treaty to regulate and prohibit the use of autonomous weapons to address the grave concerns raised by removing human control from the use of force.

At the 78th UN General Assembly First Committee in 2023, Costa Rica voted in favor¹³⁴⁴ of resolution L.56¹³⁴⁵ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. Costa Rica's submission to the report reiterated its support for a legally binding instrument.¹³⁴⁶

Costa Rica voted in favor of Draft Resolution L.77 on lethal autonomous weapons systems at the 79th UN General Assembly First Committee in October 2024. The draft drew attention to the "negative consequences and impact of autonomous weapon systems on global security and regional and international stability" and marked the urgent necessity of human interventions to ensure accountability, responsibility, and compliance toward international law. L.77 also noted the Secretary-General's proposal on enforcing legally binding prohibitions

 $\frac{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm_en.pdf}{}$

https://www.rree.go.cr/files/includes/files.php?id=2261&tipo=documentos

library.unoda.org/General_Assembly_First_Committee_-Seventy-Ninth_session_(2024)/78-241-Costa_Rica-SP.pdf

¹³⁴² United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

¹³⁴³ Communiqué of the Latin American and the Caribbean Conference of Social and Humanitarian Impact of Autonomous Weapons (Feb. 24, 2023),

¹³⁴⁴ Stop Killer Robots, *164 states vote against the machine at the UN General Assembly*, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

1345 General Assembly, *Lethal Autonomous Weapons*, Resolution L56 (Oct.12, 2023),

https://reachingcriticalwill.org/images/documents/Disarmamentfora/1com/1com/23/resolutions/L56.pdf

¹³⁴⁶ United Nations Office for Disarmament Affairs, *Posición Nacional sobre los sistemas de armas autónomas* (May 2024), <a href="https://docs-posición/https://docs-posición

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and regulations for autonomous weapons systems.¹³⁴⁷ Speaking at the assembly, Costa Rica reiterated the potential harms caused by lethal autonomous weapons and called for legally binding instruments to prevent the deployment of such weapons.¹³⁴⁸

Human Rights

In 2024, Freedom House ranked Costa Rica "Free" with an overall score of 91/100. 1349 Costa Rica also ranked as "Free" with a score of 85/100 for freedom on the internet; however, the report cited "worsening online intimidation, especially against critical journalists," including online hate speech and threats of violence, as well as possible "politicalization in the allocation of state funding to media outlets" as threats to Costa Ricans' online freedom. 1350 Human rights in Costa Rica predominantly stem from the UDHR, the country's Constitution, and the Inter-American Human Rights System.

OECD / G20 AI Principles

Costa Rica endorsed the OECD AI Principles for designing safe, fair, trustworthy and robust AI systems¹³⁵¹ before becoming a member of OECD on May 25, 2021.¹³⁵² Costa Rica extended its commitment by endorsing the 2024 updates.¹³⁵³

Several policies proposed in Costa Rica's national digital transformation strategy, in which AI is included, align with the OECD AI principles. These

https://documents.un.org/doc/undoc/ltd/n24/305/45/pdf/n2430545.pdf

¹³⁴⁸ Ana Ávila Minister Counselor, *United Nations General Assembly First Committee Conventional Weapons*, (Oct 23, 2024),

https://reachingcriticalwill.org/images/documents/Disarmament-

fora/1com/1com24/statements/23Oct Costa Rica.pdf

https://freedomhouse.org/country/costa-rica/freedom-world/2024

¹³⁵¹ OECD Legal Instruments, *Recommendation of the Council on Artificial Intelligence, Adherents* (May 3, 2024), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449#adherents

¹³⁴⁷ United Nations General Assembly First Committee, *General and Complete Disarmament: Lethal Autonomous Weapons Systems* (Oct. 18, 2024),

¹³⁴⁹ Freedom House, Freedom in the \overline{W} orld $\overline{2}024$: \widehat{C} osta Rica (2024),

¹³⁵⁰ Freedom House, *Freedom on the Net 2024: Costa Rica* (2024), https://freedomhouse.org/country/costa-rica/freedom-net/2024#C

¹³⁵³ OECD AI Policy Observatory, *OECD AI Principles Overview, Countries Adhering to the Principles* (2025), https://oecd.ai/en/ai-principles

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include a focus on inclusive growth; human-centered values and fairness; transparency; robustness, security, and safety; and accountability. 1354

The fAIr LAC hub in the country is a promising initiative because it aims to help in defining an ethical and responsible AI framework. 1355

Council of Europe AI Treaty

Costa Rica contributed as a non-member 1356 to the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of law. 1357 Despite this participation, Costa Rica has not signed this first legally binding international AI treaty. 1358

UNESCO Recommendation on AI Ethics

Costa Rica is one of the 193 countries that adopted the UNESCO Recommendation on the Ethics of AI during the 41st General Conference in November 2021. The instrument is the first of its kind that considers ethics as a basis for normative evaluation and guidance of AI technologies with reference to human dignity and wellbeing, and the prevention of harm. 1359

CAF, the development bank of Latin America, and UNESCO signed a letter of intent to collaborate on the implementation of the Recommendation in Latin America and the Caribbean. They pledged to create a Regional Council composed of national and local governments in the region which will support their implementation efforts. Costa Rica is a member of the Regional Council, 1360

<u>firmado digitalmente y marca de hora.pdf</u>

1355 CINDE, *Invest in Costa Rica, Costa Rica will Promote the Responsible use of Artificial* Intelligence with the Support of the Inter-American Development Bank (Sept. 29, 2021), https://cinde-cr.herokuapp.com/en/essential-news/costa-rica-will-promote-the-responsible-useof-artificial-intelligence-with-the-support-of-the-interamerican-development-bank

1356 Council of Europe, *The Framework Convention on Artificial Intelligence* (2025), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificialintelligence

https://search.coe.int/cm/pages/result_details.aspx?objectid=0900001680aee411

¹³⁵⁴ Ministry of Science, Technology and Telecommunications, Código Nacional de Tecnologías Digitales v 3.0. (2022),

https://www.micitt.go.cr/wp-content/uploads/2022/04/cntd v.3.0 -

¹³⁵⁷ Council of Europe, Draft Framework Convention on AI, human rights, democracy and the rule of law (Mar. 19 2024),

¹³⁵⁸ Council of Europe Treaty Office, Chart of Signatures and Ratifications of Traty 225 (Mar. 6, 2025), https://www.coe.int/en/web/Conventions/full-list/?module=signatures-bytreaty&treatynum=225

¹³⁵⁹ UNESCO, Ethics of Artificial Intelligence, https://www.unesco.org/en/artificialintelligence/recommendation-ethics

¹³⁶⁰ G. Ramos, Inteligência Artificial ética e responsável: das palavras aos fatos e direitos, Somos Ibero-America (Feb. 1, 2023), https://www.somosiberoamerica.org/ptbr/tribunas/inteligencia-artificial-etica-e-responsavel-das-palavras-aos-fatos-e-direitos/

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which was formally established, with its inaugural meeting convened in October 2023. This initial meeting focused on the collaborative exchange and formulation of proposals, encompassing both political and technical perspectives, aimed at guiding the ethical development of Artificial Intelligence within the region.¹³⁶¹

Costa Rica signed the resulting Santiago Declaration to Promote Ethical Artificial Intelligence. ¹³⁶² It aligns with the UNESCO Recommendation and establishes fundamental principles that should guide public policy on AI. These include proportionality, security, fairness, non-discrimination, gender equality, accessibility, sustainability, privacy and data protection. ¹³⁶³

Costa Rica also participated in the Second Ministerial and High Authorities Summit on the Ethics of Artificial Intelligence in Latin America and the Caribbean held in Montevideo, Uruguay, on October 3 and 4, 2024. The summit consolidated the work proposed in the first Ministerial Summit held in Santiago de Chile in October 2023, seeking to advance collaborative and sustainable AI-regulations efforts for Latin America and the Caribbean. 1364

The Ministry of Science, Technology and Telecommunications in Costa Rica developed the National AI Strategy released in 2024 through collaboration with UNESCO to align the strategy with the UNESCO Recommendation. 1365

Costa Rica is currently completing the UNESCO Readiness Assessment Methodology (RAM), a tool to support the effective implementation of the

 $\underline{\text{https://www.unesco.org/en/articles/chile-will-host-first-latin-american-and-caribbean-ministerial-and-high-level-summit-ethics.}$

Table 1363 UNESCO, UNESCO and leading Ministry in Santiago de Chile host Milestone Regional LAC Forum on Ethics of AI (Dec. 5, 2023), https://www.unesco.org/en/articles/unesco-and-leading-ministry-santiago-de-chile-host-milestone-regional-lac-forum-ethics-ai?hub=387.

1364 Development Bank of Latin America and the Caribbean, *Second Ministerial Summit on Ethics of Artificial Intelligence in Latin America and the Caribbean* (Oct. 2024), https://www.caf.com/en/currently/events/2024/10/online-second-ministerial-summit-on-the-ethics-of-artificial-intelligence-in-latin-america-and-the-caribbean/

¹³⁶⁵ Mariana Alvarez, Costa Rica will be the first country in Central America to have an Artificial Intelligence strategy (Mar. 1, 2023), https://www.unesco.org/en/articles/costa-rica-will-be-first-country-central-america-have-artificial-intelligence-strategy

¹³⁶¹ UNESCO, Chile will host the First Latin American and Caribbean Ministerial and High Level Summit on the Ethics of Artificial Intelligence (Sept. 25, 2023),

¹³⁶² Cumbre Ministerial y de Altas Autoridades de América Latina y el Caribe, *Declaracion de Santiago "Para promover una inteligencia artificial ética en América Latina y el Caribe"* (Oct. 2023), https://minciencia.gob.cl/uploads/filer_public/40/2a/402a35a0-1222-4dab-b090-5c81bbf34237/declaracion_de_santiago.pdf.

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Recommendation.¹³⁶⁶ The RAM helps countries and UNESCO identify and address any institutional and regulatory gaps.¹³⁶⁷

Evaluation

Costa Rica adopted a national AI strategy aligned with the UNESCO Recommendation through collaboration with UNESCO. Costa Rica has specifically endorsed worldwide initiatives focused on the ethical and responsible use of AI, including the OECD AI principles and the UNESCO Recommendation on the Ethics of AI, and has also participated in the IDB-led fAIr LAC hub. Costa Rica has an independent data protection agency charged with enforcing its comprehensive data protection law regime. The extensive use of AI both in public and private sectors calls, however, for protection of the right to algorithmic transparency.

Czechia

In 2024, Czechia adopted an updated National AI Strategy. The country also became party to the Council of Europe AI Treaty as an EU member state, though the country has not signed the treaty independently.

National AI Strategy

The Czech Ministry of Industry and Trade (MIT) announced¹³⁶⁸ the approval of an updated *National AI Strategy of the Czech Republic 2030*¹³⁶⁹ by government resolution on July 24, 2024. This updated strategy represents a fundamental shift from Czechia's original 2019 National Artificial Intelligence Strategy's (NAIS) general aspirational guidelines approach to a more structured and accountable framework. The change is significant because it moves from voluntary guidelines to specific requirements with designated oversight and enforcement mechanisms. This includes the new element of a mandatory implementation framework which includes regular reporting requirements, specific timelines for implementation, clear accountability measures, and concrete funding commitments.¹³⁷⁰

https://www.mpo.gov.cz/en/business/digital-economy/artificial-intelligence/

¹³⁶⁶ UNESCO, *Implementation of the Recommendation on the Ethics of Artificial Intelligence*, General Conference, 42nd session (Nov. 2, 2023)

¹³⁶⁷ UNESCO Global AI Ethics and Governance Observatory, *Readiness Assessment Methodology* https://www.unesco.org/ethics-ai/en/ram

¹³⁶⁸ Ministry of Industry and Trade, Artificial Intelligence (2024),

¹³⁶⁹ Ministry of Industry and Trade, *National AI Strategy of the Czech Republic 2030* [Czech only] (Jul. 24, 2024), https://www.mpo.gov.cz/assets/cz/podnikani/digitalni-ekonomika/umela-inteligence/2024/8/Narodni-strategie-umele-intelience-CR-2030.pdf

¹³⁷⁰ Ibid, pp. 47–48

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Other notable changes from the 2019 NAIS reflected in the updated NAIS 2030 include a restructuring of the strategy's seven key areas, which are now: 1) AI in Research, Development and Innovation, 2) Education and Expertise in AI, 3) AI Skills and Labor Market Impacts; 4) Ethical and Legal Aspects of AI, 5) Security Aspects of AI, 6) AI in Industry and Business, and 7) AI in Public Administration and Public Services. Most importantly among the structural changes, International Cooperation is now integrated across all areas rather than being a standalone area, and Ethics and Legal Aspects of AI are now their own focused topic area, after previously being combined as two among five topics in the 2019 NAIS. MAIS.

The 2019 NAIS provides context for the updated version. The NAIS follows up on the commitment the Czech Republic undertook by signing, together with other EU Member States the 2018 EU Declaration of Cooperation on Artificial Intelligence. The NAIS is part of the Innovation Strategy of the Czech Republic 2019–2030¹³⁷⁵ and the Digital Czech Republic strategy. The NAIS sets out a framework of priority objectives and tools to support AI development in the academic, public and private sectors, mutual cooperation and international engagement.

The aim of the NAIS is to improve the national economic growth and competitiveness in AI by (1) promoting research and development activities; (2) financing research and development, investment support, and development of the AI ecosystem; (3) Creating public service infrastructures and providing access to data for AI development (4) Upgrading human capital and the educational system in order to meet the demands of AI (5) Measuring the impact of AI on labor systems and labor markets (6) addressing legal, societal and ethical aspects of AI, consumer protection and security issues, with reference to the work of the UN, OECD and Council of Europe in the field; (7) Engaging in international cooperation in the field of AI

To achieve these objectives, the Czech Government envisages policy actions across key areas like education, R&D support, financing, industry, social

¹³⁷² Ibid, p. 5

¹³⁷¹ Ibid, pp. 32–61

¹³⁷³ Ministry of Industry and Trade of the Czech Republic, *National Artificial Intelligence Strategy of the Czech Republic* (2019), https://www.mpo.cz/assets/en/guidepost/for-the-media/press-releases/2019/5/NAIS eng web.pdf

¹³⁷⁴ European Commission, *EU Member States Sign Up to Cooperate on Artificial Intelligence* (Apr. 10. 2018), https://digital-strategy.ec.europa.eu/en/news/eu-member-states-sign-cooperate-artificial-intelligence

¹³⁷⁵ European Commission AI Watch, *Czech Republic AI Strategy Report* (Sept. 1, 2021), https://ai-watch.ec.europa.eu/countries/czech-republic/czech-republic-ai-strategy-report_en ¹³⁷⁶Ministry of Industry and Trade of the Czech Republic, *Digital Czech Republic* (Feb. 12, 2019), https://www.mpo.cz/en/business/digital-society/digital-czech-republic--243601/

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impacts, regulation and international cooperation. For each key area, the Strategy identifies the responsible Ministry, the policy initiatives to develop, the cooperating entities, and key targets until 2021, 2027 and 2035.

The Deputy Prime Minister and Minister of Industry and Trade are directly responsible for the NAIS implementation and will coordinate it through the newly established AI Committee. The AI committee is a subcommittee of the Digital Czech Republic Steering Committee. The Committee primarily includes responsible ministries who are competent to coordinate each specific key area of the Strategy and will be in charge of the NAIS operational management. Working groups are affected to each of the NAIS seven key objectives. Once a year, the Steering Committee and the Czech Government will receive a progress report on the NAIS implementation.

The updated National AI Strategy of the Czech Republic 2030 specifically refers, multiple times, across multiple contexts, to: 1) Fairness (*spravedlnost*); 2) Accountability (*odpovědnost*); 3) Transparency (*transparentnost*); 4) Rule of Law (*právnistát*); 5) Legal Force (*právnisíla*); and 6) Enforcement (*vymáhání*).¹³⁷⁷ By contrast, the 2019 NAIS included a section dedicated to the legal, societal and ethical aspects of AI, but did not specifically refer to Fairness, Accountability, Transparency, or Rule of Law. The 2019 NAIS, however, mentions "maintaining a high level of protection of fundamental and other rights, in line with the European approach of human-centric AI." ¹³⁷⁸

In introduction to the 2019 NAIS, the Czech Prime Minister stated, "We are going to focus on protecting every person and consumer, their rights and privacy, especially the weakest ones. We are going to prevent discrimination, manipulation and misuse of AI, we are going to set the rules for decision-making of algorithms about people in everyday life." The NAIS also refers to "securing standards primarily in the areas of security, personal data protection and the protection of fundamental rights in research, development and use of AI." The NAIS provides for the "continuous evaluation of legislative and other legal risks for the competitiveness of the Czech Republic, creation of ethical frameworks and for the national implementation of binding EU regulations and recommendations." The updated NAIS continues this commitment.

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¹³⁷⁷ Ministry of Industry and Trade, *National AI Strategy of the Czech Republic 2030* [Czech only], pp. 5–61 (Jul. 24, 2024), https://www.mpo.gov.cz/assets/cz/podnikani/digitalni-ekonomika/umela-inteligence/2024/8/Narodni-strategie-umele-intelience-CR-2030.pdf

¹³⁷⁸ Ministry of Industry and Trade of the Czech Republic, *National Artificial Intelligence Strategy of the Czech Republic*, pp. 3, 36 (2019), https://www.mpo.cz/assets/en/guidepost/for-the-media/press-releases/2019/5/NAIS eng web.pdf

¹³⁷⁹ Ibid, p. 3

¹³⁸⁰ Ibid, p. 34

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The National AI Strategy of the Czech Republic 2030 continues the path first established with the 209 NAIS to embody, and now put into more specific action, the Government's "commitment to becoming one of Europe's innovative leaders and a country of the technological future within twelve years. This translates into a position cautioning the EU against overregulation in view of the adoption of an EU AI Act, following the release of the European Commission's White Paper on AI. In November 2019, the Czech Republic prepared a position non-paper for the EU on the "Regulatory Framework for AI in the EU." In this non-paper, the Czech Republic recommended to refrain from initial overregulation of AI, to promote self-regulation and soft-law based on best practices, and to define horizontal red lines as a means of ensuring the protection of fundamental rights as well as legal certainty. The Czech Republic also emphasized that "securing the safety of citizens is the very precondition for the true implementation of fundamental human rights and freedoms."

The Czech Republic is also one of 14 EU Member States that urged the Commission in October 2020 to push for as little regulation as possible in the AI field to find a balance between setting up rules and ensuring fast AI development. In their non-paper, Czechia and other EU Member States set out two visions for the EU's development of AI: (1) promoting innovation, while managing risks through a clear framework and (2) establishing trustworthy AI as a competitive advantage. ¹³⁸⁴

Public Participation

Public participation to formulate the 2024 National AI Strategy was formalized and inclusive. The public participation phase for preparing the update took place from June 28–August 20, 2023, and included 517 respondents from the general public, public administration representatives, private sector stakeholders,

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¹³⁸¹ Ibid, p. 3

¹³⁸² Union of Industry and Transport of the Czech Republic, *Joint Position on AI White Paper* (Jun. 16, 2020), https://www.spcr.cz/aktivity/z-hospodarske-politiky/13720-spolecna-pozice-k-bile-knize-o-umele-inteligenci

¹³⁸³ AI Observatory and Forum, *Regulatory Framework for Artificial Intelligence in the European Union: Non-paper of the Czech Republic* (Fb. 15, 2020), http://observatory.ilaw.cas.cz/index.php/2020/02/15/czech-republics-non-paper-on-ai-regulatory-framework-in-the-eu/

¹³⁸⁴ Denmark Ministry of Industry, Business and Financial Affairs, *Innovative and Trustworthy AI: Two Sides of the Same Coin Position Paper on behalf of Denmark, Belgium, the Czech Republic, Finland, France Estonia, Ireland, Latvia, Luxembourg, the Netherlands, Poland, Portugal, Spain and Sweden, https://www.em.dk/media/15214/non-paper-innovative-and-trustworthy-ai-two-side-of-the-same-coin.pdf*

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academic institutions, research organizations, and non-profit organizations. To ensure broad-based support and relevance, the MPO consulted with public and private representatives. [...] We were inspired by the approaches of countries like Canada, the USA, the United Kingdom, and the Netherlands. We organized an online roundtable where experts from these countries presented their approaches to AI. The roundtable served as a platform for exchanging information and best practices," said Petr Očko, Chief Director for Digitalization and Innovation at the MPO. 1386

This approach demonstrates more active commitment to public participation, including the use of Expert Working Groups, organized by the Aspen Institute in cooperation with prg.ai, under the auspices of the Ministry of Industry and Trade. However, it is unclear exactly how the general public was incorporated into the participation, which appears to possibly have focused mostly on experts, industry, and academics with some inclusion of NGOs and social partners. Despite the lack of clear insights into this process, it is notable that there appears to be a dedicated effort by key Czech AI leaders to embrace the need for, and execution of, robust public participation, perhaps in response to the lack of civil-society engagement, such as by human rights organizations, in the 2019 strategy. 1387

In February 2020, Czechia launched the AI Observatory and Forum, an expert platform on legal aspects of AI to create a favorable social and legal environment for research, development and use of responsible AI.¹³⁸⁸ The platform is tasked with identifying legislative obstacles for research, development and use of AI and offering recommendations on their removal, developing legal and ethical recommendations for practice, providing space for public debate and engaging Czechia in international discussions on AI regulation and data economy. Audits in the public and private sector will also detect the existence of legal barriers. The core of the expert platform and forum consists of a team of independent experts that continuously monitors trends in research and development of AI, its social impact, the development of legal and ethical rules in Czechia, in other countries and at international level. The platform cooperates

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¹³⁸⁵ Ministry of Industry and Trade, *National AI Strategy of the Czech Republic 2030* [Czech only], pp. 11–12 (Jul. 24, 2024), https://www.mpo.gov.cz/assets/cz/podnikani/digitalni-ekonomika/umela-inteligence/2024/8/Narodni-strategie-umele-intelience-CR-2030.pdf

¹³⁸⁶ CZ Daily, *Czech Republic Unveils New AI Strategy for 2030* (Jul. 25, 2024), https://czechdaily.cz/czech-republic-unveils-new-ai-strategy-for-2030

¹³⁸⁷ International Center for Not-for-Profit Law, *Being Alware: Incorporating Civil Society into National Strategies on Artificial Intelligence: Czech Republic* (2020), https://ecnl.org/sites/default/files/2021-

^{02/}ECNL%20ICNL%20NAIS%20Czech%20Republic%20Dec%202020.pdf

¹³⁸⁸ AI Observatory and Forum, Czech Republic's Expert Platform and Forum for Monitoring Legal and Ethical Rules for Artificial Intelligence, http://observatory.ilaw.cas.cz/

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closely with the AI Committee in charge of coordinating the implementation of the NAIS. It is not clear how the general public is involved in the discussions or the work of the Platform. The latest news uploaded to the platform website are from 2020.

EU Digital Services Act

As an EU member state, Czechia shall apply the EU Digital Services Act (DSA). The DSA regulates online intermediaries and platforms. Its main objective is to prevent illegal and harmful activities online and the spread of disinformation. The 2022 Strengthened Code of Practice on Disinformation requires signatories to take action in several domains, such as demonetizing the dissemination of disinformation; ensuring the transparency of political advertising; empowering users; enhancing the cooperation with fact-checkers; and providing researchers with better access to data.

The DSA sets out a co-regulatory framework where service providers can work under codes of conduct to address negative impacts regarding the viral spread of illegal content as well as manipulative and abusive activities, which are particularly harmful for vulnerable recipients of the service, such as children and minors.

FU ALAct

As an EU member State, Czechia is bound by the EU AI Act. ¹³⁹¹ The EU AI Act is a risk-based market regulation which supports the objective of promoting a human-centric approach to AI and making the EU a global leader in the development of secure, trustworthy and ethical AI.

The EU AI Act establishes a complex and layered governance structure involving multiple entities, such as notifying and notified bodies, conformity assessment bodies, an AI Board, an AI Office, national competent authorities, and market surveillance authorities. By and large, national market surveillance authorities are primarily responsible for the implementation and enforcement of

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https://www.europarl.europa.eu/RegData/seance_pleniere/textes_adoptes/definitif/2024/03-13/0138/P9_TA(2024)0138_EN.pdf

¹³⁸⁹ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act), (Oct. 21, 2022), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022R2065

¹³⁹⁰ European Commission, *The 2022 Code of Practice on Disinformation*, https://digital-strategy.ec.europa.eu/en/policies/code-practice-disinformation

¹³⁹¹ European Parliament, Artificial Intelligence Act, European Parliament legislative resolution of 13 March 2024 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts (COM(2021)0206 – C9-0146/2021 – 2021/0106(COD)), P9_TA(2024)0138,

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the provisions of the regulation concerning high risks AI systems, with some coordination among national market surveillance authorities and monitoring by the European Commission. The Commission, including the European AI Office¹³⁹² established in February 2024, has exclusive powers to supervise and enforce the obligations of providers of general-purpose AI models.

Data Protection

Since the Czech Republic is an EU Member State, the General Data Protection Regulation (GDPR)¹³⁹³ is directly applicable in Czechia and to Czechs. The aim of the GDPR is to "strengthen individuals' fundamental rights in the digital age and facilitate business by clarifying rules for companies and public bodies in the digital single market. A single law will also do away with the current fragmentation in different national systems and unnecessary administrative burdens."¹³⁹⁴ The GDPR has been applicable since May 25, 2018.

Regarding the activities of law enforcement authorities, the EU Data Protection Law Enforcement Directive (LED)¹³⁹⁵ protects citizens' fundamental right to data protection whenever personal data is used by criminal law enforcement authorities for law enforcement purposes. It will in particular ensure that the personal data of victims, witnesses, and suspects of crime are duly protected and will facilitate cross-border cooperation in the fight against crime and terrorism." The LED provides for the prohibition of any decision based solely on automated processing, unless it is provided by law, and of profiling that results in discrimination. The LED also requires for Member States, including the

¹³⁹² European Commission, *European AI Office*, https://digital-strategy.ec.europa.eu/en/policies/ai-office

notes the protection (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, https://eur-lex.europa.eu/EN/legal-content/summary/general-data-protection-regulation-gdpr.html

¹³⁹⁴ European Commission, *Legal Framework of EU Data Protection*, https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection_en

¹³⁹⁵ Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA, https://eur-lex.europa.eu/eli/dir/2016/680/oj/eng

https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection en

¹³⁹⁷ Article 11 (1) and (2) of the LED, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

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Czech Republic, to enable data subjects to exercise their rights via national data protection authorities. 1398

The 2019 Personal Data Processing Act both supplements the GDPR and implements the LED in Czech law. 1399

The EU Charter of Fundamental Rights more generally provides that EU citizens have the right to protection of their personal data. Article 8 of the Charter states that: "Everyone has the right to the protection of personal data concerning him or her. Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law."

The Czech Republic is also a member of the Council of Europe and has signed but has not yet ratified¹⁴⁰⁰ the Council of Europe's Convention 108+ for the protection of individuals with regard to the processing of personal data.¹⁴⁰¹

AI Oversight

The Office for Personal Data Protection (DPA) is the national supervisory authority in the Czech Republic. The DPA oversees enforcement of both the GDPR and the Personal Data Processing Act. Despite being a member of the Global Privacy Assembly (GPA) since 2002, the DPA has not endorsed the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence; the 2020 GPA Resolution on AI Accountability; the 2022 GPA Resolution on

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¹³⁹⁸ Article 17 of the LED.

¹³⁹⁹ Czech Personal Data Protection Act (Mar. 12, 2019), https://uoou.gov.cz/media/act-no-110-2019-coll.pdf

Louncil of Europe, Chart of Signatures and Ratifications of Treaty 223 (Mar. 9, 2025),
 https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=223
 Council of Europe, Modernised Convention for the Protection of Individuals with Regard to the Processing of Personal Data (May 18, 2018)
 https://www.coe.int/en/web/data-protection/convention108-and-protocol

¹⁴⁰² Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

¹⁴⁰³ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

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Facial Recognition Technology 1404 or the 2023 GPA Resolution on Generative AL 1405

The Czech Republic also has several oversight bodies for human rights that could contribute to data protection. The Government Council for Human Rights is a permanent advisory body to the Government for the protection of human rights. The Council is in charge of monitoring compliance with the Constitution and other legislation governing the protection of human rights as well as the national implementation of international commitments of the Czech Republic in the field of human rights.

A Government Council for Gender Equality, a Government Council for National Minorities, a Government Board for Persons with Disabilities, and an Inter-ministerial Commission for Roma Community Affairs also protect human rights. The Czech Republic Ombudsman, the Public Defender of Rights is a non-accredited associate member of European Network of National Human Rights Institutions. 1408

Algorithmic Transparency

The Czech Republic has ratified Convention 108, which includes provisions for algorithmic transparency, but has not yet ratified the Protocol that amends it (Convention 108+) and expands algorithmic transparency requirements. However, the Czech Republic is subject to the GDPR as an EU member state. Czechs have a general right to obtain access to information about automated decision-making and to the factors and logic of an algorithm. 1409

The 2020 Recommendation of the Council of Europe Committee of Ministers on human rights impacts of algorithm systems¹⁴¹⁰ specifically emphasizes requirements on transparency, accountability and effective remedies.

¹⁴⁰⁴ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

¹⁴⁰⁵ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf.

¹⁴⁰⁶ Government of the Czech Republic, Government Council for Human Rights, https://www.vlada.cz/en/ppov/rlp/government-council-for-human-rights-50632/

¹⁴⁰⁸ European Network of National Human Rights Institutions, *Our Members*, https://ennhri.org/our-members/

¹⁴⁰⁹ See Recital 63 and Article 22 of the GDPR.

¹⁴¹⁰ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020), https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

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With regard to transparency, the Recommendation provides that "Transparency levels should be as high as possible and proportionate to the severity of adverse human rights impacts, including ethics labels or seals for algorithmic systems to enable users to navigate between systems."1411

Regarding contestability, the Recommendation clarifies that "Contestation should include an opportunity to be heard, a thorough review of the decision and the possibility to obtain a non-automated decision. This right may not be waived, and should be affordable and easily enforceable before, during and after deployment, including through the provision of easily accessible contact points and hotlines."1412

Environmental Impact of AI

The Czech Republic NAIS primarily focuses on advancing AI for economic competitiveness, financial and research developments, legal aspects, innovation, and ethical frameworks. It does not specifically address policies aimed at mitigating the environmental impact of AI technologies.¹⁴¹³

Lethal Autonomous Weapons

According to the Czech Republic, "it is indispensable for the CCW High Contracting Parties to have sufficient guidance on how to ensure that any new weapon, means or methods of warfare are in compliance with the International Humanitarian Law, which is our main objective" and "welcome[s] the work on Lethal Autonomous Weapons Systems."1414

The Czech Republic is one of the 70 countries that endorsed a joint statement on autonomous weapons systems at the 2022 United Nations General Assembly. The joint statement urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law, including through maintaining human responsibility and accountability in the use of force."1415

¹⁴¹¹ Ibid

¹⁴¹² Ibid

¹⁴¹³ Ministry of Industry and Trade, *National AI Strategy of the Czech Republic 2030* [Czech only] (Jul. 24, 2024), https://www.mpo.gov.cz/assets/cz/podnikani/digitalni-ekonomika/umelainteligence/2024/8/Narodni-strategie-umele-intelience-CR-2030.pdf

¹⁴¹⁴ Statement by Mr. Hani Stolina at the Thematic Discussion on Conventional Weapons of the First Committee of the 74th Session of the General Assembly of the United Nations (Oct. 23, 2019), https://perma.cc/NC9W-YDM2

¹⁴¹⁵ United Nations (UN) General Assembly, First Committee, Joint Statement on Lethal Autonomous Weapons Systems First Committee, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

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Czechia participated in the REAIM 2023 international summit on the responsible application of artificial intelligence in the military domain hosted by the Netherlands. At the end of the Summit, Czechia endorsed a joint call for action on the responsible development, deployment and use of artificial intelligence in the military domain. ¹⁴¹⁶ In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." ¹⁴¹⁷ The Czech Republic also endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023. ¹⁴¹⁸

The second REAIM summit took place in 2024 in the Republic of Korea.¹⁴¹⁹

At the 78th UN General Assembly First Committee in 2023, Czechia voted in favor¹⁴²⁰ of resolution L.56¹⁴²¹ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. The report should analyze ways to address the challenges and concerns autonomous weapon systems raise from humanitarian, legal, security, technological and ethical perspectives and reflect on the role of humans in the use of force.

 $\underline{\text{https://estatements.unmeetings.org/estatements/}11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm en.pdf}$

<u>slot-at-the-conference-on-disarmament</u>

1420 Stop Killer Robots, *164 states vote against the machine at the UN General Assembly*,

¹⁴¹⁶ Government of Netherlands, *Call to action on responsible use of AI in the military domain* (Feb. 16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action (State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy* (Nov. 9, 2023), endorsing States as of Feb. 12, 2024, https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

¹⁴¹⁹ Government of the Netherlands, *Speech by Minister Hanke Bruins Slot at the High Level Segment of the Conference on Disarmament* (Feb. 27, 2024), <a href="https://www.government.nl/documents/speeches/2024/02/27/speech-by-minister-hanke-bruins-the

https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/
General Assembly, *Resolution L56: Lethal Autonomous Weapons* (Oct.12, 2023),

https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

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Human Rights

Czechia adopted the United Nations Declaration on Human Rights. As a member of the European Union and of the Council of Europe, Czechia is committed to upholding the EU Charter of Fundamental Rights and the European Convention on Human Rights. According to Freedom House, the Czech Republic is considered "Free" with a score of 94/100, up two points from the 2023 score. 1422

In a 2020 Recommendation to member States on the human rights impacts of algorithmic systems, the Council of Europe Committee of Ministers recalled that their commitment to the Convention for the Protection of Human Rights and Fundamental Freedoms required member state to "ensure that any design, development and ongoing deployment of algorithmic systems occur in compliance with human rights and fundamental freedoms, which are universal, indivisible, inter-dependent and interrelated, with a view to amplifying positive effects and preventing or minimising possible adverse effects."¹⁴²³

OECD / G20 AI Principles

The Czech Republic has been a member of OECD since 1995 and has endorsed the OECD AI Principles.¹⁴²⁴ The original NAIS emphasizes the importance of cooperation with the OECD for the implementation of the Strategy measures. Exchange of information in expert groups on AI at the OECD and coordination of preparations for negotiations within the OECD are amongst those measures.¹⁴²⁵ The OECD AI Policy Observatory acknowledges that the NAIS addresses "inclusive growth, sustainable development and well-being; robustness, security and safety; accountability; fostering a digital ecosystem for AI; providing an enabling policy environment for AI; building human capacity and preparing for labour market transition, international co-operation for trustworthy AI."¹⁴²⁶

The Czech Republic joined the Global Partnership on AI, a multistakeholder initiative which aims to foster international cooperation on AI

https://freedomhouse.org/country/czechia/freedom-world/2024

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

¹⁴²² Freedom House, Freedom in the World 2024: Czechia (2024),

¹⁴²³ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020),

¹⁴²⁴ OECD AI Policy Observatory, *OECD AI Principles Overview, Countries Adhering to the AI Principles* (2025), https://oecd.ai/en/ai-principles

¹⁴²⁵ Ministry of Industry and Trade of the Czech Republic, *National Artificial Intelligence Strategy of the Czech Republic*, pp. 36, 38–39 (2019),

https://www.mpo.cz/assets/en/guidepost/for-the-media/press-releases/2019/5/NAIS_eng_web.pdf

1426OECD AI Policy Observatory, *AI Policies in Czechia: National AI Strategy of the Czech Republic* (2025), https://oecd.ai/en/dashboards/countries/CzechRepublic

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research and applied activities, in 2022.¹⁴²⁷ The GPAI is "built around a shared commitment to the OECD Recommendation on Artificial Intelligence."

Council of Europe AI Treaty

The Czech Republic contributed as a Council of Europe and EU Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of law. The Committee on AI approved the Draft Framework Convention during its 10th Plenary session in March 2024. The Czech Republic is party to the Convention as an EU member state but has not signed independently. 1429

UNESCO Recommendation on AI Ethics

A UNESCO member state since1993,¹⁴³⁰ Czechia is among the 193 countries that endorsed the UNESCO Recommendation on AI, the first ever global agreement on the ethics of AI.¹⁴³¹ The Czech Republic supported the implementation of the UNESCO Recommendation by hosting the first ever Global Forum on the Ethics of AI under the Czech Presidency of the Council of the European Union and under the patronage of UNESCO in December 2022. The forum placed a spotlight on "ensuring inclusion in the AI world," and took stock of the implementation of the recommendation.¹⁴³²

Czechia has not initiated the Readiness Assessment Methodology (RAM), a tool developed by UNESCO to assist in the implementation of the Recommendation.¹⁴³³

¹⁴²⁸ Council of Europe, *Draft Framework Convention on AI, Human Rights, Democracy and the Rule of Law* (Mar. 19, 2024),

https://search.coe.int/cm/pages/result_details.aspx?objectid=0900001680aee411

¹⁴³⁰ UNESCO, Member States (2025), https://www.unesco.org/en/countries#

¹⁴²⁷ GPAI, Community (2024), https://gpai.ai/community/

¹⁴²⁹ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 9, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

¹⁴³¹ UNESCO, UNESCO Member States Adopt the First Ever Global Agreement on the Ethics of Artificial Intelligence (Nov. 2021), https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence

¹⁴³² UNESCO, First Global Forum on Ethics of AI Held in Prague, One Year after the Adoption of UNESCO's Recommendation (2022), https://www.unesco.org/en/articles/first-global-forum-ethics-ai-held-prague-one-year-after-adoption-unescos-recommendation

¹⁴³³ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

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Evaluation

The Czech Republic's ambition to become a European leader in the digital field by 2030¹⁴³⁴ has shaped its position on AI policy. The release in 2024 of an updated National Artificial Intelligence Strategy 2030 builds on that ambition by shifting to a focus on implementation. The updated National AI Strategy of the Czech Republic 2030, effective as of July 2024, shifted transitioned from the broad aspirational approach in the 2019 NAIS to a structured, more enforceable framework.

Although the country adheres to a human centric approach to AI through its commitment to implementing the OECD AI Principles and the UNESCO Recommendation on the Ethics of AI, Czechia has consistently stood against perceived overregulation, notably through the EU AI Act, and strives with its national AI strategy to remove what it considers as legal impediments to AI development. The Czech Republic has not yet ratified the modernized Convention 108+ for the protection of individuals with regard to the processing of personal data. With the adoption of the EU AI Act, Czechia shall establish a national supervisory mechanism which, it is to be hoped, will be an independent one and will take the protection of human rights seriously.

Denmark

In 2024, Denmark's Agency for Digital Government was designated the national competent authority for the EU AI Act, collaborated with the data protection authority to launch a regulatory sandbox, and published guides for using generative AI. Denmark also became party to the Council of Europe AI Treaty through the European Commission's endorsement.

National AI Strategy

The Danish government unveiled their national AI strategy in March 2019. 1436 The Danish strategy on AI development outlines the issues that must be tackled, and defines specific policy efforts and key initiatives. The national AI strategy intends to establish Denmark as a leader in responsible AI development. There are four objectives to accomplish this goal:

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¹⁴³⁴ Ministry of Industry and Trade of the Czech Republic, *National Artificial Intelligence Strategy of the Czech Republic*, p. 3 (2019), https://www.mpo.cz/assets/en/guidepost/for-the-media/press-releases/2019/5/NAIS eng web.pdf

¹⁴³⁵ Ministry of Industry and Trade, *National AI Strategy of the Czech Republic 2030* [Czech only] (Jul. 24, 2024), https://www.mpo.gov.cz/assets/cz/podnikani/digitalni-ekonomika/umela-inteligence/2024/8/Narodni-strategie-umele-intelience-CR-2030.pdf

¹⁴³⁶ Danish Government, *National Strategy for Artificial Intelligence* (2019), https://en.digst.dk/media/19337/305755 gb version final-a.pdf

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- Establish a consistent ethical and human-centered foundation for artificial intelligence;
- Prioritize and promote research in artificial intelligence;
- Encourage the growth of Danish firms through the development and use of artificial intelligence;
- Ascertain that the public sector utilizes AI to provide world-class services to citizens and society.

The strategy covers both the public and the private sector and presents key challenges, focus areas, policy initiatives as well as priority areas. It aims to create a framework that shall improve the level of trust in AI. Therefore, the strategy states six principles for AI, including self-determination, human dignity equality and justice, and addresses also responsibility and explainability. The national strategy establishes priority areas to lift the work of AI within Denmark. These priority areas are healthcare, energy and utilities, agriculture and transport.

In May 2024, the Danish Agency for Digital Government published three new AI Guides for companies, citizens and authorities for testing and working with Generative AI.¹⁴³⁸

Denmark has also issued several digital strategies to create the foundation for digital development. They refer briefly to AI. The current Joint Government Digital Strategy runs form 2022 until 2025 and "shall seize opportunities of digital development in Denmark". It contains topics such as labor shortage, climate change, migration and digital inclusion and introduces 28 initiatives. The Joint Government Digital Strategy aims to allow a broad civil participation. The previous Joint Government Digital Strategy ran form 2016–2020. It established three objectives: To create digital solutions simple to use and of high quality, To provide favorable conditions for growth, and To always promote security and confidence. 1439

Denmark contributed as a Council of Europe Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of law. The Committee on AI approved the Draft Framework Convention during its 10th Plenary session in March 2024. The Council of Europe Framework Convention on Artificial Intelligence and human rights, democracy, and the rule of law was adopted in May 2024. It is a legally binding treaty aimed at ensuring the respect of human rights, the rule of law and democratic legal standards in the use of artificial intelligence (AI) systems. The

¹⁴³⁷ Ibid

¹⁴³⁸ Danish Agency for Digital Government, *The Agency for Digital Government publishes AI Guides* (May 3, 2024), https://en.digst.dk/news/news-archive/2024/maj/the-agency-for-digital-government-publishes-ai-guides/

¹⁴³⁹ Agency for Digital Government, *The Joint Government Digital Strategy*, https://en.digst.dk/strategy/the-joint-government-digital-strategy/

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treaty is also open to non-European countries and sets out a legal framework that covers and addresses the risks that AI systems may pose, while promoting responsible innovation.¹⁴⁴⁰

Nordic-Baltic and Nordic Cooperation on Al

As for the regional landscape, the Danish Minister for digitalization signed the declaration on "AI in the Nordic-Baltic region" establishing a collaborative framework on "developing ethical and transparent guidelines, standards, principles and values to guide when and how AI applications should be used" and "on the objective that infrastructure, hardware, software and data, all of which are central to the use of AI, are based on standards, enabling interoperability, privacy, security, trust, good usability, and portability." 1441

The ministerial declaration Digital North 2.0¹⁴⁴² builds on the common priorities of the Nordic-Baltic countries, and follows the previous ministerial declaration, Digital North 2017-2020. "In order to promote work with digitalisation, co-ordinate efforts, and follow up on the goals of the declaration, a council of ministers for digitalisation (MR-DIGITAL) was established in 2017. The aim is to promote development in three areas: (1) Increase mobility and integration in the Nordic and Baltic region by building a common area for cross-border digital services; (2) Promote green economic growth and development in the Nordic-Baltic region through data-driven innovation and a fair data economy for efficient sharing and re-use of data; and (3) Promote Nordic-Baltic leadership in the EU/EEA and globally in a sustainable and inclusive digital transformation of our societies." ¹⁴⁴³

The Nordic and Baltic ministers for digitalization released another joint statement in November 2021, announcing a focus on digital inclusion, striving to implement measures to make digital services more accessible to all Danish inhabitants and ensuring that those who do not possess the necessary level of skills get the opportunity to acquire them. ¹⁴⁴⁴

0.0

¹⁴⁴⁰ Committee of Ministers, *Council of Europe adopts first international treaty on artificial intelligence* (May 17, 2024), https://www.coe.int/en/web/portal/-/council-of-europe-adopts-first-international-treaty-on-artificial-intelligence

¹⁴⁴¹ Nordic and Baltic Ministers of Digitalization, *AI in the Nordic-Baltic region* (May 14, 2018), https://www.norden.org/en/declaration/ai-nordic-baltic-region

¹⁴⁴² Nordic and Baltic Ministers of Digitalization, *Ministerial Declaration Digital North 2.0* (Sept. 29, 2020), https://www.norden.org/en/declaration/ministerial-declaration-digital-north-20
¹⁴⁴³ Nordic Co-operation, *Nordic-Baltic co-operation on digitalisation*,

 $[\]underline{https://www.norden.org/en/information/nordic-baltic-co-operation-digitalisation}$

¹⁴⁴⁴ Nordic and Baltic Ministers of Digitalization, *Common statement on the importance of promoting digital inclusion as a central part of the digital transformation in the Nordic-Baltic region* (Nov. 26, 2021), https://www.norden.org/en/declaration/common-statement-importance-promoting-digital-inclusion-central-part-digital

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In September 2022, the Nordic and Baltic ministers for digitalization issued a common statement on the importance of cooperation on digital security in the Nordic-Baltic region following the COVID-19 pandemic and the war in Ukraine. The ministers stressed that this "rapid transformation has challenged everyone to adapt to new, digital ways of doing business, learning and accessing public authorities." The ministers declared that they "have committed to ensuring that our region maintains its position as a leader in digitalisation, and that everyone in the region benefit from digitalisation regardless of age, wealth, education or level of digital skills. One important factor that helps ensure a strong level of digitalisation in the region is the trust citizens put in digital services from the public sector—be it at regional, national or local level. In order to keep up this high level of trust, we need to continue our efforts to make our digital public services human centric and accessible. [...] Robust and secure digital services, safeguarding users' privacy and ensuring that personal data are stored and processed in a trustworthy way, are crucial to the citizens' sustained trust in digital services."1445

As part of its action plan for Vision 2030 (2021–2024), the Nordic Council of Ministers identified innovation, digital integration, the safe use of artificial intelligence, data development and open data, education and digitalization as key objectives. The Nordic Council of Ministers also emphasizes the involvement of civil society in efforts relating to our vision for 2030 thanks to "a Nordic civil society network and public consultations." 1447

Nordic Project 2024 will continue toward this vision to support collaboration among Nordic and Baltic countries in developing and using AI in a responsible way. The project aims to support Nordic businesses' development and application of responsible and ethical AI to achieve critical mass by pooling and coordinating resources through a collaboration platform, center, or hub.¹⁴⁴⁸

¹⁴⁴⁵ Nordic and Baltic Ministers of Digitalization, *Common statement on the importance of cooperation on digital security in the Nordic-Baltic region* (Sept. 6, 2022), https://www.norden.org/en/declaration/common-statement-importance-cooperation-digital-

https://www.norden.org/en/declaration/common-statement-importance-cooperation-digital-security-nordic-baltic-region

1446 Nordic Council of Ministers, *The Nordic Region – Toward being the most sustainable and*

integrated region in the world, Action Plan for 2021–2024 (Dec. 14, 2020), https://www.norden.org/en/publication/nordic-region-towards-being-most-sustainable-and-integrated-region-world

¹⁴⁴⁷ Nordic Council of Ministers, *Guidelines for involving civil society in work relating to Our Vision 2030* (Feb. 12, 2021), https://www.norden.org/en/publication/guidelines-involving-civil-society-work-relating-our-vision-2030

¹⁴⁴⁸ Nordic Innovation, *New Nordic AI -Preparation project* (Aug. 30, 2024), https://www.nordicinnovation.org/programs/new-nordics-ai-preparation-project

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Public Participation

Denmark provides programs that enable non-governmental actors (e.g., the academic community, business, civil society, and regional and local governments) to express their perspectives or provide expert advice that informs policy-making processes. These policy initiatives enable stakeholders or experts to engage in public discussions to share information and foster collaboration. Public awareness campaigns and civic engagement activities include informing and consulting with members of the public. 1449

The Danish AI strategy for its part is based on proposals from a Digital Growth Panel¹⁴⁵⁰ and the Danish Government's Disruption Committee. ¹⁴⁵¹

The Danish Ministry of Foreign Affairs launched the Tech for Democracy Initiative in 2021, which brings together government members, organizations, industries and civil society to ensure that technology works for humans and not the other way round. The initiative aims to establish a multistakeholder dialogue and offers numerous events on AI and human rights. 1452

The Danish Pioneer Centre for AI opened in 2021. It focuses on fundamental AI research and aims to make Denmark a leader in human-centered and ethically responsible AI. The Pioneer Center is a national initiative initiated by the Ministry of Higher Education and Science. It includes research foundations as well as Danish universities. 1453

In 2022, a Danish political party called Synthetic Party and led by an AI hoped to be able to stand for Denmark's general election. The party's mission was to raise awareness of the role of AI and its impact on society. Although the party was far from receiving enough signatures of support to be able to stand for the election, it drew attention to the interaction between AI and humans. 1454 In 2024, the Danish Data Protection Agency (Datatilsynet) introduced an AI-specific Impact Assessment Template for companies and authorities to assess the

instruments/Public awareness campaigns and other outreach activities

¹⁴⁵² Tech For Democracy, https://techamb.um.dk/impact/tech-for-democracy

¹⁴⁴⁹ OECD AI Policy Observatory, Public awareness campaigns and civic participation activities (2025), https://oecd.ai/en/dashboards/policy-

¹⁴⁵⁰ European Commission, Directorate-General for Communications Networks, Content and Technology, Digital Growth Strategy 2025 (2021), https://digital-skillsjobs.europa.eu/en/actions/national-initiatives/national-strategies/denmark-digital-growthstrategy-2025

¹⁴⁵¹ The Danish Government, Ministry for Economic Affairs and the Interior, *Denmark's* National Reform Programme (2019), https://commission.europa.eu/content/2019-europeansemester-national-reform-programmes-and-stabilityconvergence-programmes en

¹⁴⁵³ University of Copenhagen, The Danish Pioneer Centre for AI marks its official opening (Mar. 28, 2022),

https://di.ku.dk/english/news/2022/the danish pioneer centre for ai marks its official openin g/
1454 Det Syntetiske Parti [The Synthetic Party], https://detsyntetiskeparti.wordpress.com/program/

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development and operation of AI solutions. The template emphasizes compliance with GDPR principles, including purpose limitation, data minimization, accuracy, security, transparency and the ability to explain AI decisions to data subjects.¹⁴⁵⁵

Furthermore, as part of the government's digitization strategy, the Danish Data Protection Authority collaborated with the Danish Agency for Digitalisation to establish a regulatory sandbox for AI, a controlled environment where companies and authorities can access relevant expertise and guidance in GDPR when developing or using AI solutions. A sandbox process provides: (1) Free access to relevant expertise and guidance; (2) Increased confidence in the finished project, product or service; (3) Better understanding of the regulatory requirements, expectations and the impact of the regulations on the business; (4) Strengthened perception of the company or authority as responsible and proactive in the approach to ethical and responsible use of AI; and (5) Opportunity to inform and contribute to future guidance efforts from the Danish Data Protection Authority and the Danish Agency for Digitalisation.¹⁴⁵⁶

EU Digital Services Act

As an EU member state, Denmark shall apply the EU Digital Services Act (DSA).1457 The DSA regulates online intermediaries and platforms. Its main objective is to prevent illegal and harmful activities online and the spread of disinformation by requiring online intermediaries and platforms to implement ways to prevent and remove posts containing illegal goods, services, or content while giving users the means to report or flag this type of content. The DSA also bans targeted advertising based on a person's sexual orientation, religion, ethnicity, or political beliefs and targeted advertising to minors based on profiling.

EU AI Act

As an EU member State, Denmark is bound by the EU AI Act. 1458 The EU AI Act is a risk-based market regulation which supports the objective of promoting

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¹⁴⁵⁵ Danish Data Protection Authority, *New templates for carrying out impact assessments* (May 22, 2024), https://www.datatilsynet.dk/presse-og-nyheder/nyhedsarkiv/2024/maj/nye-skabeloner-til-gennemfoerelse-af-konsekvensanalyser

¹⁴⁵⁶ Danish Data Protection Authority and Danish Agency for Digital Government, *New regulatory sandbox for AI* (Mar. 5, 2024), https://www.datatilsynet.dk/presse-og-nyhedsarkiv/2024/mar/ny-regulatorisk-sandkasse-for-ai

¹⁴⁵⁷ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act), (Oct. 21, 2022), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022R2065

¹⁴⁵⁸ European Parliament, Artificial Intelligence Act, European Parliament legislative resolution of 13 March 2024 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts (COM(2021)0206 – C9-0146/2021 –

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a human-centric approach to AI and making the EU a global leader in the development of secure, trustworthy and ethical AI. The AI Act entered into force on August 1, 2024, with additional provisions entering info

The EU AI Act establishes a complex and layered governance structure involving multiple entities, such as notifying and notified bodies, conformity assessment bodies, an AI Board, an AI Office, national competent authorities, and market surveillance authorities. Denmark designated the Agency for Digital Government the national competent authority charged with coordinating with supervisory authorities and the European AI Office. 1459 The Agency is part of the Ministry of Digital Affairs and is in charge of implementing digital and AI policies in the public sector for citizens and businesses. For example, the agency implemented the regulatory sandboxes and created AI guides for citizens, businesses, and authorities. 1460

Data Protection

Denmark, like other European countries, has enacted laws to supplement the EU General Data Protection Regulation (GDPR). 1461 In Denmark, the GDPR and its Danish supplementary act, the Data Protection Act (DPA)¹⁴⁶² are the primary regulations governing the processing of personal data. The DPA provides for certain exceptions to the GDPR, most notably regarding the processing of personal data in the employment sector and the processing of national registration numbers.

In 2002, the Danish Act on Personal Data Processing came into force, implementing Directive 95/46 EC. However, despite the fact that the Danish data protection regulation is approximately two decades old, until the GDPR was

2021/0106(COD)), P9 TA(2024)0138,

https://www.europarl.europa.eu/RegData/seance pleniere/textes adoptes/definitif/2024/03-13/0138/P9 TA(2024)0138 EN.pdf

https://www.digmin.dk/digitalisering/nyheder/nyhedsarkiv/2024/apr/digitaliseringsstyrelsenudpeges-som-tilsynsmyndighed-for-kunstig-intelligens

¹⁴⁵⁹ Ministry of Digital Affairs, The Agency for Digital Government is Appointed as the Supervisory Authority for Artificial Intelligence [Digitaliseringsstyrelsen udpeges som tilsynsynsmyn-dighed for kunstig intelligens] (Apr. 10. 2024),

¹⁴⁶⁰ Agency for Digital Government, The Agency for Digital Government Publishes AI Guides (May 3, 2024), https://en.digst.dk/news/news-archive/2024/maj/the-agency-for-digitalgovernment-publishes-ai-guides/

 $^{^{}ar{1}461}$ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (Apr. 27, 2016), http://data.europa.eu/eli/reg/2016/679/oj

¹⁴⁶² Data Protection Act, Act No. 502 on supplementary provisions to the regulation on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (May 23, 2018), https://www.datatilsynet.dk/media/7753/danish-dataprotection-act.pdf

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implemented in 2016, little attention was paid to data protection in Denmark. Prior to 2017–2018, the term 'data protection' was almost unknown to the broader Danish population and many businesses. Thus, GDPR compliance has been a hot topic in recent years. Since the GDPR's adoption, Danish businesses have invested in data protection compliance, mostly to mitigate economic and legal risks.

The Danish and other European supervisory authorities have released several recommendations and decisions interpreting the GDPR and relevant national legislation, allowing Danish businesses to conduct significantly more targeted and resource-efficient compliance operations. Denmark has lagged behind the majority of other EU Member States when it comes to data protection knowledge and compliance. So far, there have only been two cases in which fines have been imposed by Danish courts for GDPR breaches. The levels of fines (100.000 DKK and 50.000 DKK) were very low compared to fines in other countries (with fines up to millions). According to some privacy law professionals, there is a significant risk for Denmark to be considered a "safe haven" in relation to fines, which could cause companies that do not want to comply with the GDPR to locate in Denmark.¹⁴⁶³

Regarding the activities of law enforcement authorities, Denmark transposed the EU Data Protection Law Enforcement Directive (LED)¹⁴⁶⁴ through the Danish Law Enforcement Act.¹⁴⁶⁵ The LED "protects citizens' fundamental right to data protection whenever personal data is used by criminal law enforcement authorities for law enforcement purposes. It will in particular ensure that the personal data of victims, witnesses, and suspects of crime are duly protected and will facilitate cross-border cooperation in the fight against crime and terrorism."¹⁴⁶⁶ The LED provides for the prohibition of any decision based solely on automated processing, unless it is provided by law, and of profiling that results

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¹⁴⁶³ Claas Thöle, Four years of GDPR: The Danish approach to data protection, or absence thereof? (Sept. 15, 2022), https://inplp.com/latest-news/article/four-years-of-gdpr-the-danish-approach-to-data-protection-or-absence-thereof/

¹⁴⁶⁴ Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

¹⁴⁶⁵ Danish Law Enforcement Act,

 $[\]frac{https://www.datatilsynet.dk/Media/637998758521368022/The\%20Danish\%20Law\%20Enforcement\%20Act.pdf}{}$

¹⁴⁶⁶ European Commission, *Legal Framework of EU Data Protection*, https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection en

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in discrimination. 1467 The LED also requires for Member States, including Denmark, to enable data subjects to exercise their rights via national data protection authorities. 1468

The EDPB has produced guidelines on the use of facial recognition technologies in the area of law enforcement, 1469 stressing that law enforcement must "satisfy the requirements of necessity and proportionality." The EDPB stresses that facial recognition tools should only be used in strict compliance with the Law Enforcement Directive (LED). 1470

The EU Charter of Fundamental Rights more generally provides that EU citizens have the right to protection of their personal data. Article 8 of the Charter states that: "Everyone has the right to the protection of personal data concerning him or her. Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law."

The Danish data protection agency, the Datatilsynet, is the national supervisory authority in Denmark. Despite being a member of the Global Privacy Assembly (GPA) since 2002, the Datatilsynet has not endorsed the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence, 1471 the 2020

¹⁴⁶⁷ Article 11 (1) and (2) of the LED, https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=celex%3A02016L0680-20160504

¹⁴⁶⁸ Article 17 of the LED

¹⁴⁶⁹ European Data Protection Board, Guidelines 05/2022 on the use of facial recognition technology in the area of law enforcement [obsolete] (May12, 2022), https://edpb.europa.eu/system/files/2022-05/edpb-

guidelines 202205 frtlawenforcement en 1.pdf ¹⁴⁷⁰ European Data Protection Board, EDPB adopts Guidelines on calculation of fines &

Guidelines on the use of facial recognition technology in the area of law enforcement, Press release (May 16, 2022), https://edpb.europa.eu/news/news/2022/edpb-adopts-guidelinescalculation-fines-guidelines-use-facial-recognition en

¹⁴⁷¹ Global Privacy Assembly, Declaration on Ethics and Data Protection in Artificial Intelligence (Oct. 23, 2018), https://globalprivacyassembly.org/wpcontent/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

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GPA Resolution on AI Accountability, ¹⁴⁷² the 2022 GPA Resolution on Facial Recognition Technology, ¹⁴⁷³ or the 2023 GPA Resolution on Generative AI. ¹⁴⁷⁴

Algorithmic Transparency

Although it has not yet ratified the Protocol amending the Convention 108 which provides for algorithmic transparency, Denmark is subject to the GDPR. Danes have a general right to obtain access to information about automated decision-making and to the factors and logic of an algorithm.¹⁴⁷⁵

The recently adopted EU AI Act sets transparency requirements for various risk categories of AI systems, each with specific forms and standards. For general-purpose AI systems (GPAI), these will be clarified by the ongoing, multistakeholder Code of Practice process (through April 2025), facilitated by the EU AI Office, which will shape GPAI rules coming into application in August 2025. For systems in other risk categories, ongoing standards work will provide a clearer basis in view of gradual AI Act compliance deadlines.¹⁴⁷⁶

The Digital Services Act (DSA), fully in force since February 2024, while not directly targeting algorithmic transparency, introduced a requirement for large online platforms to publish transparency reports on their content moderation practices. At least once a year, VLOPs and VLOSEs must issue detailed transparency reports.¹⁴⁷⁷ Among other details, such companies must describe the volumes, accuracy and error rate of their automated content moderation systems.

The recently adopted EU Platform Work Directive, pending transcription into national law by member states, also introduces transparency requirements, regarding the algorithmic management of workers.¹⁴⁷⁸ Among other rules, the

¹⁴⁷⁶ European Commission, *AI Act: Participate in the drawing-up of the first General-Purpose AI Code of Practice* (July 30, 2024) https://digital-strategy.ec.europa.eu/en/news/ai-act-participate-drawing-first-general-purpose-ai-code-practice

¹⁴⁷⁸ Council of the European Union, *Platform workers: Council adopts new rules to improve their working conditions* (Oct. 14, 2024), https://www.consilium.europa.eu/en/press/press-

¹⁴⁷² Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

¹⁴⁷³ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

¹⁴⁷⁴ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf.

¹⁴⁷⁵ See Recital 63 and Article 22 of the GDPR

¹⁴⁷⁷ European Commission, *How the Digital Services Act enhances transparency online*, https://digital-strategy.ec.europa.eu/en/policies/dsa-brings-transparency

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Directive aims to make the use of algorithms in human resources management more transparent, ensuring human oversight of automated systems, and guaranteeing workers' right to contest automated decisions.

The 2020 Recommendation of the Council of Europe Committee of Ministers on human rights impacts of algorithm systems¹⁴⁷⁹ specifically emphasizes requirements on transparency, accountability and effective remedies. The Recommendation provides that "Transparency levels should be as high as possible and proportionate to the severity of adverse human rights impacts, including ethics labels or seals for algorithmic systems to enable users to navigate between systems. The use of algorithmic systems in decision-making processes that carry high risks to human rights should be subject to particularly high standards as regards the explainability of processes and outputs."¹⁴⁸⁰ The Recommendation also clarifies that "Contestation should include an opportunity to be heard, a thorough review of the decision and the possibility to obtain a non-automated decision. This right may not be waived, and should be affordable and easily enforceable before, during and after deployment, including through the provision of easily accessible contact points and hotlines."¹⁴⁸¹

In the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law, adopted by the EU in September 2024, Article 8 on Transparency and oversight instructs Parties to "adopt or maintain measures to ensure that adequate transparency and oversight requirements tailored to the specific contexts and risks are in place in respect of activities within the lifecycle of artificial intelligence systems, including with regard to the identification of content generated by artificial intelligence systems." The European Commission's signature binds Denmark to the Convention.

Independent Council for Ethical Use of Data

According to Statistics Denmark, 83 percent of Danes have confidence in the way public authorities manage personal information. The government has set a goal of increasing this to 90% by 2024 in world-class digital services. To

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

 $[\]underline{releases/2024/10/14/platform\text{-}workers\text{-}council\text{-}adopts\text{-}new\text{-}rules\text{-}to\text{-}improve\text{-}their\text{-}working\text{-}}\underline{conditions/}$

¹⁴⁷⁹ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020),

¹⁴⁸⁰ Ibid

¹⁴⁸¹ Ibid

¹⁴⁸² Council of Europe, *Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law* (Sept. 5, 2024), https://rm.coe.int/1680afae3c ¹⁴⁸³ Danish Government, *National Strategy for Artificial Intelligence*, p. 25 (2019), https://en.digst.dk/media/19337/305755 gb version final-a.pdf

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accomplish this goal and fully exploit the potential of artificial intelligence, the government has set to instill confidence in the public sector's and private sector's work with data and new technologies. The government has established six ethical principles that will serve as the foundation for future development and application of artificial intelligence and has developed several initiatives promoting a strong emphasis on data ethics and establishing a responsible foundation for AI as part of the Danish National Strategy for AI. A critical component of these initiatives is to increase the accountability of both the public and private sectors' use of data and AI by ensuring transparency and compliance with data ethical guidelines. The Danish government established an Independent Data Ethics Council in 2019 with the mission of advising the public and private sectors on data-related ethical issues.

Danish Labeling Program for Digital Accountability

Another key initiative is the "D-seal." The Danish government established an independent labelling scheme in collaboration with a consortium of the Confederation of Danish Industry, the Danish Chamber of Commerce, SMEdenmark, and the Danish Consumer Council. It is supported by the Danish Business Authority and financed by the Danish Industry Foundation. "All companies, regardless of their size, must meet the D-seal's data ethics requirements if they develop software and if they use or develop algorithms and AI." ¹⁴⁸⁴ "The purpose of the D-seal is to promote data security, data protection and data ethics at Danish companies, so that customers and consumers can feel safe when using the companies' products and services." ¹⁴⁸⁵ The idea is for the seal to create a market incentive for actors to be more data ethical. The D-seal was launched in September 2021.

The D-seal is based on 8 criteria: A management system for data accountability; Awareness and safe behavior; Technical IT security; Requirements for suppliers' IT security and digital accountability; Transparency and control of data; Privacy & security by design & default; Reliable algorithms & AI; Data ethics.

In 2020, ahead of the negotiations regarding the draft EU AI Act, Denmark, together with 13 other EU Member States, issued a non-paper responding to the European Commission's White Paper on AI.¹⁴⁸⁶ Through this

¹⁴⁸⁴ Birgitte Kofod Olsen, *Danish Labeling Program for Digital Accountability* (Sept. 28, 2021), https://dataethics.eu/danish-labeling-program-for-digital-accountability/; Frederick Weiergang Larsen, *Denmark: An independent council and a labelling scheme to promote the ethical use of data*, OECD, The AI Wonk (Jun. 15, 2020), https://oecd.ai/wonk/an-independent-council-and-seal-of-approval-among-denmarks-measures-to-promote-the-ethical-use-of-data">https://oecd.ai/wonk/an-independent-council-and-seal-of-approval-among-denmarks-measures-to-promote-the-ethical-use-of-data

¹⁴⁸⁶ Denmark, Belgium, the Czech Republic, Finland, France, Estonia, Ireland, Latvia, Luxembourg, the Netherlands, Poland, Portugal, Spain and Sweden, *Non-paper: Innovative and*

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non paper, Denmark called for a "flexible" framework with voluntary self-labelling schemes. Denmark argued for a risk-based approach towards AI, highlighting that trustworthy and human-centric AI goes hand in hand with innovation, economic growth and competitiveness. The non-paper concludes with a call to the EU for a voluntary European labelling scheme that would make it visible for potential users, for example, citizens, businesses as well as public administrations, which applications are based on secure, responsible and ethical AI and data.¹⁴⁸⁷

Digitization of Public Administration

In October 2023, the Danish Data Protection Authority (*Datatilsynet*) published guidance on the development and use of AI by public authorities. The report contained the results of the mapping of the use of AI across the public sector longer term. The Danish Data Protection Authority stated that it will look at more guidance on how organizations can handle the risks that may be associated with the use of AI, such as bias and lack of transparency.

Environmental Impact of AI

The Danish National Strategy for Artificial Intelligence emphasizes responsible and ethical AI use across sectors, particularly targeting healthcare, public administration, and the green transition. This strategy is a part of Denmark's broader commitment to sustainability. It includes measures such as promoting the use of renewable energy in AI-related infrastructures and supporting the development of efficient data processing methods to reduce carbon footprints.¹⁴⁸⁹

Lethal Autonomous Weapons

At a 2015 informal meeting of the Convention on Certain Convention Weapons Experts on Lethal Autonomous Weapons Systems, Denmark affirmed that weapons must remain under "meaningful human control.¹⁴⁹⁰

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 $\underline{experts\text{-}laws/statements/13April}\underline{Denmark.pdf}$

Trustworthy AI: Two Sides of the Same Coin, Netherlands and You (Aug. 10, 2020), https://www.netherlandsandyou.nl/web/pr-eu-brussels/documents

¹⁴⁸⁷ Melissa Heikkla, *6 Key battles ahead for Europe's AI Law* (Apr. 21, 2021), https://www.politico.eu/article/6-key-battles-europes-ai-law-artificial-intelligence-act/,

¹⁴⁸⁸ Datatilsynet, *Ny vejledning om offentlige myndigheders brug af AI og kortlægning af AI på tværs af den offentlige sektor* (Oct. 5, 2023), https://www.datatilsynet.dk/presse-og-nyheder/nyhedsarkiv/2023/okt/ny-vejledning-om-offentlige-myndigheders-brug-af-ai-og-kortlaegning-af-ai-paa-tvaers-af-den-offentlige-sektor

¹⁴⁸⁹ Agency for Digital Government, *The Danish National Strategy for Artificial Intelligence*, p. 65 (Mar. 2019), https://en.digst.dk/strategy/the-danish-national-strategy-for-artificial-intelligence/

¹⁴⁹⁰ Government of Denmark, *Statement to the Convention on Conventional Weapons informal meeting of experts on lethal autonomous weapons systems*, http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/ccw/2015/meeting-

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In 2020, during the General Debate of the First Committee of the 75th UN General Assembly, the Permanent Representative of Denmark declared, "Denmark supports the work of the GGE on Lethal Autonomous Weapons Systems (LAWS), in particular the 11 guiding principles. In our work on these principles we should in particular aim to develop an understanding of the type and degree of human machine interaction."¹⁴⁹¹

Denmark was also one of the 70 countries that endorsed a joint statement on autonomous weapons systems at the 2022 United Nations General Assembly. The joint statement urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law, including through maintaining human responsibility and accountability in the use of force." ¹⁴⁹²

In February 2023, Denmark participated in an international summit on the responsible application of artificial intelligence in the military domain hosted by the Netherlands. At the end of the Summit, Denmark endorsed a joint call for action on the responsible development, deployment and use of artificial intelligence in the military domain. ¹⁴⁹³ In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." ¹⁴⁹⁴ Denmark also endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023. ¹⁴⁹⁵

fora/1com/1com20/statements/19Oct Denmark.pdf

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¹⁴⁹¹ Statement by H.E. Mr. Martin Bille Hermann, *Permanent Representative of Denmark General Debate First Committee of the 75th UN General Assembly* (Oct. 19, 2020), https://reachingcriticalwill.org/images/documents/Disarmament-

 ¹⁴⁹² United Nations (UN) General Assembly, First Committee, Joint Statement on Lethal
 Autonomous Weapons Systems First Committee, 77th United Nations General Assembly Thematic
 Debate – Conventional Weapons (Oct. 21, 2022),

 $[\]underline{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcS\underline{nnAm_en.pdf}$

¹⁴⁹³ Government of Netherlands, *Call to action on responsible use of AI in the military domain* (Feb. 16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action (Feb. US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Feb. 12, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

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At the 78th UN General Assembly First Committee in 2023, Denmark cosponsored and voted in favor of resolution L.56 on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. The report was released in July 2024.

Human Rights

According to Freedom House, Denmark receives high scores for Political Rights and Civil Liberties for a combined score of 97/100 in 2024. The 2024 Freedom House report notes that "Denmark is a robust democracy with regular free and fair elections. Citizens enjoy full political rights, the government protects free expression and association, and the judiciary functions independently. However, Denmark has struggled to uphold fundamental freedoms for immigrants and other newcomers." Denmark is a signatory to major human rights treaties, including the Universal Declaration of Human Rights. Denmark has also ratified several European human rights instruments, including the European Convention on Human Rights (ECHR).

In a 2020 Recommendation to member States on the human rights impacts of algorithmic systems, the Council of Europe Committee of Ministers reminded member states that their commitment "to ensuring the rights and freedoms enshrined in the Convention for the Protection of Human Rights and Fundamental Freedoms to everyone within their jurisdiction" requires them to "ensure that any design, development and ongoing deployment of algorithmic systems occur in compliance with human rights and fundamental freedoms, which are universal, indivisible, inter-dependent and interrelated, with a view to amplifying positive effects and preventing or minimising possible adverse effects."¹⁴⁹⁹

The Danish Parliament established the Danish Centre for Human Rights in 1987, which was renamed the Danish Institute for Human Rights in 2002. As

fora/1com/1com23/resolutions/L56.pdf

1498 Freedom House, Freedom in the Woo

¹⁴⁹⁶ Stop Killer Robots, *164 states vote against the machine at the UN General Assembly*, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

¹⁴⁹⁷ General Assembly, *Resolution L56: Lethal Autonomous Weapons* (Oct. 12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-

¹⁴⁹⁸ Freedom House, *Freedom in the World 2024: Denmark* (2024), https://freedomhouse.org/country/denmark/freedom-world/2024

Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020), https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

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Denmark's NHRI (National Human Rights Institute), the Institute has counterparts in other countries. 1500

OECD / G20 AI Principles

Denmark is a member of the OECD and has endorsed the OECD AI Principles. 1501

In a 2021, report on the state of implementation of the OECD AI Principles, the OECD noted the progress that Denmark is making towards the implementation of the OECD AI principles. 1502

Denmark is also a member of the Global Partnership on AI, a multistakeholder initiative that aims to foster international cooperation on AI research and applied activities and is "built around a shared commitment to the OECD Recommendation on Artificial Intelligence." ¹⁵⁰³

Council of Europe AI Treaty

Denmark participated in negotiations for the Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law as a Council of Europe member. Denmark became party to this first legally binding international AI treaty with the European Commission signature in September 2024 but has not taken action on the treaty as an independent nation.¹⁵⁰⁴

UNESCO Recommendation on AI Ethics

Denmark has endorsed the UNESCO Recommendations on AI, the first ever global agreement on the ethics of AI. 1505 It remains to be seen how this endorsement will translate in practice.

Evaluation

Denmark's National AI strategy, released in 2019, sets out an ambitious agenda for the country. Denmark has emphasized responsible AI development, established an independent Data Ethics Council, endorsed the OECD AI

¹⁵⁰⁰ https://www.humanrights.dk/

¹⁵⁰¹ OECD Legal Instruments, Recommendation of the Council on Artificial Intelligence, Adherents (May 3, 2024), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449#adherents

¹⁵⁰² OECD, State of Implementation of the OECD AI Principles: Insights from National AI Policies (June 18, 2021), https://www.oecd.org/digital/state-of-implementation-of-the-oecd-aiprinciples-1cd40c44-en.htm

¹⁵⁰³ GPAI, Community (2024), https://gpai.ai/community/

¹⁵⁰⁴ Council of Europe Treaty Office, Chart of Signatures and Ratifications of Treaty 225 (Mar. 18, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-bytreaty&treatynum=225

¹⁵⁰⁵ UNESCO, UNESCO member states adopt the first ever global agreement on the Ethics of Artificial Intelligence (Nov. 2021), https://www.unesco.org/en/articles/unesco-member-statesadopt-first-ever-global-agreement-ethics-artificial-intelligence.

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Principles, and promoted opportunities for public participation in the development of AI policy. Denmark has also introduced certification seals to promote trustworthy AI. In a non-binding paper issued ahead of the EU Act negotiations, Denmark set out two visions for the EU's development of AI: (1) promoting innovation, while managing risks through a clear framework and (2) establishing trustworthy AI as a competitive advantage. The question that Denmark's position raises is whether Denmark considers AI ethics as a means for AI deployment or a condition. Denmark has established an independent national competent authority in accordance with the EU AI Act and even offered guides on safe and responsible use of generative AI for citizens, companies, and authorities.

As Denmark has endorsed the UNESCO Recommendation on the Ethics of AI and the country's action on the EU AI Act, Council of Europe AI Treaty, and Nordic-Baltic collaboration is a step toward implementation. The ratification of the modernized Convention 108 for the protection of individuals with regard to the processing of personal data would be a strong signal that Denmark prioritizes the fundamental rights of its citizens.

Dominican Republic

In 2024, the Dominican Republic progressed on implementing the National AI Strategy through technical projects and international alliances. The country also completed the UNESCO Readiness Assessment Methodology (RAM) and began implementing recommendations.

National AI Strategy

"We find ourselves at a transformative moment for the future of our nation. AI stands as the emblematic technology of our century, with an impact that will resonate in all facets of our society. A vast territory of new opportunities is opening before us, a horizon of transformation which calls us to immediate action." The President of the Dominican Republic introduced the National AI Strategy in October 2023 with these words.

One of the key pillars of the Strategy is Smart Governance. Smart Governance is resting on ethics and includes the digitization of public administration. Key objectives include the promotion of ethical and responsible AI in the Dominican Republic and the strengthening of the legislative and regulatory data protection framework.

The digitization of public administration will concern the adoption of AI systems in the fields of justice, health, education, security and transport. The

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¹⁵⁰⁶ Denmark, Belgium, the Czech Republic, Finland, France, Estonia, Ireland, Latvia, Luxembourg, the Netherlands, Poland, Portugal, Spain and Sweden, *Non-paper: Innovative and Trustworthy AI: Two Sides of the Same Coin*, Netherlands and You (Aug. 10, 2020), https://www.netherlandsandyou.nl/web/pr-eu-brussels/documents

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Dominican Republic plans to implement generative AI applications, including chatbots, digital assistants, and predictive models, to address citizens' needs and combat corruption. Monitoring AI-based public services will involve establishing criteria centered on transparency and data quality.

One year later, the Government Office of Information and Communication Technologies (OGTIC), led by Director Bartolomé Pujals, presented the first results of the National AI Strategy. The report highlighted the country's advancement in regional partnerships and alliances such as signing the Cartagena Declaration at the Latin American and Caribbean Ministerial Summit on AI (Colombia), supporting a regional AI ecosystem focused on productivity and societal well-being. Domestically, the Dominican Republic also introduced TAINA, an AI system designed to modernize public services using text and voice technology, although there was no further information on its deployment. The Dominican Republic will host the III Summit on AI Ethics in 2025, reinforcing its role as a leader in ethical AI governance in the region. 1507

AI has also been addressed through other national and regional initiatives. The Dominican Republic's Ministry of Economy, Planning and Development (MEPyD) as described as "the pillars of the fourth industrial revolution, the internet of things, Big Data and big data analysis, cloud computing, artificial intelligence, among other aspects of the technology." MEPyD Minister Juan Ariel Jiménez recognized that "large volumes of data, artificial intelligence and blockchain are transforming economic activities around the world. This technological trend has repercussions on production, social interaction, planning and, of course, on public management."

The Dominican Republic has focused on the use of AI in the fields of public management and economic development. In 2021, President Luis Abinader issued Decree 71-21, establishing the Digital Transformation Cabinet¹⁵⁰⁹ to oversee the Dominican Republic's Digital Agenda 2030. The Cabinet "responds to the government's vision of making information and communication technologies a strategic tool for sustainable development [...] and inclusive for

https://ogtic.gob.do/categoria/noticias/ogtic-da-a-conocer-resultados-de-la-enia-en-su-primerano-de-implementacion

¹⁵⁰⁷ Government Office of Information and Communication Technologies (OGTIC), Results of the First Year of the National AI Strategy (ENIA) (Oct. 14, 2024),

¹⁵⁰⁸ Gobierno de la República Economía, *Planificación, MEPYD Uses Artificial Intelligence to Improve Decision-Making in Public Management* (Nov. 28, 2019), https://mepyd.gob.do/mepyd-utiliza-inteligencia-artificial-mejorar-la-toma-decisiones-la-gestion-publica

¹⁵⁰⁹ Presidencia de la República Dominicana, *President Abinader Creates the Digital Transformation Cabinet* (Mar. 9, 2021), https://presidencia.gob.do/noticias/presidente-abinader-crea-el-gabinete-de-transformacion-digital

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Dominican society."¹⁵¹⁰ Lisandro Macarrulla, Minister of the Presidency, stressed that the Agenda "will raise national productivity and competitiveness levels, placing us in a better position in global markets [... and] will improve the quality of life of citizens because they will be able to receive more and better services from the State and they will develop new skills that will allow them to access better jobs."¹⁵¹¹ The Digital Agenda 2030 builds on previous digital strategies to address new technological challenges while incorporating a long-term vision that involves all social actors in its design and implementation. The Vice Minister of the Digital Agenda, José David Montilla, stated that working groups and thematic committees have been created that "include members of the cabinet, representatives of public and private institutions involved, specialists and volunteers, who will develop each of the pillars of the Agenda.

The Digital Agenda 2030 is divided into five main axes: 1) governance and regulatory framework; 2) connectivity and access 3) education and digital skills; 4) digital government; and 5) digital economy. Each of these axes responds to specific objectives through performance measurement indicators. "By 2030, the Dominican Republic expects to have reduced the digital divide and ensured access to, and use of, digital technologies in a secure and sustainable environment." The Digital Agenda has been developed in line with the broader development strategy, more particularly with regard to addressing the digital divide through education.

The Dominican Republic has also been part of the Caribbean Artificial Intelligence Initiative led by the UNESCO Cluster Office for the Caribbean and the Broadcasting Commission of Jamaica (BCJ), with the support of UNESCO Information for all Program (IFAP) National Committee of Jamaica. The Initiative "aims to develop a sub-regional strategy on the ethical, inclusive and humane use of AI in the Caribbean Small Island Developing States". ¹⁵¹³ The Caribbean AI Policy Roadmap was released in June 2021, ¹⁵¹⁴ following a period of stakeholder consultation. ¹⁵¹⁵

 $\underline{https://presidencia.gob.do/sites/default/files/decree/2021-08/Decreto\%20527-08/Decreto\%2052-0$

¹⁵¹⁰ Ibid; Luis Abinader, *Decree* 571-21 (Aug. 26, 2021),

^{21%20}Agenda%20Digital%202030.pdf

¹⁵¹¹ Ibid

¹⁵¹² OECD, *Multidimensional Review of the Dominican Republic: Towards Greater Well-Being for All* (Dec. 13, 2022), https://www.oecd-ilibrary.org/development/multi-dimensional-review-of-the-dominican-republic 560c12bf-en

¹⁵¹³ UNESCO, *UNESCO Kingston*, https://www.unesco.org/en/fieldoffice/kingston

¹⁵¹⁴ Caribbean Artificial Intelligence Initiative, *Caribbean Artificial Intelligence Roadmap* (2021), https://ai4caribbean.com/wp-content/uploads/2021/07/Caribbean-Artificial-Intelligence-Policy-Roadmap.pdf

¹⁵¹⁵ Ibid, p. 2

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On February 18-19, 2021, a two-day "Artificial Intelligence Forum: Opportunities to Accelerate Human Progress for Sustainable Development in Caribbean Small Islands Developing States" was organized to collect input from diverse stakeholders regarding AI policy topics. In April 2021, three additional workshops addressing the AI Policy Roadmap principles were held with stakeholders from the private sector, academia, civil society and youth. 1517

The Caribbean AI Policy Roadmap acknowledges that "AI systems raise new types of ethical issues that include, but are not limited to, their impact on decision-making in employment and labour, social interaction, health care, education, media, freedom of expression, access to information, privacy, democracy, discrimination, and weaponization. Furthermore, new ethical challenges are created by the potential of AI algorithms to reproduce biases, for instance regarding gender, ethnicity, and age, and thus to exacerbate already existing forms of discrimination, identity prejudice and stereotyping. As Caribbean nations expand their adoption of AI tools and other exponential technologies, stakeholders (policymakers, citizens, private sector, academia, and NGOs) must proactively collaborate to create strategies for the humanistic development of guidelines, regulations and laws. Boundaries should be defined to regulate the AI decision-making, AI rights, inclusion of manual overrides and AI accountability protocols."

The Policy Roadmap has been developed based on a series of "assumptions" about the Caribbean and Artificial Intelligence. These include: "Human creativity is inextricably linked to Caribbean identify, economic viability and sustainable development"; "AI is a product of human creativity"; "AI is in service of humanity"; "AI must be inclusive, fair, transparent, accountable"; "AI must be regulated"; "Human rights supersede AI rights"; "Bias is everywhere in AI"; "We Are Our Data"; "Data rights will be the civil rights movement of the 21st century." ¹⁵¹⁸

The Policy Roadmap is based on six principles: Resiliency, Governance, Transformation, Upskilling, Preservation and Sustainability.¹⁵¹⁹ With regard to governance, actions to be taken include:

• "Develop Responsible AI Governance, Oversight, Principles & Policies to Do No Harm and to enhance safety, security and accountability of AI.

https://www.unesco.org/en/articles/unesco-caribbean-artificial-intelligence-initiative (Dec. 7, 2023), https://www.unesco.org/en/articles/unesco-caribbean-artificial-intelligence-initiative (Dec. 7, 2023), https://www.unesco.org/en/articles/pioneering-artificial-intelligence-policy-caribbean (May 20, 2021), https://www.unesco.org/en/articles/pioneering-artificial-intelligence-policy-caribbean (Saribbean Artificial Intelligence Initiative, Caribbean AI Policy Roadmap (2021), p. 5, https://ai4caribbean.com/wp-content/uploads/2021/07/Caribbean-Artificial-Intelligence-Policy-Roadmap.pdf

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- Promote AI as a tool for service to humanity.
- Establish common values and principles to ensure fairness, transparency and accountability in digital transformation and increased integration of AI algorithms.
- Develop policy and legislation to enable the establishment of national and regional AI Governance Committees / Oversight Boards as well as national and regional licensing regime to manage and monitor the development of standards that govern the industry including technical code of conduct for developers, procurement guidelines for buyers, design and use principles and ethically aligned design standards.
- Regulate AI industry to provide redress and punishment for individuals & companies that violate citizen rights and wellbeing including banning cyberbullying, hate crimes, discriminatory algorithms, disinformation and graphically violent images inclusive of penalties and fines.
- Develop an AI Appeal Court and Online Dispute Resolution System.
- Increase advocacy for AI ethics by targeting software developers at global forums and hosting a global software conference to network, lobby, share research and initiate collaborations with big tech.
- Develop AI software to test AI for biases and identify AI applications in most need of governance. Protect citizen privacy and instill trust."1520

The Dominican Republic is also a member of the Community of Latin American and Caribbean States (CELAC) and participated in its seventh Summit on January 24, 2023, in Buenos Aires. The Summit culminated in the signature of the Buenos Aires Declaration reinforcing the commitment to protect citizens' rights and interests among signatories, including the Dominican Republic. This declaration fosters regional integration and collaboration on issues such as AI-based cyber threats and disinformation. 1521

The Dominican Republic signed the Cartagena de Indias Declaration with 15 other nations, supporting ethical AI development and education in the region. The Declaration called for cooperation to create inclusive, rights-focused AI frameworks in August 2024. The country also reaffirmed its commitment to AI governance by signing the Declaration of Montevideo in

¹⁵²⁰ Ibid, p. 41

¹⁵²¹ CELAC Summit, *Declaration of Buenos Aires*, Ministry of Foreign Affairs (Jan. 24, 2023), https://www.cancilleria.gob.ar/userfiles/prensa/declaracion de buenos aires - version final.pdf
¹⁵²² Ministry of Science, Technology, Knowledge, and Innovation, *Subsecretary Gainza at the AI Summit in Colombia: Governance Is Not Only Regulation and Legal Frameworks, but Primarily about Perspectives and Principles* (Aug. 9, 2024),

https://www.minciencia.gob.cl/noticias/subsecretaria-gainza-en-cumbre-de-ia-en-colombia-la-gobernanza-no-es-solo-regulacion-y-marcos-legales-sino-que-principalmente-tiene-que-ver-con-perspectivas-y-principios/

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October 2024. ¹⁵²³ The Montevideo Declaration highlighted the use of UNESCO's Readiness Assessment and CAF's Guide to develop inclusive policies. The Dominican Republic also committed to addressing challenges in the regional AI Roadmap.

Public Participation

To engage with external stakeholders in development of digital service and policy design, the Dominican Republic used focus groups, public consultations and social media. 1524

Data Protection

The Dominican Constitution enshrines the right to the protection of personal data in public and private records under Section 44(2) and provides that data controllers and processors are to comply with data security, professional secrecy, data quality and data loyalty.¹⁵²⁵

The Dominican Republic issued Law No 172-13 on the Comprehensive Protection of Personal Data of consumers or users. 1526 Article 10 and Article 14 provide the right to access and right to rectification of personal data respectively. There is no mention of algorithmic transparency.

The Dominican Republic has no established general data protection authority. The General Law for the Protection of Consumer or User Rights No 358-05 declared that the National Institute for the Protection of Consumer Rights, "Pro Consumidor" monitors data protection compliance in relation to consumers. Pro Consumidor does not have enforcement powers, although they do have mediation and conciliation competences. 1527

The Dominican Republic has started to draft a new data protection law in line with international standards such as the Council of Europe's Convention

Agency of Electronic Government and Information and Knowledge Society, *Montevideo Declaration Approved* (Oct. 4, 2024), https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-sociedad-informacion-conocimiento/files/documentos/noticias/ENG_Montevideo%20Declaration%20approved.pdf

1524 OECD, *The Strategic and Responsible Use of Artificial Intelligence in the Public Sector of Latin America and the* Caribbean, p. 155 (2022), https://oecd-opsi.org/wp-content/uploads/2022/03/lac-ai.pdf

¹⁵²⁵ Constitute, *Dominican Republic's Constitution of 2015* (Apr. 27, 2022), https://www.constituteproject.org/constitution/Dominican Republic 2015.pdf

Presidency of the Dominican Republic, Law No. 172-13 which Aims at the Comprehensive Protection of Personal Data Recorded in Files, Public Records, Data Banks or Other Technical Means of Data Processing for Reporting Purposes, whether Public or Private [Spanish] (Dec. 15, 2013), https://presidencia.gob.do/sites/default/files/statics/transparencia/marco-legal/leyes/Ley-172-13.pdf

¹⁵²⁷ WIPO, *The Dominican Republic Issued Law No 358-05 on the Protection of the Rights of the Consumer or User* (2005), https://www.wipo.int/wipolex/en/legislation/details/11048

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108+, and has received support from the Council of Europe to this end. 1528 Should the initiative come to fruition, it would be an opportunity for the Dominical Republic to provide data subjects with the right to algorithmic transparency which is one of the main innovation of the modernized Convention 108.

According to the 2023 National AI Strategy, the revision of Law No 172-13 shall include the establishment of safeguards for the protection of personal data and human rights in the context of AI implementation and should be ready in 2025. 1529

The Dominican Republic developed a Digital Government guide that includes a provision on the documentation and explainability of digital government initiatives, software, and services. However, specific guidelines for algorithmic transparency and explainability are not provided. 1530

Facial Recognition

The Dominican General Director of Immigration, Enrique García, reported in 2021 that facial recognition technology will be used to enforce security in airports and border entry to combat drug trafficking and international crime. The Dominican Airport Association explained in September 2022 that there are intelligent security cameras in Dominican airports. 1532

The Director of the General Directorate of Passports (DGP) said in March 2022 that the country will transition from using mechanical passports to electronic passports. "The director of the DGP explained that the electronic passport would

¹⁵²⁸ Council of Europe, *GLACY+: The Dominican Republic Works on New Data Protection Law* (Dec. 2019), https://www.coe.int/en/web/cybercrime/glacyplusactivities/-

/asset_publisher/DD9qKA5QlKhC/content/glacy-the-dominican-republic-works-on-new-data-protection-

law?inheritRedirect=false&redirect=https%3A%2F%2Fwww.coe.int%2Fen%2Fweb%2Fcybercr ime%2Fglacyplusactivities%3Fp p id%3D101_INSTANCE_DD9qKA5QlKhC%26p p lifecyc le%3D0%26p p state%3Dnormal%26p p mode%3Dview%26p p col_id%3Dcolumn-4%26p p col_count%3D1

¹⁵²⁹ MEPyD, *MEPYD Uses Artificial Intelligence to Improve Decision-Making in Public Management* (Nov. 28, 2019), https://mepyd.gob.do/mepyd-utiliza-inteligencia-artificial-mejorar-la-toma-decisiones-la-gestion-publica

1530 OECD, *The Strategic and Responsible Use of Artificial Intelligence in the Public Sector of Latin America and the Caribbean* (March 22, 2022), <a href="https://www.oecd-ilibrary.org/governance/the-strategic-and-responsible-use-of-artificial-intelligence-in-the-public-use-of-artific-use

sector-of-latin-america-and-the-caribbean 1f334543-en

Arecoa, *DR airports will strengthen security with facial recognition technology* (Apr. 20, 2021), https://www.arecoa.com/aeropuertos/2021/04/20/aeropuertos-rd-reforzaran-seguridad-tecnologia-reconocimiento-facial/

¹⁵³² Dominican Republic Today, Airport Association Assures Security Cameras Make Criminal Actions "Extremely Difficult" (Sept. 16, 2022),

 $\frac{https://dominicantoday.com/dr/economy/2022/09/16/airport-association-assures-security-cameras-make-criminal-actions-extremely-difficult/$

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have an integrated chip that facilitates facial recognition and will contain all the carrier information. However, Pichardo added that at the moment, this change does not have a scheduled date because advice is being sought to prevent errors that entail significant expenses, as has happened with other countries." ¹⁵³³

Environmental Impact of Al

The Dominican Republic's Digital Economy Agenda includes an objective to use technology to promote "economic and social well-being as a way to promote sustainable development." The country has also committed to using mitigating the environmental impact of AI by endorsing the Montevideo Declaration, a regional document centered on implementing the UNESCO Recommendation, that includes Environment and Sustainability as areas of focus for 2024–2025. 1535

Lethal Autonomous Weapons

The National AI Strategy makes clear that the goal of the Dominican Republic is to pursue the prohibition of the use of AI as a weapon of war. 1536

The Dominican Republic endorsed 2019 Declaration on Lethal Autonomous Weapons prepared by France and Germany and opened for endorsement during the Alliance for Multilateralism event on 26 September 2019. The Declaration posits 11 Principles on Lethal Autonomous Weapons Systems. These principles respond to challenges relating to the development of LAWS within the UN's Convention of Certain Conventional Weapons (CCW). These principles affirm among others that "international humanitarian law applies to these systems; a human must always be responsible for the decision to use these systems; [and] States must examine the legality of these new weapons that they are developing or requiring at the design stage.

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¹⁵³³ Dominican Today, *General Directorate of Passports with a view to changing to electronic passport* (March 10, 2022), https://dominicantoday.com/dr/local/2022/03/10/address-of-passports-with-a-view-to-changing-to-electronic-passport/

¹⁵³⁴ Luis Abinader, *Decree 571-21* (Aug. 26, 2021),

https://presidencia.gob.do/sites/default/files/decree/2021-08/Decreto%20527-21%20Agenda%20Digital%202030.pdf

¹⁵³⁵ Republic of Uruguay, Ministerial and High Authorities, *Montevideo Declaration* (Oct. 4, 2024), https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-conocimiento/files/documentos/noticias/ENG Montevideo%20Declaration%20approved.pdf

¹⁵³⁶ Gobierno de la República Economía, Planificación, *MEPYD Uses Artificial Intelligence to Improve Decision-Making in Public Management* (Nov. 28, 2019), https://mepyd.gob.do/mepyd-utiliza-inteligencia-artificial-mejorar-la-toma-decisiones-la-gestion-publica

¹⁵³⁷ France Diplomacy, *11 Principles on Lethal Autonomous Weapons Systems (LAWS)*, https://www.diplomatie.gouv.fr/en/french-foreign-policy/united-nations/multilateralism-a-principle-of-action-for-france/alliance-for-multilateralism/article/11-principles-on-lethal-autonomous-weapons-systems-laws#sommaire 2

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The Dominican Republic is one of the 70 countries that endorsed a joint statement on autonomous weapons systems at the 2022 United Nations General Assembly. The joint statement urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law, including through maintaining human responsibility and accountability in the use of force." ¹⁵³⁸

The Dominican Republic endorsed the Belén Communiqué, ¹⁵³⁹ which calls for "urgent negotiation" of a binding international treaty to regulate and prohibit the use of autonomous weapons to address the grave concerns raised by removing human control from the use of force in February 2023.

Also in February 2023, at the Responsible AI in the Military Domain Summit (REAIM 2023) co-hosted by the Netherlands and the Republic of Korea, nearly sixty states agreed to issue a joint call to action on the responsible development, deployment and use of AI in the military domain. The Dominican Republic endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023. 1541

At the 78th UN General Assembly First Committee in 2023, the Dominican Republic co-sponsored resolution L.56 on autonomous weapons systems¹⁵⁴² and voted in favor¹⁵⁴³ of it, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems,"

https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm_en.pdf

https://www.rree.go.cr/files/includes/files.php?id=2261&tipo=documentos

¹⁵³⁸ United Nations (UN) General Assembly, First Committee, Joint Statement on Lethal Autonomous Weapons Systems First Committee, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

¹⁵³⁹ Latin American and the Caribbean Conference of Social and Humanitarian Impact of Autonomous Weapons, *Communiqué* (Feb. 24, 2023),

Government of Netherlands, *Call to action on responsible use of AI in the military domain*, (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action

¹⁵⁴¹ US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Feb. 12, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

¹⁵⁴² UN General Assembly, *Resolution L56: Lethal Autonomous Weapons* (Oct. 12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

¹⁵⁴³ Stop Killer Robots, *164 states vote against the machine at the UN General Assembly*, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

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and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems.

The UN General Assembly adopted Draft Resolution on Lethal Autonomous Weapons Systems, with the Dominican Republic voting in favor in November 2024.¹⁵⁴⁴

Human Rights

In 2024, Freedom House ranked the Dominican Republic as "partly free," with a score of 68/100 for political rights and civil liberties. L545 According to the Freedom House 2024 report, "The Dominican Republic holds regular elections that are relatively free, though recent years have been characterized by controversies around implementing a new electoral framework." "Pervasive corruption undermines state institutions and the use of excessive force by police is a problem. Discrimination against Dominicans of Haitian descent and Haitian migrants, as well as against LGBT+ people, remain serious problems."

Despite these issues, the Human Rights Council Working Group Universal Periodic Review in June 2024 highlighted the country's progress in human rights, noting legislative advances in areas such as gender equality, child protection, and anti-discrimination measures. Key achievements include prohibiting child marriage, expanding educational access, and enhancing social protections for vulnerable groups. The report also discusses ongoing reforms to improve public security, reduce poverty, and protect marginalized communities, particularly through addressing the rights of women, children, and the LGBTQ+ community. Recommendations emphasize the need for further action on issues like statelessness, migration, and gender-based violence, urging the Dominican Republic to continue aligning its policies with international human rights standards. ¹⁵⁴⁶

OECD / G20 AI Principles

The Dominican Republic has not endorsed the OECD AI principles.¹⁵⁴⁷ According to OECD AI Principle 2.5 regarding international cooperation for trustworthy AI, "Governments, including developing countries and with

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¹⁵⁴⁴ United Nations, Seventy-Ninth Session, 30th Meeting of the United Nations, *In Nearly 50 Separate Recorded Votes, First Committee Approves 15 Drafts on Conventional Weapons, Divergent Approaches to Outer Space Security* (Nov. 5, 2024), https://press.un.org/en/2024/gadis3756.doc.htm

¹⁵⁴⁵ Freedom House, *Freedom in the World 2024: Dominican Republic* (2024), https://freedomhouse.org/country/dominican-republic/freedom-world/2024

¹⁵⁴⁶ UN Human Rights Council, *Report of the Working Group on the Universal Periodic Review: Dominican Republic* (Jun. 25, 2024),

https://documents.un.org/doc/undoc/gen/g24/090/58/pdf/g2409058.pdf

¹⁵⁴⁷ OECD AI Observatory, *OECD AI Principles Overview, Countries Adhering to the AI Principles* (2025), https://oecd.ai/en/ai-principles

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stakeholders, should actively cooperate to advance these principles and to progress on responsible stewardship of trustworthy AI. Governments should work together in the OECD and other global and regional fora to foster the sharing of AI knowledge, as appropriate." The OECD acknowledges the work of the Inter-American Development Bank and its ""fAIr LAC" initiative to promote the responsible and ethical use of AI and improve the public services e.g., education, health, and social protection, in Latin American and Caribbean (LAC) countries," which includes the Dominican Republic.

In 2022, the OECD, in partnership with the Development Bank of Latin America (CAF) also published a report on "The Strategic and Responsible Use of Artificial Intelligence in the Public Sector of Latin America and the Caribbean," including the Dominican Republic. 1549

Council of Europe AI Treaty

The Dominican Republic has not signed the first legally binding global treaty on AI, the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law. 1550

UNESCO Recommendation on AI Ethics

The Dominican Republic is a member state of UNESCO.¹⁵⁵¹ The Dominican Republic endorsed the UNESCO Recommendation on AI Ethics.¹⁵⁵²

The Latin American Development Bank (CAF) and UNESCO signed a letter of intent to implement the Recommendation in Latin America and the Caribbean and support the establishment of a Regional Council that incorporates all governments of the region. ¹⁵⁵³ Following the first summit centered on AI ethics

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¹⁵⁴⁸ OECD, *State of Implementation of the OECD AI Principles*, p. 76 (Jun. 2021), https://www.oecd-ilibrary.org/docserver/1cd40c44-

T549 OECD, The Strategic and Responsible Use of Artificial Intelligence in the Public Sector of Latin America and the Caribbean (Mar. 22, 2022), https://www.oecd-

 $[\]underline{ilibrary.org/governance/the-strategic-and-responsible-use-of-artificial-intelligence-in-the-public-sector-of-latin-america-and-the-caribbean_1f334543-en$

¹⁵⁵⁰ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 9, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

¹⁵⁵¹ UNESCO, *List of the Member States and the Associate Members* (2025), https://pax.unesco.org/countries/ListeMS.html.

United Nations, 193 countries adopt first-ever global agreement on the Ethics of Artificial Intelligence (Nov. 25, 2021), https://news.un.org/en/story/2021/11/1106612.

¹⁵⁵³ UNESCO, CAF and UNESCO will create a council to review ethical criteria for artificial intelligence in Latin America and Caribbean (June 23, 2022),

 $[\]frac{https://www.unesco.org/en/articles/caf-and-unesco-will-create-council-review-ethical-criteria-artificial-intelligence-latin-america-and.}$

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in the region, the Dominican Republic signed the 2023 Santiago Declaration to Promote Ethical Artificial Intelligence. The Declaration aligns with the UNESCO Recommendation and establishes fundamental principles that should guide public policy on AI. These principles include proportionality, security, fairness, non-discrimination, gender equality, accessibility, sustainability, privacy and data protection. The National AI Strategy states that the Dominican Republic will draft of a code of AI ethics in line with the UNESCO Recommendation.

Following the second meeting of the Regional Council in 2024, the Dominican Republic signed the Montevideo Declaration, ¹⁵⁵⁷ which emphasizes a commitment to human rights, freedoms, and democracy and outlines five key priorities for countries to pursue in the coming year: Governance and Regulation, Talent and Future Work, Protection of Vulnerable Groups, Environment, and Sustainability. Regional governments and the AI Working Group, with support from UNESCO and CAF, will lead the implementation, with semi-annual reviews to ensure transparency and stakeholder engagement.

The Dominican Republic completed the UNESCO Readiness Assessment Methodology (RAM), a tool to support the effective implementation of the Recommendation in 2024. Key recommendations focus on advancing the National Artificial Intelligence Strategy (ENIA) with strong institutional and public support. Priorities include updating regulatory frameworks for data protection, cybersecurity, and potential AI-specific regulations, along with strengthening public sector capacities, promoting diversity in AI, and reducing urban-rural technology access disparities. 1559

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¹⁵⁵⁴ Cumbre Ministerial y de Altas Autoridades de América Latina y el Caribe, *Declaracion de Santiago "Para promover una inteligencia artificial ética en América Latina y el Caribe"* (Oct. 2023), https://minciencia.gob.cl/uploads/filer-public/40/2a/402a35a0-1222-4dab-b090-5c81bbf34237/declaracion-de-santiago.pdf

Total UNESCO, UNESCO and leading Ministry in Santiago de Chile host Milestone Regional LAC Forum on Ethics of AI (Dec. 5, 2023), https://www.unesco.org/en/articles/unesco-and-leading-ministry-santiago-de-chile-host-milestone-regional-lac-forum-ethics-ai?hub=387

¹⁵⁵⁶ Gobierno de la República Economía, *Planificación, MEPYD uses artificial intelligence to improve decision-making in public management* (Nov. 28, 2019), https://mepyd.gob.do/mepyd-utiliza-inteligencia-artificial-mejorar-la-toma-decisiones-la-gestion-publica

Republic of Uruguay, Ministerial and High Authorities, *Montevideo Declaration* (Oct. 4, 2024), https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-conocimiento/files/documentos/noticias/ENG Montevideo%20Declaration%20approved.pdf

¹⁵⁵⁸ UNESCO Global AI Ethics and Governance Observatory, Readiness Assessment

Methodology (2023), https://www.unesco.org/ethics-ai/en/ram

¹⁵⁵⁹ UNESCO, Dominican Republic: Artificial Intelligence Readiness Assessment Report (2024), https://unesdoc.unesco.org/ark:/48223/pf0000391573?posInSet=1&queryId=N-EXPLORE-87169348-9aac-4bd8-a172-616945b057f1

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Evaluation

The Dominican Republic's endorsement of the UNESCO Recommendation on the Ethics of AI has strengthened efforts toward responsible AI governance. The adoption of the National AI Strategy provides a strong ethical foundation, but its success will depend on effective implementation, particularly in ensuring algorithmic transparency and revising data protection laws, which are pending.

While the country's stance on banning autonomous weapons is commendable, concerns about AI surveillance persist. The introduction of TAINA to modernize public services is promising, and the country's participation in the Cartagena and Montevideo Declarations highlights a commitment to ethical AI. However, the lack of progress on updating the data protection law poses a challenge to fully realizing these ambitions.

Egypt

In 2024, Egypt completed the first phase of the 2019 National Artificial Intelligence Strategy and initiated the second phase, which includes a focus on governance. Egypt also saw its efforts on the African Union Continental Artificial Intelligence Strategy come to fruition with the AU Executive Council endorsement in July 2024.

National AI Strategy

The Egyptian Cabinet approved the formation of a National Council for Artificial Intelligence (NCAI) tasked with "outlining, implementing and governing the AI strategy in close coordination with the concerned experts and entities" 1560 in November 2019. The Technical Committee of the National Council for Artificial Intelligence, composed of representatives from all relevant government entities, as well as independent experts in the field of Artificial Intelligence (AI) released the National AI Strategy in 2021. 1561 On this occasion, the President of the Arab Republic of Egypt, Abdel Fattah Al–Sisi, stated, "We strongly believe that as emerging technologies create opportunities, they also pose challenges that we should be prepared for. Thus, we aim, through the National AI Strategy, to open the door to dialogue with stakeholders and promote international cooperation to exchange views on the best practices for developing and using AI to build the common good. This is in addition to adopting and leading strong

¹⁵⁶⁰ National Council for Artificial Intelligence (NCAI), Ministry of Communications and Information Technology (Egypt), https://mcit.gov.eg/en/Artificial Intelligence

¹⁵⁶¹ Ministry of Communications and Information Technology, *Egypt National Artificial Intelligence Strategy*, paragraph 2 (Jul. 2021),

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stances on AI ethics and the social and economic impact of using AI applications in African and Arab countries, under the umbrella of the African Union (AU) and the League of Arab States (LAS) to reach a common vision that reflects our needs and aspirations and conforms to our values and principles."1562

The National AI Strategy builds on the previous work of the Ministry of Communications and Information Technology and the Ministry of Higher Education and Scientific Research, along with input from independent experts and private sector companies. 1563

The two main objectives of the Egyptian National AI Strategy are to: "Exploit AI technologies to support the achievement of Egypt's sustainable development goals, to the benefit of all Egyptians; Play a key role in facilitating regional cooperation within the African and Arab regions and establish Egypt as an active international player in AI."1564

The strategy consists of four pillars:

- 1. AI for government: the automation of government processes and the embedding of AI in decision-making cycles to increase efficiency and transparency
- 2. AI for development: the application of AI in different economic sectors, prioritizing agriculture/environment/water management; healthcare; Arabic natural language processing; economic planning and development; and manufacturing and smart infrastructure management
- 3. Capacity building: increasing general awareness of AI and providing professional training
- 4. International activities: fostering cooperation at both the regional and the international level.

In turn, these four pillars are supported by four categories of enablers:

- 1. Governance: including ethics, laws and regulations, tracking and monitoring
- 2. Data: including collection, management and monetization strategies
- 3. Ecosystem: including private sector, research and academia, and civil society
- 4. Infrastructure: including fair access to compute, storage, networking, and other assets 1565

When it comes to "Governance" as an enabler, the National Strategy has shed light on the importance of adopting responsible/ethical AI policies, legislations and regulations "to mitigate potential misuse [of AI and] promote and enable the widespread adoption of AI solutions."1566

¹⁵⁶² Ibid, paragraph 10

¹⁵⁶³ Ibid

¹⁵⁶⁴ Ibid

¹⁵⁶⁵ Ibid 1566 Ibid, paragraph 10.1.2

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Towards that end, the National Strategy put in place the following Key Performance Indicators (KPIs) to assess the status of ethical AI in Egypt:

- The establishment of a dedicated track within NCAI for AI Ethics
- Publish Guidelines for Responsible and Ethical development of AI
- A set of rules and regulations for responsible AI use
- Ethics in AI/technology courses being offered in universities as part of computing degrees. 1567

The most significant milestone is the adoption of the Egyptian Charter for Responsible AI in February 2023, which offers "actionable insights and policies for decision makers in government, academia, industry, and civil society." Egypt's efforts were also witnessed in establishing AI Faculties at Egyptian universities and teaching AI ethics in computer science faculties. 1569

The National Strategy is implemented in a phased approach. The first phase (2020–2022) focused on "training graduates and professionals to fulfil market needs and proving the value of AI in the different strategic sectors by starting pilot projects within government in partnership with local and foreign entities" as well as "building regional bridges to unify AI efforts on the African and Arab levels, as well as active participation in international organizations on topics such as AI Ethics, AI for SDGs, and the impact of AI on labor markets and education." ¹⁵⁷⁰

In the second phase (2023–2026), the emphasis will be placed on expanding AI into additional sectors. The government intends to establish a "paperless, collaborative, and smart" government.¹⁵⁷¹ Egypt signed a Memorandum of Understanding (MoU) with Thales, a French technology solutions company to integrate AI solutions to governmental services and to build AI capacity.¹⁵⁷²

In December 2023, the National Council for AI, chaired by Minister of Communications and Information Technology Amr Talaat, discussed plans regarding the second phase¹⁵⁷³ of the National AI Strategy. The second phase began in the second quarter of 2024 and encompasses several key economic

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¹⁵⁶⁷ Ibid

¹⁵⁶⁸ National Council for AI, Egyptian Charter for Responsible AI, v. 1.0 (2023),

https://aicm.ai.gov.eg/en/Resources/EgyptianCharterForResponsibleAIEnglish-v1.0.pdf

¹⁵⁶⁹ Ministry of Communications and Information Technology, *Egypt National Artificial Intelligence Strategy* (Jul. 2021), https://mcit.gov.eg/en/Publication/Publication_Summary/9283 ¹⁵⁷⁰ Ibid, point 2

¹⁵⁷¹ Ibid

¹⁵⁷² Ministry of Communications and Information Technology, *ICT Minister Witnesses Signing MoU between MCIT, Thales to Develop Apps, Build Capacity in AI* (Mar. 16, 2021),

https://mcit.gov.eg/en/Media_Center/Press_Room/Press_Releases/63234

¹⁵⁷³ National Council for AI Discusses 'National AI Strategy' Phase II, https://mcit.gov.eg/en/Media_Center/Press_Room/Press_Releases/67437

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sectors. The second phase of the Strategy aims to develop initiatives across six key pillars: governance, ecosystem, information infrastructure, data, human resources, and technology. Priority initiatives include raising public awareness about AI, supervising the domestic data lifecycle and fostering AI expertise. Egypt's progress in this phase aligns with the OECD AI Principles, as highlighted in the OECD Artificial Intelligence Review of Egypt, published in May 2024. 1574

Egypt is actively working to bring the perspective of developing countries to international discussions, thereby helping to narrow the AI knowledge and development gap between developed and developing countries. ¹⁵⁷⁵ In 2019, Egypt participated in the drafting of the UNESCO Recommendation on the Ethics of AI, serving as the Ad Hoc Expert Group's vice-chair. 1576

Egypt is also positioning itself as a regional leader in the AI and digital policy world. In 2019, Egypt hosted the third session of the African Union (AU) Specialized Technical Committee on Communication and Information Technologies. This meeting was crowned by the adoption of the Sharm El Sheikh Declaration, which recognized and reaffirmed the necessity for a coherent African Digital Transformation Strategy "to guide a common, coordinated response to reap the benefits of the Fourth Industrial Revolution."1577 Egypt hosted the first-ever DSC MENA 24 AI conference. This conference aimed to gain actionable insights into the international AI landscape through in-depth sessions on generative AI, natural language processing, computer vision, data engineering, cloud data, and AI applications in healthcare. 1578

Egypt also helped create the AU African Working Group on AI, a group tasked with drafting a continent-wide AI strategy. 1579 This strategy aspires to create a common stance on AI issues, areas of priority, and the role of AI in vital sectors as well as ensure "the governance of AI and the protection and availability of data and developing AI regulations." The strategy also aims to position the African voice at the center of international fora and to "bridge the digital divide

https://www.oecd-ilibrary.org/docserver/2a282726-en.pdf

https://mcit.gov.eg/en/Publication/Publication Summary/9283

¹⁵⁷⁴OECD Library, OECD Artificial Intelligence Review of Egypt (May 14, 2024),

¹⁵⁷⁵ Ministry of Communications and Information Technology, Egypt National Artificial Intelligence Strategy, point 9 (Jul. 2021),

¹⁵⁷⁸ Ahramonline, Egypt to Host First-Ever DSC MENA 24 AI Conference in April (Apr. 3, 2024), https://english.ahram.org.eg/NewsContent/3/1239/520431/Business/Tech/Egypt-to-hostfirstever-DSC-MENA--AI-conference-in.aspx

¹⁵⁷⁹ François Candelon, Hind El Bedraoui, Hamid Maher, Developing an Artificial Intelligence Strategy for Africa (Feb. 9, 2021), https://oecd-development-matters.org/2021/02/09/developingan-artificial-intelligence-for-africa-strategy/

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between developed [States] and African countries."¹⁵⁸⁰ Such active engagement culminated in Egypt being elected Chair of the African AI Working Group. ¹⁵⁸¹ In February 2021, Egypt hosted the first meeting of the African AI Working Group, which led to the issuance of the Common Africa Position Paper on the Priority Areas of Africa towards AI, followed by the second meeting, which was also hosted by Egypt in December 2022. ¹⁵⁸² Overall, the meetings of African Working Group on AI aimed to craft an African AI strategy in line with African Agenda 2063. ¹⁵⁸³

Egypt also chairs the Arab League's AI Working Group. 1584

Public Participation

The Ministry for Communications and Information Technology launched a website under the National Council for Artificial Intelligence¹⁵⁸⁵ that allows the public to easily access the National Strategy, I news, details about AI events, projects, and capacity-building programs, and information about AI partnerships with governments, international organizations, private sector companies, and academia. The AI Platform also includes a page where researchers can submit academic articles.

Regarding the drafting of the National AI Strategy, a stakeholder consultative process took place with academics, independent experts, and private sector companies. Nevertheless, neither the National Council for AI nor the Ministry for Communications and Information Technology has sought public feedback on any AI policy proposals.

Data Protection

The Egyptian Constitution protects citizens' rights to privacy under Article 57. Egypt passed Law No. 151 on the Personal Data Protection Law (PDPL) in

https://mcit.gov.eg/en/Media Center/Latest News/News/66696

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https://www.constituteproject.org/constitution/Egypt 2014.pdf

¹⁵⁸⁰ Ministry of Communications and Information Technology, *Egypt Hosts Second Meeting of African AI Working Group* (Dec 14, 2022),

https://mcit.gov.eg/en/Media Center/Latest News/News/66696

¹⁵⁸¹ Ministry of Communications and Information Technology, *Egypt Chairs AU Working Group on AI* (Feb. 25, 2021), https://mcit.gov.eg/en/Media_Center/Latest_News/News/58203

¹⁵⁸² Ministry of Communication and Information Technology, *Egypt Hosts Second Meeting of African AI Working Group* (Dec. 14, 2022),

¹⁵⁸³ Ibid

¹⁵⁸⁴ Ministry of Communications and Information Technology, *Egypt Elected Chair of Arab AI Working Group* (Feb. 16, 2021),

 $[\]underline{https://mped.gov.eg/adminpanel/sharedFiles/OECD_Artificial_Intelligence_Review_of_Egypt_c}\\ \underline{9a.pdf}$

¹⁵⁸⁵ Ministry of Communications and Information Technology, *Egypt Artificial Intelligence Platform*, https://ai.gov.eg

¹⁵⁸⁶ Constitute Project, *The Egyptian Constitution*,

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July 2020. ¹⁵⁸⁷The Minister of Communications and Information Technology publicized draft a Executive Regulation of the PDPL in June 2022. ¹⁵⁸⁸ However, the regulations have not been formalized as of 2024. ¹⁵⁸⁹

The PDPL was drafted following the example of the European General Data Protection Regulation (GDPR). Article 2 of the PDPL provides for data subject rights such as the right to erasure, the right to be informed, the right to access, and the right to rectification and to object. The PDPL also enshrines principles applicable to the collection, storage and processing of personal data. These principles are (1) Data minimization; (2) Accuracy and security; (3) Lawfulness, and (4) Storage limitation. The PDPL foresees financial sanctions in the event of violations regarding the protection of personal data.

The PDPL provides for the creation of a data protection authority, namely, the Personal Data Protection Center (DPC). The Center is meant to be an independent authority that operates under the Ministry of Communications and Information Technology.¹⁵⁹¹ The DPC will set and apply decisions, regulations, and measures in relation to data protection and foresee an adequate mechanism for law enforcement. However, the DPC has not been established.¹⁵⁹²

Egypt does not have a data protection authority and is not a member of the Global Privacy Assembly (GPA). Egypt has not endorsed the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence, the 2020

https://www.dlapiperdataprotection.com/index.html?t=authority&c=EG

¹⁵⁸⁷ https://www.trade.gov/market-intelligence/egypt-data-protection

¹⁵⁸⁸ Ministry of Communications and Innovation Technology, *Personal Data Protection Law Executive Regulations to Be Issued Late 2022: NTRA VP* (Jun. 21, 2022), https://mcit.gov.eg/Upcont/MediaCenter/MCIT%20in%20Press622202200Personal_Data_Protection_Law_Executive_Regulations_to_Be_Issued_Late_2022_NTRA.pdf

¹⁵⁸⁹ Masaar Technology & Law Community, Data Protection Center: Masaar's Proposal on the Executive Regulations for the Data Protection Law (Mar. 18, 2024), https://masaar.net/en/data-protection-center-masaars-proposal-on-the-executive-regulations-for-the-data-protection-law/
1590 DLA Piper, Data Protection Laws of the World: Collection and processing in Egypt (Jan. 19, 2024).

^{2024), &}lt;a href="https://www.dlapiperdataprotection.com/?t=collection-and-processing&c=EG#insight">https://www.dlapiperdataprotection.com/?t=collection-and-processing&c=EG#insight
1591 DLA Piper Data Protection, Data Protection Laws of the World: National Data Protection Authority in Egypt (Jan. 19, 2024),

¹⁵⁹² Masaar Technology & Law Community, *Data Protection Center: Masaar's Proposal on the Executive Regulations for the Data Protection Law* (Mar. 18, 2024), https://masaar.net/en/data-protection-center-masaars-proposal-on-the-executive-regulations-for-the-data-protection-law/
¹⁵⁹³ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

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GPA Resolution on AI Accountability, ¹⁵⁹⁴ the 2022 GPA Resolution on Facial Recognition Technology, ¹⁵⁹⁵ or the 2023 GPA Resolution on Generative AI. ¹⁵⁹⁶

At a conference on the challenges to the right to privacy given the rapid development of artificial intelligence organized by Egypt's Supreme Standing Committee for Human Rights, in collaboration with the Arab Organization for Human Rights (AOHR) in July 2022, the Minister of Social Solidarity Nevine El-Qabbaj stated that "artificial intelligence has breached all limits, even our mental privacy." 1597

Algorithmic Transparency

The PDPL does not refer to algorithmic transparency. However, the principles of "transparency and explainability" are enshrined in the Egyptian Charter for Responsible AI, in addition to the right of the user to know "when he or she is interacting with an AI system and not a human being."

The Charter provides that "Any end-user using an AI system has the fundamental right to know when he or she is interacting with an AI system and not a human being, for example in the case of automated call centers." The Charter also emphasizes that: "Developers of AI systems should always strive to provide transparent and explainable AI solutions. The degree of explainability required will vary according to the application domain and project requirements, but project sponsors must be clear on the potential tradeoff between the accuracy/quality and explainability of any given model. When in doubt, developers should opt for simpler models with higher degrees of explainability, without compromising the minimum desired quality and accuracy." 1598

¹⁵⁹⁴ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

¹⁵⁹⁵ Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

¹⁵⁹⁶ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

¹⁵⁹⁷ AhramOnline, Egypt Kicks Off Int'l Human Rights Conference on Challenges Facing Right to Privacy (Jul. 21, 2022), https://english.ahram.org.eg/News/471889.aspx

¹⁵⁹⁸ National Council for AI, *Egyptian Charter for Responsible AI*, v. 1.0 (2023), https://aicm.ai.gov.eg/en/Resources/EgyptianCharterForResponsibleAIEnglish-v1.0.pdf

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Biometric Recognition

Egypt is increasingly adopting biometric technologies for security and surveillance. A deal was struck between the Arab Organization for Industrialization and Idemia, a leading biometric company, for the latter to produce biometric devices, including facial recognition systems, in Egypt. ¹⁵⁹⁹ The Egyptian government agreed with Idemia in early 2020 to build a digital ID system for Egypt Post "backed by fingerprint biometrics and citizen IDs." ¹⁶⁰⁰ In 2021, Fingo, another organization specializing in biometrics, announced it had partnered with Egypt to develop a vein-based recognition system for the country's national ID program. ¹⁶⁰¹

On the sidelines of the recent COP27 hosted in Sharm El-Sheikh, the Egyptian government signed an MoU with the US-based company, Honeywell International Inc, to "run a pilot model in Sharm El-Sheikh by transforming the new building of the South Sinai Governorate General Assembly and Sharm El-Shaikh Hospital into sustainable smart buildings relying on modern technologies, especially artificial intelligence and data analytics." This agreement came as the second deal after Egypt contracted Honeywell in 2019 to provide city-wide public safety, security and surveillance system for the new administrative capital, which, according to a press release by the company, will "integrate advanced Internet of Things (IoT) software and [...] also connect video feeds from more than 6,000 IP cameras over a futureproof wireless network, and run sophisticated video analytics to monitor crowds and traffic congestion, detect incidents of theft, observe suspicious people or objects, and trigger automated alarms in emergency situations." ¹⁶⁰³

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¹⁵⁹⁹ Ayang MacDonald, *Idemia renews Mauritania contract, signs deal with AOI for biometric device production in Egypt, Biometric Update.COM (Nov. 9, 2020)*

 $[\]underline{https://www.biometricupdate.com/202011/idemia-renews-mauritania-contract-signs-deal-with-\underline{aoi-for-biometric-device-production-in-egypt}$

¹⁶⁰⁰ Chris Burt, *Idemia to build biometrics-backed digital identity service in Egypt, supply TSA trials, joins Kantara, Biometric Update.COM (Mar. 12, 2020),*

 $[\]frac{https://www.biometricupdate.com/202003/idemia-to-build-biometrics-backed-digital-identity-service-in-egypt-supply-tsa-trials-joins-kantara$

¹⁶⁰¹ Fingo, *Egypt to unlock futuristic ID verification with finger-vein recognition tech*, (Feb. 18, 2021), https://www.fingo.to/media/egypt-to-unlock-futuristic-id-verification-with-finger-vein-recognition-tech/

¹⁶⁰² North Africa Post, *Egypt: US Honeywell company to transform government institutions into smart buildings*, https://northafricapost.com/62581-egypt-us-honeywell-company-to-transform-government-institutions-into-smart-buildings.html

¹⁶⁰³ ZAWYA, *Honeywell to deploy world-class public safety and security infrastructure for Egypt's new smart city*, https://www.zawya.com/en/press-release/honeywell-to-deploy-world-class-public-safety-and-security-infrastructure-for-egypts-new-smart-city-f8th3lyy

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These deals were concluded in a legal vacuum even though biometric systems could adversely impact several human rights, including the right to freedom of expression, the right to assembly, and the right to privacy.¹⁶⁰⁴

EdTech

In May 2022, Human Rights Watch published a global investigative report on the education technology (EdTech) endorsed by 49 governments, including Egypt, for children's education during the pandemic. Based on technical and policy analysis of 163 EdTech products, Human Rights Watch found that governments' endorsements of the majority of these online learning platforms put at risk or directly violated children's rights.

This is the case for example of the EdTech product "Edmodo" used in Egypt, which according to Human Rights Watch, has the capability to collect Android Advertising IDs which enable advertisers to track children, over time and across different apps installed on their device, for advertising purposes. Edmodo also allows for shadow profiling by getting access to contacts' details and photos, if saved on the phone. According to Human Rights Watch, in line with child data protection principles as well as corporations' human rights responsibilities outlined in the United Nations Guiding Principles on Business and Human Rights, EdTech and AdTech companies should not collect and process children's data for advertising. The report noted steps companies should take to protect children's rights, including working with governments to define clear retention and deletion rules for children's data collected during the pandemic. Furthermore, governments should develop, refine, and enforce modern child data protection laws and standards, and ensure that children who want to learn are not compelled to give up their other rights to do so. 1605

AI Credit Scoring

Egypt introduced AI Credit Scoring in the Egypt National AI Strategy. Mith AI Credit Scoring in finance and banking, Egypt aims to providing score cards to the finance sector and enabling access to financing and thus empowering un-bankable individuals and small businesses to contribute greatly to the economy.

¹⁶⁰⁴ Institute of Development Studies, University of Sussex, Surveillance Law in Africa: a review of six countries, Egypt country report,

https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/16893/Egypt%20Country%20Report.pdf?sequence=5&isAllowed=y

¹⁶⁰⁵ Human Rights Watch, *How Dare They Peep into My Private Life* (May 25, 2022), https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rights-violations-governments

¹⁶⁰⁶ Ministry of Communications and Information Technology, *Egypt National Artificial Intelligence Strategy*, point 7 (Jul. 2021),

https://mcit.gov.eg/en/Publication/Publication Summary/9283

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Environmental Impact of AI

Egypt's 2021 National AI Strategy highlights the use of AI technology to mitigate the environmental cost of agriculture in the AI for Development (AI4D) pillar. However, the strategy does not address the environmental cost or resources required to develop and deploy AI systems. The Egyptian Charter for Responsible AI requires the environmental impact of Government AI projects to be weighed in "a thorough impact assessment to ensure maximum benefit from the technology, while respecting the guidelines of responsible and ethical AI development." House

The African Union Continental Artificial Intelligence Strategy to which Egypt contributed identifies emissions and resource demands among the risks of using and developing AI systems. The Strategy identifies environmental protection as a priority area to apply AI technology but also calls for countries to center sustainability through innovations such as green data centers in developing technology. The strategy identifies environmental protection as a priority area to apply AI technology but also calls for countries to center sustainability through innovations such as green data centers in developing technology.

Lethal Autonomous Weapons

While Egypt has signed the Convention on Conventional Weapons (CCW), it has not yet ratified the Convention. However, Egypt has been actively participating in CCW meetings on killer robots since 2014. Bassem Yehia Hassan Kassem Hassan, a representative of Egypt, speaking on behalf of the Arab Group, stated that the presence of weapons of mass destruction and their modernization are a grave threat to international security and development, and that international community must develop norms and rules to encourage responsible behavior and increase cooperation to reach concrete progress in

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https://mcit.gov.eg/en/Publication/Publication Summary/9283

¹⁶⁰⁷ Ministry of Communications and Information Technology, *Egypt National Artificial Intelligence Strategy*, pp. 29–30 (Jul. 2021),

National Council for AI, Egyptian Charter for Responsible AI, v. 1.0, p. 5 (2023), https://aicm.ai.gov.eg/en/Resources/EgyptianCharterForResponsibleAIEnglish-v1.0.pdf
 African Union, Continental Artificial Intelligence Strategy, p. 25 (Aug. 9, 2024), https://au.int/en/documents/20240809/continental-artificial-intelligence-strategy
 Ibid, pp. 37, 45

¹⁶¹¹ United Nations Office of Disarmament Affairs, Status of the Treaty, Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, https://treaties.unoda.org/t/ccwc

¹⁶¹² Brian Stauffer, Human Rights Watch, *Stopping Killer Robots Country Positions on Banning Fully Autonomous Weapons and Retaining Human Control* (Aug. 10, 2020), https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and# ftn95

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dealing with threats posed by lethal autonomous weapons and the use of artificial intelligence in armaments. 1613

On numerous occasions, Egypt has warned that these weapon systems may have "possible ramifications on the value of human lives [and] the calculation of the cost of war," 1614 and thus, there must be "specific prohibitions on acquisition, research and development, testing, deployment, transfer, and use [of these systems]."1615 Egypt has called for a moratorium on lethal autonomous weapons systems until a ban is achieved, supporting "a legally binding instrument against the development and manufacture of such weapon systems [...] as well as the regulation of existing systems that fall within [the CCW] mandate." ¹⁶¹⁶

At the 78th UN General Assembly First Committee in 2023, Egypt voted in favor¹⁶¹⁷ of resolution L.56¹⁶¹⁸ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. The report should analyze ways to address the challenges and concerns autonomous weapon systems raise from humanitarian, legal, security, technological and ethical perspectives and reflect on the role of humans in the use of force.

Egypt also voted in favor of Resolution L.77 on lethal autonomous weapons systems in 2024.1619 The resolution, supported by 161 states, raises concerns about the "negative consequences and impact of autonomous weapon systems on global security and regional and international stability" and stresses the "the importance of the role of humans in the use of force to ensure responsibility and accountability and for States to comply with international law."

fora/1com/1com23/resolutions/L56.pdf

¹⁶¹³ United Nations, First Committee Weighs Potential Risks of New Technologies as Members Exchange Views on How to Control Lethal Autonomous Weapons, Cyberattacks (Oct. 26, 2018), https://press.un.org/en/2018/gadis3611.doc.htm

¹⁶¹⁴ Government of Egypt, Statement to the UN Human Rights Council (May 30, 2013), http://stopkillerrobots.org/wp-content/uploads/2013/05/HRC Egypt 10 30May2013.pdf

¹⁶¹⁵ Brian Stauffer, Human Rights Watch, Stopping Killer Robots Country Positions on Banning Fully Autonomous Weapons and Retaining Human Control (Aug. 10, 2020),

https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fullyautonomous-weapons-and# ftn95

¹⁶¹⁶ Automated Decision Research, State Position on Autonomous Weapons Systems: Egypt, https://automatedresearch.org/news/state_position/egypt/

¹⁶¹⁷ Stop Killer Robots, 164 States Vote against the Machine at the UN General Assembly (Nov. 1, 2023), https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

¹⁶¹⁸ General Assembly, Resolution L56: Lethal Autonomous Weapons (Oct. 12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-

¹⁶¹⁹ Automated Decision Research, Egypt State Positions (2024), https://automatedresearch.org/news/state_position/egypt/

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The Resolution noted "the repeated calls by the Secretary-General to urgently conclude negotiations of a legally binding instrument with prohibitions and regulations for autonomous weapons systems, in line with a two-tier approach." ¹⁶²⁰

Human Rights

Egypt has endorsed the Universal Declaration of Human Rights. However, the Freedom in the World report ranks Egypt as "Not Free" with a score of 18/100 for 2024. The report cites the authoritarian rule of President Abdel Fattah al-Sisi and the lack of meaningful political opposition given the prosecution and imprisonment of dissenter and general restriction of civil liberties such as freedoms of the press, assembly, and expression. Criminalization of dissent, harrassment, and surveillance for internet users as well as restrictions to access led to the "Not Free" ranking and 28/100 score on the Freedom on the Net report. 1622

In March 2021, 31 UN member states penned a joint declaration, supported by numerous NGOs, strongly condemning human rights abuses in Egypt. The declaration highlighted constraints on citizens' freedom of expression, as well as their ability to voice political opposition and to peacefully assemble. 1623

Egypt is criticized by international human rights organizations and civil society for state surveillance on citizens' communications and censorship on content online. Enactment of Law No. 175/2018 on Combating Information Technology Crimes (Anti-Cyber Crime Law) aimed to ensure online safety, security and fraud, however, it is evaluated as a regulation which can be used for surveillance due to vague definitions and language. Moreover, there is also

¹⁶²⁰ Stop Killer Robots, *161 States Vote against the Machine at the UN General Assembly* (2024), https://www.stopkillerrobots.org/news/161-states-vote-against-the-machine-at-the-un-general-assembly/

¹⁶²¹ Freedom House, Freedom in the World 2024: Egypt (2024),

https://freedomhouse.org/country/egypt/freedom-world/2024
Treedom House, *Freedom in the World 2024: Egypt* (2024),

https://freedomhouse.org/country/egypt/freedom-net/2024

Human Rights Watch, *Condemnation of Egypt's Abuses at UN Rights Body: Overdue Action is a Step Forward* (Mar. 12, 2021), https://www.hrw.org/news/2021/03/12/condemnation-egypts-abuses-un-rights-body#.

¹⁶²⁴ Wafa Ben Hassine, Egyptian Parliement Approves Cybercrime Law Legalizing Blocking of Websites and Full Surveillance of Egyptians (Jun. 20, 2018),

https://www.accessnow.org/egyptian-parliament-approves-cybercrime-law-legalizing-blocking-of-websites-and-full-surveillance-of-egyptians/

¹⁶²⁵ Killian Balz, Hussam Mujally, Egypt: The New Egyptian Anti-Cybercrime Law Regulates Legal Responsibility for Web Pages And Their Content (2018),

https://www.mondaq.com/security/820028/the-new-egyptian-anti-cybercrime-law-regulates-legal-responsibility-for-web-pages-and-their-content; Jillian C. York, *Egypt's Draconian New Cybercrime Bill Will Only Increase Censorship* (Jul 12, 2018),

https://www.eff.org/deeplinks/2018/07/draconian-new-cybercrime-bills-vietnam-and-egypt-will-only-increase-censorship

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criticism on Egypt's collaboration procedures with private software and technology solution companies for the lack of transparency and accountability in projects such as Idemia and Thales. 1626

In late 2021, Egypt launched the National Human Rights Strategy. 1627 On this occasion, President Abdel-Fattah El-Sisi declared 2022 as the year of civil society. 1628 The Human Rights Strategy is based on three axes: a) Constitutional Guarantees for Enhancing Human Rights Respect and Protection, b) Egypt's International and Regional Human Rights Obligations, and 3) Sustainable Development Strategy: Egypt Vision 2030. While the Strategy tackled all human rights, particularly political rights, it did not address the positive/adverse impact of technology on these rights or the human rights implications of artificial intelligence. The Strategy referred only to the use of technology to enhance human rights under the "Right to Litigation and Strengthening Guarantees for a Fair Trial." The National Human Rights Strategy emphasizes that one of the target results of the Egyptian State is the expansion of "the automated litigation system [...] in courts and their support entities to enhance speedy justice." ¹⁶²⁹ Accordingly, the State adopted various measures "most notably the automation of many judicial services, including automated litigation process in misdemeanor courts and launching remote litigation in civil and economic courts." ¹⁶³⁰

In February 2023, Egypt released the Egyptian Charter on Responsible AI. The Charter builds on the OECD AI Principles and UNESCO Recommendation on the Ethics of AI. The Charter recognizes the significant risks AI might pose, such as bias, data drift, lack of transparency, lack of legal responsibility, and lack of fairness and equality. Therefore, it introduces guidelines and best practices for assessing AI systems trustworthiness with the aim to protect human rights and ensure the responsible, transparent, and fair use of the technology. 1631

For instance, the Charter, as a reflection of the human-centeredness principle, stresses that "[t]he primary goal of using AI in Government is the wellbeing of citizens, including combating poverty, hunger, inequality, illiteracy, and corruption; achieving prosperity and inclusion." As for fairness, the Charter sets

¹⁶²⁶ Marceau Sivieude (ed.), Egypt: A repression made in France International Federation for Human Rights (FIDH), Cairo Institute for Human Rights Studies (CIHRS), Human Rights League (LDH), Armaments Observatory (OBSARM) (Jun. 2, 2018), https://www.fidh.org/en/issues/litigation/egypt-a-repression-made-in-france

¹⁶²⁷ Supreme Standing Committee for Human Rights, National Human Rights Strategy (2021– 2026), https://sschr.gov.eg/media/gapb5bq4/national-human-rights-strategy.pdf

¹⁶²⁸ Egypt's State Information Service, Sisi declares 2022 as year of civil society, https://www.sis.gov.eg/Story/161945/Sisi-declares-2022-as-year-of-civil-society?lang=en-us ¹⁶²⁹ Ibid, p. 27.

¹⁶³⁰ National Human Rights Strategy, p. 25.

¹⁶³¹ National Council for AI, Egyptian Charter for Responsible AI, v. 1.0 (2023), https://aicm.ai.gov.eg/en/Resources/EgyptianCharterForResponsibleAIEnglish-v1.0.pdf

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out a number of rules, including that "AI systems, especially data-driven models, must be monitored regularly while in production to ensure no data drift occurs. In those cases, the quality of the data must be reviewed and if needed, the underlying models need to be changed to accommodate changes in data." Regarding accountability, the Charter provides that the "[u]ltimate responsibility and accountability for the behavior and outcomes of an AI system must always lie with natural or legal persons. AI systems should not be given legal personality themselves." The Charter also stresses that "[f]inal Human Determination is always in place [which] means that ultimately, humans are in charge of making decisions, and are able to modify, stop, or retire the AI system if deemed necessary."1632

OECD / G20 AI Principles

Although Egypt is not an OECD member, the country endorsed the AI Principles as a nonmember in 2021¹⁶³³ and continued to adhere to them after their update in 2024.1634 As reported by the OECD in their 2021 white paper "State of implementation of the OECD principles," Egypt has set up a governing body (the National Council for AI) to oversee the implementation of its AI strategy. 1635 This is a concrete first step toward fulfilling the OECD recommendation of ensuring "a policy environment that will open the way to deployment of trustworthy AI systems."

Egypt has also taken steps toward fulfilling three of the four other OECD recommendations. The creation of both the AI Platform and the new Egyptian Center of Excellence, 1636 a government group that will work with private or academic partners to deliver AI projects on behalf of beneficiaries, help to "foster accessible AI ecosystems with digital infrastructure and technologies and mechanisms to share data and knowledge." Empowering "people with the skills for AI and support workers for a fair transition" will be accomplished through enrollments in the newly created "Faculties of AI" at eight public and private Egyptian universities. 1637 Egypt's cooperation "across borders and sectors to

1632 Ibid

¹⁶³³ OECD Legal Instruments, Recommendation of the Council on Artificial Intelligence (May 3, 2024), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449

¹⁶³⁴ OECD AI Policy Observatory, OECD AI Principles Overview, Countries Adhering to the AI Principles (2025), https://oecd.ai/en/ai-principles

¹⁶³⁵ OECD, State of implementation of the OECD AI Principles: Insights from national AI policies, p. 10, OECD Digital Economy Papers, No. 311 (Jun. 18, 2021), https://doi.org/10.1787/1cd40c44-en,

¹⁶³⁶ National Council for AI, Egyptian AI Center of Excellence (AIEG), https://ai.gov.eg/strategy/center-of-excellence.

¹⁶³⁷ Sally Radwan, Samar Sobeih, Egypt's AI strategy is more about development than AI, OECD.ai Policy Observatory (May 26, 2021), https://oecd.ai/en/wonk/egypt-ai-strategy

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progress on responsible stewardship of trustworthy AI" is evidenced by its participation in and leadership of international AI committees.

The final OECD recommendation is that governments "facilitate public and private investment in research & development to spur innovation in trustworthy AI." The Egyptian government's plans set a public goal of 7.7% of Egyptian Gross Domestic Product deriving from AI & robotics by 2030. 1638

The recently adopted Charter on Responsible AI purports to demonstrate how the country will interpret and implement the OECD AI Principles of "human-centeredness," "transparency and explainability," "fairness," "accountability," "security and safety." ¹⁶³⁹

Although Egypt is not a member of the Global Partnership on AI (GPAI), the Egyptian Ministry of Communications and Information Technology participated in GPAI events in 2021.¹⁶⁴⁰

Council of Europe AI Treaty

Egypt did not participate in the negotiations for the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law, which opened for signature by member and non-member countries in September 2024. ¹⁶⁴¹ Egypt has not signed this first legally binding international AI treaty. ¹⁶⁴²

UNESCO Recommendation on AI Ethics

Egypt endorsed the UNESCO Recommendation on AI Ethics¹⁶⁴³ and took an active part in its drafting.¹⁶⁴⁴ Egypt embedded most of the principles adopted in the UNESCO Recommendations on AI Ethics in its Charter for Responsible AI, albeit no concrete implementation has taken place so far. The Charter draws on the guidelines developed by UNESCO and other organizations by translating these recommendations into steps "to help ensure the responsible development,

https://www.rebellionresearch.com/egypts-artificial-intelligence-future.

1639 National Council for AI, *Egyptian Charter for Responsible AI*, v. 1.0 (2023),

 $\underline{https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence}$

Rebellion Research, Egypt AI: Egypt's Artificial Intelligence Future (Mar. 14, 2021), https://www.rebellionresearch.com/egypts.ortificial intelligence future

 $[\]underline{https://aicm.ai.gov.eg/en/Resources/EgyptianCharterForResponsibleAIEnglish-v1.0.pdf}$

¹⁶⁴⁰ Ministry of Communications and Information Technology, *Egypt Partakes in Second GPAI Summit* (Nov. 10, 2021), https://mcit.gov.eg/en/Media Center/Latest News/News/64759
¹⁶⁴¹ Council of Europe, *The Framework Convention on Artificial Intelligence* (2025),

¹⁶⁴² Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 19, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

¹⁶⁴³ United Nations, 193 countries adopt first-ever global agreement on the Ethics of Artificial Intelligence, UN News (Nov. 25, 2021). https://news.un.org/en/story/2021/11/1106612

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deployment, management, and use of AI systems in the country."¹⁶⁴⁵ Although the Charter recognizes the principle of "human-centered AI," it does not acknowledge that "Respect, protection and promotion of human rights and fundamental freedoms" lie at the heart of Ethical AI.

Egypt is in the process of completing UNESCO's Readiness Assessment Methodology (RAM),¹⁶⁴⁶ a tool designed to help countries determine their readiness "for sustainable and responsible AI adoption while reinforcing national policies and strategies in this vital field."¹⁶⁴⁷

Evaluation

Egypt has been a leading voice in the African and Arab world to foster the regulation of AI. It has been chairing African and Arab working groups on the topic and actively participated in the drafting of the UNESCO Recommendation on the Ethics of AI. A key milestone was the adoption of the Egyptian Charter on Responsible AI. Egypt will soon start implementing the second phase of its National Strategy. Concerns exist regarding the lack of open and public participation in AI policy initiatives. The use of biometric technologies for security and surveillance is of particular concern in a country deemed "not free" according to Freedom House.

Estonia

In 2024, Estonia's Ministry of Economy published an AI Action Plan focused on enhancing public-sector AI competencies and creating legal frameworks to address ethical AI use. Estonia also participated in negotiations for the Council of Europe Framework Convention on Artificial Intelligence and became party to the treaty through the European Commission's signature.

National AI Strategy

The Estonian Cabinet adopted its first National AI Strategy in July 2019. 1648 The Government Chief Information Officer Office, based in the Ministry of Economic Affairs and Communications, was tasked with steering the AI

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National Council for AI, Egyptian Charter for Responsible AI, v. 1.0 (2023),
 https://aicm.ai.gov.eg/en/Resources/EgyptianCharterForResponsibleAIEnglish-v1.0.pdf
 UNESCO Global AI Ethics and Governance Observatory, Global Hub (Oct. 2024),
 https://www.unesco.org/ethics-ai/en/global-hub

¹⁶⁴⁷ Ministry of Communications and Information Technology, *MCIT*, *UNESCO Co-Launch Egypt AI RAM* (Feb. 17, 2025),

https://mcit.gov.eg/en/Media Center/Press Room/Press Releases/68238

¹⁶⁴⁸ Estonia's National AI Strategy 2019-2021 (Jul. 2019), https://f98cc689-5814-47ec-86b3-db505a7c3978.filesusr.com/ugd/7df26f 27a618cb80a648c38be427194affa2f3.pdf

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Strategy. The first National AI Strategy built on a May 2019 report of Estonia's AI Taskforce. 1649 The actions detailed in the first AI Strategy were designed to advance the adoption of AI solutions in both the private and public sectors, to increase AI capacities and research and development, and to develop the legal environment to facilitate AI. The first AI Strategy committed to the establishment of a steering group, comprised of government representatives and other stakeholders, to monitor the implementation of the AI Strategy. In addition, the e-Estonia Council was tasked with considering the strategy's implementation annually. The first AI Strategy was conceived as a short-term strategy, intended to apply up until 2021. By adopting a short-term strategy, Estonia intends to gain insight and develop a long-term strategy in response to the experience gained. Estonia aims to monitor the development of the short-term action plan and keep the European Union informed of developments.

In spite of Estonia's national digital adviser initially proposing the adoption of a law granting legal personality to AI, Estonia's AI Taskforce concluded that no substantial legal changes were currently required to address the issues presented by AI. 1650 The Taskforce Report maintained, "Both now and in the foreseeable future, kratts are and will be human tools, meaning that they perform tasks determined by humans and express the intention of humans directly or indirectly." Accordingly, the AI Taskforce Report clarified that the "actions" of AI are attributable to the relevant state body or private party that uses the AI solution. 1651 Minor changes recommended include the removal of obsolete laws and providing additional clarity to facilitate the use of AI. Estonia's Chief Information Officer stated that Estonia wants to "build on the EU framework, not to start creating and arguing" for a separate Estonian framework. A draft EU AI Act is currently being negotiated.

Neither the first AI Strategy nor the AI Taskforce Report provided significant detail on questions related to the ethics of artificial intelligence.

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¹⁶⁴⁹ Report of Estonia's AI Taskforce (May 2019) https://f98cc689-5814-47ec-86b3-db505a7c3978.filesusr.com/ugd/7df26f_486454c9f32340b28206e140350159cf.pdf

¹⁶⁵⁰ Ibid; See also, Astghik Grigoryan, *Estonia: Government Issues Artificial Intelligence Report* (Jul. 31, 2019), https://www.loc.gov/law/foreign-news/article/estonia-government-issues-artificial-intelligence-report/

¹⁶⁵¹ Estonia's National AI Strategy (July 2019) https://f98cc689-5814-47ec-86b3-db505a7c3978.filesusr.com/ugd/7df26f_27a618cb80a648c38be427194affa2f3.pdf

¹⁶⁵² Astghik Grigoryan, Estonia: Government Issues Artificial Intelligence Report, US Library of Congress (Jul. 31, 2019) https://www.loc.gov/item/global-legal-monitor/2019-07-31/estonia-government-issues-artificial-intelligence-report/; referencing Ronald Liive, Estonian State IT Manager Siim Sikkut: If There Were 1% in the State Budget for Science, We Could Talk More About Kratind, DigiGeenius (May 5, 2019). In 2018, Estonia signed up to a European Union Declaration of Cooperation on Artificial Intelligence https://digital-strategy.ec.europa.eu/en/news/eu-member-states-sign-cooperate-artificial-intelligence

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Reference was, however, made to guidance provided by the European Commission for the development and implementation of trustworthy artificial intelligence. The Taskforce Report acknowledged that "trustworthy artificial intelligence must be guided by the principles of human rights, positive rights, and values, thus ensuring the ethics dimension and objective." The Report recognized the relevance of the EU Charter of Fundamental Rights and referred to the following rights as central according to the Commission guidance on AI: the right to human dignity, the right to freedom, respect of the principles of democracy and the state, based on the rule of law, right to equality, non-discrimination, and acknowledgement of minorities, and civil rights.

To ensure that the development and use of AI is ethical, the Taskforce Report emphasized the importance of ensuring that AI is human-centric; that rights, ethics principles, and values are fundamental; and that AI may bring unintended consequences. The first AI Strategy referenced the EU guidelines that identify the importance of the following values: human agency, technical reliability, privacy and data management, transparency, non-discrimination, social and environmental well-being, and responsibility.

The Estonian Cabinet adopted its new Artificial Intelligence Strategy (2022-2023) as a continuation of Estonia's first national AI strategy (2019–2021). This AI strategy was carried out in line with the objectives laid out by the European Commission in its Coordinated Plan on Artificial Intelligence. Estonia's AI Task Force developed and implemented the country's national AI strategy for 2024-2026 in January of 2024.

Nordic-Baltic Cooperation on Al

As for the international landscape, the Estonian minister responsible for digital development signed the 2018 declaration on "AI in the Nordic-Baltic region" establishing a collaborative framework on "developing ethical and transparent guidelines, standards, principles and values to guide when and how AI applications should be used" and "on the objective that infrastructure, hardware, software and data, all of which are central to the use of AI, are based on standards,

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¹⁶⁵³ Report of Estonia's AI Taskforce (May 2019), https://f98cc689-5814-47ec-86b3-db505a7c3978.filesusr.com/ugd/7df26f_486454c9f32340b28206e140350159cf.pdf; European Commission, Ethics Guidelines for Trustworthy AI (Apr. 8, 2019), https://ec.europa.eu/digital-single-market/en/news/ethics-guidelines-trustworthy-ai

¹⁶⁵⁴ Report of Estonia's AI Taskforce (May 2019), https://f98cc689-5814-47ec-86b3-db505a7c3978.filesusr.com/ugd/7df26f 486454c9f32340b28206e140350159cf.pdf

¹⁶⁵⁵ Government of the Republic of Estonia, *Estonia's national artificial intelligence strategy for the period 2019-2021* (July 2019), https://f98cc689-5814-47ec-86b3-db505a7c3978.filesusr.com/ugd/7df26f 27a618cb80a648c38be427194affa2f3.pdf

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enabling interoperability, privacy, security, trust, good usability, and portability." ¹⁶⁵⁶

The ministerial declaration Digital North 2.0¹⁶⁵⁷ builds on the common priorities of the Nordic-Baltic countries, and follows the previous ministerial declaration, Digital North 2017–2020. The countries created a Council of Ministers for Digitalization (MR-DIGITAL) "to promote work with digitalisation, co-ordinate efforts, and follow up on the goals of the declaration." ¹⁶⁵⁸

In November 2021, the Nordic and Baltic ministers for digitalization released another joint statement announcing a focus on digital inclusion, striving to implement measures to make digital services more accessible to all Estonian inhabitants and ensuring that those who do not possess the necessary level of skills get the opportunity to acquire them. ¹⁶⁵⁹

The Nordic and Baltic ministers for digitalization issued a common statement in 2022 on the importance of cooperation on digital security in the Nordic-Baltic region following the COVID-19 pandemic and the war in Ukraine. In their common statement, the ministers stressed that this "rapid transformation has challenged everyone to adapt to new, digital ways of doing business, learning and accessing public authorities." The ministers declared that they "have committed to ensuring that our region maintains its position as a leader in digitalisation, and that everyone in the region benefit from digitalisation regardless of age, wealth, education or level of digital skills. One important factor that helps ensure a strong level of digitalisation in the region is the trust citizens put in digital services from the public sector – be it at regional, national or local level. In order to keep up this high level of trust, we need to continue our efforts to make our digital public services human centric and accessible. [...] Robust and secure digital services, safeguarding users' privacy and ensuring that personal data are stored and processed in a trustworthy way, are crucial to the citizens' sustained trust in digital services."1660

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¹⁶⁵⁶ Nordic and Baltic Ministers of Digitalization, *AI in the Nordic-Baltic region* (May 14, 2018), https://www.norden.org/en/declaration/ai-nordic-baltic-region

¹⁶⁵⁷ Nordic and Baltic Ministers of Digitalization, *Ministerial Declaration Digital North 2.0* (Sept. 29, 2020), https://www.norden.org/en/declaration/ministerial-declaration-digital-north-20 (Sept. 29, 2020), https://www.norden.org/en/declaration/ministerial-declaration-digital-north-20 (Sept. 29, 2020), https://www.norden.org/en/declaration/ministerial-declaration-digital-north-20 (Sept. 29, 2020), https://www.norden.org/en/declaration/ministerial-declaration-digital-north-20 (Sept. 2020), https://www.norden.org/en/declaration/ministerial-declaration-digital-north-20 (Sept. 2020), https://www.norden.org/en/declaration/ministerial-declaration-digital-north-20 (Sept. 2020), https://www.norden.org/en/declaration/ministerial-declaration-digital-north-20 (Sept. 2020), <a href="https://www.norden.org/en/declaration-decla

https://www.norden.org/en/information/nordic-baltic-co-operation-digitalisation

¹⁶⁵⁹ Nordic and Baltic Ministers of Digitalization, *Common statement on the importance of promoting digital inclusion as a central part of the digital transformation in the Nordic-Baltic region* (Nov. 26, 2021), https://www.norden.org/en/declaration/common-statement-importance-promoting-digital-inclusion-central-part-digital

¹⁶⁶⁰ Nordic and Baltic Ministers of Digitalization, *Common statement on the importance of cooperation on digital security in the Nordic-Baltic region* (Sept. 6, 2022), https://www.norden.org/en/declaration/common-statement-importance-cooperation-digital-security-nordic-baltic-region

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The Secretary of the Nordic Council of Ministers published a report in May 2024 presenting the fundamental characteristics of the digitalization of their national public administrations from a legal perspective. The report discusses the impact of proposed EU regulations on AI, such as the AI Act, and their implications for national legislations within the Nordic-Baltic countries. It underscores the need for harmonized legal frameworks that support AI innovation while safeguarding fundamental rights and public trust. ¹⁶⁶¹

Public Participation

In 2018, the Estonian government brought together an expert group to participate in a cross-sectional coordination project on AI.¹⁶⁶² The three tasks of this expert group were to develop the so-called Estonian artificial intelligence action plan; prepare draft legislation to ensure clarity in the Estonian judicial area and organize the necessary supervision; notify the public about the implementation of kratts and introduce possible options.

Participants in the group included representatives from state authorities, the private sector, universities, and sectoral experts. To prepare the report, interviews were conducted, including with company representatives involved in the development of AI and ICT representatives from universities. Working groups (in the fields of law, education, and the public sector) were also created. The e-estonia website states, "In these debates, technical and legal expertise goes a long way. But the discussion must also involve the public. Honest, meaningful debate requires that dreamy utopias be balanced with open discussions about AI's controversial attributes and threats. Only this can create user-friendly legislation that's equipped to reduce legal nightmares in the long-term." 1664

Documents relating to the AI Strategy are accessible on the internet. The website Kratid provides links to the National Artificial Intelligence Strategy, the Report of Estonia's AI Taskforce, the Vision Paper on #KrattAI: The Next Stage of Digital Public Services in #eEstonia, and the #KrattAI Roadmap for 2020. 1665

The Kratid website was updated with the new AI Strategy (2022–2023) and the new #KrattAI Roadmap for 2021–2022 in 2022. A separate website, the

¹⁶⁶² Report of Estonia's AI Taskforce, p. 42 (May 2019), https://f98cc689-5814-47ec-86b3-db505a7c3978.filesusr.com/ugd/7df26f 486454c9f32340b28206e140350159cf.pdf

¹⁶⁶¹ Nordic Cooperation, *Public Digitali-sation in a legal perspective* (May, 13, 2024) https://pub.norden.org/temanord2024-503/index.html

¹⁶⁶³ Report of Estonia's AI Taskforce (May 2019) (See Annex for details on membership, p. 42 https://f98cc689-5814-47ec-86b3-

 $[\]underline{db505a7c3978.filesusr.com/ugd/7df26f_486454c9f32340b28206e140350159cf.pdf}$

¹⁶⁶⁴ e-estonia, *AI and the Kratt Momentum* (Oct. 2018) <u>https://e-estonia.com/ai-and-the-kratt-momentum/</u>

¹⁶⁶⁵ Kratid, Artificial Intelligence, Vision and Plans (2024), https://www.kratid.ee/kratt-visioon

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Electronic Information System (EIS),¹⁶⁶⁶ enables anyone to follow ongoing legislatives procedures, search for documents in the information system, take part in public consultations and comment on a document under inter-agency coordination. The EIS is a working environment for inter-agency coordination, submission of documents to the government and the parliament, and public consultation. In addition to national documents, draft European Union legislation and other documents related to the European Union decision-making process are available in the EIS.

The Ministry of Economic Affairs and Communications published the new national AI strategy (2022–2023) for public consultation for two weeks in 2021. Although the deadline was tight, the public had the opportunity to supplement and comment on the Action Plan.

Bürokratt¹⁶⁶⁷, an AI-powered virtual assistant designed by the Estonian government with civil society consultations, saw a significant expansion of its capabilities in January 2024. The government designed the assistant to simplify interactions with government services and promoted public awareness campaigns to increase its adoption among civil society.

EU Digital Services Act

As an EU member state, Estonia shall apply the EU Digital Services Act (DSA).1668 The DSA regulates online intermediaries and platforms. The main objective of the DSA is to prevent illegal and harmful activities online and the spread of disinformation. The DSA also bans targeted advertising based on a person's sexual orientation, religion, ethnicity, or political beliefs. The DSA also bans targeted advertising to minors based on profiling.

Signatories to the DSA also commit to take action in several domains, such as demonetizing the dissemination of disinformation; ensuring the transparency of political advertising; empowering users; enhancing the cooperation with fact-checkers; and providing researchers with better access to data, as part of the 2022 DSA mitigation measure Strengthened Code of Practice on Disinformation. 1669

¹⁶⁶⁷ European Commission, #Bürokratt programme and national virtual assistant platform and ecosystem (2024), https://commission.europa.eu/projects/burokratt-programme-and-national-virtual-assistant-platform-and-ecosystem_en

¹⁶⁶⁶ Eelnõude infosüsteem, *The Electronic Information System* [Estonian] (2025), https://eelnoud.valitsus.ee/main#Aok2CJTq

¹⁶⁶⁸ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act), (Oct. 21, 2022), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022R2065

¹⁶⁶⁹ European Commission, *The 2022 Code of Practice on Disinformation*, https://digital-strategy.ec.europa.eu/en/policies/code-practice-disinformation

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As part of its obligations under the DSA, Estonia was required to designate a Digital Services Coordinator (DSC) by February 17, 2024. The DSC is responsible for overseeing the implementation and enforcement of the DSA within the country. However, as of April 24, 2024, Estonia had not yet appointed its DSC.1670 Consequently, the European Commission initiated infringement procedures by sending a formal notice to Estonia, urging the prompt designation and empowerment of the DSC to ensure compliance with the DSA. Currently appointed officer works under Consumer Protection and Technical Regulatory Authority (CPTRA).

EU AI Act

As an EU member State, Estonia is bound by the EU AI Act. ¹⁶⁷¹ The EU AI Act is a risk-based market regulation that supports the objective of promoting a human-centric approach to AI and making the EU a global leader in the development of secure, trustworthy and ethical AI. The EU AI Act entered into force on August 1, 2024. ¹⁶⁷² In 2024, Estonia was actively aligning its national policies with the AI Act.

Data Protection

Since Estonia is an EU Member State, the General Data Protection Regulation (GDPR)¹⁶⁷³ is directly applicable in Estonia and to Estonians. The aim of the GDPR is to "strengthen individuals' fundamental rights in the digital age and facilitate business by clarifying rules for companies and public bodies in the digital single market. A single law will also do away with the current fragmentation in different national systems and unnecessary administrative burdens."¹⁶⁷⁴ The GDPR entered into force on 24 May 2016 and applies since 25

¹⁶⁷⁰ European Commision, *Digital Services Coordinators* (2024), https://digital-strategy.ec.europa.eu/en/policies/dsa-dscs

https://www.europarl.europa.eu/RegData/seance_pleniere/textes_adoptes/definitif/2024/03-13/0138/P9_TA(2024)0138_EN.pdf

https://commission.europa.eu/news/ai-act-enters-force-2024-08-01 en

¹⁶⁷¹ European Parliament, Artificial Intelligence Act, European Parliament legislative resolution of 13 March 2024 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts (COM(2021)0206 – C9-0146/2021 – 2021/0106(COD)), P9 TA(2024)0138,

¹⁶⁷² European Commission, AI Act enters into force (Aug. 1, 2024)

negulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, https://eur-lex.europa.eu/EN/legal-content/summary/general-data-protection-regulation-gdpr.html

¹⁶⁷⁴ European Commission, *Data protection in the EU*, https://commission.europa.eu/law/law-topic/data-protection/data-protection-eu en

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May 2018. The Personal Data Protection Act (PDPA)¹⁶⁷⁵ and the new Personal Data Protection Implementation Act (Implementation Act) were adopted in December 2018 and February 2019 respectively to align Estonian law with the GDPR. They entered into force in January 2019 and March 2019 respectively.

Regarding the activities of law enforcement authorities, the PDPA also transposed the EU Data Protection Law Enforcement Directive (LED). 1676 "The directive protects citizens' fundamental right to data protection whenever personal data is used by criminal law enforcement authorities for law enforcement purposes. It will in particular ensure that the personal data of victims, witnesses, and suspects of crime are duly protected and will facilitate cross-border cooperation in the fight against crime and terrorism." The LED provides for the prohibition of any decision based solely on automated processing, unless it is provided by law, and of profiling that results in discrimination. 1678

The European Data Protection Board (EDPB), of which Estonia is a member, stresses that facial recognition tools should only be used in strict compliance with the Law Enforcement Directive (LED). Moreover, such tools should only be used if necessary and proportionate, as laid down in the Charter of Fundamental Rights." ¹⁶⁷⁹

The EU Charter of Fundamental Rights more generally provides that EU citizens have the right to protection of their personal data. Article 8 of the Charter states that: "Everyone has the right to the protection of personal data concerning him or her. Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law."

¹⁶⁷⁵ Personal Data Protection Act https://www.riigiteataja.ee/en/eli/523012019001/consolide

¹⁶⁷⁶ Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

¹⁶⁷⁷ European Commission, *Legal Framework of Data protection in the EU*, https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection_en

Article 11 (1) and (2) of the LED, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

¹⁶⁷⁹ European Data Protection Board, *EDPB adopts Guidelines on calculation of fines & Guidelines on the use of facial recognition technology in the area of law enforcement*, Press release (May 16, 2022), https://edpb.europa.eu/news/news/2022/edpb-adopts-guidelines-calculation-fines-guidelines-use-facial-recognition_en

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Estonia is also a member of the Council of Europe and ratified the Council of Europe's Convention 108+ for the protection of individuals with regard to the processing of personal data. 1680

The Data Protection Inspectorate¹⁶⁸¹ is the national supervisory authority in Estonia. Despite being a member of the Global Privacy Assembly (GPA) since 2006, the Inspectorate has not endorsed the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence;¹⁶⁸² the 2020 GPA Resolution on AI Accountability;¹⁶⁸³ the 2022 GPA Resolution on Facial Recognition Technology¹⁶⁸⁴ or the 2023 GPA Resolution on Generative AI.¹⁶⁸⁵

On April 5, 2024, the Estonian Data Protection Inspectorate (DPI) issued new data security recommendations in response to recent data breaches. The DPI emphasized the importance of:

- Implementing strong encryption for personal data, with pseudonymization for long-term storage of sensitive information.
- Enforcing robust password policies or adopting two-factor authentication.
- Utilizing effective monitoring systems to track system activities.
- Developing clear incident response plans.
- Raising employee awareness about data protection.
- Conducting regular tests and audits to identify potential vulnerabilities.
- Involving data protection specialists early in addressing security issues.
- Adopting recognized standards like the Estonian Information Security Standard or ISO 27001.

¹⁶⁸² Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

¹⁶⁸⁰ Council of Europe, *Modernised Convention for the Protection of Individuals with Regard to the Processing of Personal Data* (May 18, 2018) https://www.coe.int/en/web/data-protection/convention108-and-protocol

¹⁶⁸¹ Data Protection Directorate, https://www.aki.ee/en

¹⁶⁸³ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

¹⁶⁸⁴ Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

¹⁶⁸⁵ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf.

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Documenting all implemented measures and incident protocols.¹⁶⁸⁶

Algorithmic Transparency

Estonia is subject to the GDPR and Convention 108+. Estonians have a general right to obtain access to information about automated decision-making and to the factors and logic of an algorithm. 1687

The 2020 Recommendation of the Council of Europe Committee of Ministers on human rights impacts of algorithm systems¹⁶⁸⁸ specifically emphasizes requirements on transparency, accountability and effective remedies. The Recommendation provides that "Transparency levels should be as high as possible and proportionate to the severity of adverse human rights impacts, including ethics labels or seals for algorithmic systems to enable users to navigate between systems. The use of algorithmic systems in decision-making processes that carry high risks to human rights should be subject to particularly high standards as regards the explainability of processes and outputs."¹⁶⁸⁹

The Recommendation also clarifies that "Contestation should include an opportunity to be heard, a thorough review of the decision and the possibility to obtain a non-automated decision. This right may not be waived, and should be affordable and easily enforceable before, during and after deployment, including through the provision of easily accessible contact points and hotlines." ¹⁶⁹⁰

The Ministry of Justice announced that it would draft legislation addressing high-risk algorithmic systems that will require the creators of AI (both public and private) to provide transparency regarding when AI communicates with an individual, processes an individual's data, or makes a decision on the basis of the individual's data. A representative of the Ministry said that non-transparency of decisions is the biggest threat. When it comes to AI, based on current knowledge, even the person who wrote the algorithm's code is unable to explain the reasons behind a decision, as the system is self-learning and self-evolving. "An assessment or a decision made by an algorithm may have a significant impact on fundamental rights no matter whether we are speaking of a

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

https://www.dataguidance.com/news/estonia-dpi-publishes-data-security-recommendations (Apr. 8, 2024), https://www.dataguidance.com/news/estonia-dpi-publishes-data-security-recommendations see Recital 63 and Article 22 of the GDPR. Article 9 c) of the Convention 108+ as well as Recital 77, Explanatory Report, Convention 108+, p. 24, https://rm.coe.int/convention-108-convention-for-the-protection-of-individuals-with-regar/16808b36f1

¹⁶⁸⁸ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020),

¹⁶⁸⁹ Ibid

¹⁶⁹⁰ Ibid

¹⁶⁹¹ Estonian Ministry, *Use of AI must Respect Fundamental Rights* (Aug. 19, 2020) <u>www.baltic-course.com/eng/Technology/?doc=158411&output=d</u>

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self-learning or a human-defined algorithm. It is a duty of a country based on the rule of law to have foresight and prevent serious interferences with fundamental rights by means of setting out a relevant legislative framework," said Kai Härmand at the time Deputy Secretary General on Legal Policy at the Ministry of Justice.

Estonia's National AI Strategy for 2022–2023, which is currently being updated for the 2024–2026 period, underscores the importance of transparency in AI systems. The strategy outlines measures to ensure that AI applications, including algorithms used in public services, are transparent, accountable, and aligned with ethical standards. ¹⁶⁹²

Digitization of Public Services

In 2018, the Estonian Undersecretary for Communications and State Information Systems emphasized the importance of facilitating AI in Estonia for investment and innovation, as well as for public administration. ¹⁶⁹³ In light of its commitment to e-government, Estonia emphasizes the use of AI for government services. Indeed, *KrattAI* refers to "the vision of how digital public services should work in the age of artificial intelligence;" or more specifically, KrattAI is described as an "interoperable network of AI applications, which enable citizens to use public services with virtual assistants through voice-based interaction." ¹⁶⁹⁴

The Estonian government makes use of automated decision-making in many different contexts. 1695 For example, the Tax and Customs Board uses automated decision-making to facilitate tax refunds following the submission of an online income tax return. Other examples include the use of tachographs on lorries and automated speed checks on motorways to issue cautionary fines and the use of automated decision-making for the determination of a child's school on

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¹⁶⁹² Data Guidance, *Estonia: DPI publishes data security recommendations* (Apr. 8, 2024), https://www.dataguidance.com/news/estonia-dpi-publishes-data-security-recommendations

https://www.riigikantselei.ee/et/uudised/eesti-saab-tehisintellekti-strateegia; Tanel Kerikmäe and Evelin Pärn-Lee, Legal Dilemmas of Estonian Artificial Intelligence Strategy: In Between of E-Society and Global Race, AI & Society (2020).

¹⁶⁹⁴ KRATT Artificial Intelligence Programme of #Estonia, #*KrattAI: roadmap for 2020* (2020), https://f98cc689-5814-47ec-86b3-

db505a7c3978.filesusr.com/ugd/7df26f 19625e00a7b84900b99e952b1ce7d21a.pdf; Republic of Estonia, Ministry of Economic Affairs and Communications, *Report of Estonia's AI Taskforce* (May 2019), https://f98cc689-5814-47ec-86b3-

<u>db505a7c3978.filesusr.com/ugd/7df26f</u> <u>486454c9f32340b28206e140350159cf.pdf</u>. The report of Estonia's AI Taskforce defined 'kratt' as being "a practical application that uses artificial intelligence and that fulfils a specific function."

¹⁶⁹⁵ See also #*KrattAI Roadmap for 2020* (2020), https://f98cc689-5814-47ec-86b3-db505a7c3978.filesusr.com/ugd/7df26f 19625e00a7b84900b99e952b1ce7d21a.pdf

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the basis of their registered residence. There has been international coverage of Estonia's ambitious plans for AI in the public sector – including on the issue of "Robot Judges." The Estonian court system embraces digitalization and started an e-File system in 2005. The use of AI to tackle an immense backlog of cases has been considered, including the adoption of projects that can make "autonomous decisions within more common court procedures/tasks that would otherwise occupy judges and lawyers alike for hours." 1698

The government has also launched the AI Govstack Testbed program (Bürokratt) and invites anyone with relevant experience to participate in an experimental framework to build the next generation AI-led country. Bürokratt exemplifies the Estonian vision of how digital public services should work in the age of AI. Bürokratt is an interoperable network of public and private sector AI solutions, which from the user's point of view, act as a single channel for public services and information. According to the International Research Centre on Artificial Intelligence (IRCAI), operating under UNESCO, "all the aspects regarding KrattAI are fully transparent – starting from business strategy and roadmap to the technology side: architecture, technical solutions – which is Open Source and available to all users." Open source AI components are also used for the Kratid website.

The Estonian government provides a data tracker tool accessible through the state portal (<u>eesti.ee</u>) that enables anyone with an eID to keep track of which institutions have accessed their data and for what purposes. ¹⁷⁰² As pointed out on the e-estonia website, transparency is "fundamental to foster trust in the effective functioning of the whole system." Information is also provided regarding automated processing although Algorithm Watch states that it "is not always clear if data is used as a part of an automatic process or viewed by an official." ¹⁷⁰³ In spite of the ambition of this tool, the Estonian Human Rights Center argue that the

¹⁶⁹⁶ Council of State of the Netherlands and ACA-Europe, *An Exploration of Technology and the Law* (May 14, 2018), http://www.aca-europe.eu/colloquia/2018/Estonia.pdf

¹⁶⁹⁷ Eric Niller, Can AI Be a Fair Judge in Court? Estonia Thinks So, Wired (Mar. 23, 2019) https://www.wired.com/story/can-ai-be-fair-judge-court-estonia-thinks-so/

Anett Numa, *Artificial Intelligence as the New Reality of E-justice*, e-estonia (Apr. 2020) https://e-estonia.com/artificial-intelligence-as-the-new-reality-of-e-justice/

¹⁶⁹⁹ e-Estonia, AI Govstack Testbed, https://e-estonia.com/ai-govstack-testbed est/

¹⁷⁰⁰ International Research Centre on Artificial Intelligence, *IRCAI Global 2021 Top 100 List* (2021), https://ircai.org/top100/entry/krattai/

¹⁷⁰¹ Kratid, *Kratijupid*, https://www.kratid.ee/kratijupid

¹⁷⁰² Federico Plantera, *'Data Tracker - Tool that Builds Trust in Institutions,'* e-estonia (Sept. 2019), https://e-estonia.com/data-tracker-build-citizen-trust/

¹⁷⁰³ Algorithm Watch, *Automating Society Report 2020*, p. 75 (Oct. 2020), https://automatingsociety.algorithmwatch.org/wp-content/uploads/2020/10/Automating-Society-Report-2020.pdf

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data provided is variable depending on the service and at times not detailed enough. To assist transparency and understanding, the Estonian Human Rights Center suggests that visual depictions of data use should be provided. Similarly, Algorithm Watch states that the current tool does not provide a "clear understanding of what profiling is done by the state, which data is collected, how it is used, and for what purpose." 1705

"It is a duty of a country based on the rule of law to have foresight and prevent serious interferences with fundamental rights by means of setting out a relevant legislative framework," said Kai Härmand at the time Deputy Secretary General on Legal Policy at the Ministry of Justice.

Estonia plans to amend its Administrative Procedure Act with the view of automating certain administrative acts, e.g., evaluation and processing of license applications. The pending law "establishes the basis for conducting automatic administrative proceedings, as well as issuing automatic administrative acts or performing actions, which means actions without the intervention of an official or employee acting on behalf of an administrative body." The key features of the draft law are the following: 1707

- automated decisions infringing individuals' rights must be statutorily recognized, i.e., have a legal basis;
- automation must be advantageous to both, the state as well as an individual (e.g., by speeding up the decision-making);
- automation as such may not affect the ultimate outcome of the decision;
- the right to be heard, the right to communication between an individual and an authority and the right to have reasons given for automated decisions must be guaranteed, save for some limited exceptions;
- proactive services must be subject to the clear special provisions and an individual must have an opportunity to decline such services to ensure respect for her dignity.

¹⁷⁰⁵ Algorithm Watch, *Automating Society Report 2020*, p. 75 (Oct. 2020), https://automatingsociety.algorithmwatch.org/wp-content/uploads/2020/10/Automating-Society-Report-2020.pdf

¹⁷⁰⁴ Kari Käsper and Liina Rajavee, *Inimõigused, Infoühiskond Ja Eesti: Esialgne Kaardistus*, Estonian Human Rights Centre (2019)

Amendments to Other Acts Related thereto 634 SE (Oct. 5, 2022), <a href="https://www.riigikogu.ee/tegevus/eelnoud/eelnou/21f6df90-a333-413a-a533-ebbf7e9deebe/Haldusmenetluse%20seaduse%20muutmise%20ja%20sellega%20seonduvalt%20teiste%20seaduste%20muutmise%20seaduse%20muutmise%20seaduse

¹⁷⁰⁷ Ivo Pilving, *Guidance-based Algorithms for Automated Decision-Making in Public Administration: the Estonian Perspective*, CERIDAP (Feb. 2023), https://ceridap.eu/guidance-based-algorithms-for-automated-decision-making-in-public-administration-the-estonian-perspective/?lng=en

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The draft law passed the first reading in September 2022, and certain groups submitted their opinions on the draft in October 2022. There has been no further development since then.¹⁷⁰⁸

Environmental Impact

Estonia, a nation with a highly digitized public sector, recognizes the potential environmental consequences of its digital infrastructure. To address these concerns, the Estonian government adopted the Digital Agenda 2030 in 2021. This long-term strategy aims to establish a "green digital government" by prioritizing environmentally responsible solutions and minimizing the ecological impact of digital services. To achieve these objectives, the Estonian Ministry of Economic Affairs and Communications commissioned a report to analyze the environmental footprint of Estonia's digital society comprehensively.

When it comes to the use of AI, the UNESCO Recommendation emphasizes that AI actors should favor data, energy and resource efficient AI methods that will help ensure that AI becomes a more prominent tool. It is still unclear how Estonia will implement this recommendation. While Estonia benefits from its advanced digital infrastructure, the environmental impact of technologies like AI necessitates careful consideration. The energy demands of AI, particularly for training complex models, contribute to carbon emissions, a concern amplified by Estonia's reliance on oil shale for electricity generation. Estonia's Digital Agenda 2030 and its comprehensive analysis of its digital society's ecological footprint demonstrate a commitment to balancing technological advancement with environmental sustainability.

Lethal Autonomous Weapons

In a 2019 meeting of the Group of Governmental Experts on Lethal Autonomous Weapons Systems, Estonia expressed the view that "humans must retain ultimate control and responsibility in relation to the use of force in armed conflict" and "humans must exercise such control over a weapon system as may be necessary to ensure that the weapon system operates consistently with international law."¹⁷⁰⁹

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¹⁷⁰⁸ Parliament of Estonia, *Act on Amendments to the Administrative Procedures Act and Amendments to Other Acts Related thereto 634 Sei* (Oct. 5, 2022), https://www.riigikogu.ee/tegevus/eelnoud/eelnou/21f6df90-a333-413a-a533-ebbf7e9deebe/Haldusmenetluse%20seaduse%20muutmise%20ja%20sellega%20seonduvalt%20t

ebbf/e9deebe/Haldusmenetluse%20seaduse%20muutmise%20ja%20sellega%20seonduvalt%20teiste%20seaduste%20muutmise%20seadus

¹⁷⁰⁹ Permanent Mission of Estonia to the UN and other International Organisations in Geneva, Group of Governmental Experts on Lethal Autonomous Weapons Systems – First meeting, Statement of Estonia (March 25-29, 2019), https://unoda-documents-12

library.s3.amazonaws.com/Convention on Certain Conventional Weapons -

Group of Governmental Experts (2019)/LAWS%2BGGE%2B2019%2BI%2B-

^{%2}BEstonia%2B-%2BAgenda%2Bitem%2B5%28c%29.pdf

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Estonia was one of the 70 countries that endorsed a joint statement on autonomous weapons systems at the 2022 United Nations General Assembly. The joint statement urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law, including through maintaining human responsibility and accountability in the use of force." 1710

In February 2023, Estonia participated in an international summit on the responsible application of artificial intelligence in the military domain hosted by the Netherlands. At the end of the Summit, Estonia endorsed a joint call for action on the responsible development, deployment and use of artificial intelligence in the military domain. In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." Estonia also endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023. 1713

At the 78th UN General Assembly First Committee in 2023, Estonia voted in favor¹⁷¹⁴ of resolution L.56¹⁷¹⁵ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems.

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¹⁷¹⁰ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee, 77th United Nations General Assembly Thematic Debate – Conventional Weapons* (Oct. 21, 2022),

 $[\]frac{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm_en.pdf}{}$

¹⁷¹¹ Government of Netherlands, *Call to action on responsible use of AI in the military domain* (Feb.16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action

¹⁷¹³ US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Feb. 12, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

¹⁷¹⁴ Stop Killer Robots, *164 states vote against the machine at the UN General Assembly*, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

¹⁷¹⁵ General Assembly, *Resolution L56: Lethal Autonomous Weapons* (Oct.12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

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Human Rights

Estonia is a member of the European Union and the Council of Europe and is, accordingly, committed to the upholding of the Charter of Fundamental Rights and the European Convention on Human Rights. Estonia ratified the Universal Declaration on Human Rights and has acceded to international human rights treaties, such as the International Covenant on Civil and Political Rights. The Estonian Constitution also grants fundamental rights to citizens.

In Freedom House's 2024 Country Report, Estonia ranked "Free" with a score of 95/100, up one from 2023. 1716 In Estonia, "democratic institutions are generally strong, and both political rights and civil liberties are widely respected." Freedom House noted, that "Estonia is well-known for its transparency and well-developed e-governance services."

In a 2020 Recommendation to member States on the human rights impacts of algorithmic systems, the Council of Europe Committee of Ministers reminded member states that their obligations to the Convention for the Protection of Human Rights and Fundamental Freedoms "stands throughout the continuous processes of technological advancement and digital transformation that European societies are experiencing," meaning "member States must ensure that any design, development and ongoing deployment of algorithmic systems occur in compliance with human rights and fundamental freedoms, which are universal, indivisible, inter-dependent and interrelated, with a view to amplifying positive effects and preventing or minimizing possible adverse effects."¹⁷¹⁷

In a 2018 report, the Commissioner for Human Rights of the Council of Europe urged the Estonian authorities to give careful consideration "to the ethical, legal and human rights implications of using robots and artificial intelligence in the care of older persons" given Estonia's strong focus on digitalization, new technologies, and AI.¹⁷¹⁸

OECD / G20 AI Principles

Estonia endorsed the OECD Principles on Artificial Intelligence, agreeing to "promote the use of AI that is innovative and trustworthy and that respects

¹⁷¹⁶ Freedom House, *Freedom in the World 2024: Estonia* (2024), https://freedomhouse.org/country/estonia/freedom-world/2023

¹⁷¹⁷ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020), https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

¹⁷¹⁸ Council of Europe, Commissioner for Human Rights, *Report of the Commissioner for Human Rights of the Council of Europe Dunja Mijatović Following her Visit to Estonia from 11 to 15 June 2018*, p. 21 (Sept. 28, 2018),https://rm.coe.int/report-of-the-council-of-europe-commissioner-for-human-rights-dunja-mi/16808d77f4

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human rights and democratic values"¹⁷¹⁹ in their original form in May 2019 and as updated in May 2024.

Council of Europe AI Treaty

Estonia contributed as a Council of Europe and EU Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy, and the Rule of Law. The Committee on AI approved the Draft Framework Convention during its 10th Plenary session in March 2024. The European Union on behalf of all members on September 5, 2024; however, Estonia has not signed individually.

UNESCO Recommendation on AI Ethics

Estonia has endorsed the UNESCO Recommendations on AI, the first ever global agreement on the ethics of AI. 1720 No available records explicitly address implementation of the recommendation, though Estonia's efforts to align with the EU AI Act and participation in negotiations of the Council of Europe Framework Convention on AI demonstrate the country's attention to the Recommendations.

Evaluation

As a member of the European Union and the Council of Europe, Estonia is committed to the protection of human rights, ethics in AI, and algorithmic transparency. On 5 September 2024, the EU Commission signed the CoE AI Treaty on behalf of the EU. During the negotiations, Estonia demonstrated a pragmatic approach to incorporate more signatures as opposed to having an ambitious text gaining less international support.¹⁷²¹ Estonia has also endorsed the OECD AI Principles and the UNESCO Recommendation on the Ethics of AI. At regional level, Estonia has signed the Declaration of Collaboration on AI in the Nordic-Baltic Region which includes a commitment "to develop ethical and transparent guidelines, standards, norms and principles that can be employed as a steering mechanism to guide AI programmes."¹⁷²²

By contrast, Estonia's first AI Strategy did not consider the issues of ethics and human rights in significant depth. Nevertheless, Estonia opted for a short-term

¹⁷¹⁹ OECD AI Policy Observatory, *OECD AI Principles Overview, Countries Adhering to the AI Principles* (2024), https://oecd.ai/en/ai-principles

¹⁷²⁰ UNESCO, *UNESCO member states adopt the first ever global agreement on the Ethics of Artificial Intelligence* (Nov. 2021), https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence.

¹⁷²¹ European External Action Service, *The European Commission Signs Historic Council of Europe Framework Convention on Artificial Intelligence and Human Rights* (Sept. 10, 2024) https://www.eeas.europa.eu/delegations/council-europe/european-commission-signs-historic-council-europe-framework-convention-artificial-intelligence-and_en?s=51

¹⁷²² Nordic Co-operation, *AI in the Nordic-Baltic region, Declaration* (May 14, 2018), https://www.norden.org/en/declaration/ai-nordic-baltic-region

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strategy in order to be able to adapt it to a rapidly evolving AI landscape. Based on Estonia's experience as a leading country in the world regarding the use of data¹⁷²³ and e-governance, its second national AI strategy, although still wary of "proactive over-regulation in a rapidly evolving area" and of "creating unnecessary obstacles", includes the bases for an ethical framework and provides for specific actions in this regard.

Reflective of this approach is Estonia's Prime Minister Kaja Kallas' statement: "We are already using artificial intelligence in our operations and services, but we see there is a huge potential to make our services more convenient for the people." "But at the same time, we are a rule-of-law country and every individual's privacy is a very important matter for us." This is a similar position that Estonia defended with regard to the draft EU AI Act. "We welcome the proposed AI Act because we have long supported the idea that European-wide harmonized regulation ensures a common market, and minimizing risks increases acceptance of AI technologies," said Mr. Velsberg, the Estonian Government Chief Data Officer. The question remains whether Estonia considers AI ethics a means for AI deployment or the respect of ethical principles as a condition for AI deployment. With the adoption of the EU AI Act, Estonia shall establish a national supervisory mechanism which, it is to be hoped, will be an independent one and will take the protection of human rights seriously.

Ethiopia

In 2024, Ethiopia's Council of Ministers approved a National AI Policy and Parliament adopted the Personal Data Protection Proclamation. As part of the African Union, Ethiopia also committed to the AU Continental AI Strategy.

National AI Strategy

Ethiopia has endowed the Artificial Intelligence Institute with the mission of developing a National AI Strategy. The Ethiopian Council of Ministers approved the National AI Policy in July 2024. The policy aims to leverage AI for economic growth, social development, and national security. It focuses on data management, human capital development, infrastructure development, and ethical considerations.

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¹⁷²³ E-estonia, *Estonia is leading the world in the use of data* (May 23, 2022), https://e-estonia.com/estonia-is-leading-the-world-in-the-use-of-data/

¹⁷²⁴ Invest in Estonia, *Prime Minister Kaja Kallas: Artificial intelligence is the next big thing for Estonia* (2022), https://investinestonia.com/prime-minister-kaja-kallas-artificial-intelligence-is-the-next-big-thing-for-estonia/

¹⁷²⁵ Ethiopian News Agency, *Ethiopia Gives Priority to Enhance National Capacity in AI* (2024), https://www.ena.et/web/eng/w/eng 4858408

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Ethiopia's National AI Strategy reflects a commitment to harnessing artificial intelligence for national development while aligning with international standards. Key areas of alignment include:

- 1. *Human-Centric Approach*: The strategy emphasizes the use of AI to benefit society, particularly in sectors such as agriculture, health, and education, which resonates with the OECD's call for AI that prioritizes human wellbeing. 1726
- 2. Transparency and Explainability: Ethiopia's strategy includes commitments to ensuring transparency in AI operations, aligning with the OECD's principle that AI systems should be transparent and provide explanations for their decisions.¹⁷²⁷
- 3. *Ethical AI Development*: The incorporation of ethical guidelines in Ethiopia's strategy aligns with UNESCO's recommendations for the ethical deployment of AI, ensuring respect for human rights and the promotion of social justice. ¹⁷²⁸
- 4. *Inclusivity and Non-Discrimination*: The strategy aims to ensure equitable access to AI technologies, particularly for marginalized communities, reflecting UNESCO's emphasis on inclusivity in AI development.¹⁷²⁹
- 5. *Human Rights Protection*: Ethiopia recognizes the importance of aligning AI with human rights principles, echoing the Council of Europe's emphasis on protecting human rights in AI deployment.¹⁷³⁰
- 6. Regulatory Frameworks: The establishment of robust regulatory measures to govern AI use demonstrates Ethiopia's commitment to responsible governance, in line with the principles set forth by the Council of Europe.¹⁷³¹

In summary, Ethiopia's National AI Strategy aligns with the OECD AI Principles, UNESCO recommendations, and the Council of Europe Treaty on AI, showcasing a commitment to ethical, inclusive, and transparent AI development.

After three years of consultations with key stakeholders, Ethiopia's Council of Ministers has unanimously endorsed the country's national artificial intelligence (AI) strategy during its 37th regular meeting. ¹⁷³²

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¹⁷²⁶ OECD, Recommendation of the Council on Artificial Intelligence (2019), https://www.oecd.org/going-digital/ai/principles

¹⁷²⁷ Ibid

¹⁷²⁸ UNESCO, *Recommendation on the Ethics of Artificial Intelligence* (2021) https://en.unesco.org/artificial-intelligence/ethics

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¹⁷³⁰ Council of Europe, *Draft Convention on Artificial Intelligence, Human Rights, Democracy and the Rule of Law* (2021), https://rm.coe.int/ai-convention-draft-2021/1680a8b20a

¹⁷³² Ethiopian Artificial Intelligence Institute, *The Council of Ministers Unanimously Decide to Implement the National Artificial Intelligence Policy* (2024), https://www.aii.et/the-council-of-ministers-unanimously-decide-to-implement-the-national-artificial-intelligence-policy/

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The Ethiopian government is undertaking a series of initiatives to increase the adoption of technology for social and economic development, while also building a competitive domestic AI industry that upholds national security priorities. To provide strategic direction for this effort, the government has established a comprehensive national AI policy.

The new AI policy outlines the government's vision and goals for the sector. It specifies the technological framework to enable effective stakeholder collaboration, as well as guidelines for data management, governance, and human resource development.

Following thorough deliberations, the council of ministers has resolved to allocate the necessary resources and commence the implementation of the national AI policy. This marks a significant step forward in Ethiopia's ambition to leverage AI innovation to drive socioeconomic progress and strengthen its technological capabilities.

African Union

As a member of the African Union (AU), Ethiopia is committed to advancing the formulation and implementation of human-centered AI policies, in alignment with the goals of the AU digital transformation strategy¹⁷³³ and the Continental Data Policy Framework.¹⁷³⁴

The Continental AI Strategy was finalized in July 2024 during the 45th Ordinary Session of the African Union Executive Council in Accra, Ghana. The heads of African governments are expected to endorse the Strategy in February 2025 during the AU's annual summit in Addis Ababa, Ethiopia.

The Strategy calls for unified national approaches among AU Member States for inclusive and responsible AI development. It aligns with the AU Agenda 2063—a vision of a prosperous and integrated Africa—by centering AI development within empowerment, economic growth, and cultural progress. The Strategy was supported both technically and financially by UNESCO, ensuring that the African Union's approach to AI regulation and innovation aligned with the UNESCO Recommendation on the Ethics of Artificial Intelligence. ¹⁷³⁵

Along with the development of the Continental AI Strategy, the African Union engaged with other international regulatory frameworks on AI in 2024. In April 2024, African Union senior officials met in Addis Ababa with the G7

¹⁷³⁴ African Union, 40th Ordinary Session of the Executive Council (Feb. 2-3, 2022), https://au.int/sites/default/files/decisions/41584-EX CL Dec 1143-1167 XL E.pdf

¹⁷³³ African Union, *The Digital Transformation Strategy for Africa (2020–2030)*, https://au.int/sites/default/files/documents/38507-doc-dts-english.pdf

¹⁷³⁵ UNESCO, *UNESCO's Support to AU's Continental AI Framework and Strategy* (Aug. 28, 2024), https://www.unesco.org/en/articles/unescos-support-aus-continental-ai-framework-and-strategy

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Presidency to strengthen collaboration on AI.¹⁷³⁶ Among other discussions, the meeting highlighted the plans for the Italian G7 Presidency alongside the United Nations Development Programme (UNDP) to co-design an AI Hub for Sustainable Development with African leaders in 2024. The meeting co-chair stated, "The Italian G7 Presidency is committed to collaborating with UNDP, the African Union and African partners to steer global collective action and address critical infrastructure challenges in local AI ecosystems within African countries, specifically in the areas of data, compute and talent. The AI Hub aims to be a catalyzer for systemic change and accelerate the achievement of the Sustainable Development Goals. The benefits of an AI empowered Africa will have a positive impact not just within the African continent but across the world." ¹⁷³⁷

BRICS

At the 2023 BRICS Summit in South Africa, Ethiopia, together with Iran, Egypt, Saudi Arabia and the United Arab Emirates, was accepted by China, Russia, India, Brazil and South Africa as a new BRICS member. Russian President Putin who takes over the rotating chairmanship of BRICS in January 2024 said that the bloc seeks "strengthening multilateralism for equitable global development and security." During the Summit, Chinese President Xi Jinping announced that BRICS countries would launch the AI Study Group of the BRICS Institute of Future Networks soon. 1739

The BRICS AI Study Group, established under the BRICS Institute of Future Networks, aims to foster collaboration and innovation in AI among member countries. Ethiopia can benefit from this platform by accessing advanced AI technologies, collaborating on AI research, attracting investments, and developing domestic AI capabilities.¹⁷⁴⁰

BRICS also elaborated on the Digital Economy Working Group proposed in a 2022 concept note¹⁷⁴¹ at the 2023 BRICS Summit, aiming to develop digital

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¹⁷³⁶ United Nations Development Programme (UNDP), *The G7 Presidency Partners with UNDP Africa to Advance AI for Sustainable Development* (Apr. 15, 2024),

 $[\]frac{https://www.undp.org/africa/press-releases/g7-presidency-partners-undp-africa-advance-aisustainable-development}{}$

¹⁷³⁷ Ibid

¹⁷³⁸ Taarifa Rwanda, *Ethiopia Officially Confirmed as BRICS Member* (Jan. 8, 2024), https://furtherafrica.com/2024/01/08/ethiopia-officially-confirmed-as-brics-member/

¹⁷³⁹ Namibia Economist, *BRICS Nations to Establish a Study Group to Track AI*, BRICS (Oct.6, 2023), https://infobrics.org/post/39534/

¹⁷⁴⁰ Ethiopian Artificial Intelligence Institute, *The BRICS 'AI Study Group' Addressing Disparities in AI Advancement* (Aug. 30, 2024), https://www.aii.et/the-brics-ai-study-group-addressing-disparities-in-ai-advancement/

¹⁷⁴¹ BRICS 2022 China, Concept Note: BRICS Digital Economy Cooperation (2022), https://www.gov.br/memp/pt-br/assuntos/brics-sme-working-group-1/documents-on-smes/2022-china/concept-note-on-brics-digital-economy-2-china.pdf

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education cooperative mechanisms. Deepening technological cooperation through this Working Group may also encourage future BRICS cooperation on AI.

In January 2024, China also called for the development of a "BRICS AI Development Cooperation Center" to be constructed in China. This announcement was followed by the release in February 2024, of the AI Governance International Evaluation Index, which evaluates BRICS' AI development in contrast to G-7 countries. ¹⁷⁴² As a member of BRICS, Ethiopia may benefit from this AI collaboration arising from the expansion of BRICS AI initiatives. However, geopolitical tensions between BRICS members China and Russia and the West may pose challenges in advancing a BRICS AI agenda on the global stage.

Data Protection

The 1995 Constitution of the Federal Democratic Republic of Ethiopia establishes a fundamental right to privacy.

Ethiopia made a significant stride in data protection with the enactment of the Personal Data Protection Proclamation No. 1321/2024 in July 2024.¹⁷⁴³ This comprehensive law, as outlined in the Federal Negarit Gazette, replaces Ethiopia's fragmented regulatory framework and empowers individuals by granting them rights over their personal data, such as access, rectification, erasure, and objection to processing¹⁷⁴⁴. It also imposes stringent obligations on organizations handling personal data, including implementing robust security measures, obtaining informed consent, and ensuring transparency¹⁷⁴⁵.

As another form of protection, the Proclamation emphasizes data localization and regulates cross-border data transfers, emphasizing "sovereignty of data" to keep Ethiopian citizen data within national borders. ¹⁷⁴⁶ Rules only allow personal data transfers outside of Ethiopia to countries with similar data protection standards.

By aligning with international standards, this law positions Ethiopia as a leader in data privacy and fosters a more secure digital environment. The Ethiopian Communications Authority—the regulatory authority for Communications Services in Ethiopia—will play a leading role in enforcing the law and addressing complaints from data subjects.

¹⁷⁴² Global Times, *China Researchers Release AI Governance Index, with China Ranking in First Echelon,* (Feb. 6, 2024), https://www.globaltimes.cn/page/202402/1306760.shtml

¹⁷⁴³ Federal Democratic Republic of Ethiopia, *Personal Data Protection Proclamation No.* 1321/2024 (Jul. 24, 2024),

https://www.dataguidance.com/sites/default/files/personal_data_protection_proclamation_1321-2024.pdf

¹⁷⁴⁴ Ibid

¹⁷⁴⁵ Ibid

¹⁷⁴⁶ International Trade Administration, *Ethiopia- Country Commercial Guide* (Sept. 2024), https://www.trade.gov/country-commercial-guides/ethiopia-digital-economy

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The right to privacy is further reinforced in several legal instruments, including the Criminal Code of the Federal Democratic Republic of Ethiopia (Proclamation No. 414/2004), the Civil Code of the Empire of Ethiopia (Proclamation No. 165/1960), the Freedom of the Mass Media and Access to Information Proclamation (No. 590/2008), and the recently enacted Media Proclamation No. 1238/2021. The Media Proclamation of 2021 repealed portions of the Mass Media & Access to Information Proclamation specifically related to mass media.¹⁷⁴⁷

Based on Section 8 of Ethiopia's Freedom of the Mass Media and Access to Information Proclamation No. 590/2008, personal data refers to any information that can be used to identify a living individual. This includes core identifiers like name, address, identification numbers, fingerprints, and blood type. It also encompasses details of life history, such as medical, educational, professional, and financial records, along with any criminal history. Additionally, the definition covers background and affiliations, including ethnic, national, or social origin, marital status, pregnancy status, age, color, sexual orientation, religion, beliefs, culture, and language. It includes information on physical and mental health conditions, including disabilities, as well as personal views and opinions on grant proposals or awards, provided they don't identify another individual, and how others perceive the individual.¹⁷⁴⁸

The Communication Services Proclamation No. 1148/2019 (Ar.50)¹⁷⁴⁹ establishes the responsibility of the Ethiopian Communication Authority to promote data privacy. The Ethiopian Communications Authority's Consumers Rights and Protection Directive No. 832/2021 explicitly defines personal data in section 2(12) as any information relating to an identified or identifiable natural person leading to identify such person, directly or indirectly in particular by reference to an identifier such as a name, an identification number, location data, telephone number, traffic and billing data, and other personal information in the context of Telecommunications Services.¹⁷⁵⁰

https://www.dlapiperdataprotection.com/index.html?t=definitions&c=ET

6fa116cf71e8/communicationsserviceproclamationno1148-2019.pdf

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¹⁷⁴⁷ Bowmans Law, *Africa Guide to Data Protection* (2022), https://bowmanslaw.com/wpcontent/uploads/2022/06/Data-Protection_01.06.2022.pdf

¹⁷⁴⁸ DLA Piper, *Data Protection in Ethiopia* (2025),

¹⁷⁴⁹ Ministry of Finance of Ethiopia, *Proclamation No. 1148/20219: Proclamation for the Communications Service*, Federal Negarit Gazette (Aug. 12, 2019), https://www.mofed.gov.et/media/filer_public/7c/78/7c781a5b-1c06-4f6d-9128-

¹⁷⁵⁰ Ethiopian Communications Authority, *Telecommunications Consumer Rights and Protection Directive No. 832/2021* (Aug. 2021),

https://cyrilla.org/api/files/1689857290044ckib706mn44.pdf

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The Digital ID Proclamation 1284/2023¹⁷⁵¹ has been recently enacted with the view to adopt a comprehensive legal framework for the regulation of the national digital identification system. The Proclamation provides the rules for collecting, processing, transferring, disclosing, modifying, and overall management of personal data of registrants. "Personal Data" for the said Proclamation means the biometric and demographic data collected with the 'digital identification system [Article (2)(17)]. Interestingly, according to Article 17(1) of the Proclamation, the owner of the personal data is the registrant, and they shall give their data to the registrar upon their consent for processing, transferring, disclosing, and modifying.

Ethiopia has not signed the Council of Europe Convention 108¹⁷⁵² and its amending protocols or the African Union's Convention on Cyber Security and Personal Data Protection, known as the Malabo Convention, ¹⁷⁵³ which entered into force in June 2023. ¹⁷⁵⁴

Digitization

Ethiopia's population reached 126.5 million by 2023, with more than 63% employed in agriculture¹⁷⁵⁵ and approximately 77% residing in rural areas¹⁷⁵⁶ with limited infrastructure and Internet access. At the beginning of 2024, there were only 24.83 million internet users, indicating a penetration rate of 19.4%.¹⁷⁵⁷ Despite the digital divide, the Government of Ethiopia launched the national digital

⁷⁵¹ Federal N

¹⁷⁵¹ Federal Negarit Gazette, *Proclamation No. 1284/2023: Ethiopian Digital Identification Proclamation*, Citizenship Rights in Africa Initiative (Apr. 18, 2023),

https://citizenshiprightsafrica.org/ethiopian-digital-identity-proclamation-number-1284-2023/

1752 Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 108* (2018)

https://www.coe.int/en/web/conventions/full-list?module=treaty-detail&treatynum=108; Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 223* (Mar. 12, 2025),

https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=223

¹⁷⁵³ African Union, *Convention on Cyber Security and Personal Data Protection* (2014), https://au.int/sites/default/files/treaties/29560-treaty-0048 -

african union convention on cyber security and personal data protection e.pdf

¹⁷⁵⁴ Data Protection Africa, *Africa: AU's Malabo Convention Set to Enter Force after Nine Years* (May 19, 2023), https://dataprotection.africa/malabo-convention-set-to-enter-force/

¹⁷⁵⁵ The World Bank, *Employment in agriculture (% of total employment) (modeled ILO estimate) –Ethiopia* (2022),

https://data.worldbank.org/indicator/SL.AGR.EMPL.ZS?locations=ET

¹⁷⁵⁶ World Bank, *Report No. AUS0002202, Ethiopia: Employment in Urban and Rural Ethiopia* (Apr. 2021),

 $[\]underline{https://documents1.worldbank.org/curated/en/717091632198808079/pdf/Employment-in-Urban-and-Rural-Ethiopia.pdf}$

¹⁷⁵⁷ DataReportal, *Digital 2024: Ethiopia* (2024), https://datareportal.com/reports/digital-2024-ethiopia

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transformation strategy, Digital Ethiopia 2025,¹⁷⁵⁸ in June 2020. This strategy, built upon key economic sectors such as Agriculture, Manufacturing and Services, focuses on four foundational cross-sector areas: Infrastructure, Enabling Systems, Digital Interactions, and Digital Ecosystem. The overarching goals of this strategy include job creation, foreign exchange earnings, and inclusive prosperity, aiming to attain middle-income status by 2025. The World Bank approved \$200 million in concessional loans to support its implementation.¹⁷⁵⁹

The Ministry of Innovation and Technology (MinT) has significantly developed initiatives across various sectors since the Digital Ethiopia 2025 Strategy and Proclamation No. 1097/2019 in 2019 were adopted, including the Digital ID program.¹⁷⁶⁰

The National Bank has adopted the National Digital Payments Strategy¹⁷⁶¹ in the finance sector, while the government has embraced the Electronic Transaction Proclamation 1205/2020.¹⁷⁶² The International Telecommunication Union launched Digital Transformation Centers in Addis Ababa in 2022. The 17th Internet Governance Forum (IGF) took place in November and December 2022 in Addis Ababa.¹⁷⁶³

Biometric Identification

Ethiopia is currently implementing a Digital ID Program, ¹⁷⁶⁴ Fayda, as part of the Digital Ethiopia 2025 Strategy. Given the ongoing civil war, there are fears

https://www.lawethiopia.com/images/Policy_documents/Digital-Ethiopia-2025-Strategy-english.pdf

Digital-Foundations-Project.pdf

https://citizenshiprightsafrica.org/ethiopian-digital-identity-proclamation-number-1284-2023/; National ID, *NID History* (2023), https://id.gov.et/about

¹⁷⁶² Ethiopian Custom Commission (2020), http://www.ecc.gov.et/web/ecc/proclamations/document-library/flrbyLVlmPJq/view-file/761466

¹⁷⁵⁸ Ministry of Innovation and Technology, *Digital Ethiopia 2025*, Law Ethiopia (2020),

World Bank, Report No. PAD3617, Project Appraisal document on a Proposed Credit in the Amount of SDR138.9 Million (US\$200 Million Equivalent) to the Federal Democratic Republic of Ethiopia for an Ethiopia Digital Foundations Project (Mar. 24, 2021), https://documents1.worldbank.org/curated/en/421681619316030132/pdf/Ethiopia-Ethiopia-

¹⁷⁶⁰ Federal Negarit Gazette, *Proclamation No. 1284/2023: Ethiopian Digital Identification Proclamation*, Citizenship Rights in Africa Initiative (Apr. 18, 2023),

¹⁷⁶¹ National Bank of Ethiopia, *National Digital Payments Strategy 2021–2024* (2024), https://nbe.gov.et/wp-content/uploads/2023/04/National-Digital-Payment-Strategy.pdf

¹⁷⁶³ United Nations, Department of Economic and Social Affairs, *Highlights 2022-2023*, https://desapublications.un.org/publications/un-desa-annual-highlights-report-2022-2023
¹⁷⁶⁴ *National Id Ethiopia* (2023), https://id.gov.et/

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that the Digital ID Program could reinforce discrimination against ethnic minorities.¹⁷⁶⁵

In March 2022, the National Identification (ID) Program hosted its first "Digital Identification Proclamation Consultation" with over 200 key stakeholders invited, representing Federal ministries and government agencies, regional governments, civil society organizations, local human rights organizations, and international institutions.¹⁷⁶⁶ In 2023, the Digital ID Proclamation 1284/2023¹⁷⁶⁷ was issued and the Fayda program got underway.

Since then, the government has taken several initiatives to promote Fayda. The National Identity Program (NIP) entered a partnership with the country's Federal Civil Service Commission to make the Fayda digital ID the main identification credential for all civil servants. NIP and the Ministry of Education have announced that biometric digital ID has been adopted as the official student ID across educational institutions, not UNICEF signed a MoU with NIP to support digital ID registration for children. At the end of 2023, Ethiopia called for an expression of interest in recruiting a public relations firm that will communicate the adoption of Fayad digital ID to the public to attain 90 million digital ID enrollments target within the revised deadline of 2028 from 2025.

Although government officials told parliament in November 2023 that digital ID registration is not mandatory, and that people can continue to use their analogue Kebele ID card, the same cannot be said in 2024. The digital ID became mandatory for all transactions with financial institutions¹⁷⁷² and access to public services.¹⁷⁷³

Biometric Update (2023), https://www.biometricupdate.com/202309/ethiopia-makes-fayda-the-main-credential-for-civil-servants

¹⁷⁶⁵ Context (2023), https://www.context.news/surveillance/ethiopia-digital-id-prompts-tears-of-ethio-profiling

¹⁷⁶⁶ Citizenship Rights in Africa Initiative (Mar. 15, 2022), https://citizenshiprightsafrica.org/first-ethiopian-digital-identification-draft-proclamation-public-consultation/

¹⁷⁶⁷ National Id Ethiopia (2023), https://id.gov.et/law

¹⁷⁶⁹ Biometric Update (2023), https://www.biometricupdate.com/202309/ethiopia-rolls-out-student-ids-integrates-biometric-data-to-issue-fayda

¹⁷⁷⁰ Biometric Update (2023), https://www.biometricupdate.com/202310/unicef-pens-deal-to-support-ethiopias-digital-id-registration-for-children

¹⁷⁷¹ Biometric Update (2024), https://www.biometricupdate.com/202312/ethiopia-shops-for-pr-firm-to-popularize-fayda-digital-id-speed-adoption

¹⁷⁷² Biometric Update (2023), https://www.biometricupdate.com/202307/ethiopia-to-make-digital-id-obligatory-for-banking-operations

¹⁷⁷³ Biometric Update (2024), https://www.biometricupdate.com/202401/ethiopia-to-make-digital-id-compulsory-for-access-to-government-services

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The program is being implemented with \$350 million funding from the World Bank's International Development Association (IDA), from which \$10 million has been disbursed as of August, 2024. The program's goal is for 90 million Ethiopians and legal residents to hold the Fayda digital ID by January 2029. However, the Ethiopia National ID Program (NIDP) hopes to issue 70 million IDs by the end of 2025. As of August 2024, Fayda has seen 8.2 million registrations. The recent passage of the Personal Data Protection Proclamation is an important step to safeguard data and digital privacy as this digital ID registration increases.

In 2024, digital ID registration became compulsory for any Ethiopian seeking access to government services. ¹⁷⁷⁸ More recently, Ethiopia has worked to establish Fayda as a digital ID for domestic flights, marked by a Memorandum of Understanding signed by Ethiopian Airlines and the NIDP. ¹⁷⁷⁹ Ethiopian Airlines is also working to integrate biometric passenger processing throughout the travel journey, from booking to boarding.

Ethiopia has also rolled out the Fayda program to the country's refugee population, currently gradually rolling it out to 77,000 refugees living in Addis Ababa. The program's goal is to extend digital ID access to the over 1 million refugees in Ethiopia, primarily individuals from South Sudan, Somalia, Eritrea, and Sudan. This digital ID expansion is supported in partnership with the National ID Program (NIDP) and UNHCR, the UN Refugee Agency. Access to this ID card will help refugees engage in financial transactions, enroll in schools, and obtain SIM cards.

Environmental Impact of AI

Ethiopia's efforts and support to align national AI policies with the UNESCO Recommendation on the Ethics of AI demonstrates attention to the environmental impact of AI. Sustainability is one of ten core principles UNESCO

1776 Ibid

¹⁷⁷⁴ Biometric Update, *Ethiopia Digital ID for Inclusion and Services Project Restructured* (Aug. 26, 2024), https://www.biometricupdate.com/202408/ethiopia-digital-id-for-inclusion-and-services-project-restructured

¹⁷⁷⁵ Ibid

¹⁷⁷⁷ Ibid

¹⁷⁷⁸ Biometric Update (Jan. 15, 2024), https://www.biometricupdate.com/202401/ethiopia-to-make-digital-id-compulsory-for-access-to-government-services

¹⁷⁷⁹ Biometric Update, *Ethiopia moves to enable Fayda digital ID for domestic flights*, (2024), https://www.biometricupdate.com/202410/ethiopia-moves-to-enable-fayda-digital-id-for-domestic-flights

¹⁷⁸⁰ The UN Refugee Agency, *Inclusion in Ethiopia's ID System Opens New Doors for Refugees*, (May 24, 2024), https://www.unhcr.org/us/news/stories/inclusion-ethiopia-s-id-system-opens-new-doors-refugees

¹⁷⁸¹ Ibid

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identified for a human-rights centered approach to AI ethics.¹⁷⁸² UNESCO also identifies Environment and Ecosystems as one of eleven key policy areas for implementation. The African Union Continental AI Strategy emphasizes sustainable development and seeks to develop AI to achieve this goal.

However, Ethiopia has not indicated specific policies or projects to curb the emissions and other environmental impacts of AI systems and infrastructure.

Lethal Autonomous Weapons

Ethiopia has not acceded to the Convention on Certain Conventional Weapons (CCW) neither to any of its Protocols.¹⁷⁸³

At the 78th UN General Assembly First Committee in 2023, Chile voted in favour¹⁷⁸⁴ of resolution L.56¹⁷⁸⁵ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. The report should analyze ways to address the challenges and concerns autonomous weapon systems raise from humanitarian, legal, security, technological and ethical perspectives and reflect on the role of humans in the use of force.

"Ethiopia is a member of the African Group within the United Nations and is a member of the Non-Aligned Movement (NAM). Both the African Group and the NAM support the negotiation of a legally binding instrument on autonomous weapon systems." ¹⁷⁸⁶ Ethiopia was party to a working paper submitted on behalf of the NAM and other Parties to the CCW to the GGE on LAWS, which stated that "a strengthened and reinforced multilateral approach, with new legally-binding provisions for addressing the humanitarian and international security challenges posed by emerging technologies in the area of LAWS, is vital. There is an urgent need to pursue a legally-binding instrument on LAWS." ¹⁷⁸⁷

fora/1com/1com23/resolutions/L56.pdf

¹⁷⁸² UNESCO, Ethics of Artificial Intelligence: The Recommendation, A Human-Rights Approach to AI (2025), https://www.unesco.org/en/artificial-intelligence/recommendation-ethics

¹⁷⁸³ United Nations, Disarmament Office (1980), https://disarmament.unoda.org/the-convention-on-certain-conventional-weapons/

¹⁷⁸⁴ Stop Killer Robots, *164 states vote against the machine at the UN General Assembly*, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

¹⁷⁸⁵ General Assembly, *Resolution L56: Lethal Autonomous Weapons* (Oct. 12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-

¹⁷⁸⁶ Automated Decision Research, *State Position – Ethiopia*, https://automatedresearch.org/news/state position/ethiopia/

¹⁷⁸⁷ Non-Aligned Movement Geneva Chapter Coordinator of the Group of NAM and other states to the CCW, Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects (2021), https://documents.unoda.org/wp-content/uploads/2021/06/NAM.pdf

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Human Rights

Ethiopia is a party to a number of international and regional human rights instruments, including the Universal Declaration on Human Rights 1948, the International Covenant on Civil and Political Rights 1966,¹⁷⁸⁸ the Convention of the Rights of the Child 1989,¹⁷⁸⁹ and the African Charter on Rights and Welfare of the Child 1990.¹⁷⁹⁰ These human rights instruments ratified by Ethiopia form an 'integral part' of the laws of the country, according to Article 9 of its Constitution.

As of 2024, the human rights landscape in Ethiopia is marked by significant challenges, as reflected in the Freedom House report, which assigns Ethiopia a score of 24 out of 100 in its Freedom in the World index, ¹⁷⁹¹ indicating a lack of political rights and civil liberties. The human rights landscape in Ethiopia is marked by significant challenges that reflect ongoing political, social, and ethnic tensions. This score underscores the urgent need for reform and accountability in the country, in particular around political repression, ethnic tensions and violence, media freedom, and restrictions on humanitarian aid.

OECD / G20 AI Principles

Ethiopia has not endorsed the OECD AI Principles. However, Ethiopia is a member of the African Union, which has recently joined the G20.

Council of Europe Al Treaty

Ethiopia has not signed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law.¹⁷⁹²

UNESCO Recommendation on AI Ethics

As a member of UNESCO, Ethiopia along with 192 other member states, adopted in 2021 the UNESCO Recommendation on the Ethics of AI, the first global standard on the ethics of AI. 1793

https://au.int/sites/default/files/treaties/36804-treaty-

african charter on rights welfare of the child.pdf

¹⁷⁸⁸ United Nations (1966) https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-civil-and-political-rights

¹⁷⁸⁹ United Nations (1989) https://www.ohchr.org/en/instruments-

mechanisms/instruments/convention-rights-child

¹⁷⁹⁰ African Union, African Charter on the Rights and Welfare of the Child (1990),

¹⁷⁹¹ Freedom House, *Freedom in the World 2024: Ethiopia* (2024), https://freedomhouse.org/country/ethiopia/freedom-world/2024

¹⁷⁹² Council of Europe Treaty Office, Chart of Signatures and Ratifications of Treaty 225 (Mar.

^{12, 2025), &}lt;a href="https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225">https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

¹⁷⁹³ UNESCO, (2023), https://www.unesco.org/en/articles/unesco-adopts-first-global-standard-ethics-artificial-intelligence

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The Deputy General Director, Research and Development Cluster, from the Ethiopian Artificial Intelligence Institute participated in the June 2024 UNESCO-Eastern Africa Sub-Regional Forum on Artificial Intelligence (EARFAI). EARFAI focused on the potential for AI to benefit sustainable development and societal change in Eastern Africa, including discussions on the landscape of AI governance. The Major theme of EARFAI involved discussions of implementation of UNESCO's Recommendation on the Ethics of AI within Eastern African states.

To assist with this implementation, UNESCO released the Readiness Assessment Methodology (RAM) in 2023, as a tool to guide Member States in identifying institutional and regulatory gaps that may inhibit development of an ethical AI ecosystem in line with the Recommendation. UNESCO has rolled out RAM in 22 African countries, including Ethiopia, where the RAM is in preparation.

Evaluation

Ethiopia is navigating a transformative journey in artificial intelligence with advancements and challenges across several key dimensions.

Ethiopia has initiated the development of a governance framework for AI, as outlined in its National AI Strategy. The strategy aims to establish regulatory measures that align with international standards. However, the framework is still in its nascent stages, lacking comprehensive regulations that ensure accountability and transparency in AI applications and missing an effective organized roadmap for implementation. These gaps present risks related to misuse and ethical concerns. For example, while the National AI Strategy and AU Continental Strategy include commitments to fairness, accountability, and transparency, implementation of these ethical guidelines remains inconsistent, with limited mechanisms to monitor AI systems for bias or discrimination.

Ethiopia has made progress in building local capacity for AI through partnerships with universities and technology hubs. Broader public awareness and involvement through this capacity-building can promote greater public participation in AI policy formulation, which the government has acknowledged as important.

Ethiopia is beginning to address issues of privacy, data protection, and individual rights in the digital landscape. However, existing legal frameworks are still evolving, and there is a pressing need to strengthen laws that safeguard

https://www.unesco.org/en/earfai/programme?hub=149901

¹⁷⁹⁴ UNESCO, *Programme: UNESCO-Eastern Africa Sub-Regional Forum on Artificial Intelligence (EARFAI)*, (Jun. 24–26, 2024),

¹⁷⁹⁵ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

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citizens' rights in the face of increasing surveillance and data collection. Fears remain that the Digital ID Program holds the potential to become a tool of mass surveillance in a country with a historically challenging human rights landscape.

Ethiopia's progress in AI is noteworthy. Nevertheless, significant challenges remain in governance, ethical implementation, capacity building, public engagement, and the protection of digital rights.

Finland

In 2024, Finland created a Working Task Force to implement the EU AI Act and submitted draft national legislation aligned with the Act for public consultation. The country also voted in the UN for the general and complete disarmament regarding LAWS and became party to the Council of Europe AI treaty through the European Commission's signature. However, Finland has not signed the treaty independently.

National AI Strategy

In 2017, Finland was among the first countries to develop a national AI strategy, establishing proposed target dates and allocating public funds in furtherance of the country's AI-related business objectives. The vision put forth by the national strategy is that "In another five years time, artificial intelligence will be an active part of every Finn's daily life. Finland will make use of artificial intelligence boldly in all areas of society – from health care to the manufacturing industry – ethically and openly. Finland will be a safe and democratic society that produces the world's best services in the age of artificial intelligence. Finland will be a good place for citizens to live and a rewarding place for companies to develop and grow. Artificial intelligence will reform work as well as create wellbeing through growth and productivity."

At that time, Finland explained that it implemented this AI strategy to: (1) enhance business competitiveness using AI, (2) ensure top-level expertise and attract top experts, (3) provide the world's best public services, and (4) make Finland a front runner in the age of AI. 1796

To that end, in May 2017, Finland's Minister of Economic Affairs launched Finland's AI Programme, ¹⁷⁹⁷ an operational program tasked with "turning Finland into a leading country in the application of artificial intelligence."

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¹⁷⁹⁶ OECD, *State of Implementation of the OECD AI Principles* (Jun. 18, 2021), https://www.oecd.org/content/dam/oecd/en/publications/reports/2021/06/state-of-implementation-of-the-oecd-ai-principles 38a4a286/1cd40c44-en.pdf

¹⁷⁹⁷ Finnish Government, Turning Finland into a leading country in the age of Artificial Intelligence (Mar. 14, 2018), https://valtioneuvosto.fi/en/-/1410877/raportti-suomi-ponnistaa-tekoalyajan-karkimaaksi

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The Programme focused on three areas: an efficient public sector, a well-functioning society, and a competitive business and industry sector. 1798

The Minister of Economic Affairs appointed a steering committee, which included representatives from the public, private, and research sectors, and charged the steering committee with publishing a report containing its recommendations regarding the operationalization of Finland's AI Programme. Within the steering committee, the Minister of Economic Affairs established four subgroups "assigned to participate in the compilation and implementation of the Finnish AI Programme" and focused on four (4) key areas: (1) expertise and innovations; (2) data and platform economy; (3) transformation of work and society; and (4) ethics.

The steering committee published three reports. The first one, entitled "Finland's age of artificial intelligence: Turning Finland into a leading country in the application of artificial intelligence" was released in 2017. In this report, the steering committee examined "the significance of artificial intelligence to Finland's well-being, revised the programme objectives, and made some recommendations for actions, which, if implemented, should facilitate Finland's objective to "adopt and benefit from AI." 1800

In June 2018, the steering committee subgroup on transformation of work and society, published a second report entitled, "Work in the age of artificial intelligence: Four perspectives on the economy, employment, skills and ethics." The subgroup separately examined (1) the impact of artificial intelligence on growth and employment; (2) labor market dynamics in a technological revolution; (3) learning and skills in a transition; and (4) good application of artificial intelligence technology and ethics. The report also offered three policy recommendations: (1) Increase the competitiveness of business and industry; (2) Provide high-quality public services and improve the efficiency of

¹⁷⁹⁸ Ministry of Economic Affairs and Employment, Leading the way into the age of artificial Intelligence: Final Report of Finland's Artificial Intelligence Programme (Jun. 12, 2019),

https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/161688/41_19_Leading%20the%20way%20into%20the%20age%20of%20artificial%20intelligence.pdf

1799 Ministry of Economic Affairs and Employment, Finland's Age of Artificial Intelligence:

Turning Finland into a leading country in the application of artificial intelligence, Objective and recommendations for measures (Dec. 18, 2017),

http://iulkajeut.yaltioneuwosto.fi/bitstream/handle/10024/160391/TEMrap. 47, 2017, verkkojulkaj

 $[\]frac{http://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/160391/TEMrap_47_2017_verkkojulkaisut.pdf}{}$

Testing Future of Life, Global AI Policy (Dec. 16, 2022), https://futureoflife.org/resource/ai-policy/

1801 Ministry of Economic Affairs and Employment, Work in the age of artificial intelligence:

Four perspectives on the economy, employment, skills and ethics (Sept. 10, 2018),

https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/160980/TEMjul_21_2018_Work_in_th

e age.pdf

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the public sector; (3) Ensure a well-functioning society and wellbeing for its citizens. 1802

In this report, the subgroup defines the relationship between "good application of technology" and ethics in the following way. "In its most unassuming form, good application of technology means being aware of the potential negative impacts or problems associated with it and applying the technology accordingly. The most ambitious definition also includes a conscious attempt to use technology to promote certain societal goals regarded as valuable. We start our discussion with the more ambitious goal." Accordingly, the subgroup identifies three key "values of a good artificial intelligence society": transparency, responsibility, and extensive societal benefits.

According to the subgroup, "transparency refers to openness regarding 1) what data are collected and for what purpose (to underpin decision-making based on artificial intelligence), and 2) what the aim of the algorithms supporting and making decisions is." Associated with transparency, is traceability, or "the possibility of tracing the purity and integrity of the data underpinning decision-making based on artificial intelligence and the grounds for making decisions." The subgroup explains that "rather than the grounds of decisions made by individual algorithms, the requirement of traceability focuses on comprehensive understanding of the operation of the entire neural network system. The problem of traceability can partly be responded to by clarifying the rules of when a machine makes the actual decision and when only a prediction that supports final decision-making by a human. [...] However, the point of departure in all cases is that humans assume ultimate legal and moral responsibility for the decisions." ¹⁸⁰³

In December 2019, the steering committee published its third and final report, "Leading the way into the age of artificial intelligence." The report detailed the steering committee's policy recommendations for Finland's AI Programme. The report also set forth the contours of Finland's "vision" of a country that, by 2025, "is competitive and able to attract talent and has the most

¹⁸⁰³ Ministry of Economic Affairs and Employment, *Work in the age of artificial intelligence:* Four perspectives on the economy, employment, skills and ethics), p.50 (Sep. 10, 2018), https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/160980/TEMjul_21_2018_Work_in_theage.pdf

¹⁸⁰² The report cautioned that "The conclusions of the report do not necessarily represent the group's joint views," but "do represent a majority opinion."

¹⁸⁰⁴ The Ministry of Economic Affairs and Employment of Finland, *Leading the way into the age of artificial intelligence Final report of Finland's Artificial Intelligence Programme* (Jun. 12, 2019),

http://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/161688/41_19_Leading%20the%20way%20into%20the%20age%20of%20artificial%20intelligence.pdf

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relevantly educated population consisting of well-informed and independent citizens" in "the age of artificial intelligence." 1805

In November 2020, Finland launched the Artificial Intelligence 4.0 Programme. "The purpose of the programme is to formulate the objectives and measures to promote digitalisation in Finland. Particular attention should be paid to SMEs, increases in digital investment and European cooperation. The programme will contribute to the recovery of companies and the economy from the coronavirus pandemic. According to the European Commission, digitalisation is one of the key means to generate new economic growth." 1806

According to the European Commission's Digital Economy and Society Index (DESI), Finland was the most digital country in the EU in 2022. ¹⁸⁰⁷ The first interim report from launch to step one ¹⁸⁰⁸ suggests that the digitalization agenda needs to be done "in cooperation between companies, research, and academia as well as training institutes and public organizations." The vision of Finland was that by 2030 to be a "sustainable winner in the twin transition"—i.e. green and digital transition. This is in line with the EU's coordinated plan on AI and its 2024 publication Communication on Boosting Startups and Innovation in Trustworthy Artificial Intelligence, which highlights a strategic plan for investment in trustworthy AI. ¹⁸⁰⁹ The second interim (and final) report was launched in October 2022 and focuses on three key areas for development: (1) investments in research, development, and leading technologies; (2) increasing digital capabilities and promoting the uptake of technologies that speed up the digital and green transition in industry SME and (3) strengthen Finland's position through European cooperation and transatlantic relations. ¹⁸¹⁰

In addition, a Copyright Infrastructure Task Force was set up by the Ministry of Education and Culture (Term March 2024–October 2027) to "promote

¹⁸⁰⁵ Future of Life, Global AI Policy (Dec. 16, 2022) https://futureoflife.org/resource/ai-policy/
¹⁸⁰⁶ Ministry of Economic Affairs and Employment, *Artificial Intelligence 4.0 programme to*

speed up digitalisation of business (Nov. 17, 2020), https://tem.fi/en/-/artificial-intelligence-4.0-programme-to-speed-up-digitalisation-of-business

¹⁸⁰⁷ European Council, *The Digital Economy and Society Index (DESI)* (2022), https://digital-strategy.ec.europa.eu/en/policies/desi

¹⁸⁰⁸ Finnish Government, Artificial Intelligence 4.0 programme. First interim report: from launch to implementation stage (Dec. 7, 2021),

https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/163663/TEM 2021 53.pdf

¹⁸⁰⁹ European Commission, Communication on boosting startups and innovation in trustworthy artificial intelligence (Jan. 24, 2024), https://digital-

 $[\]underline{strategy.ec.europa.eu/en/library/communication-boosting-startups-and-innovation-trustworthy-artificial-intelligence}$

¹⁸¹⁰ Finnish Government, Artificial Intelligence 4.0 report: Finland Has the Opportunity to Lead the Way in the Ethical Digital and Green Transitions (Oct. 24, 2022), https://tem.fi/en/-/artificial-intelligence-4.0-report-finland-has-the-opportunity-to-lead-the-way-in-the-ethical-digital-and-green-transitions

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the proper functioning of the copyright system in particular to form an open rights data framework (ORDF) for new technologies" (like AI). The work is in progress and by 2025, the task force will identify Use Case Groups and conduct the pilot. At the national level, a National Copyright Delegation was established for 2023–2027, focusing on three areas: (1) Practices related to AI, (2) Technologies, and (3) Legal issues.

At the EU level, work is underway to equip the creative industries with adequate tools to manage the challenges arising from Large Language Models and Generative AI. 1812

The government also decided in September 2024 to have AI underpin its two research focus areas for 2025: (1) Economy and welfare in an era of strategic competition, and (2) Skills, labor supply, and migration in future Finland. ¹⁸¹³

The new proposed budget for 2025 does not specifically mention AI and there have been funding cuts across ministries. However, the funding for security and infrastructure has increased. The Prime Minister highlights that the government is in debt. This budget takes into consideration the Recovery and Resilience Plan under the EU, the invasion of Ukraine, and Finland's subsequent decision to join 1817 and support NATO. 1818

 ¹⁸¹¹ Finnish Government, AI and Copyright—EU: Copyright Infrastructure Task Force—Copyright Infrastructure 2024–2027 (2024), https://okm.fi/en/project?tunnus=OKM024:00/2024
 ¹⁸¹² European Commission, Study on Opportunities and Challenges of Artificial Intelligence (AI) Technologies for the Cultural and Creative Sectors (Mar. 16, 2022), https://digital-strategy.ec.europa.eu/en/library/study-opportunities-and-challenges-artificial-intelligence-aitechnologies-cultural-and-creative

¹⁸¹³ Finnish Government, *Government decides on themes for strategic research in 2025* (Sept. 19, 2024) https://valtioneuvosto.fi/en/-/government-decides-on-themes-for-strategic-research-in-2025

¹⁸¹⁴ Finnish Government, *Budget 2025* (Sept. 9, 2024), https://valtioneuvosto.fi/en/-/prime-minister-orpo-s-government-long-term-economic-adjustment-continues-focus-shifts-to-growth
¹⁸¹⁵ Finnish Government, *Valtioneuvosto Statsradet, Pääministerin ilmoitus hallituksen politiikasta vuonna 2024 ja keskeisimmistä eduskunnalle annettavista esityksistä* (Feb. 13, 2024), https://valtioneuvosto.fi/-/10616/paaministerin-ilmoitus-hallituksen-politiikasta-vuonna-2024-ja-keskeisimmista-eduskunnalle-annettavista-esityksista

¹⁸¹⁶ Ministry of Finance, *Finland requests second payment from EU under Recovery and Resilience Plan* (Oct. 11, 2024), https://valtioneuvosto.fi/en/-/10623/finland-requests-second-payment-from-eu-under-recovery-and-resilience-plan

¹⁸¹⁷ Ministry of Foreign Affairs, *President of the Republic decides on Finland's accession to NATO Status of Forces Agreement and Paris Protocol* (Mar. 22, 2024), https://valtioneuvosto.fi/en/-/10184/president-of-the-republic-decides-on-finland-s-accession-to-nato-status-of-forces-agreement-and-paris-protocol

¹⁸¹⁸ Ministry of Defense, *Government report on Finland's contribution to NATO's collective peacetime missions submitted to Parliament* (Oct. 24, 2024), https://valtioneuvosto.fi/en/government-report-on-finland-s-contribution-to-nato-s-collective-peacetime-missions-submitted-to-parliament

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Finland joined the "Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy", led by the USA.1819 A policy paper titled, "The EU and military AI governance forging value-based coalitions in an age of strategic competition", by the Finnish Institute of International Affairs, which is an autonomous institute, established and funded by the Parliament of Finland, highlights that "With 22 member states in common, the EU's development of AI in military applications is nevertheless closely tied with NATO." After joining NATO, Finland took 22 decisions costing €1.8 billion for military support to Ukraine. ¹⁸²⁰ Finland states in its report to the Parliament on its achievement of the UN 2030 Agenda for Sustainable Development, "According to Article 5 of the North Atlantic Treaty, NATO deterrence and defense is of fundamental importance for Finland's security. ¹⁸²¹

In October 2022, while informing the Finnish Parliament of the evolution of the negotiations surrounding the EU AI Act, the government stressed the importance of supporting innovation and achieving proportionality. DESI was integrated into the State of the Digital Decade Result, in line with the Digital Decade Policy Programme 2030. As of 2024, Finland generally performs better than the EU average. 1823

Nordic-Baltic and Nordic Cooperation on Al

As for the regional landscape, the Finnish Minister in charge of digitalization signed the declaration on "AI in the Nordic-Baltic region" in 2018, establishing a collaborative framework on "developing ethical and transparent guidelines, standards, principles and values to guide when and how AI applications should be used" and "on the objective that infrastructure, hardware, software and data, all of which are central to the use of AI, are based on standards,

¹⁸¹⁹ Ministry of Defense, *Finland joins the Declaration on Responsible Military Use of Artificial Intelligence and Autonomy* (Nov. 14, 2023), https://valtioneuvosto.fi/en/-/finland-joins-the-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy

¹⁸²⁰ Valtioneuvosto Statsradet, *Pääministerin ilmoitus hallituksen politiikasta vuonna 2024 ja keskeisimmistä eduskunnalle annettavista esityksistä* (Feb. 13, 2024), https://valtioneuvosto.fi/-/10616/paaministerin-ilmoitus-hallituksen-politiikasta-vuonna-2024-ja-keskeisimmista-eduskunnalle-annettavista-esityksista

Valtioneuvosto Statsradet, *Valtioneuvoston selonteko YK:n kestävän kehityksen toimintaohjelma Agenda2030:ntoimeenpanosta*, p. 5 (Nov. 14, 2024), https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/165921/VN_2024_49.pdf?sequence=1 &is Allowed=y

¹⁸²² Ministry of Economic Affairs and Employment of Finland, *Amendments to EU's proposed AI regulation – Parliament to be informed by a follow-up Union communication* (Oct. 27, 2022), https://tem.fi/en/-/amendments-to-eu-s-proposed-ai-regulation-parliament-to-be-informed-by-a-follow-up-union-communication

¹⁸²³ European Commission, *DESI - Compare Countries Progress* (2024), https://digital-decadedesi.digital-strategy.ec.europa.eu/datasets/desi/charts

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enabling interoperability, privacy, security, trust, good usability, and portability. In 2024, a proposal for a shared vision for Nordic AI was discussed by high-level decision-makers from the private and public sectors with Nordic and Baltic ministers in Copenhagen, where the vision outlined was for large-scale AI adoption, with tangible benefits for both citizens and businesses.¹⁸²⁴

The ministerial declaration Digital North 2.0¹⁸²⁵ builds on the common priorities of the Nordic-Baltic countries, and follows the previous ministerial declaration, Digital North 2017-2020. "In order to promote work with digitalisation, co-ordinate efforts, and follow up on the goals of the declaration, a council of ministers for digitalisation (MR-DIGITAL) was established in 2017. The aim is to promote development in three areas: (1) Increase mobility and integration in the Nordic and Baltic region by building a common area for cross-border digital services; (2) Promote green economic growth and development in the Nordic-Baltic region through data-driven innovation and a fair data economy for efficient sharing and re-use of data; and (3) Promote Nordic-Baltic leadership in the EU/EEA and globally in a sustainable and inclusive digital transformation of our societies." ¹⁸²⁶

In November 2021, the Nordic and Baltic ministers for digitalization released another joint statement announcing a focus on digital inclusion, striving to implement measures to make digital services more accessible to all Finnish inhabitants and ensuring that those who do not possess the necessary level of skills get the opportunity to acquire them. ¹⁸²⁷

The Nordic and Baltic ministers of digitalization issued a common statement on the importance of cooperation on digital security in the Nordic-Baltic region in September 2022, following the COVID-19 pandemic and the war in Ukraine. In their common statement, the ministers stressed that this "rapid transformation has challenged everyone to adapt to new, digital ways of doing business, learning and accessing public authorities." The ministers declared that they "have committed to ensuring that our region maintains its position as a leader in digitalisation, and that everyone in the region benefit from digitalisation regardless of age, wealth, education or level of digital skills. One important factor that helps ensure a strong level of digitalisation in the region is the trust citizens

¹⁸²⁶ Nordic Co-operation, Nordic-Baltic Co-operation on Digitalisation,

https://www.norden.org/en/information/nordic-baltic-co-operation-digitalisation

Nordic Cooperation, *A shared Nordic future with artificial intelligence* (Aug. 30, 2024), https://www.norden.org/en/news/shared-nordic-future-artificial-intelligence

¹⁸²⁵ Nordic and Baltic Ministers of Digitalization, *Ministerial Declaration Digital North 2.0* (Jul.

^{14, 2023),} https://dk.usembassy.gov/u-s-nordic-leaders-summit-in-helsinki/

¹⁸²⁷ Nordic and Baltic Ministers of Digitalization, *Common statement on the importance of promoting digital inclusion as a central part of the digital transformation in the Nordic-Baltic region* (Nov. 26, 2021), https://www.norden.org/en/declaration/common-statement-importance-promoting-digital-inclusion-central-part-digital

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put in digital services from the public sector – be it at regional, national or local level. In order to keep up this high level of trust, we need to continue our efforts to make our digital public services human centric and accessible. [...] Robust and secure digital services, safeguarding users' privacy and ensuring that personal data are stored and processed in a trustworthy way, are crucial to the citizens' sustained trust in digital services."¹⁸²⁸

As part of its action plan for Vision 2030 (2021–2024), the Nordic Council of Ministers also identified innovation, digital integration, the safe use of artificial intelligence, data development and open data, education and digitalization as key objectives. A new initiative for research collaboration on ethical and responsible use of AI was documented in March 2024 as a discussion paper 1830. There are suggestions for a regional funding scheme and to identify instruments and thematic scoping relevant to Nordic research funders. Further, the suggested Nordic initiative not just understands the consequences and potential of AI in Nordic societies (Nordic value added, EU AI Act, data biases, cross-cutting strategic priorities) but uses thematic calls to "identify, amplify and fully capitalize on Nordic strengths and provide grounds for transfer of knowledge and lessons learned between sectors.

US-Nordic Leaders' Summit

In July 2023, the Presidents of Finland and the United States and the Prime Ministers of Denmark, Iceland, Norway and Sweden participated in the third US-Nordic Leaders' Summit. The leaders recognized the significance of emerging technologies such as AI and the need for appropriate guardrails and risk mitigation measures. The US and the Nordic countries committed to "step up" cooperation on technologies such as AI and to develop technologies and standards that align with and uphold human rights and fundamental freedoms.¹⁸³¹

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¹⁸²⁸ Nordic and Baltic Ministers of Digitalization, *Common statement on the importance of cooperation on digital security in the Nordic-Baltic region* (Sept. 6, 2022), https://www.norden.org/en/declaration/common-statement-importance-cooperation-digital-security-nordic-baltic-region

¹⁸²⁹ Nordic Council of Ministers, *The Nordic Region: Toward Being the Most Sustainable and Integrated Region in the World, Action Plan for 2021–2024* (Dec. 14, 2020), https://www.norden.org/en/publication/nordic-region-towards-being-most-sustainable-and-integrated-region-world

¹⁸³⁰ NordForsk, A Nordic initiative for research and innovation on responsible and ethical use of Artificial Intelligence (May 8, 2024), https://www.norden.org/en/publication/nordic-initiative-research-and-innovation-responsible-and-ethical-use-artificial

¹⁸³¹ US-Nordic Leaders Summit (Jul. 13, 2023), https://dk.usembassy.gov/u-s-nordic-leaders-summit-in-helsinki/

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Public Participation

Finland's longstanding and broad commitment to an open democracy has traditionally been given expression by extensive consultation with established groups. ¹⁸³² The Finnish Constitution also states that "democracy entails the right of the individual to participate in and influence the development of society and his or her living conditions." Provisions on consultation and participation are given further weight in various laws and guidelines including the Act on the Openness of Government Activities.

In 2024, the Finnish government requested an opinion on the draft of the government's proposal for legislation on the implementation of the artificial intelligence regulation. The draft seeks to advance the implementation of the EU's artificial intelligence regulation, regarding the supervision of certain artificial intelligence systems. The proposed law sets the competent market surveillance authorities and the authorities with the competence to receive and process notifications. Furthermore, the Finnish Transport and Communications Agency (Traficom) is appointed as a centralized contact point. The bill also proposed the amendment of the law on the market control of certain products (Law 1137/2016) to include within its scope.

Digital Services Act

As an EU member state, Finland shall apply the EU Digital Services Act (DSA).¹⁸³⁴ The DSA regulates online intermediaries and platforms. Its main objective is to prevent illegal and harmful activities online and the spread of disinformation.

The DSA also bans targeted advertising based on a person's sexual orientation, religion, ethnicity, or political beliefs. The DSA also bans targeted advertising to minors based on profiling.

The Finnish Transport and Communications Agency, Traficom, is the DSA main supervisor. However, the Consumer Ombudsman and the Data Protection Ombudsman supervise specific other obligations.

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¹⁸³² OECD, *Better Regulation in Europe: Finland, Transparency through consultation and communication*, p. 71 (May 27, 2010), https://www.oecd-ilibrary.org/governance/better-regulation-in-europe-finland-2010_9789264085626-en

¹⁸³³ utlåtande.fi, *Begäran om utlåtande: utkast till regeringens proposition med förslag till lagstiftning om genomförande av förordningen om artificiell intelligens* (Apr. 12, 2024), https://www.lausuntopalvelu.fi/SV/Proposal/Participation?proposalId=0e252297-c14b-4b6b-a0da-0a35756c9a90

¹⁸³⁴ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act) (Oct. 21, 2022), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022R2065

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Signatories also commit to reducing the risk of online harms under the 2022 Strengthened Code of Practice on Disinformation, 1835 which counts as a mitigation measure under the DSA. Actions include demonetizing the dissemination of disinformation, ensuring the transparency of political advertising, empowering users, enhancing the cooperation with fact-checkers, and providing researchers with better access to data.

EU AI Act

As an EU member State, Finland is bound by the EU AI Act,¹⁸³⁶ which entered into force on August 1, 2024.¹⁸³⁷ The EU AI Act is a risk-based market regulation that supports the objective of promoting a human-centric approach to AI and making the EU a global leader in the development of secure, trustworthy, and ethical AI.

Finland has opted for an active role at EU level, choosing not to enact new national legislation while awaiting the AI Act's entry into force. ¹⁸³⁸ Following the approval of the AI Act, Finland moved forward with the proposal of a bill to regulate the EU AI Act. Traficom serves as a centralized contact point for digital matters, while various sectoral authorities are designated for the oversight or market surveillance of their respective areas.

The Traficom indication is logical considering this agency's previous role as the "principal supervisor and coordinating authority referred to in the Digital Services Act, and it is responsible for other duties imposed by the regulations."

This institutional choice may be contested or viewed as a departure from the European Data Protection Board's (EDPB) recommendation that "DPAs (acting as MSAs) should be designated as the single points of contact for the public and counterparts at Member State and Union levels," given that "the single point of contact under the AI Act should be an MSA as provided for by Article 70(2) AI Act."

¹⁸³⁵ European Commission, *The 2022 Code of Practice on Disinformation*, https://digital-strategy.ec.europa.eu/en/policies/code-practice-disinformation

https://www.europarl.europa.eu/RegData/seance_pleniere/textes_adoptes/definitif/2024/03-13/0138/P9 TA(2024)0138 EN.pdf

¹⁸³⁶ European Parliament, Artificial Intelligence Act, European Parliament legislative resolution of 13 March 2024 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts (COM(2021)0206 – C9-0146/2021 – 2021/0106(COD)), P9_TA(2024)0138,

¹⁸³⁷ European Commission, *European Artificial Intelligence Act Comes into Force*, Press Release (Jul. 31, 2024), https://ec.europa.eu/commission/presscorner/detail/en/ip_24_4123

¹⁸³⁸ Erkko Korhonen et al., *Artificial Intelligence 2024: Finland, Trends and Developments* (May 28, 2024), https://practiceguides.chambers.com/practice-guides/artificial-intelligence-2024/finland/trends-and-developments

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Nonetheless, the Office of the Data Protection Ombudsman still "has a strong role under the draft proposal. The Office of the Data Protection Ombudsman is appointed as the supervisory authority regarding prohibited AI systems and many high-risk AI systems, like biometrics, law enforcement, migration, education, and employment." It is still unclear which body will be notifying authority to protect Fundamental Rights under the EU AI Act Article 77.

Data Protection

Since Finland is an EU Member State, the General Data Protection Regulation (GDPR)¹⁸³⁹ is directly applicable in Finland and to Finnish people. The aim of the GDPR is to "strengthen individuals' fundamental rights in the digital age and facilitate business by clarifying rules for companies and public bodies in the digital single market. A single law will also do away with the current fragmentation in different national systems and unnecessary administrative burdens."¹⁸⁴⁰ The GDPR entered into force on 24 May 2016 and applies since 25 May 2018. The Finnish Data Protection Act,¹⁸⁴¹ which entered into force on January 1, 2019, supplements the GDPR. Another key sectoral legislation in the field is the Act on the Protection of Privacy in Working Life.¹⁸⁴²

Regarding the activities of law enforcement authorities, Finland transposed the EU Data Protection Law Enforcement Directive (LED)¹⁸⁴³ through the Act on the Processing of Personal Data in Criminal Cases and in connection with Maintaining National Security, which entered into force on January 1, 2019, along with the Data Protection Act. The LED "protects citizens' fundamental right to data protection whenever personal data is used by criminal law enforcement authorities for law enforcement purposes. It will in particular ensure that the personal data of victims, witnesses, and suspects of crime are duly protected and will facilitate cross-border cooperation in the fight against crime and

https://tietosuoja.fi/en/legislation

¹⁸³⁹ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, https://eur-lex.europa.eu/EN/legal-content/summary/general-data-protection-regulation-gdpr.html

¹⁸⁴⁰ European Commission, *Legal Framework of EU Data Protection* (2025), https://commission.europa.eu/law/law-topic/data-protection/data-protection-eu en

¹⁸⁴¹ Ministry of Justice of Finland, *Data Protection Act (1050/2018)*,

¹⁸⁴² DLA Piper, *Data Protection Laws Of The World – Finland* (Jan. 4, 2023), https://www.dlapiperdataprotection.com/index.html?t=law&c=FI

¹⁸⁴³ Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

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terrorism."¹⁸⁴⁴ The LED provides for the prohibition of any decision based solely on automated processing, unless it is provided by law, and of profiling that results in discrimination. ¹⁸⁴⁵

Finland is also a member of the Council of Europe and ratified the Council of Europe's Convention 108+ for the protection of individuals with regard to the processing of personal data. 1846

The Data Protection Ombudsman is the national supervisory authority which supervises compliance with data protection legislation and safeguards the rights and freedoms of individuals with regard to the processing of their personal data. The Ombudsman has made numerous important decisions, late including with administrative fines amounting to several hundred thousand Euros. The institutional mission of the Data Protection Ombudsman is expected to be broadened in alignment with the draft proposal for the Finnish EU AI Act national regulation. The recent attributions encompass supervisory authority over prohibited AI systems, as well as numerous high-risk AI systems, addressing sensitive areas such as biometrics, law enforcement, migration, education, and employment.

Concerning this aspect, the Finnish Data Protection Ombudsman and current EDPB chair, Anu Talus, asserted the importance of the cooperation between authorities for the EU AI Act Enforcement, pointing out that "the debate on artificial intelligence in particular continued to be intense and is being even more so in 2024. It is important to ensure that cooperation between authorities in the enforcement of the EU's AI Act is smooth at both national and European level¹⁸⁵⁰

¹⁸⁴⁵ Article 11 (1) and (2) of the LED, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

¹⁸⁴⁴ European Commission, *Legal Framework of EU Data Protection*, https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection en

¹⁸⁴⁶ Council of Europe, *Modernised Convention for the Protection of Individuals with Regard to the Processing of Personal Data* (May 18, 2018), https://www.coe.int/en/web/data-protocol

¹⁸⁴⁷ Office of the Data Protection Ombudsman of Finland, https://tietosuoja.fi/en/home
¹⁸⁴⁸ European Data Protection Board, *News on Finland*,

https://edpb.europa.eu/news/news_en?news_type=All&field_edpb_member_states_target_id=76

1849 European Data Protection Board, Administrative Fine Imposed On Psychotherapy Centre

Vastaamo For Data Protection Violations (Dec 7, 2021), https://edpb.europa.eu/news/nationalnews/2022/administrative-fine-imposed-psychotherapy-centre-vastaamo-data-protection_en

European Data Protection Board, Finnish SA: Administrative fine on Viking Line for unlawful
processing of employees' health data (Dec 9, 2022), https://edpb.europa.eu/news/nationalnews/2023/finnish-sa-administrative-fine-viking-line-unlawful-processing-employees_en

1850 Data Protection Ombudsman, Annual Report of the Office of the Data Protection

Ombudsman 2023: data protection work in a changing digital world, Press Release (Apr. 14,

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Despite being a member of the Global Privacy Assembly (GPA) since 2002, the Data Protection Ombudsman has not endorsed the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence, ¹⁸⁵¹ 2020 GPA Resolution on AI Accountability, ¹⁸⁵² 2022 GPA Resolution on Facial Recognition Technology, ¹⁸⁵³ or 2023 GPA Resolution on Generative AI. ¹⁸⁵⁴

Algorithmic Transparency

Finland is subject to the GDPR-like Finnish Law and Convention 108+. Finns have a general right to obtain access to information about automated decision-making and to the factors and logic of an algorithm. ¹⁸⁵⁵ In 2023, OECD again recognized Finland and Helsinki for the Open AI Register of AI Systems use in the public sector as an example of OECD AI Principle 1.3 on transparency and explainability. ¹⁸⁵⁶

The 2020 Recommendation of the Council of Europe Committee of Ministers on human rights impacts of algorithm systems¹⁸⁵⁷ specifically emphasizes requirements on transparency, accountability and effective remedies. The Recommendation provides that "Transparency levels should be as high as possible and proportionate to the severity of adverse human rights impacts, including ethics labels or seals for algorithmic systems to enable users to navigate

2024), https://tietosuoja.fi/en/-/annual-report-of-the-office-of-the-data-protection-ombudsman-2023-data-protection-work-in-a-changing-digital-world

¹⁸⁵¹ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

¹⁸⁵² Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-use-of-AI-EN-1.pdf

¹⁸⁵³ Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

¹⁸⁵⁴ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf.

¹⁸⁵⁵ See Recital 63 and Article 22 of the GDPR. Article 9 c) of the Convention 108+ as well as Recital 77, *Explanatory Report*, *Convention 108*+, p. 24, https://rm.coe.int/convention-108-convention-for-the-protection-of-individuals-with-regar/16808b36f1

¹⁸⁵⁶ OECD, *The State of Implementation of the OECD AI principles four years on*, p. 38 (Oct. 27, 2023), https://www.oecd-ilibrary.org/docserver/835641c9-en.pdf

¹⁸⁵⁷ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020), https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

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between systems. The use of algorithmic systems in decision-making processes that carry high risks to human rights should be subject to particularly high standards as regards the explainability of processes and outputs."¹⁸⁵⁸

The Recommendation also clarifies that "Contestation should include an opportunity to be heard, a thorough review of the decision and the possibility to obtain a non-automated decision. This right may not be waived, and should be affordable and easily enforceable before, during and after deployment, including through the provision of easily accessible contact points and hotlines." ¹⁸⁵⁹

In December 2018, Juha Sipilä's Government (2015–2019) submitted to Parliament the Government report on information policy and artificial intelligence. The report combines two aspects while paying special attention to ethical issues and 200 people from different sectors of society were involved in working on the Report. 1860

In the report, information policy is studied not only from the viewpoint of information management, but also from the perspective of the conditions for the use of information, value basis, ethical principles and financial impacts. Information policies discussed in the report relate to data access rights, data ownership, copyrights, security and personal data protection. The report constitutes the knowledge basis and a policy, upon which a roadmap with prioritized actions can be built in the future. ¹⁸⁶¹ The development and deployment of AI raises uncertainty about the application of the current legislation on these issues and increases the need for a reform of the legislative and regulatory framework. ¹⁸⁶²

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

¹⁸⁵⁸ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020),

¹⁸⁵⁹ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020),

¹⁸⁶⁰ Finland, *Government report on information policy and artificial intelligence* (Dec. 5, 2018), https://vm.fi/documents/10623/7768305/VM_Tiepo_selonteko_070219_ENG_WEB.pdf/89b99a8e-01a3-91e3-6ada-

³⁸⁰⁵⁶⁴⁵¹ad3f/VM_Tiepo_selonteko_070219_ENG_WEB.pdf.pdf/VM_Tiepo_selonteko_070219_ENG_WEB.pdf

¹⁸⁶¹ Ministry of Finance, *Information Policy Report* (Apr. 10, 2019),

 $[\]frac{\text{https://vm.fi/documents/10623/1464506/AuroraAI+development+and+implementation+plan+20}}{19\%E2\%80\%932023.pdf}$

¹⁸⁶² European Commission, AI Watch, *Finland AI Strategy Report* (2020), https://aiwatch.ec.europa.eu/countries/finland/finland-ai-strategy-report_en#regulation

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Finland aligns with the European Union's Digital Services Act (DSA), ¹⁸⁶³ which entered into force on 17 February 2024. It mandates algorithmic transparency from very large online platforms (VLOPs) and very large online search engines (VLOSEs) that have more than 45 million users per month, requiring them to disclose algorithmic structures and address systemic risks tied to algorithmic decisions. Finland, through the European Centre for Algorithmic Transparency (ECAT), ¹⁸⁶⁴ has been actively participating in supporting and enforcing these standards, with particular emphasis on monitoring algorithmic impact across various sectors, from social media to public administration. The EU's DSA Implementing Regulation standardizes the format, content, and reporting periods for transparency reports, and providers will begin to collect data according to the Implementing Regulation as of July 1, 2025, with the first harmonized reports due at the beginning of 2026. ¹⁸⁶⁵

Access to Data

The 2019 final report noted that "Data has become the world's most valuable resource, but when the existing operating models are applied, it primarily benefits a few giant corporations that collect the data from their service users." With respect to the adoption of the GDPR by Finland (and other EU countries), the final report opined that although the law "strengthened the rights of individuals and harmonised the EU regulation related to processing of personal data" as currently formulated, "there is no joint concept or interoperable open ecosystem for the exchange of personal data based on consumer consent."

The final report observes that "Finland is in a position to become a global trendsetter and a forerunner within the EU in the creation of fair, consumer-oriented principles" and that consumer-oriented principles require "a visionary approach and a joint EU-level roadmap, as well as technical proof of functional exchange of data."

3 **C**

¹⁸⁶³ Office of Data Protection Ombudsman, *The Digital Services Act and Powers of the Data Protection Ombudsman in the Monitoring of Online Platforms* (Nov. 25, 2024), https://tietosuoja.fi/en/digital-services-act

¹⁸⁶⁴ European Commission, *About: European Centre for Algorithmic Transparency (ECAT)* (2024), https://algorithmic-transparency.ec.europa.eu/about_en

¹⁸⁶⁵ European Commission, *Implementing Regulation laying down templates concerning the transparency reporting obligations of providers of online platforms* (Nov. 4, 2024), https://digital-strategy.ec.europa.eu/en/library/implementing-regulation-laying-down-templates-concerning-transparency-reporting-obligations

¹⁸⁶⁶ Ministry of Economic Affairs and Employment, *Leading the way into the era of artificial intelligence: Final report of Finland's Artificial Intelligence Programme*, p.54 (Jun. 12, 2019), <a href="https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/161688/41_19_Leading%20the%20way%20into%20the%20age%20of%20artificial%20intelligence.pdf?sequence=4&isAllowed=y

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Digitization of Public Services

In 2020, Finland launched a National Artificial Intelligence Programme — AuroraAI. 1867 The program prepares Finland for a human-centric and ethically sustainable society in the age of artificial intelligence through a decentralized open network and open data for smart public services and applications. 1868

In September 2020, the city of Helsinki launched an AI registry in beta version to detail how city government uses algorithms to deliver services. "Each algorithm cited in the registry lists datasets used to train a model, a description of how an algorithm is used, how humans utilize the prediction, and how algorithms were assessed for potential bias or risks. The registry also provides citizens a way to give feedback on algorithms their local government uses and the name, city department, and contact information for the person responsible for the responsible deployment of a particular algorithm." The city of Helsinki describes it AI register as "a window into the artificial intelligence systems used by the City of Helsinki. Through the register, you can get acquainted with the quick overviews of the city's artificial intelligence systems or examine their more detailed information based on your own interests. You can also give feedback and thus participate in building human-centred AI in Helsinki." 1870

The city of Helsinki's public register for algorithmic transparency has eight use cases on the website, a majority of which are chatbots: Summer Job Voucher chatbot, Parking chatbot, Urho—an outdoors sports and recreation chatbot, International House chatbot, Sotebot Helskini chatbot for social service, an intelligent material management system for 1.8 million items of The City Library, Obotti—a chatbot for the Central Library, Talbotti—a chatbot for City of Helsinki's financial management service and a rental apartment search chatbot.¹⁸⁷¹

In 2022, a new research project, Civic Agency in AI also started with the aim to help the public sector ensure that their AI tools are transparent, accountable,

¹⁸⁶⁸ UN, *Aurora Finland*, https://publicadministration.desa.un.org/good-practices-for-digital-government/compendium/aurora-ai-finland

¹⁸⁶⁷ Ministry of Finance, *The AuroraAI national artificial intelligence programme begins – with the aim of using artificial intelligence to bring people and services together in a better way* (Feb. 7, 2024), https://valtioneuvosto.fi/en/-/10623/kansallinen-tekoalyohjelma-auroraai-alkaa-tavoitteena-saada-ihmiset-ja-palvelut-kohtaamaan-paremmin-tekoalyn-avulla?

¹⁸⁶⁹ Khari Johnson, *Amsterdam and Helsinki launch algorithm registries to bring transparency to public deployments of AI* (Sept. 28, 2020), https://venturebeat.com/2020/09/28/amsterdam-and-helsinki-launch-algorithm-registries-to-bring-transparency-to-public-deployments-of-ai/

¹⁸⁷⁰ City of Helsinki AI Register, https://ai.hel.fi/en/get-to-know-ai-register/

¹⁸⁷¹City of Helsinki, AI Register (Nov. 15, 2024), https://ai.hel.fi/en/ai-register/

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and equitable. Its purpose is to develop best practices and recommendations regarding AI governance. 1872

In May 2023, a new general legislation on automatic decision-making in public administration entered into force, with an 18-month transition period. The legislation requires authorities to provide appropriate information about the use of an automated decision-making procedure. The legislation allows automated decision-making on administrative matters in so far as making a decision on the matter in question does not require individual consideration. Concerns exist with regard to its compatibility with Article 22(1) GDPR which provides for the right of the data subject not to be subject to a decision solely based on automated processing.

On the basis of this law, in October 2023, the Finnish Immigration Service adopted a decision to introduce automated decision making for students' first residence permits. One condition for the use of automated decision is that "the residence permit can be granted according to the application, and the matter does not require more extensive holistic deliberation." ¹⁸⁷⁴

According to the e-government development index for 2024, Finland was one of the leading group of countries, ranking 9th with Helsinki a leading city. Straumurinn, developed with Estonia and Finland in 2018, is a government initiative to ensure data security, integrity, and interoperability between government agencies. Aviondata. ii is an open database platform of Finnish 2351 datasets and 71 APIs (for example Kela, the Social Insurance Institution of Finland uses this system), while Suomi. ii, established in 2023 contains

https://fcai.fi/news/2022/2/8/participatory-research-to-improve-artificial-intelligence-based-public-sector-services-and-empower-citizens

https://www.finlex.fi/en/laki/kaannokset/2019/en20190906#L6aP28b

 $\frac{https://migri.fi/documents/5202425/182258005/Decision+to+introduce+automated+decision+ma}{king+-+First+residence+permits+of+students.pdf}$

https://desapublications.un.org/sites/default/files/publications/2024-

09/%28Web%20version%29%20E-Government%20Survey%202024%201392024.pdf

https://island.is/en/o/digital-iceland/information-about-straumurinn-x-road

¹⁸⁷² Finish Center for Artificial Intelligence (FCAI), *Participatory Research To Improve Artificial Intelligence Based Public Sector Services and Empower Citizens* (Feb 8, 2022),

¹⁸⁷³ Act on Information Management in Public Administration,

¹⁸⁷⁴ Finnish Immigration Service, *Decision to introduce automated decision making: First residence permits of students* (Oct. 18, 2023),

¹⁸⁷⁵ UN, E-Government Survey (2024),

¹⁸⁷⁶ Digital Iceland, island.is, *Information about Straumurinn (X-Road)*,

¹⁸⁷⁷ Avoindata.fi, *All Finnish open data from one place* (Nov. 15, 2024), https://www.avoindata.fi/en

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restricted public sector data¹⁸⁷⁸ for which you need to get access.¹⁸⁷⁹ In November 2024, Prime Minister Petteri Orpo hosted a roundtable with the business sector to stressed coordination between public sector and AI firms was needed and that AI offered opportunities for the public sector to improve its productivity and economic growth.¹⁸⁸⁰"

AI and Children

Finland and UNICEF have been collaborating to create internationally applicable policy guidance for the use and development of AI for children. The Ministry for Foreign Affairs supports the project, where practices are developed for the planning of safe and inclusive AI solutions that take the rights of the child into account.¹⁸⁸¹

The Ministry of Education and Culture is developing statute and drafting a Recommendation on AI literacy, legal and ethical issues. ¹⁸⁸² The purpose is to develop competencies through AI literacy and its safe use in learning use and equal opportunities for education and training actors.

Facial Recognition

According to news reports, Finland's National Bureau of Investigation has acknowledged using facial recognition technology in connection with certain law enforcement activities. After initially denying that it had used facial recognition technology in response to media questioning, the Finnish officials from the National Bureau of Investigation acknowledged that four members of its Child Exploitation Investigation Unit had conducted 120 searches of the Clearview AI system during the 2019 to 2020 time period.

The Deputy Data Protection Ombudsman issued a note to the National Bureau of Investigation regarding the controversial use of Clearview AI facial

¹⁸⁷⁸ Avoindata.fi, *High-value dataset category introduced on Suomi.fi Open Data service* (Sept. 25, 2024), https://www.avoindata.fi/en/article/high-value-dataset-category-introduced-on-suomifi-open-data-service

¹⁸⁷⁹ Suomi.fi, *All Finnish restricted data from one place* (Nov. 15, 2024), https://suojattudata.suomi.fi/engg/

¹⁸⁸⁰ Government Communications Department, *Prime Minister Orpo hosts roundtable discussion on artificial intelligence* (Nov. 13, 2024), https://valtioneuvosto.fi/en/-/prime-minister-orpo-hosts-roundtable-discussion-on-artificial-intelligence

¹⁸⁸¹ Ministry of Foreign Affairs, *Policy Guidance on AI for Children piloted in different parts of the world* (Oct. 19, 2021), https://um.fi/current-affairs/-

 $[\]underline{/asset_publisher/gc654PySnjTX/content/lapsiin-liittyvan-tekoalyn-pelisaantoja-pilotoitu-eri-puolilla-maailmaa}$

¹⁸⁸² Ministry of Education and Culture, *Recommendations for AI* (Sept. 18, 2024), https://okm.fi/en/project?tunnus=OKM021:00/2024

¹⁸⁸³ Nord News, *The Data Protection Commissioner Raped the Finnish Police for a controversial facial identity application* (Sept. 29, 2021), https://nord.news/2021/09/29/the-data-protection-commissioner-raped-the-finnish-police-for-a-controversial-facial-identity-application/

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recognition technology. In September 2021, the Deputy Data Protection Ombudsman warned the National Bureau of Investigation that its police officers had used a facial recognition technology system without first verifying that it complied with data security or data protection laws.¹⁸⁸⁴

A Digital Travel Credentials biometric pilot, funded by the European Union, for border checks was launched in August 2023 at the Helsinki-Vantaa airport. Finland also began work on a national digital identity wallet in April 2024, in line with the European Union's eEIDAS regulation which introduces the European Digital Identity (EUDI) Wallet. Biometric data via facial recognition technologies are processed under the GDPR and the EU AI Act. 1887

Environmental Impact of AI

In November 2020, Finland launched its Artificial Intelligence 4.0 strategy, where the objective is to be a frontrunner in both green and digital transitions. According to an interim report issued in December 2021, Finland plans to be carbon neutral by 2035. Finland also plans to reinforce the EU's Green Deal, which considers AI data centers significant consumers of

https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal en

¹⁸⁸⁴ European Data Protection Board, Finnish SA: Police reprimanded for illegal processing of personal data with facial recognition software (Oct. 7, 2021),

https://www.edpb.europa.eu/news/national-news/2021/finnish-sa-police-reprimanded-illegal-processing-personal-data-

 $[\]frac{facial_en\#:\sim:text=Summary\%20of\%20the\%20Decision\&text=The\%20decision\%20to\%20try\%2}{0the,i.e.\%20the\%20National\%20Police\%20Board}$

¹⁸⁸⁵ Biometric Update.com, *Tech5 face biometrics deployed for Digital Travel Credential pilot in Finland* (Mar. 12, 2024), https://www.biometricupdate.com/202403/tech5-face-biometrics-deployed-for-digital-travel-credential-pilot-in-finland

¹⁸⁸⁶Biometric Update.com, *Finland starts work on national digital identity wallet* (Apr. 30, 2024), https://www.biometricupdate.com/202404/finland-starts-work-on-national-digital-identity-wallet

¹⁸⁸⁷ Chambers & Partners, *Artificial Intelligence 2024*: Finland (2024), https://chambers.com/downloads/gpg/996/008 finland.pdf

¹⁸⁸⁸ Ministry of Economic Affairs and Employment, *Artificial Intelligence 4.0 report: Finland has the opportunity to lead the way in the ethical digital and green transitions* (Oct. 24, 2022), https://valtioneuvosto.fi/en/-//1410877/artificial-intelligence-4.0-report-finland-has-the-opportunity-to-lead-the-way-in-the-ethical-digital-and-green-transitions

¹⁸⁸⁹ Finnish Government, Artificial Intelligence 4.0 programme. First interim report: From launch to implementation stage (Dec. 7, 2021),

https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/163663/TEM 2021 53.pdf

¹⁸⁹⁰ European Commission, *The European Green Deal* (Sept. 11, 2024),

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energy¹⁸⁹¹ and the challenge to European energy grids with the war in Ukraine.¹⁸⁹² One of the four proposals in the Interim Report of the Artificial Intelligence 4.0 Programme published in December 2021 focuses on "Nature smartness and digital technology" to lead to the "triple victory of sustainable development": economic, ecological and social benefits.¹⁸⁹³ In February 2024, the prime minister, Petteri Orpo reiterated that "Work, security and skills: these are also at the heart of the Government Programme."¹⁸⁹⁴

Along with Austria and Sweden, Finland has been evaluated at the top end, in the EU and globally, regarding overall sustainability (environmental, social and economic) as defined in Agenda 2030 in the Sustainable Development Report, 2022. 1895 By 2024, Finland had the highest score of 86.35 out of 100 in the Sustainable Development Report out of 193 countries. 1896 The Government submitted a report in 2024 on the implementation of the United Nations' 2030 Agenda for Sustainable Development to Parliament, which was the half way mark since the country adopted the 2030 Agenda in 2016. 1897

The areas highlighted for improvement were responsible production and consumption (of which AI is a new significant area). While Finland excelled in other SDG areas, achieving 86% of the 17 SDGs, the country lagged on imports, electronic waste, and nitrogen emissions. Still, according to the Climate

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¹⁸⁹¹ European Commission, European Green Deal: Energy Efficiency Directive adopted, helping make the EU 'Fit for 55' (Jul. 25, 2023), https://energy.ec.europa.eu/news/european-green-deal-energy-efficiency-directive-adopted-helping-make-eu-fit-55-2023-07-25_en

¹⁸⁹² European Commission, *State of the Energy Union Report* (Sept. 11, 2024), https://energy.ec.europa.eu/document/download/bd3e3460-2406-47a1-aa2e-

c0a0ba52a75a_en?filename=State%20of%20the%20Energy%20Union%20Report%202024.pdf

¹⁸⁹³ Ministry of Economic Affairs and Employment, *How can Finland achieve the 2030 artificial intelligence vision? — Interim report of the Artificial Intelligence 4.0 programme compiles proposals for concrete aims and measures* (Dec. 12, 2021), https://tem.fi/en/-/how-can-finland-achieve-the-2030-artificial-intelligence-vision-interim-report-of-the-artificial-intelligence-4.0-programme-compiles-proposals-for-concrete-aims-and-measures

¹⁸⁹⁴ Valtioneuvosto Statstradet, Pääministerin ilmoitus hallituksen politiikasta vuonna 2024 ja keskeisimmistä eduskunnalle annettavista esityksistä (Feb. 13, 2024), https://valtioneuvosto.fi/-/10616/paaministerin-ilmoitus-hallituksen-politiikasta-vuonna-2024-ja-keskeisimmista-eduskunnalle-annettavista-esityksista

¹⁸⁹⁵ SDG Transformation Center, *Sustainable Development Report 2022* (Jun. 2022), https://sdgtransformationcenter.org/reports/sustainable-development-report-2022

 ¹⁸⁹⁶ SDG Transformation Center's Data Hub, Sustainable Development Report 2024 (Jul. 17, 2024), https://datahub.sdgtransformationcenter.org/rankings/sustainable-development-report
 1897 Government Communications Department, Government submits sustainable development report to Parliament (Nov. 14, 2024), https://valtioneuvosto.fi/en/-/government-submits-sustainable-development-report-to-parliament-1

¹⁸⁹⁸ Valtioneuvosto Statsradet, Valtioneuvoston selonteko YK:n kestävän kehityksen toimintaohjelma Agenda2030:ntoimeenpanosta (Nov. 14, 2024),

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Change Act (2022), Finland will strive to become carbon neutral. The report on UN 2030 Agenda for Sustainable Development states, "The Foreign and Security Policy the UN Sustainable Development Goals (SDGs) is to be achieved by Agenda 2030 have been jeopardised by, among other things, the lack of multilateral cooperation in the field of sustainable development. problems of multilateralism, the repercussions of the war of aggression in Russia, and the interest rate pandemic the consequences of the currency pandemic." 1900

Lethal Autonomous Weapons

In a 2020 report, Human Rights Watch noted that at the 2014 UN General Assembly, Finnish officials stated that the issue of lethal autonomous weapons systems is "a complex issue." Finnish officials cautioned that the "development of weapons and means of warfare where humans are completely out of the loop would pose serious risks from the ethical and legal viewpoint," stressing that "humans should always bear the ultimate responsibility when dealing with questions of life and death." Finnish officials have not supported proposals to negotiate a new international treaty to ban or restrict killer robots. However, in June 2019, Finland's new government released a coalition platform that seeks to ban weapons systems based on artificial intelligence. 1901

Finland was one of the 70 countries that endorsed a joint statement on autonomous weapons systems at the 2022 United Nations General Assembly. The joint statement urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law, including through maintaining human responsibility and accountability in the use of force." ¹⁹⁰²

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 $\frac{https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/165921/VN_2024_49.pdf?sequence=1}{\&isAllowed=y}$

¹⁸⁹⁹ Ministry of the Environment, *New Climate Change Act into force in July* (Jun. 9, 2022), https://valtioneuvosto.fi/en/-/1410903/new-climate-change-act-into-force-in-july

¹⁹⁰⁰ Valtioneuvosto Statsradet, *Valtioneuvoston selonteko YK:n kestävän kehityksen toimintaohjelma Agenda2030:ntoimeenpanosta*, p. 10 (Nov. 14, 2024), https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/165921/VN_2024_49.pdf?sequence=1 &isAllowed=y

¹⁹⁰¹ Human Rights Reports, *Stopping Killer Robots: Country Positions on Banning Fully Autonomous Weapons and Maintaining Human Control* (Aug. 10, 2020), https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and

¹⁹⁰² United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

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Finland also submitted a working paper, together with Sweden, France, Germany, the Netherlands, Norway, and Spain, to the 2022 Chair of the Group of Governmental Experts on emerging technologies in the area of Lethal Autonomous Weapons Systems. This working paper presents a two-tier approach. Accordingly, States should commit to (1) outlaw fully autonomous lethal weapons systems operating completely outside human control and a responsible chain of command, and (2) regulate other lethal weapons systems featuring autonomy in order to ensure compliance with the rules and principles of international humanitarian law, by preserving human responsibility and accountability, ensuring appropriate human control and implementing risk mitigation measures.

In February 2023, Finland participated in an international summit on the responsible application of artificial intelligence in the military domain hosted by the Netherlands. At the end of the Summit, Finland endorsed a joint call for action on the responsible development, deployment and use of artificial intelligence in the military domain. ¹⁹⁰⁴ In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." States also "stress the importance of a holistic, inclusive and comprehensive approach in addressing the possible impacts, opportunities and challenges of the use of AI in the military domain and the need for all stakeholders, including states, private sector, civil society and academia, to collaborate and exchange information on responsible AI in the military domain."¹⁹⁰⁵

Finland also endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023. 1906

At the 78th UN General Assembly First Committee in 2023, Finland voted in favor¹⁹⁰⁷ of resolution L.56¹⁹⁰⁸ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons

 $\underline{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm\ en.pdf}$

¹⁹⁰³ Documents from the 2022 CCW Group of Governmental Experts on lethal autonomous weapon systems. Convention on Certain Conventional Weapons,

¹⁹⁰⁴ Government of Netherlands, *Call to action on responsible use of AI in the military domain* (Feb.16, 2023),

¹⁹⁰⁵ Responsible AI in the Military domain Summit, *REAIM Call to Action* (Feb. 16, 2023),

¹⁹⁰⁶ US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy* (Nov. 9, 2023), endorsing States as of Feb. 12, 2024,

¹⁹⁰⁷ Stop Killer Robots, 164 states vote against the machine at the UN General Assembly,

¹⁹⁰⁸ General Assembly, *Lethal Autonomous Weapons*, Resolution L56 (Oct.12, 2023),

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systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems.

A new act on the export of dual-use items entered into force on September 1, 2024 to harmonize Finnish regulations with the EU Export Control Regulation. Phe list applies to software and technology. This Act can be extended to AI-based systems as per the EU AI Act, which states (Item 24), Nonetheless, if an AI system developed, placed on the market, put into service, or used for military, defense, or national security purposes is used outside those temporarily or permanently for other purposes, for example, civilian or humanitarian purposes, law enforcement, or public security purposes, such a system would fall within the scope of this Regulation. However, the regulation, also mentions (Item 24) "An AI system placed on the market for civilian or law enforcement purposes which is used with or without modification for military, defense or national security purposes should not fall within the scope of this Regulation, regardless of the type of entity carrying out those activities."

The vote supports Finland's position on Lethal Autonomous Weapons Systems, as per its submission on May 15, 2024, 1912 to the United Nations referring to its previous Note ODA-2024-00019/LAWS dated February 1, 2024. The document highlights that Finland's objective is the conclusion of an international instrument that is legally or politically binding to address the challenges of LAWS. The proposal suggests prohibitions and regulations to (1) outlaws autonomous weapons systems that operate without any form of human involvement and outside a human-responsible chain of command (2) regulate the development and use of all other weapons systems having autonomous features or functions ensuring their compliance with the rules and principles of international law. These suggestions are intended to be application specific and technology agnostic. In October 2024, the draft UN legislation L.77 was formally adopted where Finland voted for the

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¹⁹⁰⁹ Ministry of Foreign Affairs, *Legislation on export control of dual-use items to be reformed* (Aug. 16, 2024), https://valtioneuvosto.fi/en/-/legislation-on-export-control-of-dual-use-items-to-be-reformed

¹⁹¹⁰ EU LEX, Regulation (EU) 2021/821 of The European Parliament and of The Council (May 20, 2023), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02021R0821-20230526

¹⁹¹¹ EU LEX, Regulation (EU) 2024/1689 of The European Parliament and of The Council (Jul. 7, 2024), https://eur-lex.europa.eu/legal-

content/EN/TXT/?uri=CELEX%3A32024R1689&qid=1730891247545

¹⁹¹² UNODA, Submission by Finland concerning United Nations General Assembly resolution 78/241 of 22 December 2023 on Lethal Autonomous Weapons Systems to the United Secretary-General (May 16, 2024), https://docs-library.unoda.org/General_Assembly First_Committee-Seventy-Ninthsession (2024)/78-241-Finland-EN 0.pdf

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adoption¹⁹¹³ of the high-level agenda for the general and complete disarmament of lethal autonomous weapons systems.¹⁹¹⁴

Human Rights

As one of the signatories to the Universal Declaration of Human Rights and several international human rights treaties and conventions, ¹⁹¹⁵ Finland is committed to protecting human rights, civil liberties, and political rights. Under Finnish law, these rights are guaranteed and subject to the rule of law as interpreted by an independent judiciary.

Freedom House gives Finland a top score (100/100) in 2024 for political rights and civil liberties, observing that "Finland's parliamentary system features free and fair elections and robust multiparty competition. . Corruption is not a significant problem, and freedoms of speech, religion, and association are respected. The judiciary is independent under the constitution and in practice." ¹⁹¹⁶

In a 2020 Recommendation to member States on the human rights impacts of algorithmic systems, the Council of Europe Committee of Ministers reminded member states that their commitment to "ensuring the rights and freedoms enshrined in the Convention for the Protection of Human Rights and Fundamental Freedoms to everyone within their jurisdiction" requires them to to "ensure that any design, development and ongoing deployment of algorithmic systems occur in compliance with human rights and fundamental freedoms, which are universal, indivisible, inter-dependent and interrelated." ¹⁹¹⁷

https://automatedresearch.org/news/state_position/finland/

https://freedomhouse.org/country/finland/freedom-world/2024

¹⁹¹³ Automated Research Decision, Finland (Oct. 2024),

¹⁹¹⁴ United Nations General Assembly, *Lethal autonomous weapons systems - A/C.1/79/L.77* (October, 2024), https://documents.un.org/doc/undoc/ltd/n24/305/45/pdf/n2430545.pdf

¹⁹¹⁵ These include the International Covenant on Economic, Social and Cultural Rights,

International Covenant on Civil and Political Rights, European Convention on Human Rights and Protocol amending the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (108+)

¹⁹¹⁶ Freedom House, Freedom in the World 2024: Finland (2024),

¹⁹¹⁷ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020), https://search.coe.int/cm?i=09000016809e1154

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OECD / G20 AI Principles

Finland is a long-time member of the OECD and has adopted OECD AI Principles, 1918 committing "to uphold international standards that aim to ensure AI systems are designed to be robust, safe, fair and trustworthy."1919

The OECD recognizes Finland's progress implementing principle 1.3 transparency and explainability (in Helsinki), and for promoting international research collaboration. 1920 It was also one of the early countries to have a National AI Strategy.

Council of Europe AI Treaty

Finland contributed as a Council of Europe Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy, and the Rule of Law. The Committee on AI approved the Draft Framework Convention during its 10th Plenary session in March 2024. The European Commission signed on behalf of the members of the European Union (including Finland) on September 5, 2024.¹⁹²¹ Finland has not signed independently.

UNESCO Recommendation on AI Ethics

Finland has endorsed the UNESCO Recommendations on AI, the first ever global agreement on the ethics of AI.¹⁹²² UNESCO is currently implementing its Readiness Assessment Methodology (RAM) in several countries, but Finland is not yet on the list of countries that have implemented or are in the process of implementing the Readiness Assessment Methodology (RAM). 1923

Finland has, nonetheless, has a historic of international cooperation with UNESCO. The Finnish National Commission for UNESCO "act as liaison

¹⁹¹⁸ OECD AI Policy Observatory, AI in Finland (2025),

https://oecd.ai/en/dashboards/countries/Finland

¹⁹¹⁹ OECD AI Policy Observatory, OECD AI Principles Overview, Countries Adhering to the AI Principles (2025), https://oecd.ai/en/ai-principles

¹⁹²⁰ OECD, State of Implementation of the OECD AI Principles Four Years On (Oct. 27, 2023), https://www.oecd.org/en/publications/the-state-of-implementation-of-the-oecd-ai-principlesfour-years-on 835641c9-en.html

¹⁹²¹ Europe Union External Action, The European Commission signs historic Council of Europe Framework Convention on Artificial Intelligence and Human Rights (Sept. 10, 2024), https://www.eeas.europa.eu/delegations/council-europe/european-commission-signs-historiccouncil-europe-framework-convention-artificial-intelligence-and en

¹⁹²² UNESCO, UNESCO member states adopt the first ever global agreement on the Ethics of Artificial Intelligence (Nov. 2021), https://www.unesco.org/en/articles/unesco-member-statesadopt-first-ever-global-agreement-ethics-artificial-intelligence

¹⁹²³ UNESCO Global AI Ethics and Governance Observatory, Global Hub, List of countries that have implemented or are in the process of implementing the Readiness Assessment Methodology (RAM) (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

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between UNESCO and national authorities. The Finnish National Commission is an advisory body and issues opinions to the Ministry of Education and Culture and the Government and takes initiatives with regard to: measures to be taken in Finland following decisions and recommendations adopted by UNESCO General Conferences and UNESCO executive bodies and by international conferences and meetings organized by UNESCO; other major matters and questions of principle relating to the activities of UNESCO; the representation of Finland at General Conferences and on UNESCO executive bodies and at international meetings and talks organized by UNESCO; other questions relating to UNESCO's fields of activity assigned to the Commission by the Ministry of Education and Culture; and communication of UNESCO's aims and activities in Finland. 1924

Evaluation

Finland was one of the most digital countries in the EU in 2023. In its national AI strategy, one of the first in the world, Finland adopted an approach based on its vision of "a good artificial intelligence society." Risks posed by AI do not occupy center stage in the strategy, but Finland has tried to develop best practices and hands-on solutions for ensuring trustworthy AI by design. The capital, Helsinki, is the first city to have developed and adopted an AI register to foster trust in AI and ensure the best service to citizens.

Finland benefits from strong European and national data protection frameworks. The use of the Clearview facial recognition system by law enforcement authorities was controversial and was reprimanded by the Data Inspectorate. However, the introduction of a new law authorizing automated decisions in administration raises questions regarding its compatibility with data subjects' rights not to be subjected to automated decision making enshrined in the GDPR.

Finland has also worked closely with UNICEF to develop internationally applicable policy guidance for the use AI by children and has endorsed both the OECD AI Principles and the UNESCO Recommendation on the Ethics of AI. It remains to be seen which concrete steps Finland will adopt to turn its commitment to the UNESCO AI Ethics Recommendation into actions.

France

In 2024, France's data protection authority released recommendations for AI system development and while the government appointed a Minister of Artificial Intelligence to centralize AI leadership and policymaking. The new

¹⁹²⁴ Ministry of Education and Culture, *Finnish National Commission for UNESCO*, https://okm.fi/en/national-commission-for-unesco

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ministry could be important for implementing the EU AI Act, which entered into force. France became party to the Council of Europe AI treaty as an EU Member State.

National AI Strategy

France's national Strategy on Artificial Intelligence entitled "AI for Humanity" aims to make France a world leader in AI. "AI will raise a lot of issues in ethics, in politics, it will question our democracy and our collective preferences," stated French President Emmanuel Macron in 2018. 1925 He continued: "If you want to manage your own choice of society, your choice of civilization, you have to be able to be an acting part of this AI revolution." 1926

France's AI strategy sets out four objectives: (1) Reinforcing the AI ecosystem to attract the very best talents, (2) Developing an open data policy, especially in sectors where France already has the potential for excellence, such as healthcare, (3) Creating a regulatory and financial framework favoring the emergence of "AI champions," and (4) Promoting AI regulation and ethics, to ensure to high standard and acceptability for citizens. This includes supporting human sciences research on ethics of use, making all algorithms used by the State public, including admission to higher education, and encouraging AI's openness to diversity.

In November 2022, the French Government launched the second phase of the national AI strategy until 2025, with a focus on priority areas such as trusted AI and generative AI. 1927

The national AI strategy builds on the Villani¹⁹²⁸ report, For a Meaningful Artificial Intelligence: Towards a French and European Strategy, ¹⁹²⁹ as well as the

¹⁹²⁵ President of France, *France's New National Strategy for Artificial Intelligence - Speech of Emmanuel Macron* (Mar. 29, 2018), https://www.elysee.fr/emmanuel-macron/2018/03/29/frances-new-national-strategy-for-artificial-intelligence-speech-of-emmanuel-macron.en

¹⁹²⁶ Nicholas Thompson, *Emmanuel Macron Talks to WIRED about France's AI Strategy* (Mar. 31, 2018), https://www.wired.com/story/emmanuel-macron-talks-to-wired-about-frances-ai-strategy

¹⁹²⁷ French Ministry of Economy and Finance, *The national strategy for artificial intelligence* (Oct. 17, 2023), https://www.entreprises.gouv.fr/fr/numerique/enjeux/la-strategie-nationale-pour-l-ia

¹⁹²⁸ Cedric Villani is a French mathematician, Fields Medal winner and Member of Parliament. Part 5 of his report focuses on ethical considerations of AI and notably includes proposals to open the "black box", implement ethics by design, and set up an AI Ethics Committee.

¹⁹²⁹ Cedric Villani, *For a Meaningful Artificial Intelligence: Toward a French and European Strategy* (Mar. 2018), https://jp.ambafrance.org/IMG/pdf/missionvillani_report_eng-vf.pdf?24352/f6e726378dead5b62f65c936495bc30b090a6c7e

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work of "France Strategy" ¹⁹³⁰ and of the French national data protection authority (CNIL). ¹⁹³¹

The National Coordinator for AI, tasked with the implementation of the national AI strategy, works with all administrations, centers and research laboratories dedicated to AI. 1932

National Pilot Committee for Digital Ethics

With regard to AI regulation and ethics (objective 4 of the National AI Strategy), in July 2019, the Prime Minister asked the French National Consultative Committee on Bioethics (CCNE) to launch a pilot initiative dedicated to Digital Ethics. The National Pilot Committee for Digital Ethics (NPCDE), created in December 2019, "shall submit initial contributions on the ethics of digital sciences, technologies, uses and innovations and determine relevant equilibria for the organization of public debate on digital ethics and artificial intelligence." It is also tasked with maintaining ethical oversight and to raise awareness, inform and assist individuals, companies, administrations, institutions, etc., in their decision-making process. 1933 The committee has been seized by the Prime Minister to give opinions on the ethical issues concerning three specific topics of digital applications using in particular machine learning: 1) Conversational agents (chatbots); 2) Autonomous cars; and 3) Medical diagnosis and health AI.

However, civil society groups such as Access Now have objected to government studies that simply propose ethical guidelines rather than hard law. Access Now explains, "[t]here is solid and creative thinking in the advisory paper that informed the strategy around the ethical and regulatory challenges posed by AI, but at the moment the proposed solutions largely involve the creation of groups to study them rather than the proposal of new or modified norms." "France's

¹⁹³⁰ France Stratégie, the strategy department attached to the French Prime Minister, released a synthesis *France intelligence artificielle* report (Mar. 2017), https://www.enseignementsup-recherche.gouv.fr/cid114739/rapport-strategie-france-i.a.-pour-le-developpement-destechnologies-d-intelligence-artificielle.html

¹⁹³¹ CNIL (National Commission on Information Technology and Civil Liberties), *Algorithms and Artificial Intelligence: CNIL's Report on the Ethical Issues* (May 25, 2018), https://www.cnil.fr/en/algorithms-and-artificial-intelligence-cnils-report-ethical-issues

¹⁹³² Government of France, Prime Minister, *Nomination de M. Renaud VEDEL. comme Coordinateur national pour l'intelligence artificielle* (Mar. 9, 2020),

https://www.gouvernement.fr/sites/default/files/document/document/2020/03/communique_de_p_resse_de_m._edouard_philippe_premier_ministre_-

nomination de m. renaud vedel comme coordinateur national pour lintelligence artificielle - 09.03.2020.pdf

¹⁹³³ Claude Kirchner, *The French National Committee for Digital Ethics* (Feb. 24, 2020), https://ai-regulation.com/the-french-national-committee-for-digital-ethics/

¹⁹³⁴ AccessNow, Mapping Regulatory Proposals for Artificial Intelligence in Europe (Nov. 18, 2018),

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AI strategy generally cleaves to the 'ethics' framework and makes scant reference to hard legal constraints on AI development." AccessNow notes that the "Villani report is considerably more detailed about the ethical and legal challenges posed by AI." While some civil society organizations oppose the need for the NPCDE, they continue to work towards their objectives and convened a conference with the European Research Consortium for Informatics and Mathematics (ERCIM) Ethics Working Group to discuss digital technology ethics and connected technologies in October 2022. 1935

In September 2023, the Prime Minister launched a new Committee on generative AI.¹⁹³⁶ Its aim is to make concrete recommendations in order to adapt French AI strategy. Among the members are Joëlle Barral from Google, Yann le Cun from Meta as well as Arthur Mensch and Cedric O, both involved with Mistral AI. Concerns about a possible conflict of interests and influence on the French position with regard to the draft EU AI Act have been raised.¹⁹³⁷

Public Participation

The Villani report, which has been a key source of inspiration for France's national strategy, relied on the work of multiple stakeholders but not the public at large. However, the CNIL for its part did organize a public debate that led to its report on "the ethical matters raised by algorithms and artificial intelligence." The CNIL report on the ethical issues raised by AI also followed extensive public outreach in 2017. More than 3,000 people took part in 45 debates and events, organized by 60 partners, including research centers, public institutions, trade unions, think tanks and companies. 1938

According to BEUC, the European consumer organization, more than 80% of those polled in France are familiar with Artificial Intelligence and over 50%

 $\underline{https://www.accessnow.org/cms/assets/uploads/2018/11/mapping_regulatory_proposals_for_AI_\underline{in_EU.pdf}$

¹⁹³⁵ ERCIM, Forum on Digital Ethics in Research: Beyond Compliance, ERCIM News (Jan. 11, 2023), https://ercim-news.ercim.eu/en132/jea/forum-on-digital-ethics-in-research-beyond-compliance

¹⁹³⁶ French Ministry of Economy and Finance, *France sets up a committee for generative artificial intelligence* (Oct. 3, 2023), https://www.economie.gouv.fr/comite-intelligence-artificielle-generative

¹⁹³⁷ Théophane Hartmann, AI Act: French government accused of being influenced by lobbyist with conflict of interest (Dec. 21, 2023), https://www.euractiv.com/section/artificial-intelligence/news/ai-act-french-government-accused-of-being-influenced-by-lobbyist-with-conflict-of-interests/

¹⁹³⁸ CNIL, *Algorithms and artificial intelligence: CNIL's report on the ethical issues*, CNIL (May 25, 2018), https://www.cnil.fr/en/algorithms-and-artificial-intelligence-cnils-report-ethical-issues

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respondents agreed that companies use AI to manipulate consumer decisions. BEUC also reported that there is little trust over authorities to exert effective control over organizations and companies using AI. More than 60% of respondents in France said users should be able to say "no" to automated decision-making.

EU Digital Services Act

As an EU member state, France shall apply the EU Digital Services Act (DSA).¹⁹⁴⁰ The DSA regulates online intermediaries and platforms. Its main objective is to prevent illegal and harmful activities online and the spread of disinformation. The DSA also bans targeted advertising based on a person's sexual orientation, religion, ethnicity, or political beliefs and targeted advertising to minors based on profiling.

EU AI Act

As an EU member State, France is bound by the EU AI Act. 1941 The EU AI Act is a risk-based market regulation which supports the objective of promoting a human-centric approach to AI and making the EU a global leader in the development of secure, trustworthy and ethical AI.

The EU AI Act establishes a complex and layered governance structure involving multiple entities, such as notifying and notified bodies, conformity assessment bodies, an AI Board, an AI Office, national competent authorities, and market surveillance authorities. By and large, national market surveillance authorities are primarily responsible for the implementation and enforcement of the provisions of the regulation concerning high risks AI systems, with some coordination among national market surveillance authorities and monitoring by the European Commission. The Commission, including the European AI Office¹⁹⁴²

¹⁹³⁹ BEUC, Artificial Intelligence, what consumers say: Findings and policy recommendations of a multi-country survey on AI, (Sept. 7, 2020) https://www.beuc.eu/publications/beuc-x-2020-078 artificial intelligence what consumers say report.pdf

¹⁹⁴⁰ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act), (Oct. 21, 2022), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022R2065

¹⁹⁴¹ European Parliament, Artificial Intelligence Act, European Parliament legislative resolution of 13 March 2024 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts (COM(2021)0206 – C9-0146/2021 – 2021/0106(COD)), P9 TA(2024)0138 (Mar. 13, 2024),

https://www.europarl.europa.eu/RegData/seance_pleniere/textes_adoptes/definitif/2024/03-13/0138/P9_TA(2024)0138_EN.pdf

¹⁹⁴² European Commission, *European AI Office*, https://digital-strategy.ec.europa.eu/en/policies/ai-office

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established in February 2024, has exclusive powers to supervise and enforce the obligations of providers of general-purpose AI models.

The AI Act came into force on August 1, 2024.¹⁹⁴³ France has until the end of 2025 to name the relevant authorities responsible for overseeing and enforcing the EU AI Act.

Data Protection

The right to the protection of personal data falls within the scope of application of the right to respect for private life, 1944 which is constitutionally protected. 1945

Since France is an EU Member State, the General Data Protection Regulation (GDPR)¹⁹⁴⁶ is directly applicable in France and to French people. The aim of the GDPR is to "strengthen individuals' fundamental rights in the digital age and facilitate business by clarifying rules for companies and public bodies in the digital single market. A single law will also do away with the current fragmentation in different national systems and unnecessary administrative burdens."¹⁹⁴⁷ The GDPR entered into force on 24 May 2016 and applies since 25 May 2018.

The EU Data Protection Law Enforcement Directive (LED)¹⁹⁴⁸ "protects citizens' fundamental right to data protection whenever personal data is used by criminal law enforcement authorities for law enforcement purposes, It will in particular ensure that the personal data of victims, witnesses, and suspects of crime are duly protected and will facilitate cross-border cooperation in the fight against crime and terrorism."¹⁹⁴⁹ The LED provides for the prohibition of any decision

¹⁹⁴⁵ See Constitutional Council, decision n° 99-416 DC (July 23, 1999)

 $\underline{https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection \ en }$

¹⁹⁴³ European Commission, *AI Act Enters into Force* (Aug. 1, 2024), https://commission.europa.eu/news/ai-act-enters-force-2024-08-01_en

¹⁹⁴⁴ See Cassation, Civ. 1, (Nov. 5) 1996.

¹⁹⁴⁶ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (Apr. 27, 2016), https://eur-lex.europa.eu/EN/legal-content/summary/general-data-protection-regulation-gdpr.html

¹⁹⁴⁷ European Commission, *Legal Framework of EU Data Protection*, https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection en

¹⁹⁴⁸ Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA (Apr. 27, 2016), https://eurlex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

¹⁹⁴⁹ European Commission, Legal Framework of EU Data Protection,

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based solely on automated processing, unless it is provided by law, and of profiling that results in discrimination. 1950

The 1978 French Data Protection Act was amended in 2018 to adapt it to both the GDPR and the LED. 1951

The EU Charter of Fundamental Rights more generally provides that EU citizens have the right to protection of their personal data. Article 8 of the Charter states that: "Everyone has the right to the protection of personal data concerning him or her. Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law."

France is also a member of the Council of Europe and ratified the Council of Europe's Convention 108+ for the protection of individuals with regard to the processing of personal data. 1952

AI Oversight

The French data protection authority (CNIL) has published several papers on AI, including a 2018 report on the ethical issues raised by AI. 1953 This report set out two founding principles—fairness and vigilance—six recommendations, and six concerns. Following this report, a joint 2020 paper by the CNIL and the Defender of Rights detailed concerns around the transparency obligations of those responsible for AI systems. 1954

The CNIL's work also contributed to the Declaration on Ethics and Data Protection in AI, which was later adopted by the Global Privacy Assembly in 2018. 1955 The CNIL is a member of the Global Privacy Assembly (GPA) since 2002. The CNIL did not endorse the 2020 GPA Resolution on AI

¹⁹⁵⁰ Article 11 (1) and (2) of the LED, https://eur-lex.europa.eu/legal- content/EN/TXT/?uri=celex%3A02016L0680-20160504

¹⁹⁵¹ "Informatique et Libertés" Act, as modified by Bill n° 2018-493 (June 20, 2018), implemented by Decree n° 2018-687 (Aug. 1, 2018), and Order n° 2018-1125 (Dec. 12, 2018). ¹⁹⁵² Council of Europe, Modernised Convention for the Protection of Individuals with Regard to the Processing of Personal Data (May 18, 2018), https://www.coe.int/en/web/dataprotection/convention108-and-protocol

¹⁹⁵³ CNIL, Algorithms and Artificial Intelligence: CNIL's Report on the Ethical Issues (May 25, 2018), https://www.cnil.fr/en/algorithms-and-artificial-intelligence-cnils-report-ethical-issues ¹⁹⁵⁴ CNIL, Algorithmes et discriminations : le Défenseur des droits, avec la CNIL, appelle à une mobilisation collective (May 2020), https://www.cnil.fr/fr/algorithmes-et-discriminations-ledefenseur-des-droits-avec-la-cnil-appelle-une-mobilisation

¹⁹⁵⁵ Global Privacy Assembly, Declaration on Ethics and Data Protection in AI (Oct. 23, 2018), http://globalprivacyassembly.org/wp-content/uploads/2019/04/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

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Accountability¹⁹⁵⁶ but co-sponsored the 2022 GPA Resolution on Facial Recognition Technology¹⁹⁵⁷ and the 2023 GPA Resolution on Generative AI. 1958

In January 2023, the CNIL created an AI Department (AID) to improve its understanding of the risks posed by AI systems, prepare for the entry into force of the EU AI Act, and develop further relationships within the AI ecosystem. ¹⁹⁵⁹ The AID Director is Bertrand Pailhes, the former national coordinator for France's national AI strategy, helping to align AID's efforts with the national AI strategy's objectives and work towards creating a common EU framework for trustworthy and innovative AI. ¹⁹⁶⁰

Generative AI was one of the key topics in the 2023 action plan. The CNIL's work on Generative AI was supported by the AID¹⁹⁶¹ and its Digital Innovation Laboratory (LINC), which released a study on generative AI to understand better its functioning and risks.¹⁹⁶² The CNIL issued its first recommendations on the development of AI systems in April 2024, following a public consultation. The recommendations seek to support AI ecosystem players in complying with the GDPR, focusing on the purpose of data processing, data retention, and data minimization.¹⁹⁶³ A second public consultation focusing on the legal basis of legitimate interest to develop AI systems, data subject rights, and

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¹⁹⁵⁶ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

¹⁹⁵⁷ Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

¹⁹⁵⁸ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf.

¹⁹⁵⁹ CNIL, *The CNIL Creates an Artificial Intelligence Department and Begins to Work on Learning Databases* (Jan. 26. 2023), https://www.cnil.fr/en/cnil-creates-artificial-intelligence-department-and-begins-work-learning-databases

¹⁹⁶⁰ Kingdom of the Netherlands, *Non-Paper Innovative and Trustworthy AI: Two Sides of the Same Coin*, Netherlands and You (Oct. 8, 2020), https://www.netherlandsandyou.nl/web/pr-eubrussels/documents?

¹⁹⁶¹ CNIL, *AI: the action plan of the CNIL* (May 2023), https://www.cnil.fr/en/artificial-intelligence-action-plan-cnil

¹⁹⁶² LINC, *Dossier IA generative – ChatGPT : un beau parleur bien entraîné* (Apr. 26, 2023), https://linc.cnil.fr/dossier-ia-generative-chatgpt-un-beau-parleur-bien-entraine

¹⁹⁶³ CNIL, AI: CNIL Publishes Its First Recommendations on the Development of Artificial Intelligence Systems (Jun. 7 2024), https://www.cnil.fr/en/ai-cnil-publishes-its-first-recommendations-development-artificial-intelligence-systems

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safe development of AI systems closed on October 1, 2024, with new recommendations expected to be published in early 2025. 1964

Algorithmic Transparency

Following the assassination in October 2020 of history professor Samuel Paty, the Secretary of State for the Digital Transition and Electronic Communications, Cédric O, wrote in a blog that "the opacity of the functioning of (social media) algorithms and their moderation is a societal and democratic aberration." He added "it is also essential that full transparency be observed vis a vis the public authorities as regards the principles governing in detail the choices made by their moderation algorithms, whether it is about online hatred or dissemination of false information." ¹⁹⁶⁵

France is subject to the GDPR and Convention 108+ which both provide for a general right to obtain access to information about automated decision-making and to the factors and logic of an algorithm. 1966

The 2020 Recommendation of the Council of Europe Committee of Ministers on human rights impacts of algorithm systems¹⁹⁶⁷ specifically emphasizes requirements on transparency, accountability and effective remedies. The Recommendation provides that "The use of algorithmic systems in decision-making processes that carry high risks to human rights should be subject to particularly high standards as regards the explainability of processes and outputs."¹⁹⁶⁸ The Recommendation also clarifies that "Contestation should include an opportunity to be heard, a thorough review of the decision and the possibility to obtain a non-automated decision. This right may not be waived, and should be affordable and easily enforceable before, during and after deployment, including through the provision of easily accessible contact points and hotlines."¹⁹⁶⁹

https://medium.com/@cedric.o/r%C3%A9gulations-657189f5d9d2

¹⁹⁶⁴ CNIL, [Closed] Artificial Intelligence: The CNIL Opens a New Public Consultation on the Development of AI Systems (Jul. 2. 2024), https://www.cnil.fr/en/closed-artificial-intelligence-cnil-opens-new-public-consultation-development-ai-systems

¹⁹⁶⁵ Cédric O, Régulations, Medium (Oct. 20, 2020),

¹⁹⁶⁶ See Recital 63 and Article 22 of the GDPR. Article 9 c) of the Convention 108+ as well as Recital 77, *Explanatory Report, Convention 108*+, p. 24, https://rm.coe.int/convention-108-convention-for-the-protection-of-individuals-with-regar/16808b36f1

¹⁹⁶⁷ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020),

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

¹⁹⁶⁸ Ibid

¹⁹⁶⁹ Ibid

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Health Data Hub Controversy

In pursuit of its open data policy objective, France launched the Health Data Hub (HDH) in December 2019¹⁹⁷⁰ to facilitate data sharing and foster research. This data sharing is done by amalgamating 18 public databases of patient data to connect with environmental, patient compliance, and quality of life data, enabling consideration of all the data surrounding a patient.¹⁹⁷¹ The HDH's compiled health data is hosted by Microsoft.¹⁹⁷²

Following the European Court of Justice's *Schrems II* judgment in July 2020 which invalidated the Privacy Shield, France's highest administrative court (the *Conseil d'État*) considered a request for the suspension of the HDH. In October 2020, the Conseil d'Etat rejected the request. The Conseil d'Etat observed that "personal data hosted in the Netherlands under a contract with Microsoft cannot legally be transferred outside the European Union. While the risk cannot be completely excluded that the American intelligence services request access to this data, it does not justify, in the very short term, the suspension of the Platform, but requires special precautions to be taken, under the supervision of the CNIL." 1973

Following this decision, the CNIL announced it will advise public authorities on the implementation of appropriate guarantees and will ensure that use of the HDH's health crisis-related research projects is necessary. 1974

The press reported in October 2020 that the debates are far from over since the CNIL and the Conseil d'État do not have the same analysis of the situation. According to the CNIL, the end of the Privacy Shield requires an urgent change of host for the personal data. According to the Conseil d'Etat, the risks are hypothetical and not urgent. A CNIL's draft determination, could have

¹⁹⁷¹ Opus Line, *Heath Data Hub: An Ambitious French Initiative for Tomorrow's Health* (Mar. 25, 2019), https://www.opusline.fr/health-data-hub-an-ambitious-french-initiative-for-tomorrows-health/

¹⁹⁷⁰ Government of France, Ministry of Solidarity and Health, *Création officielle du Health data hub* (Dec. 2, 2019), https://sante.gouv.fr/archives/archives-presse/archives-communiques-de-presse/article/creation-officielle-du-health-data-hub

¹⁹⁷² Florian Dèbes, *L'Etat choisit Microsoft pour les données de santé et crée la polémique*, Les Ecos (Jun. 4, 2020), https://www.lesechos.fr/tech-medias/hightech/letat-choisit-microsoft-pour-les-donnees-de-sante-et-cree-la-polemique-1208376

¹⁹⁷³ Le Conseil d'Etat, *Health Data Hub et protection de données personnelles: des précautions doivent être prises dans l'attente d'une solution pérenne* (Oct. 14, 2020), https://www.conseil-etat.fr/actualites/actualites/health-data-hub-et-protection-de-donnees-personnelles-des-precautions-doivent-etre-prises-dans-l-attente-d-une-solution-perenne

¹⁹⁷⁴ CNIL, Le Conseil d'État demande au Health Data Hub des garanties supplémentaires pour limiter le risque de transfert vers les États-Unis (Oct. 14, 2020), https://www.cnil.fr/fr/le-conseil-detat-demande-au-health-data-hub-des-garanties-supplementaires

¹⁹⁷⁵ Informatique News, *Divergences sur le Health Data Hub* (Oct. 19, 2020), https://www.informatiquenews.fr/divergences-sur-le-health-data-hub-les-annonces-de-

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essentially prevented the HDH's implementation.¹⁹⁷⁶ According to Mediapart, at the end of November 2020, the Minister of Health and Solidarity, Olivier Véran, responded to the President of the CNIL by saying he would put an end to Microsoft's hosting of the HDH within two years.¹⁹⁷⁷

In 2022, health data remains a major concern for the CNIL. Indeed, this data, known as sensitive data in EU law, has been widely collected and processed by many different data controllers and processors in the current health context to fulfill different purposes. Some of these purposes are access to the workplace for certain professions, implementing a sanitary pass, monitoring COVID-19 evolution, establishing vaccination campaigns, deepening research, and implementing health protocols for COVID-19 patients, among others. In this regard, in January 2023, the CNIL issued its Standard relating to the processing of personal data implemented for the purpose of managing health vigilance systems. 1978

GAIA-X

In April 2020, France and Germany launched Gaia-X, a platform joining up cloud-hosting services from dozens of French and German companies for business to move their data freely under Europe's data processing rules. "We are not China, we are not the United States—we are European countries with our own values and our own European interests that we want to defend" said French Economy Minister Bruno Le Maire. 1979 Gaia-X is meant to play a key role in the European data strategy as its success lies in the ability to harmonize rules on data sharing. 1980 According to the GAIA-X website: "The exchange of data across organisations is currently constrained by proprietary, non-transparent, non-

<u>zoomtopia-cohesity-sassocie-a-aws-des-iphone-12-en-5g-le-teletravail-en-question-netappinsight-74042</u>

¹⁹⁷⁶ Alice Vitard, *Les détails de la mise en œuvre du Health Data Hub ne conviennent pas à la Cnil*, L'Usine Digitale, (Nov. 14, 2020), https://www.usine-digitale.fr/article/les-details-de-la-mise-en-uvre-du-health-data-hub-ne-conviennent-pas-a-la-cnil.N1024349

¹⁹⁷⁷ Mediapart, *Health Data Hub: Véran s'engage à retirer l'hébergement à Microsoft d'ici «deux ans»* (Nov. 22, 2020), https://www.mediapart.fr/journal/france/221120/health-data-hub-veran-s-engage-retirer-l-hebergement-microsoft-d-ici-deux-ans

¹⁹⁷⁸ CNIL, Standard relating to the processing of personal data implemented for the purpose of managing health vigilance systems (Jan. 2023),

https://www.cnil.fr/sites/default/files/atoms/files/standard_personal-data_health-vigilance-systems.pdf

¹⁵⁷⁹ Marion Simon Rainaurd, *Gaia-X*: où en est le projet de méta-cloud européen qui veut protéger vos données? (Nov. 13, 2020), https://www.01net.com/actualites/gaia-x-ou-en-est-le-projet-de-meta-cloud-europeen-qui-veut-proteger-vos-donnees-1991857.html

¹⁹⁸⁰ Janosch Delcker and Melissa Heikkilä, *Germany, France launch Gaia-X platform in bid for 'tech sovereignty,'* Politico (June 5, 2020), https://www.politico.eu/article/germany-france-gaia-x-cloud-platform-eu-tech-sovereignty/

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interoperable technologies that do not provide the necessary level of trust. Our concept of sovereignty translates into the autonomy and self-determination users need to operate their technology choices. Gaia-X enables and boosts the creation of Data Spaces through trusted platforms that comply with common rules, allowing users and providers to trust each other on an objective technological basis, to safely and freely share and exchange data across multiple actors." As of February 2023, Gaia-X has over 350 members, and is built upon three pillars: the Gaia-X Association, national Hubs, and Community. Each pillar contains several working groups and committees to ensure Gaia-X's objectives are met.

Gaia-X has been open to non-European firms, triggering worries that large American or Chinese companies could water down new rules or influence the initiative to benefit them rather than Europe's own interests. ¹⁹⁸¹

Use of AI in Public Administration

In December 2023, the CNIL selected four AI projects aimed at improving public services for incubation in its sandbox. One project led by the French employment agency (France Travail) is to equip job agents with AI conversational assistants to help them offer a personalized path adapted to the needs of job seekers. Another project, the "Albert" project of the DINUM (interministerial directorate for digital affairs), is aimed at civil servants. It consists of assisting them in the search for information and helping them to formulate specific responses to users. The project is based on an open language model. It is considered as a potential "lever for the deployment of AI in administrations".

Mass Surveillance

Facial recognition technology (FRT) processes sensitive personal data prohibited, at least in principle, by the GDPR and the French data protection law, subject to exceptions such as individual's consent or for important public interests. In the latter case, FRT can be authorized by a Decree of the Conseil d'État informed by an opinion from the CNIL.

FRT has long been used in France on a voluntary basis with regard to passport control in airports, bank security, and has also been tested in several colleges. The deployment of a FRT-based ID program, Alicem, ¹⁹⁸³ was scheduled

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¹⁹⁸¹ Clothilde Goujard and Laurens Cerulus, *Inside Gaia-X: How chaos and infighting are killing Europe's grand cloud project*, Politico (Oct. 26, 2021), https://www.politico.eu/article/chaos-and-infighting-are-killing-europes-grand-cloud-project/

¹⁹⁸² CNIL, Artificial intelligence and public services "sandbox": The CNIL supports 8 innovative projects (Dec 4, 2023) https://www.cnil.fr/en/artificial-intelligence-and-public-services-sandbox-cnil-supports-8-innovative-projects

¹⁹⁸³ Charlotte Jee, *France plans to use facial recognition to let citizens access government services*, MIT Technology Review (Oct. 3, 2020), https://www.technologyreview.com/2019/10/03/132776/france-plans-to-use-facial-recognition-to-let-citizens-access-government-services/

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for November 2019, despite a very critical opinion from the CNIL. Deployment was delayed after a group of NGOs appealed to the Conseil d'État requesting the annulment of the decree authorizing its creation. In early November 2019, the Conseil d'État dismissed the appeal. 1984 The same month, the CNIL published guidance on the use of facial recognition. 1985 The document, primarily directed at public authorities in France that want to experiment with facial recognition, presents the technical, legal and ethical elements that need to be considered. After recalling that facial recognition, experimental or not, must comply with the GDPR and the LED, the CNIL sets out three general requirements: (1) facial recognition can only be used if there is an established need to implement an authentication mechanism that ensures a high level of reliability, and there are no other less intrusive means that would be appropriate; (2) the experimental use of facial recognition must respect the rights of individuals (including consent and control, transparency and security); and (3) the use of facial recognition on an experimental basis must have a precise timeline and be based on a rigorous methodology setting out the objectives pursued and the criteria for success.

In December 2019, the Observatoire des Libertés Numériques¹⁹⁸⁶ and 80 organisations signed an open letter calling on the French Government and Parliament to ban any present and future use of facial recognition for security and surveillance purposes.¹⁹⁸⁷

In November 2023, investigative media Disclose revealed that in 2015, law enforcement secretly acquired surveillance video image analysis software from the Israeli company Briefcam. For eight years, the Ministry of the Interior concealed the use of this tool, which enables facial recognition. According to Disclose, the algorithmic video-surveillance option is unlawfully used by municipal police forces across the nation. 1988

¹⁹⁸⁴ Marion Garreau, *Le ministère de l'Intérieur va pouvoir lancer l'application Alicem, basée sur la reconnaissance faciale*, L'Usine Nouvelle (Nov. 5, 2020),

 $[\]frac{https://www.usinenouvelle.com/editorial/le-ministere-de-l-interieur-va-pouvoir-lancer-l-application-alicem-basee-sur-la-reconnaissance-faciale. N1024754$

¹⁹⁸⁵ CNIL, *Reconnaissance faciale: Pour un débat à la hauteur des enjeux* (Nov. 2020), https://www.cnil.fr/sites/default/files/atoms/files/reconnaissance faciale.pdf (in French).

¹⁹⁸⁶ The Observatoire des Libertés Numériques federates several French NGOs monitoring legislation impacting digital freedoms: Le CECIL, Creis-Terminal, Globenet, La Ligue des Droits de l'Homme (LDH), La Quadrature du Net (LQDN), Le Syndicat des Avocats de France (SAF), Le Syndicat de la Magistrature (SM).

¹⁹⁸⁷ La Quadrature du Net, *Joint Letter from 80 organisations: Ban Security and Surveillance Facial Recognition* (Dec. 19, 2019), https://www.laquadrature.net/en/2019/12/19/joint-letter-from-80-organisations-ban-security-and-surveillance-facial-recognition/

¹⁹⁸⁸ Disclose, *The French National Police is Unlawfully Using an Israeli Facial Recognition Software*, (Nov. 14, 2023) https://disclose.ngo/en/article/the-french-national-police-is-unlawfully-using-an-israeli-facial-recognition-software

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In 2020, the administrative tribunal of Marseille rendered a decision on facial recognition that ruled illegal a decision by the South-East Region of France (Provence-Alpes-Côte d'Azur) to test facial recognition at the entrance of two High schools. Following an analysis from the CNIL, the court ruled that there was no opportunity for free and informed consent and also that there were other, less intrusive means to manage entrance to high schools. This was the first decision ever by a court applying the General Data Protection Regulation (GDPR) to Facial Recognition Technologies (FRTs). 1992

However, many other experiments are taking place, and companies are positioning themselves, with the Olympic Games in Paris in 2024 in their sights, and a market of seven billion euros at stake.¹⁹⁹³ In May 2023, the French Government enacted France's Olympic law legitimizing automated algorithmic image processing at the Olympic Games¹⁹⁹⁴ as an experiment until March 31, 2025.¹⁹⁹⁵ An automated surveillance system will be put in place in order to detect "suspect" behavior or objects. According to Human Rights Watch, "the surveillance provision of the proposed bill would constitute a serious threat to civic freedoms and democratic principles" Human Rights Watch also noted that the European Data Protection Board and the European Data Protection Supervisor stated, "biometric surveillance stifles people's reasonable expectation of anonymity in public spaces and reduces their will and ability to exercise their civic freedoms, for fear of being identified, profiled or even wrongly persecuted." ¹⁹⁹⁶ The civil rights organization "La Quadrature du Net" also launched a campaign

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https://algorithmwatch.org/en/let-the-games-begin-frances-controversial-olympic-law-legitimizes-automated-surveillance-testing-at-sporting-events/

¹⁹⁸⁹ Tribunal Administratif de Marseille, *La Quadrature du Net, No. 1901249* (27 Nov. 2020), https://forum.technopolice.fr/assets/uploads/files/1582802422930-1090394890_1901249.pdf
¹⁹⁹⁰ CNIL, *Expérimentation de la reconnaissance faciale dans deux lycées : la CNIL précise sa position* (Oct. 29, 2019), https://www.cnil.fr/fr/experimentation-de-la-reconnaissance-faciale-dans-deux-lycees-la-cnil-precise-sa-position

¹⁹⁹¹ La Quadrature du Net, *First Success against Facial Recognition in France* (Feb. 27, 2020), https://www.laquadrature.net/en/2020/02/27/first-success-against-facial-recognition/

¹⁹⁹² AI Regulation, *First Decision of a French Court Applying GDPR to Facial Recognition* (Feb. 27, 2020), https://ai-regulation.com/first-decision-ever-of-a-french-court-applying-gdpr-to-facial-recognition/

France Culture, Quand la reconnaissance faciale en France avance masquée (Sept. 4, 2020), https://www.franceculture.fr/societe/quand-la-reconnaissance-faciale-en-france-avance-masquee (Sept. 4, 2020), https://www.franceculture.fr/societe/quand-la-reconnaissance-faciale-en-france-avance-masquee (Sept. 4, 2020), https://www.franceculture.fr/societe/quand-la-reconnaissance-faciale-en-france-avance-masquee (Sept. 4, 2020), https://www.franceculture.fr/societe/quand-la-reconnaissance-faciale-en-france-avance-masquee (Sept. 4, 2020), https://www.franceculture.fr/societe/quand-la-reconnaissance-faciale-en-france-avance-masquee (Sept. 4, 2020), https://www.franceculture.fr/societe/quand-la-reconnaissance-faciale-en-france-avance-masquee (Sept. 4, 2020), https://www.franceculture.fr/societe/quand-la-reconnaissance-faciale-en-france-avance-masquee (Sept. 4, 2020), https://www.franceculture.fr/societe/quand-la-reconnaissance-faciale-en-france-avance-masquee (Sept. 4, 2020), https://www.franceculture.fr/societe/quand-la-reconnaissance-faciale-en-france-avance-masquee (S

¹⁹⁹⁵ French Senate, *Bill on the 2024 Olympic and Paralympic Games, Law No. 2023-380* (May 19, 2023) https://www.senat.fr/travaux-parlementaires/textes-legislatifs/la-loi-en-clair/projet-de-loi-jeux-olympiques-et-paralympiques-de-2024.html

¹⁹⁹⁶ Human Rights Watch, *France: Reject Surveillance in Olympic Games Law - Algorithm-Driven System Would Violate Rights*, (March 7, 2023) https://www.hrw.org/news/2023/03/07/france-reject-surveillance-olympic-games-law

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against biometric surveillance. 1997 For its part, the CNIL has identified the use of augmented cameras in the framework of the Olympic games as a priority topic for investigation in 2024.1998

French MPs unsuccessfully tried to challenge the law before the French Constitutional Council due to the use of algorithm-driven cameras in the Olympics. The French Constitutional Council noted that facial recognition will not be used and the AI-camera system was set for a legitimate purpose and only temporarily. As long as the necessary safeguards are put into place, there is no reason to invalidate the law at this stage. 1999

In May 2022, the EDPB has produced guidelines on the use of FRT in the area of law enforcement.²⁰⁰⁰ The EDPB Chair said: "While modern technologies offer benefits to law enforcement, such as the swift identification of suspects of serious crimes, they have to satisfy the requirements of necessity and proportionality. Facial recognition technology is intrinsically linked to processing personal data, including biometric data, and poses serious risks to individual rights and freedoms." The EDPB stresses that facial recognition tools should only be used in strict compliance with the Law Enforcement Directive (LED). Moreover, such tools should only be used if necessary and proportionate, as laid down in the Charter of Fundamental Rights."²⁰⁰¹ A few months later, in October 2022, the CNIL imposed a €20 million fine on Clearview AI for unlawful use of facial recognition technology.²⁰⁰² In April 2023, the French DPA considered that the

guidelines 202205 frtlawenforcement en 1.pdf

¹⁹⁹⁷ La Quadrature du Net, France Becomes the First European Country to Legalise Biometric Surveillance (March 29, 2023), https://www.laquadrature.net/en/2023/03/29/france-becomes-thefirst-european-country-to-legalize-biometric-surveillance/

¹⁹⁹⁸ CNIL, CNIL investigations in 2024: minors data, Olympic Games, right of access and digital receipts (Feb. 8, 2024), https://www.cnil.fr/en/cnil-investigations-2024-minors-data-olympicgames-right-access-and-digital-receipts

¹⁹⁹⁹ French Constitutional Council, Law relating to the Olympic and Paralympic Games of 2024 and various other provisions - Decision No. 2023-850 DC (May 7, 2023) https://www.conseilconstitutionnel.fr/decision/2023/2023850DC.htm

²⁰⁰⁰ European Data Protection Board, Guidelines 05/2022 on the use of facial recognition technology in the area of law enforcement [obsolete] (May12, 2022), https://edpb.europa.eu/system/files/2022-05/edpb-

²⁰⁰¹ European Data Protection Board, EDPB adopts Guidelines on calculation of fines & *Guidelines on the use of facial recognition technology in the area of law enforcement,* Press release (May 16, 2022), https://edpb.europa.eu/news/news/2022/edpb-adopts-guidelinescalculation-fines-guidelines-use-facial-recognition en

²⁰⁰²https://www.cnil.fr/en/facial-recognition-20-million-euros-penalty-against-clearview-ai

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company had not complied with the order and consequently imposed an overdue penalty payment of EUR 5,200,000 on Clearview AI.²⁰⁰³

Environmental Impact of AI

France's AI Strategy includes raising international awareness about the environmental impact of AI, promoting research to make AI infrastructure "more environmentally friendly," and making ecological data open to the public among its key objectives.²⁰⁰⁴

Reports that France's delegation to the AI Action Summit in Paris in February 2025 would promote discussions around measuring AI's impact on the environment suggest progress on the first point. Anne Bouverot, Paris's envoy for AI noted that "'We will definitely push for more transparency [...] and maybe a way to do that is to have a ranking or leaderboard."²⁰⁰⁵

Lethal Autonomous Weapons

President Macron declared in an interview that he is "dead against" the deployment of lethal autonomous weapons: "You always need responsibility and assertion of responsibility." In the submission to the UN Secretary General 2024 report on member States' views on lethal autonomous weapons systems (LAWS), France emphasized support for a two-tier approach to address the challenges of LAWS. France advocates for the prohibition of fully autonomous lethal systems that are inherently indiscriminate and supports regulation of partially autonomous systems to ensure compliance with International Humanitarian Law (IHL) while maintaining human control and accountability. 2007

In October 2022, France was one of 70 states that endorsed a joint statement on autonomous weapons systems at the United Nations General Assembly. The statement called for the recognition of the dangers of autonomous weapons systems, acknowledged the need for human oversight and accountability,

²⁰⁰⁴ Digital Trade & Data Governance Hub, *France AI Strategy, Overview of the Strategy* (2018), https://datagovhub.elliott.gwu.edu/france-ai-strategy/

library.unoda.org/General Assembly First Committee -Seventy-

Ninth session %282024%29/78-241-France-EN.pdf

²⁰⁰³ EDPB, Facial Recognition: The French SA Imposes a Penalty Payment on CLEARVIEW AI, (May 11, 2023), https://www.edpb.europa.eu/news/national-news/2023/facial-recognition-french-sa-imposes-penalty-payment-clearview-ai en

²⁰⁰⁵ Dan Milmo, *French AI Summit to Focus on Environmental Impact of Energy-Hungry Tech*, Guardian (Oct. 2, 2024), https://www.theguardian.com/technology/2024/oct/02/french-ai-summit-environmental-impact-energy-hungry-tech

²⁰⁰⁶ Nicholas Thompson, *Emmanuel Macron Talks to Wired About France's AI Strategy*, Wired (Mar. 31, 2018), https://www.wired.com/story/emmanuel-macron-talks-to-wired-about-frances-ai-strategy/

²⁰⁰⁷ France, Submission to the United Nations Secretary-General on Lethal Autonomous Weapons Systems, Resolution 78/241 (May 2024), https://docs-

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and emphasized the importance of an international framework of rules and constraints.²⁰⁰⁸ In this joint statement, States declared that they "are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law (IHL), including through maintaining human responsibility and accountability in the use of force."²⁰⁰⁹

At the 78th UN General Assembly First Committee in 2023, France voted in favor²⁰¹⁰ of resolution L.56²⁰¹¹ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. The report should analyze ways to address the challenges and concerns autonomous weapon systems raise from humanitarian, legal, security, technological and ethical perspectives and reflect on the role of humans in the use of force.

France also participated in an international summit on the responsible application of artificial intelligence in the military domain hosted by the Netherlands in February 2023. At the end of the Summit, France, together with other countries, agreed on a joint call for action on the responsible development, deployment and use of artificial intelligence in the military domain. States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and

²⁰⁰⁸ Stop Killer Robots, 70 states deliver joint statement on autonomous weapons systems at UN General Assembly, (2022) https://www.stopkillerrobots.org/news/70-states-deliver-joint-statement-on-autonomous-weapons-systems-at-un-general-assembly/

²⁰⁰⁹ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

 $[\]frac{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm_en.pdf}{}$

²⁰¹⁰ Stop Killer Robots, *164 states vote against the machine at the UN General Assembly*, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

²⁰¹¹ General Assembly, *Resolution L56: Lethal Autonomous Weapons* (Oct. 12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

²⁰¹² Government of Netherlands, *Call to action on responsible use of AI in the military domain* (Feb.16, 2023), Press Release, https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action

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accountability."²⁰¹³ France also endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023.²⁰¹⁴

France took part in the second REAIM Summit, which took place in Seoul, South Korea, on September 9–10, 2024. This summit concluded with the adoption of the Blueprint for Action, which emphasizes the necessity of maintaining human involvement in the development, deployment, and use of AI in the military domain, ensuring compliance with international law and preventing the proliferation of weapons of mass destruction.²⁰¹⁵

Human Rights

France is a signatory to many international human rights treaties and conventions. France typically ranks among the top nations in the world for the protection of human rights and transparency. Freedom House ranked France "Free" in 2024 with a score of 89/100, given the country's "vibrant democratic processes and generally strong protections for civil liberties and political rights." The report also notes that "successive governments have responded to terrorist attacks and the COVID-19 pandemic by curtailing constitutional protections and empowering law enforcement to impinge upon personal freedoms."²⁰¹⁶

The French Ombudsman and the CNIL have "both, in their own area of expertise, voiced their concerns regarding the impact of algorithmic systems on fundamental rights."²⁰¹⁷ Following a joint expert seminar in May 2020, they have called in June 2020 for a collective mobilization to prevent and address discriminatory biases of algorithms.²⁰¹⁸

https://reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163&shareBbsMngNo=10264&shareMenuId=11613&shareTabMenuId=

https://freedomhouse.org/country/france/freedom-world/2024

²⁰¹³ Responsible AI in the Military domain Summit, *REAIM Call to Action* (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action

²⁰¹⁴ US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy* (Nov. 9, 2023), endorsing States as of Feb. 12, 2024, https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

²⁰¹⁵ REAIM 2024, Blueprint for Action (Sept. 11, 2024),

 $^{^{2016}}$ Freedom House, Freedom in the World 2024: France (2024),

²⁰¹⁷ Defender of Rights and CNIL, *Algorithms: Preventing Automated Discrimination* (2020), https://www.defenseurdesdroits.fr/sites/default/files/2023-

^{07/}ddd rapport algorithmes 2020 EN 20200531.pdf

²⁰¹⁸ CNIL, Algorithms and Discrimination: Defender of Rights, with the CNIL, calls for collective mobilization (June 2, 2020), https://www.cnil.fr/fr/algorithmes-et-discriminations-le-defenseur-des-droits-avec-la-cnil-appelle-une-mobilisation

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In their report Algorithms: Preventing Automated Discrimination,²⁰¹⁹ the CNIL and the ombudsman stress that bias can be introduced at every stage of the development and deployment of AI systems, discuss how algorithms can lead to discriminatory outcomes and include recommendations on how to identify and minimize algorithmic biases. The Ombudsman called on the government and relevant actors to take appropriate measures to avoid algorithms that replicate and amplify discrimination.²⁰²⁰ In particular, the Ombudsman recommended to: i) support research to develop studies to measure, and methods to prevent bias; ii) reinforce information, transparency and explainability requirements with regard to algorithms; and iii) perform impact assessments to anticipate discriminatory effects of algorithms.

In a 2020 Recommendation to member States on the human rights impacts of algorithmic systems, the Council of Europe Committee of Ministers reminded member States of their commitment "to ensuring the rights and freedoms enshrined in the Convention for the Protection of Human Rights and Fundamental Freedoms to everyone within their jurisdiction." The Committee charged states to "ensure that any design, development and ongoing deployment of algorithmic systems occur in compliance with human rights and fundamental freedoms, which are universal, indivisible, inter-dependent and interrelated, with a view to amplifying positive effects and preventing or minimising possible adverse effects."

In April 2022, the French National Consultative Commission on Human Rights also adopted an opinion on the impact of artificial intelligence on fundamental rights. The consultative Commission recommends prohibiting certain uses of AI that are considered too prejudicial to fundamental rights, such as social scoring or remote biometric identification of people in public spaces and places accessible to the public.²⁰²²

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²⁰¹⁹ Defender of Rights, *Algorithms: Preventing Automated Discrimination*, p. 19 (May 2020), https://www.defenseurdesdroits.fr/sites/default/files/2023-

^{07/}ddd rapport algorithmes 2020 EN 20200531.pdf

²⁰²⁰ Inside Tech Media, *French CNIL Publishes Paper on Algorithmic Discrimination* (June 9, 2020), https://www.insideprivacy.com/artificial-intelligence/french-cnil-publishes-paper-on-algorithmic-discrimination/

²⁰²¹ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (April 8, 2020),

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

²⁰²² CNCDH, *Avis relatif à l'impact de l'intelligence artificielle sur les droits fondamentaux* (A-2022-6), https://www.cncdh.fr/publications/avis-relatif-limpact-de-lintelligence-artificielle-sur-les-droits-fondamentaux-2022-6

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Al Safety Summit

In November 2023, France participated in the first AI Safety Summit and endorsed the Bletchley Declaration.²⁰²³ France thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible."

France hosted the third iteration of the AI Safety Summit, rebranded as the AI Action Summit, in February 2025. 2024

OECD / G20 AI Principles

France endorsed the OECD and the G20 AI Principles.²⁰²⁵

In 2020, France and Canada, and a dozen other countries announced the Global Partnership on Artificial Intelligence (GPAI) to "support the responsible and human-centric development and use of AI in a manner consistent with human rights, fundamental freedoms, and our shared democratic values."²⁰²⁶

The OECD praised France for its commitment to following OECD recommendations on public administration by publishing a guide for public administrations on the responsible use of algorithms in the public sector.

During a 2023 interview, President Emmanual Macron stated, "The G7 and the Organisation for Economic Co-operation and Development (OECD), which includes 38 countries, would be a "good platform" to develop global regulation." ²⁰²⁷

²⁰²³ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, *Prime Minister's Office, The Bletchley Declaration by Countries Attending the AI Safety Summit* (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

²⁰²⁴ Elysee, *Artificial Intelligence Action Summit* (2025), https://www.elysee.fr/en/sommet-pour-l-action-sur-l-ia

²⁰²⁵ OECD Legal Instruments, *Recommendation of the council on Artificial Intelligence, Adherents* (May 3, 2024), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449#adherents

²⁰²⁶ Government of Canada, *Joint Statement from founding members of the Global Partnership on Artificial Intelligence* (Jun. 15, 2020), https://www.canada.ca/en/innovation-science-economic-development/news/2020/06/joint-statement-from-founding-members-of-the-global-partnership-on-artificial-intelligence.html

²⁰²⁷ French President Emmanuel Macron, *France sees global A.I. regulation ideas by the end of this year, wants to work with U.S. on tech laws - CNBC interview* (Jun 15, 2023), https://www.cnbc.com/2023/06/15/ai-regulation-france-sees-ideas-on-global-laws-by-end-of-year.html

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Council of Europe AI Treaty

France contributed as a Council of Europe and EU Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of Law. The Committee on AI approved the Draft Framework Convention during its 10th Plenary session in March 2024.²⁰²⁸ The European Commission signed this first legally binding international AI treaty on behalf of EU Member States on September 5, 2024.²⁰²⁹ France did not sign independently.

UNESCO Recommendation on Al Ethics

France endorsed the 2021 UNESCO Recommendation on AI Ethics, the first ever global agreement on the ethics of AI.²⁰³⁰ France is not implementing or preparing the UNESCO Readiness Assessment Methodology (RAM), a tool to facilitate implementation of the AI ethics Recommendations by helping countries identify gaps in their AI governance and infrastructure.²⁰³¹

Evaluation

France is among the leaders in national AI policies. France has endorsed the OECD/G20 AI Principles and contributed to the creation of the Global Partnership on AI. French authorities in charge of human rights, data protection and ethics are actively involved in AI policy and have published practical guidance regarding facial recognition and algorithmic transparency. France anticipated the entry into force of the EU AI Act by creating a dedicated AI unit with its data protection authority.

However, when it comes to the use of AI by law enforcement authorities and for security purposes, strong resistance exists to fully enforce fundamental rights. France successfully advocated for a national security exemption in both the EU AI Act and the Council of Europe Framework Convention on AI, human rights, democracy and the rule of law. France also played a key role in imposing a separate and lighter regime for GPAI models under the EU AI Act.

https://search.coe.int/cm/pages/result_details.aspx?objectid=0900001680aee411

²⁰²⁸ Council of Europe, *Draft Framework Convention on AI*, human rights, democracy and the rule of law (Mar. 2024),

²⁰²⁹ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 16, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

²⁰³⁰ UNESCO, Member States (2025), https://www.unesco.org/en/countries

²⁰³¹ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

Germany

In 2024, Germany introduced an AI-driven data strategy to enhance sustainable development through AI and became party to the Council of Europe AI Treaty through the EU signature. The federal government also presented bills to Parliament to permit the use of facial recognition by law enforcement and the use of biometric identification in migration.

National AI Strategy

The German government initially published its national AI strategy in November 2018.²⁰³² The three main goals are (1) "to make Germany and Europe a leading centre for AI and thus help safeguard Germany's competitiveness in the future", (2) to ensure "a responsible development and use of AI which serves the good of society," and (3) to "integrate AI in society in ethical, legal, cultural and institutional terms in the context of a broad societal dialogue and active political measures."

In December 2020, Germany updated its AI Strategy. The federal government responded to current developments—with an overview of AI principles and frameworks developed between 2018 and 2020 -, and high-priority topics such as the COVID-19 pandemic—with a discussion on how AI can help with "pandemic control," or environmental and climate protection. ²⁰³³

From 2018 to 2021, the Digitalrat or Digital Council advised the German federal Government on how to best implement the National AI Strategy. The Committee is comprised of AI experts in science and business. An exchange between politics and national as well as international experts is also at the forefront of their activities. The 2021 coalition agreement of the German government describes AI as a crucial strategic technology for the future and addresses many key AI topics, although the German AI Association, a federation of AI companies and organizations, has noted that the agreement also has its flaws, notably with regards to data protection. ²⁰³⁵

Implementation of the OECD AI Principles Insights from National AI Policies, p. 69 (Jun. 18, 2021), https://www.oecd.org/digital/state-of-implementation-of-the-oecd-ai-principles-1cd40c44-en.htm

²⁰³² German Federal Government, Artificial Intelligence Strategy, (Nov. 2020), https://www.ki-strategie-engl.pdf
²⁰³³ German Federal Government, Artificial Intelligence Strategy of the German Federal Government (Dec. 2020), https://www.ki-strategie-engl.pdf; OECD, State of Implementation of the OECD AI Principles Insights from National AI Policies, p. 69 (Jun. 18,

²⁰³⁴ German Federal Government, *Der Digitalrat: Experten, die uns antreiben,*https://www.bundesregierung.de/breg-de/service/archiv/der-digitalrat-experten-die-uns-antreiben-1504866; German Federal Government, *Digitalisierung wird Chefsache,*https://www.bundesregierung.de/breg-de/aktuelles/digitalisierung-wird-chefsache-1140420
https://www.bundesregierung.de/breg-de/aktuelles/digitalisierun

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The guiding slogan for the German national strategy is "AI made in Germany." One section of the AI Strategy states: "The Federal Government advocates using an "ethics by, in and for design" approach throughout all development stages and for the use of AI as the key element and hallmark of an 'AI made in Europe' strategy." The Strategy continues, "The Federal Government is engaging in dialogue with national and international bodies, including the Data Ethics Commission or the EU Commission's High-Level Expert Group on AI and will take into account the recommendations of these bodies as it develops standards on ethical aspects at German and European level."

AI ethics is a core component of the AI Strategy.²⁰³⁶ The German government further emphasizes transparency for the development of AI to ensure the protection of civil rights and maintain trust in businesses and institutions. The AI Strategy suggests that "government agencies or private-sector auditing institutions" should "verify algorithmic decision-making in order to prevent improper use, discrimination and negative impacts on society."

Germany has launched several projects to implement its National AI Strategy. According to the OECD, there are approximately 29 initiatives on AI across several topics and institutions. They range from the ethical guidelines to initiatives that foster fruitful business environments. There are four that specifically focus on ethics.

First, the Ethical Guidelines for Automated and Connected Driving set out 20 ethical principles for autonomous and semi-autonomous vehicles. ²⁰³⁸ This was among the first guidelines worldwide to establish ethical principles for connected vehicular traffic. The Ethical Guidelines led to an action plan and the "creation of ethical rules for self-driving cars" that was adopted by the Federal Government. ²⁰³⁹

Second, the German AI Observatory forecasts and assesses AI technologies' impact on society. The AI Observatory also develops regulatory frameworks that help deal with the rapidly changing labor market to ensure that social aspects of these changes are not neglected.²⁰⁴⁰

²⁰³⁶ The Federal Government of Germany, *Artificial Intelligence Strategy* (Nov. 2018), https://www.ki-strategie-deutschland.de/home.html?file=files/downloads/Nationale_KI-Strategie_engl.pdf

²⁰³⁷ OECD.ai, AI in Germany, https://oecd.ai/dashboards/countries/Germany/

²⁰³⁸ Federal Ministry of Transport and Digital Infrastructure, *Ethics Commission: Automated and Connected Driving* (2017), https://www.bmvi.de/SharedDocs/EN/publications/report-ethics-commission-automated-and-connected-driving.pdf

²⁰³⁹ Federal Ministry of Transport and Digital Infrastructure, *Automated and Connected Driving*, https://www.bmvi.de/EN/Topics/Digital-Matters/Automated-Connected-Driving/automated-and-connected-driving.html

²⁰⁴⁰ Denkfabrik: Digitale Arbeitsgesellschaft, *About the AI Observatory [Über das KI-Observatorium]*, https://www.ki-observatorium.de/das-ki-observatorium/ueber-das-ki-observatorium

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Third, although not mentioning AI explicitly, the Ethical, Legal and Social Aspects of Modern Life Sciences Funding Priority, launched originally in 1997, funds research with the goal of establishing "findings regarding the opportunities and risks presented by modern life sciences" and developing a basis for discourse amongst involved stakeholders.²⁰⁴¹

Fourth, the Federal Ministry for Economic Cooperation and Development launched the Development Cooperation initiative FAIR Forward in 2019. The initiative aims to promote a more "open, inclusive and sustainable approach to AI on an international level" by "working together with five partner countries: Ghana, Rwanda, South Africa, Uganda and India." The FAIR Forward goals are to: Strengthen Technical Know-How on AI, Remove Entry Barriers to AI, and Develop Policy Frameworks ready for AI. Several projects are underway in partner countries. ²⁰⁴²

Further, the Federal Ministry for Economic Affairs and Energy launched a Regulatory Sandboxes initiative in 2018. This initiative, although not specifically dedicated to AI, focuses on "testing innovation and regulation which enable digital innovations to be tested under real-life conditions and experience to be gathered."²⁰⁴³

In response to the European Commission's White Paper on AI,²⁰⁴⁴ Germany called for tighter regulation of AI on the EU level in 2020. The German government stated it welcomes new regulations but wants more specific definitions and stricter requirements for data storage, more focus on information security and more elaborate definitions of when human supervision is needed.²⁰⁴⁵

Data Ethics Commission

In 2018, the German federal government established a Data Ethics Commission to "build on scientific and technical expertise in developing ethical guidelines for the protection of the individual, the preservation of social cohesion,

https://www.giz.de/expertise/html/61982.html

https://www.bmwk.de/Redaktion/EN/Dossier/regulatory-sandboxes.html

²⁰⁴¹ Federal Ministry of Education and Research, *The ELSA funding initiative* (Jun. 2016), https://www.gesundheitsforschung-bmbf.de/files/bmbf flyer ELSA funding initiative e.pdf 2042 Toolkit Digitalisierung, *FAIR Forward – Artificial Intelligence for All*,

²⁰⁴³ Federal Ministry for Economic Affairs and Energy, *Regulatory Sandboxes – Testing Environments for Innovation and Regulation* (2025),

²⁰⁴⁴ European Commission, *White Paper on Artificial Intelligence: a European Approach to Excellence and Trust* (Feb. 19, 2020), https://commission.europa.eu/publications/white-paper-artificial-intelligence-european-approach-excellence-and-trust_en

²⁰⁴⁵ German Federal Government, Statement by the Federal Government of the Federal Republic of Germany on the White Paper on Artificial Intelligence – A European Approach to Excellence and Trust (Jun. 30, 2020),

 $[\]underline{https://www.bmi.bund.de/SharedDocs/downloads/DE/veroeffentlichungen/2020/stellungnahmebreg-weissbuch-ki.html}$

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and the safeguarding and promotion of prosperity in the information age."²⁰⁴⁶ In 2020, the Commission recommended to the German parliament that sustainability, justice and solidarity, democracy, security, privacy, self-determination and human dignity should be the ethical and legal principles that guide the regulation of AI.²⁰⁴⁷ The Data Ethics Commission suggested a risk-based approach to the regulation of AI, which distinguishes five levels of criticality in a "criticality pyramid" and respective measures in its risk-adapted regulatory system for the use of algorithmic systems. The Commission also recommended the establishment of "ex ante approval mechanisms and continuous supervision by oversight bodies."²⁰⁴⁸

The German consumer organization federation *Verbraucherzentrale Bundesverband* (vzbv) favored the creation of the Commission and strongly supported the recommendations, as did the main German industry body *Bundesverband der Deutschen Industrie* (BDI).²⁰⁴⁹ The vzbv further emphasized that the aim of Automated Decision Making (ADM) regulation must be to ensure compliance with existing laws. Toward that goal, "it must be possible for supervisory authorities to scrutinise and verify the legality of ADM systems and their compliance with existing laws so that they can impose penalties if the law is infringed."²⁰⁵⁰ Vzbv also noted it is "important to ensure consumers' self-determination when making decisions, to strengthen consumers' confidence in ADM systems by creating transparency and to foster competition and innovation."

Public Participation

Germany's national AI strategy points out that the 2019 data strategy is based on "broad public consultation and a host of expert discussions," though participation in developing and updating its AI strategy was primarily limited to "experts in expert forums." ²⁰⁵¹

²⁰⁴⁶ Bundesministerium der Justiz und für Verbraucherschutz, *Report of the Data Ethics Commission Strengthens Data Protection* (Oct. 23, 2019),

 $[\]underline{https://www.bfdi.bund.de/SharedDocs/Pressemitteilungen/EN/2019/24_Datenethikkommission.h} \ \underline{tml}$

²⁰⁴⁷ Datenethikkommission, *Opinion of the Data Ethics Commission—Executive Summary* (Oct. 23, 2019), https://www.bfdi.bund.de/SharedDocs/Downloads/EN/Datenschutz/Data-Ethics-Commission Opinion.pdf?

²⁰⁴⁸ Louisa Well, *Algorithmwatch Automating Society Report - Germany* (2020), https://automatingsociety.algorithmwatch.org/report2020/germany/

²⁰⁴⁹ Vzbz, Communication between the Editor and Isabelle Buscke (Nov. 27, 2020)

²⁰⁵⁰ Vzbv, Artificial Intelligence: Trust is Good, Control is Better (2019),

https://www.vzbv.de/sites/default/files/2019 vzbv factsheet artificial intelligence.pdf

2051 German Federal Government, Artificial Intelligence Strategy of the German Federal

Government (Dec. 2020), https://www.ki-strategiedeutschland.de/files/downloads/Fortschreibung KI-Strategie engl.pdf

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One AI initiative, *Plattform Lernende Systeme* (Platform for Self-Learning Systems),²⁰⁵² focuses specifically on fostering dialogue between different stakeholders, like civil society, government, and business on the topic of self-learning systems. The Platform also aims to "shape self-learning systems to ensure positive, fair and responsible social coexistence" as well as strengthen skills for developing and using self-learning systems.²⁰⁵³ The IT Security, Privacy, Legal and Ethical Framework working group has published several papers on AI security and ethical issues.²⁰⁵⁴

To inform the public about AI policy, the German government created a website (KI-Strategie-Deutschland.de) to provide information on AI strategy implementation and new policy developments.²⁰⁵⁵ *Plattform Lernende Systeme* also offers a map that shows AI developments across Germany by region.²⁰⁵⁶

Germany's federal parliament also set up a Study Commission comprised in equal parts of parliamentary representatives and experts called the "Study Commission on Artificial Intelligence, Social Responsibility, and Economic, Social and Ecological Potential." The Commission's aim was to develop recommendations on AI and examine its impact on "our value systems, fundamental and human rights, and [its] benefits for society and the economy." Some of their meetings were broadcasted on parliamentary television or could be attended in person. After two years of work, the Study Commission presented its final report to the federal parliament (Bundestag) on October 28, 2020. The Commission's findings were debated in the Bundestag on November 5, 2020.

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 $^{^{2052}}$ Literally "Platform for Self-Learning Systems", but self-branded in English as Platform for AI

²⁰⁵³ Lernende Systeme, *Mission Statement*, https://www.plattform-lernende-systeme.de/mission-statement.html

²⁰⁵⁴ Lernende Systeme, *WG 3: IT Security, Privacy, Legal and Ethical Framework,* https://www.plattform-lernende-systeme.de/wg-3.html

²⁰⁵⁵ German Federal Government, *KI-Strategie*, https://www.ki-strategie-deutschland.de/home.html

²⁰⁵⁶ Lernende Systeme, *Artificial Intelligence in Germany*, https://www.plattform-lernende-systeme.de/map-on-ai.html

²⁰⁵⁷ German Parliament, Enquete-Kommission, Künstliche Intelligenz – Gesellschaftliche Verantwortung und wirtschaftliche, soziale und ökologische Potenziale,

https://www.bundestag.de/webarchiv/Ausschuesse/ausschuesse19/weitere gremien/enquete ki ²⁰⁵⁸ German Parliament, *Executive Summary of the Final Report of the Study Commission on Artificial Intelligence* (Oct. 27, 2020),

 $[\]frac{https://www.bundestag.de/resource/blob/804184/f31eb697deef36fc271c0587e85e5b19/Kurzfassung-des-Gesamtberichts-englische-Uebersetzung-data.pdf}$

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EU Digital Services Act

As an EU member state, Germany shall apply the EU Digital Services Act (DSA).²⁰⁵⁹ The DSA regulates online intermediaries and platforms. Its main objective is to prevent illegal and harmful activities online and the spread of disinformation. The DSA also bans targeted advertising based on a person's sexual orientation, religion, ethnicity, or political beliefs. The DSA also bans targeted advertising to minors based on profiling.

Through the 2022 Strengthened Code of Practice on Disinformation,²⁰⁶⁰ which counts as a mitigation measure under the DSA, signatories commit to take action in several domains, such as demonetizing the dissemination of disinformation; ensuring the transparency of political advertising; empowering users; enhancing the cooperation with fact-checkers; and providing researchers with better access to data.

EU AI Act

As an EU member State, Germany is bound by the EU AI Act.²⁰⁶¹ The EU AI Act is a risk-based market regulation which supports the objective of promoting a human-centric approach to AI and making the EU a global leader in the development of secure, trustworthy and ethical AI. The first provisions of the AI Act entered into force on August 1, 2024. EU countries have until the end of 2025 to designate institutions as oversight and supervisory authorities.²⁰⁶²

Data Protection

Since Germany is an EU Member State, the General Data Protection Regulation (GDPR)²⁰⁶³ is directly applicable in Germany and to Germans. The aim of the GDPR is to "strengthen individuals' fundamental rights in the digital age and facilitate business by clarifying rules for companies and public bodies in

²⁰⁵⁹ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act) (Oct. 21, 2022), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022R2065

²⁰⁶⁰ European Commission, *The 2022 Code of Practice on Disinformation*, https://digital-strategy.ec.europa.eu/en/policies/code-practice-disinformation

²⁰⁶¹ European Parliament, Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act) (Jul. 12, 2024), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32024R1689

²⁰⁶² European Commission, *Artificial Intelligence - Questions and Answers*, Press Corner (Aug. 1, 2024), https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_1683

²⁰⁶³ EUR-Lex, *General Data Protection Regulation (GDPR) Summary* (Jan. 7, 2022), https://eur-lex.europa.eu/EN/legal-content/summary/general-data-protection-regulation-gdpr.html

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the digital single market. A single law will also do away with the current fragmentation in different national systems and unnecessary administrative burdens." ²⁰⁶⁴ The GDPR entered into force in May 2016 and has applied since May 2018.

The activities of law enforcement authorities have been addressed at the EU level by the EU Data Protection Law Enforcement Directive (LED).²⁰⁶⁵ The directive ensures that the "personal data of victims, witnesses, and suspects of crime are duly protected and will facilitate cross-border cooperation in the fight against crime and terrorism."²⁰⁶⁶ The LED prohibits any decision based solely on automated processing, unless it is provided by law, and of profiling that results in discrimination.²⁰⁶⁷

The Federal Data Protection Act (*Bundesdatenschutzgesetz*, BDSG) was designed to bring the German privacy law on par with the GDPR and the LED. It is usually referred to as the "BDSG-new" since it replaced the former BDSG. 2068 The German Federal Cabinet approved the Draft Law 2069 to amend the BDSG in February 2024. After the legislative body's (Bundesrat) opinion, the Draft Law will be discussed by the Federal Parliament (Bundestag). 2070 The Draft Law institutionalizes a committee of Independent German Federal and State Data Protection Supervisory Authorities (Data Protection Conference—DSK), whose decisions will be legally non-binding. According to the Draft Law, companies and institutions that process personal data for scientific, historical, or statistical

²⁰⁶⁴ European Commission, *Legal Framework of EU Data Protection*, https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection en

²⁰⁶⁵ Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

²⁰⁶⁶ European Commission, *Legal Framework of EU Data Protection*, https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection en

²⁰⁶⁷ Article 11 (1) and (2) of the LED, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

²⁰⁶⁸ Federal Data Protection Act (Bundesdatenschutzgesetz, BDSG), https://www.gesetze-iminternet.de/bdsg 2018/

Bundesregierung, Draft of a First Act to Amend the Federal Data Protection Act [Entwurf eines Ersten Gesetzes zur Änderung des Bundesdatenschutz- gesetzes] (Feb. 6, 2024), https://www.bmi.bund.de/SharedDocs/gesetzgebungsverfahren/DE/Downloads/kabinettsfassung/VII4/aendg-bdsg.pdf

²⁰⁷⁰ Bundesministerium des Innern und für Heimat, *Erstes Gesetz zur Änderung des Bundesdatenschutzgesetzes*, Gesetzgebungverfahren (Aug. 9, 2023), https://www.bmi.bund.de/SharedDocs/gesetzgebungsverfahren/DE/aendg_bdsg.html

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purposes and act as joint controllers may be subject to the supervision of a single German supervisory authority, and it is possible to designate a supervisory authority that is competent for joint controllers who are subject to the supervision of different supervisory authorities. The Draft Law would allow data controllers to rely on an exception when the interest in the confidentiality of business and trade secrets outweighs the data subjects' right of access and would create a new legal basis for scoring in certain circumstances.

In addition to the BDSG-new, there are various sector-specific data protection regulations, such as those governing financial and energy industries. For example, the Telecommunications Telemedia Data Protection Act (TTDSG) set to be enforced in 2023, contains regulations about cookie management and Personal Information Management Systems.²⁰⁷¹ The name of the regulation was changed to Telecommunications Digital Services Data Protection Act (TDDDG) in 2024 as a part of the introduction of the Digital Services Act. The contents are essentially identical.²⁰⁷²" Further, the German Civil Code Article 327q is intended to protect user privacy in cases where a consumer gives their personal data to access a service.²⁰⁷³

The EU Charter of Fundamental Rights more generally provides that EU citizens have the right to protection of their personal data. Article 8 of the Charter states that: "Everyone has the right to the protection of personal data concerning him or her. Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law."

Germany is also a member of the Council of Europe and ratified the Council of Europe's Convention 108+ for the protection of individuals with regard to the processing of personal data.²⁰⁷⁴ The German Federal Council introduced a draft law in July 2024 to protect personal rights from deepfakes under criminal law. The draft law addresses privacy concerns related to deepfake technologies and provides coverage for individuals whose rights to privacy are violated.²⁰⁷⁵

 $^{^{2071}}$ TDDDG, Telekommunikation-Digitale-Dienste-Datenschutz-Gesetz, https://gesetz-ttdsg.de 2072 Ibid

²⁰⁷³ Federal Ministry of Justice, *German Civil Code*, https://www.gesetze-im-internet.de/englisch bgb/

²⁰⁷⁴ Council of Europe, *Modernised Convention for the Protection of Individuals with Regard to the Processing of Personal Data* (May 18, 2018), https://www.coe.int/en/web/data-protection/convention108-and-protocol

²⁰⁷⁵ Bundesrat, *Entwurf eines Gesetzes zum strafrechtlichen Schutz von Persönlichkeitsrechten vor Deepfakes* (Jul. 5, 2024), https://www.bundesrat.de/SharedDocs/drucksachen/2024/0201-0300/222-24(B).pdf? blob=publicationFile&v=1

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Al Oversight

The German Federal Commissioner for Data Protection and Freedom of Information (*Der Bundesbeauftragte für den Datenschutz und die Informationsfreiheit*) is the national data protection authority for Germany. It is however only in charge of federal government authorities and private telecoms and postal services. ²⁰⁷⁶ The Federal Data Protection Commissioner serves as the joint representative of the German data protection authorities within the European Data Protection Board. ²⁰⁷⁷

The Federal Data Protection Commissioner is a member of the Global Privacy Assembly since 2002. It co-sponsored the 2018 GPA Declaration on Ethics and Data Protection in AI²⁰⁷⁸ and the 2023 GPA Resolution on Generative AI.²⁰⁷⁹ The Federal Data Protection Commissioner also sponsored the 2020 GPA Resolution on AI Accountability.²⁰⁸⁰ However, the Federal Data Protection Commissioner did not endorse the 2022 GPA Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology.²⁰⁸¹

Any other private entity and all other authorities in Germany are regulated by the relevant state DPA. Several State DPA are members of the Global Privacy Assembly but none of them has endorsed GPA's AI-related resolutions.²⁰⁸²

²⁰⁷⁶ Federal Commissioner for Data Protection and Freedom of Information, *Tasks and Powers*, *BfDI*, https://www.bfdi.bund.de/EN/BfDI/UeberUns/DieBehoerde/diebehoerde_node.html

²⁰⁷⁷ Federal Commissioner for Data Protection and Freedom of Information, *The European Data Protection Board (EDPB)*, BfDI,

https://www.bfdi.bund.de/EN/Fachthemen/Gremienarbeit/EuropaeischerDatenschutzausschuss/europaeischerdatenschutzausschuss node.html

²⁰⁷⁸ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), http://globalprivacyassembly.org/wp-

content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

²⁰⁷⁹ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf.

²⁰⁸⁰ Global Privacy Assembly, *Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

²⁰⁸¹ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

²⁰⁸² Global Privacy Assembly, List of Accredited Members,

 $[\]frac{https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf$

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The Federal Data Protection Commissioner is also one of the members of the committee of Independent German Federal and State Data Protection Supervisory Authorities (Data Protection Conference—DSK). The DSK published a position paper in May 2024, ensuring that the member data protection authorities are prepared to be the designated national supervisory authority under the EU AI Act.²⁰⁸³ In the following days, the DSK published guidelines for implementing and using AI systems in compliance with the EU's data protection regulations.²⁰⁸⁴ The guidelines aim to clarify uncertainties in the use of AI systems and provide pre-implementation and implementation guidance with compliance requirements.

The Federal Data Protection Commissioner is also a member of the G7-Roundtable of the data protection and privacy authorities. The Roundtable issued the Statement on Generative AI²⁰⁸⁵ in 2023, the Statement on the Role of Data Protection Authorities in Fostering Trustworthy AI,²⁰⁸⁶ and the Statement on AI and Children²⁰⁸⁷ in 2024. The Federal Data Protection Commissioner played a significant role in the statements.²⁰⁸⁸

The G7 Data Protection Authorities (DPAs) adopted a statement on AI governance in October 2024. They pointed out the critical role of DPAs in the realm of AI, emphasizing the need for protecting the right to privacy and data protection more than ever. The adopted statement "calls on policymakers and regulators for approaches that recognise the critical role of the DPAs in ensuring that AI technologies are developed and deployed responsibly and in identifying and addressing AI issues at their source." The statement emphasized that "DPAs

²⁰⁸⁴ Datenschutzkonferenz, *Künstliche Intelligenz und Datenschutz* (May 3, 2024), https://www.datenschutzkonferenz-

online.de/media/oh/20240506 DSK Orientierungshilfe KI und Datenschutz.pdf

https://www.bfdi.bund.de/SharedDocs/Downloads/EN/G7/2024_Statement-Trustworthy-AI.pdf? blob=publicationFile&v=2

²⁰⁸³ Datenschutzkonferenz, *Nationale Zuständigkeiten für die Verordnung zur Künstlichen Intelligenz (KI-VO)*, (May. 3, 2024), https://www.datenschutzkonferenz-online.de/media/dskb/20240503_DSK_Positionspapier_Zustaendigkeiten_KI_VO.pdf

²⁰⁸⁵ Roundtable of G7 Data Protection and Privacy Authorities, *Statement on Generative AI* (Jun. 21, 2023), https://www.bfdi.bund.de/SharedDocs/Downloads/EN/G7/2023_Statement-AI.pdf? blob=publicationFile&v=1

²⁰⁸⁶ Roundtable of G7 Data Protection and Privacy Authorities, *Statement on the Role of Data Protection Authorities in Fostering Trustworthy AI* (Oct. 11, 2024),

²⁰⁸⁷ Roundtable of G7 Data Protection and Privacy Authorities, *Statement on AI and Children*, (Oct. 11, 2024), https://www.bfdi.bund.de/SharedDocs/Downloads/EN/G7/2024_Statement-AI-Children.pdf? blob=publicationFile&v=3

²⁰⁸⁸ Federal Commissioner for Data Protection and Freedom of Information, *BfDI at G7 Roundtable in Rome*, BfDI, (Oct. 11, 2024),

 $[\]underline{https://www.bfdi.bund.de/SharedDocs/Pressemitteilungen/EN/2024/13\ G7-Roundtable-Rom.html}$

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apply a human-centred lens to their mandate and have vast experience with datadriven processing and in operationalising many data protection overarching principles that can be transposed into broader AI governance frameworks, in particular fairness, accountability, transparency, and security."²⁰⁸⁹

In Bavaria, there is one authority responsible for the private sector and one for the public sector: the Data Protection Authority of Bavaria for Private Sector (BayLDA) and the Bavarian Data Protection Commissioner, which is responsible for enforcing data rights against public authorities and government agencies. ²⁰⁹⁰ In other states, one authority is responsible for all data protection supervision and enforcement in the state. One example of this is Hessen, where the Hessian Commissioner for Data Protection and Freedom of Information is responsible for the public authorities, government agencies as well as the private sector. ²⁰⁹¹

In 2021, numerous German DPAs launched a collective investigation on the use by German companies of third-party providers outside the EU and their compliance with the 2020 European Court of Justice's *Schrems II* decision regarding international data transfers. The Court has made clear that DPAs shall intervene to suspend or prohibit transfers which do not match the *Schrems II* criteria. ²⁰⁹²

The Hamburg Commissioner for Data Protection and Freedom of Information published an advisory in June 2024 on Meta's new privacy policy, planned AI model training protocol, and the utilization conditions of users' personal data from social media applications. The Hamburg Commissioner provided helpful information on users' options and what they can do, Meta's new privacy policy's aims and goals, and what happens next.²⁰⁹³ Furthermore, the BayLDA published guidelines regarding the application of the GDPR and other legal requirements to the processing of personal data by AI systems. The BayLDA

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²⁰⁸⁹ Roundtable of G7 Data Protection and Privacy Authorities, *G7 DPAs' Communiqué - Privacy in the Age of Data* (Oct. 11, 2024),

²⁰⁹⁰ Bayerisches Landesamt für Datenschutzaufsicht, *Zuständigkeit des BayLDA*, *Aufgaben*, https://www.lda.bayern.de/de/aufgaben.html

Hessische Beauftragte für Datenschutz und Informationsfreiheit , Zuständigkeit – Aufgaben und Organisation, Über Uns, https://datenschutz.hessen.de/ueber-uns/aufgaben-und-organisation
 European Data Protection Board, Coordinated German investigation of international data transfers (Jul. 2021), https://edpb.europa.eu/news/national-news/2021/coordinated-german-investigation-international-data-transfers en

²⁰⁹³ Hamburg Commissioner for Data Protection and Freedom of Information, *AI Training with Personal Data on Instagram and Facebook*, Press Release (Jun. 27, 2024), https://datenschutz-hamburg.de/fileadmin/user_upload/HmbBfDI/Datenschutz/Informationen/240627 PM AI Training with personal data Insta Facebook EN.pdf

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also expressed its opinion on the significant role and responsibility of data protection supervisory authorities in the field of AI supervision.²⁰⁹⁴"

The German Institute for Human Rights, founded in 2001 by the German Bundestag (Parliament) as an independent national institution, works to ensure the observation and promotion of human rights by the German government in Germany and abroad.²⁰⁹⁵ The Institute published an interview on protecting human rights when applying AI in the context of elderly care in 2019²⁰⁹⁶ and has emphasized the importance of assessing and preventing the human rights risks of Artificial Intelligence in 2021,²⁰⁹⁷ though the Institute has not indicated that it sees a sustained oversight of AI-related human rights infringements as a priority.

The Federal Ministry of the Interior and Community is creating the Advisory Center for AI (BeKI) as a central point for contacting and coordinating for AI projects at the federal level. BeKI is still under development²⁰⁹⁸ and aims to ensure a coordinated approach, advise on the legal, ethical, and technical topics for responsible and transparent use of AI, and transform administrative processes sustainably.²⁰⁹⁹

The State Commissioner for Data Protection in Lower Saxony announced the establishment of the Office for AI under his authority in 2024. The new unit will support the use of AI technologies in relation to data protection laws, serve as a competence center for AI-related questions, and collaborate with other relevant authorities. The Commissioner Lehmkemper pointed out: "The establishment of the staff unit is an important step to proactively meet the challenges that AI brings with it, to ensure the protection of personal data in an increasingly digitalized world, and at the same time to accompany the opportunities of technical development." The

https://www.lda.bayern.de/de/ki.html?mkt_tok=MTM4LUVaTS0wNDIAAAGVQHhz4nfvGN0UqzOzdh9guQEZYr0BeSK-YiffEsdz8i0DT-

iweup1RCfhQNvco0i4ynZFqggLzoW0oAQM0DXYnSV 02iMc1DxKxuVAD-pGoad

²⁰⁹⁵ German Institute for Human Rights, *Das Institut*, https://www.institut-fuer-menschenrechte.de/das-institut

²⁰⁹⁴ BayLDA, KI & Datenschutz, Künstliche Intelligenz (Jun. 2024),

²⁰⁹⁶ German Institute for Human Rights, *Miteinander von Mensch und Maschine* (Nov. 19, 2019), https://www.institut-fuer-menschenrechte.de/aktuelles/detail/miteinander-von-mensch-und-maschine

²⁰⁹⁷ German Institute for Human Rights, *Algorithmische Entscheidungssysteme* (Jul. 2021), https://www.institut-fuer-

<u>menschenrechte.de/fileadmin/Redaktion/Publikationen/Information/Information_Algorithmische_</u>
<u>Entscheidungssysteme.pdf</u>

Deutscher Bundestag, *Beratungszentrum für Künstliche Intelligenz*, Presse (Jul. 19, 2024), https://www.bundestag.de/presse/hib/kurzmeldungen-1013594

²⁰⁹⁹ Federal Ministry of the Interior and Community, *Beratungszentrum für Künstliche Intelligenz* (*BeKI*), https://www.digitale-

 $[\]frac{verwaltung.de/SharedDocs/downloads/Webs/DV/DE/Transformation/akteurssteckbrief-beki.pdf? \underline{blob=publicationFile\&v=5}$

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unit also aims to devise safeguards for the implementation and evaluation of AI, evaluate the potential hazards of AI-based systems, provide assistance for research, promote awareness among various stakeholders, and conclusively ensure the implementation of AI in accordance with data protection regulations.²¹⁰⁰

Algorithmic Transparency

Germany is subject to the GDPR and Convention 108+. Germans have a general right to obtain access to information about automated decision-making and to the factors and logic of an algorithm.²¹⁰¹

The 2020 Recommendation of the Council of Europe Committee of Ministers on human rights impacts of algorithm systems²¹⁰² specifically emphasizes requirements on transparency, accountability, and effective remedies. The Recommendation provides that "The use of algorithmic systems in decision-making processes that carry high risks to human rights should be subject to particularly high standards as regards the explainability of processes and outputs."²¹⁰³ The Recommendation also clarifies that "Contestation should include an opportunity to be heard, a thorough review of the decision and the possibility to obtain a non-automated decision. This right may not be waived, and should be affordable and easily enforceable before, during and after deployment, including through the provision of easily accessible contact points and hotlines."²¹⁰⁴

The Ministry of Education and Research started a funding priority for AI R&D projects on explainability and transparency in 2019. The Ministry stated that improving explainability and transparency are two of the Federal government's central research goals.²¹⁰⁵ Funding is "aimed at collaborative projects between

²¹⁰⁰ Der Landesbeauftragte für den Datenschutz Niedersachsen, *Landesbeauftragter für den Datenschutz richtet Stabsstelle für Künstliche Intelligenz ein*, Pressemitteilung Nr. 16/2024, (Sept. 30, 2024),

https://www.lfd.niedersachsen.de/startseite/infothek/presseinformationen/landesbeauftragter-furden-datenschutz-richtet-stabsstelle-fur-kunstliche-intelligenz-ein-

^{236012.}html?mkt_tok=MTM4LUVaTS0wNDIAAAGV7crKExGrGJX95nn5b50_t9A9SAwOPp lMboISIfSOga6sBm2igpC6QVtIlry4tSAbsGvr9X_gf3e83CBPYzT-

FwhRF34URxvymecLMr498FHI

²¹⁰¹ See Recital 63 and Article 22 of the GDPR. Article 9 c) of the Convention 108+ as well as Recital 77, *Explanatory Report*, *Convention 108*+, p. 24, https://rm.coe.int/convention-108-convention-for-the-protection-of-individuals-with-regar/16808b36f1

²¹⁰² Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020),

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

²¹⁰³ Ibid

²¹⁰⁴ Ibid

²¹⁰⁵ Bundesministerium für Bildung und Forschung, *KI-Erklärbarkeit und Transparenz*, https://www.softwaresysteme.pt-dlr.de/de/ki-erkl-rbarkeit-und-transparenz.php

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science and industry in an interdisciplinary composition."²¹⁰⁶ The German consumer organization vzbv emphasized in 2019 that the aim of automated decision-making regulation must be to ensure compliance with existing laws.²¹⁰⁷

In 2020, the German Data Ethics Commission for its part sees auditability, explainability, and redress possibilities as crucial for algorithm safety. ²¹⁰⁸ However, even though Germany has had a significant impact on the drafting of the EU AI Act and its transparency regulations, AlgorithmWatch has noted that Germany (and specifically its Ministry of the Interior) has in recent years tried to water down transparency obligations for AI systems in the AI Act, most notably with regard to exemptions for AI use in "law enforcement, migration, asylum and border control," including remote biometric identification systems. ²¹⁰⁹

According to AlgorithmWatch, 2110 the data protection agencies of the federal government and eight German federal states stated that greater transparency in the implementation of algorithms in the administration was indispensable for the protection of fundamental rights.²¹¹¹ The agencies demanded that if automated systems are used in the public sector, it is crucial that processes are intelligible and can be audited and controlled. In addition, public administration officials must be able to provide an explanation of the logic of the systems used and the consequences of their use. Self-learning systems must also be accompanied by technical tools to analyze and explain their methods. An audit trail should be created, and the software code should be made available to the administration and, if possible, to the public. According to the position paper, there need to be mechanisms for citizens to demand redress or reversal of decisions, and the processes must not be discriminating. In cases where there is a high risk for citizens, there needs to be a risk assessment done before deployment. Very sensitive systems should require authorization by a public agency that has yet to be created.

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²¹⁰⁶ OECD G20 Digital Economy Task Force, *Examples of AI National Policies* (2020), https://www.mcit.gov.sa/sites/default/files/examples-of-ai-national-policies.pdf

²¹⁰⁷ Vzbv, Artificial Intelligence: Trust is Good, Control is Better (2019),

https://www.vzbv.de/sites/default/files/2019 vzbv factsheet artificial intelligence.pdf

2108 Datenethikkommission, *Opinion of the Data Ethics Commission* (Oct. 2019),

https://www.bfdi.bund.de/SharedDocs/Downloads/EN/Datenschutz/Data-EthicsCommission Opinion.pdf? blob=publicationFile&v=2

²¹⁰⁹ Nikolett Aszódi and Matthias Spielkamp, *How the German government decided not to protect people against the risks of AI* (Dec. 6, 2022), https://algorithmwatch.org/en/german-government-risks-of-ai/
²¹¹⁰ Algorithm Watch, *Automating Society: Germany* (Jan. 29, 2019),

²¹¹⁰ Algorithm Watch, *Automating Society: Germany* (Jan. 29, 2019), https://algorithmwatch.org/en/automating-society-2019/germany

²¹¹¹ Freedom of Information Commissioners in Germany, *Transparenz der Verwaltung beim Einsatz von Algorithmen für gelebten Grundrechtsschutz unabdingbar* (Oct. 16, 2018), https://www.datenschutzzentrum.de/uploads/informationsfreiheit/2018 Positionspapier-Transparenz-von-Algorithmen.pdf

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One of the State DPAs, the Berlin Commissioner for Data Protection and Freedom of Information (BlnBDI), rendered a decision reasserting the importance of algorithmic transparency. In May 2023, the Berlin Data Protection Authority fined a Berlin-based bank € 300,000. The Bank used an online form to request various data about the applicant's income, occupation and personal details for a credit card application. Based on the information requested and additional data from external sources, the bank's algorithm rejected the customer's application without any justification. The algorithm is based on criteria and rules previously defined by the bank. Since the client had a good credit rating and a regular high income, he doubted the automated rejection and complained to the Berlin data protection commissioner. The lack of transparency regarding the automated decision led to the imposition of a fine by the State DPA.²¹¹²

Mannheim, in collaboration with eight other cities across Europe and with the help of Eurocities' Digital Forum, adopted an algorithm register, the Algorithmic Transparency Standard in January 2023. The aim is to provide more information for residents about the use of algorithm by municipalities and their impact. The register includes a range of information such as the type and purpose of an algorithm, the department using the algorithm, the geographical area and domain it relates to and a risk category. It also includes details on the data source and training data, any bias and mitigation, and human oversight. This initiative builds on similar algorithm registers launched in Amsterdam and Helsinki in September 2020.

According to André Sobczak, Secretary General, Eurocities, "The efforts undertaken by these cities aim to set a standard for the transparent and ethical use of algorithms while their use is still in its relative infancy across city administrations in Europe. In this way, they seek to offer both a safeguard for people whose data may be used by algorithms and have created a validated model that other cities can use straight away, without having to invest further resources themselves." ²¹¹⁴

The German Institution for Standardization (DIN) issued the DIN SPEC 92001-3 in 2023 as a guide for appropriate approaches and methods to enhance explainability throughout the life cycle of AI systems. The guide describes quality criteria, which promote explainable AI, for all types of AI systems and for all sectors. These criteria form the specific requirements for explainability and provide

²¹¹³ Algorithm register, *Algorithmic Transparency Standard*, https://www.algorithmregister.org
²¹¹⁴ Eurocities, *Nine cities set standards for the transparent use of Artificial Intelligence* (Jan. 19, 2023), https://eurocities.eu/latest/nine-cities-set-standards-for-the-transparent-use-of-artificial-intelligence/

²¹¹² Berliner Beauftragte für Datenschutz und Informationsfreiheit (BlnBDI), *Computer sagt Nein, Pressemitteilung* (May 31, 2023), https://www.datenschutz-berlin.de/pressemitteilung/computer-sagt-nein

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proof of technical operation correctness, allowing organizations to embed transparency principles in their AI-based applications. The guide is the outcome of the CERTIFIED AI project, which was financed by the Ministry of Economic Affairs, Industry, Climate Protection and Energy of the State of North Rhine-Westphalia.²¹¹⁵

The Federal Office for Information Security (BSI) published a whitepaper on transparency of AI systems in 2024. In the whitepaper, the BSI highlighted the importance of transparency for AI system's trustworthiness and defined transparency in the context of AI systems for different stakeholders. The definition has been made in a technology-neutral and future-proof manner and covers the entire ecosystem related to AI, considering transparency beyond the actual system. The whitepaper also enumerates the transparency requirements of EU AI Act and examines the opportunities and risks of transparent AI systems. ²¹¹⁶

The Federal Ministry for Digital and Transport (BMDV) and Federal Ministry of the Interior and Community (BMI) issued the AI guidelines in June 2024. The guidelines outline the framework for utilizing AI within the BMDV and BMI. It has been emphasized that the BMDV "use and design AI systems in such a way that results, modes of operation, decision-making principles and paths are presented as comprehensibly as possible for all those involved (explainable AI). This enables people to consciously acknowledge the results of AI, take responsibility for them and intervene if necessary. We make the use of AI recognizable." Furthermore, transparency regarding existing data, AI literacy, and broad participation opportunities in the AI environment are promoted. ²¹¹⁷ The BMI elucidated the manner and rationale for the utilization of AI, as well as their guiding principles regarding its application. ²¹¹⁸

Facial Recognition

German governments have launched several projects on facial recognition technology, but these have been met with considerable public resistance. In 2017, Hamburg police deployed facial recognition technology in the wake of the G20

²¹¹⁵ DIN, *Künstliche Intelligenz transparenter machen*, Presse (Jul. 19, 2023), https://www.din.de/de/din-und-seine-partner/presse/mitteilungen/kuenstliche-intelligenz-transparenter-machen-931058

²¹¹⁶ Bundesamt für Sicherheit in der Informationstechnik, *Transparenz von KI-Systemen* (Jul. 1, 2024), https://www.bsi.bund.de/SharedDocs/Downloads/DE/BSI/KI/Whitepaper-Transparenz-KI-Systeme.pdf? blob=publicationFile&v=3

²¹¹⁷ Bundesministerium für Digitales und Verkehr, *BMDV-KI-Leitlinien* (Jun. 17, 2024), https://bmdv.bund.de/SharedDocs/DE/Anlage/K/presse/pm-047-ki-richtlinie.pdf? blob=publicationFile

²¹¹⁸ Bundesministerium des Innern und für Heimat, *KI-Leitbild für das Ressort BMI* (Jun. 2024), https://www.bmi.bund.de/SharedDocs/downloads/DE/publikationen/themen/itdigitalpolitik/BMI24014.pdf? blob=publicationFile&v=3

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protests, which led to a three-year legal battle involving the Hamburg DPA and several courts that ended with the police deleting its biometric database in 2020. ²¹¹⁹ In 2018, the German Ministry of the Interior deployed facial recognition technology at a large train station in Berlin, sparking opposition from civil society. ²¹²⁰ There was further outcry in 2020, when *Der Spiegel* reported that Germany planned to set up cameras capable of identifying people at 134 train stations and 14 airports. ²¹²¹ In 2021, Germany's incoming coalition government said it would exclude biometric recognition in public spaces as well as automated state scoring systems by AI. ²¹²² A January 2023 study showed that German citizens, when asked about facial recognition technology, generally "call for strong regulations to address associated risks," although citizens' trust in the government is correlated with their attitudes towards facial recognition technology. ²¹²³

In late 2022 and early 2023, Germany has made clear it has some reservations on the AI Act, although its position seems to mesh well with the Act's general approach.²¹²⁴ Germany's position has been somewhat inconsistent: the German government favored a total ban on remote biometric identification technology in 2021 as per its coalition agreement²¹²⁵ while, in 2023, it only

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²¹¹⁹ Identity Week, *Hamburg Deletes Facial Database for G20* (Jun. 2, 2020), https://identityweek.net/hamburg-deletes-facial-database-for-g20/

²¹²⁰ Janosch Delcker, *Big Brother in Berlin*, Politico (Sept. 13, 2018),

https://www.politico.eu/article/berlin-big-brother-state-surveillance-facial-recognition-technology/

Phillipp Grüll, Germany's Plans for Automatic Facial Recognition Meet Fierce Criticism, Euractiv (Jan. 10, 2020), https://www.euractiv.com/section/data-protection/news/german-ministers-plan-to-expand-automatic-facial-recognition-meets-fierce-criticism/

²¹²² POLITICO, German Coalition Backs Ban on Facial Recognition in Public Places (Nov. 24, 2021), https://www.politico.eu/article/german-coalition-backs-ban-on-facial-recognition-in-public-places/; Alliance for Freedom, Justice, and Sustainability, Dare More Progress: Coalition agreement 2021–2025 between the Social Democratic Party of Germany (SPD), ALLIANCE 90 / THE GREENS and the Free Democrats (FDP).

https://www.welt.de/bin/Koalitionsvertrag%202021-2025.pdf bn-235257672.pdf

²¹²³ Genia Kostka, Léa Steinacker and Miriam Meckel, *Under Big Brother's Watchful Eye: Cross-Country Attitudes Toward Facial Recognition Technology*, Government Information Quarterly, 40(1) (Jan. 2023), https://doi.org/10.1016/j.giq.2022.101761

²¹²⁴ Luca Bertuzzi and Molly Killeen, *Tech Brief: Germany's AI Reservations, Fair Share Moves in the Metaverse* (Jan. 13, 2023), https://www.euractiv.com/section/digital/news/tech-brief-germanys-ai-reservations-fair-share-moves-in-the-metaverse/

²¹²⁵ SPD, Bündnis 90/Die Grünen and FDP, *Mehr Fortschritt Wagen* (2021), https://cms.gruene.de/uploads/assets/Koalitionsvertrag-SPD-GRUENE-FDP-2021-2025.pdf

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supported a ban on *real-time* biometric recognition identification and would allow ex-post identification systems.²¹²⁶

The European Data Protection Board (EDPB) has produced guidelines on the use of facial recognition technologies in the area of law enforcement.²¹²⁷ The EDPB stresses that facial recognition tools should only be used in strict compliance with the Law Enforcement Directive (LED). Moreover, such tools should only be used if necessary and proportionate, as laid down in the Charter of Fundamental Rights."²¹²⁸ After public consultation, the EDPB adopted guidelines for the use of facial recognition technologies in 2023. In version 2.0, practical examples and guidance were provided regarding facial recognition scenarios.²¹²⁹

In 2024, after a terrorist attack in Solingen, the Federal Government presented two draft bills, the so-called "security package," to tighten security measures. The first draft bill, which aims to enhance internal security and the asylum system, empowers the Federal Office for Migration and Refugees to utilize biometric data to ascertain the identity of asylum seekers that do not carry IDs by comparing biometrics with publicly accessible data from the Internet.²¹³⁰ The second draft bill, which aims to improve the fight against terrorism, allows the use of biometric comparison for facial recognition to identify suspects easier.²¹³¹ The security package has been subjected to serious criticism.²¹³²

Predictive Policing

The German police has launched several projects using AI to assist in predictive policing both on the federal and state level. The Federal Crime Agency

https://edpb.europa.eu/system/files/2022-05/edpb-

guidelines 202205 frtlawenforcement en 1.pdf

05/edpb guidelines 202304 frtlawenforcement v2 en.pdf

²¹²⁶ Luca Bertuzzi, *Germany Could Become MEPs' Ally in AI Act Negotiations*, Euractiv (Jan. 9, 2023), https://www.euractiv.com/section/artificial-intelligence/news/germany-could-become-meps-ally-in-ai-act-negotiations/

²¹²⁷ European Data Protection Board, *Guidelines 05/2022 on the use of facial recognition technology in the area of law enforcement* [obsolete] (May12, 2022), https://edph.europa.eu/system/files/2022-05/edph.

²¹²⁸ European Data Protection Board, *EDPB adopts Guidelines on calculation of fines & Guidelines on the use of facial recognition technology in the area of law enforcement*, Press release (May 16, 2022), https://edpb.europa.eu/news/news/2022/edpb-adopts-guidelines-calculation-fines-guidelines-use-facial-recognition_en

²¹²⁹ European Data Protection Board, *Guidelines* 05/2022 on the Use of Facial Recognition Technology in the Area of Law Enforcement, Version 2.0 (Apr. 26, 2023), https://www.edpb.europa.eu/system/files/2023-

²¹³⁰ Deutscher Bundestag, Entwurf eines Gesetzes zur Verbesserung der inneren Sicherheit und des Asylsystems, (Sept. 9, 2024), https://dserver.bundestag.de/btd/20/128/2012805.pdf
²¹³¹ Ibid

²¹³² Svea Windwehr, *Germany Rushes to Expand Biometric Surveillance*, EFF (Oct. 7, 2024), https://www.eff.org/deeplinks/2024/10/germany-rushes-expand-biometric-surveillance

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has used risk scoring for "militant Salafists"²¹³³ while several state police forces have deployed PRECOBS, an anti-burglary system, with varying success. The police of Baden-Württemberg, for instance, started a pilot project with PRECOBS in 2015²¹³⁴ that was ended in 2019 "due to data quality issues."²¹³⁵ North Rhine-Westphalia developed and tested the predictive policing tool SKALA from 2015 to 2018.²¹³⁶ In late 2022, Germany's Constitutional Court started a legal review of surveillance software deployed by police in the state of Hesse since 2017. The software, dubbed 'Hessendata', is based on the US company Palantir's Gotham program and its use has been met with public criticism.²¹³⁷ In the case, the court found that provisions in the laws of the states of Hesse and Hamburg, which enable the police to process data by matching data from various databases and to carry out automatic data analysis, were unconstitutional.²¹³⁸

In the EU AI Act negotiations, Germany called for a ban on systems that would replace human judges in crime and recidivism risk assessment as well, but it also pushed for exemptions for law enforcement in other areas.²¹³⁹

According to Germany's "security package," the Federal Criminal Police Office and the Federal Police will be able to compare biometric data with online sources and evaluate large volumes of data using AI. AI-based analysis can be used to establish connections between information held by law enforcement and the Internet, which is often used for predictive policing. The authority granted to law enforcement could be utilized in the event of a "particularly serious" crime suspicion. ²¹⁴⁰ The widely criticized draft has not yet been enacted into law.

Dominik Gerstner, *Predictive Policing in the Context of Residential Burglary: An Empirical Illustration on the Basis of a Pilot Project in Baden-Württemberg*, Germany, European Journal for Security Research, 3 (2018), https://doi.org/10.1007/s41125-018-0033-0

https://polizei.nrw/artikel/projekt-skala-predictive-policing-in-nrw-ergebnisse

²¹³⁷ Ben Knight, *Germany: Police Surveillance Software a Legal Headache* (Dec. 22, 2022), https://www.dw.com/en/germany-police-surveillance-software-a-legal-headache/a-64186870

 $\frac{https://www.bundesverfassungsgericht.de/SharedDocs/Entscheidungen/EN/2023/02/rs20230216}{1bvr154719en.html}$

²¹³³ Louisa Well, *Algorithmwatch Automating Society Report - Germany* (2020), https://automatingsociety.algorithmwatch.org/report2020/germany/

²¹³⁵ Louisa Well, Algorithmwatch *Automating Society Report - Germany* (2020), https://eutomatingsociety.elgorithmwatch.org/report2020/germany/

https://automatingsociety.algorithmwatch.org/report2020/germany/ 2136 Police North Rhine-Westphalia, *Projekt SKALA* (Jun. 8, 2018)

²¹³⁸ Headnotes to the Judgment of 16 February 2023, 1 BvR 1547/19, 1 BvR 2634/20, Automated Data Analysis (Feb. 16, 2023),

²¹³⁹ Luca Bertuzzi, *Germany Could Become MEPs' Ally in AI Act Negotiations*, Euractiv (Jan. 9, 2023), https://www.euractiv.com/section/artificial-intelligence/news/germany-could-become-meps-ally-in-ai-act-negotiations

²¹⁴⁰ Deutscher Bundestag, *Entwurf eines Gesetzes zur Verbesserung der Terrorismusbekämpfung*, (Sept. 9, 2024), https://dserver.bundestag.de/btd/20/128/2012806.pdf

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Environmental Impact of AI

The German Federal Government has acknowledged the importance of developing AI that is sustainable for the planet. In the 2020 update of Germany's Artificial Intelligence Strategy, the Federal Government says that it "will work to encourage that the technology is designed to be both energy and resource-efficient and is used as an instrument for environmental conservation. Direct and indirect environmental impacts will also be taken into account in all of this, so as to include rebound effects and shifting of environmental problems." There are currently no policies that explicitly refer to both AI and sustainability. However, in April 2024, the G7 Ministers of Climate, Energy, and the Environment committed to "promote and share emerging transformative capacity using artificial intelligence and machine learning to improve the complementary use of remote and in situ environmental data for climate, energy and environment decision making" in the Climate, Energy and Environment Ministers' Meeting Communiqué. 2142

The German Federal Ministry for Economic Cooperation (BMZ) and Development and the United Nations Development Programme (UNDP) announced a new platform designed to help ensure that responsible artificial intelligence is used for sustainable development in October 2024. The platform includes a list of five Sustainable Development Goals (SDG) as well as a way for participants to submit proposals for their initiatives. The initiatives should meet three criteria: (1) the initiative should be international, regional, or global, (2) the initiative should demonstrate its impact of its ability to achieve significant impact, and (3) at least one of the initiatives main goals should be to achieving one of the SDG in a developing country. ²¹⁴⁴

Lethal Autonomous Weapons

The German government's 2018 coalition agreement stated that it "rejects autonomous weapon systems devoid of human control" and called for a global

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²¹⁴⁴ BMZ & UNDP, AI for the Sustainable Development Goals (2024),

https://www.sdgaicompendium.org/

²¹⁴¹ German Federal Government, *Artificial Intelligence Strategy of the German Federal Government*, 2020 Update (Dec. 2020), https://www.ki-strategie-engl.pdf

²¹⁴² G7 Ministers of Climate, Energy, and the Environment, *Climate, Energy and Environment Ministers' Meeting Communiqué* (Apr. 29–30, 2024), https://www.g7italy.it/wp-content/uploads/G7-Climate-Energy-Environment-Ministerial-Communique Final.pdf
²¹⁴³ United Nations Development Programme (UNDP). *Global Collective Action Platform for*

²¹⁴³ United Nations Development Programme (UNDP), Global Collective Action Platform for Responsible AI for Sustainable Development Initiated by UN Development Programme and Germany's Ministry for Economic Cooperation and Development (Oct. 2024), https://www.undp.org/press-releases/global-collective-action-platform-responsible-ai-sustainable-development-initiated-un-development-programme-and-germanys-ministry

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ban.²¹⁴⁵ Also in 2018, in cooperation with the French government, the German government published a joint statement on Lethal Autonomous Weapons at the Meeting of the Group of Governmental Experts on Lethal Autonomous Weapons Systems (LAWS). They wrote, "At the heart of our proposal is the recommendation for a political declaration, which should affirm that State parties share the conviction that humans should continue to be able to make ultimate decisions with regard to the use of lethal force and should continue to exert sufficient control over lethal weapons systems they use."2146

In 2019, the then-Foreign Minister of Germany, Heiko Maas, reasserted the German position as being in favor of a total ban on Lethal Autonomous Weapons Systems, 2147 and the Foreign Ministry organized a virtual forum on LAWS in 2020 to move closer to a "collective normative framework." 2148 Observers have argued, however, that the 2021 German coalition agreement is "ambivalent about legally binding action on autonomous weapons" and that it merely "rejects" these systems instead of pushing for regulation. ²¹⁴⁹

The German government's 2021 coalition agreement states, "We reject lethal autonomous weapon systems that are completely removed from human control. We actively promote their international outlawing. We want the peaceful use of space and cyberspace. For weapons technology developments in biotech, hypersonics, space, cyber and AI, we will take early arms control initiatives. We want to contribute to strengthening norms for responsible state behavior in cyberspace."2150

In October 2022, Germany was one of 70 states that endorsed a joint statement on autonomous weapons systems at the United Nations General

²¹⁴⁵ Konrad Adenauer Stiftung Europe, A New Awakening for Europe. A New Dynamic for Germany. A New Solidarity for Our Country: Coalition Agreement between CDU, CSU, and SPD (2018), https://www.kas.de/c/document library/get file?uuid=bd41f012-1a71-9129-8170-8189a1d06757&groupId=284153

²¹⁴⁶ Permanent Representation of the Federal Republic of Germany to the Conference on Disarmament in Geneva & Représentation Permanente de la France auprès de la Conférence du Désarmement, Meeting of the Group of Governmental Experts on Lethal Autonomous Weapons Systems, Statement by France and Germany (Apr. 2018), http://perma.cc/2FQB-W8FX); US Library of Congress, Regulation of Artificial Intelligence in Selected Jurisdictions (Jan. 2019), https://www.loc.gov/law/help/artificial-intelligence/regulation-artificial-intelligence.pdf

²¹⁴⁷ Federal Foreign Office, Foreign Minister Maas on agreement of guiding principles relating to the use of fully autonomous weapons systems (Nov. 15, 2019), https://www.auswaertigesamt.de/en/newsroom/news/maas-autonomous-weapons-systems/2277194

²¹⁴⁸ Federal Foreign Office, Forum on Lethal Autonomous Weapons Systems (Apr. 2, 2020), https://www.auswaertiges-amt.de/en/aussenpolitik/themen/forum-laws/2330682

²¹⁴⁹ Autonomousweapons.org, New German "Traffic Light Coalition" Ambivalent About Legally Binding Action on Autonomous Weapons (Nov. 26, 2021), https://autonomousweapons.org/newgerman-traffic-light-coalition-ambivalent-about-legally-binding-action-on-autonomous-weapons/ ²¹⁵⁰ SPD, Bündnis 90/Die Grünen and FDP, Mehr Fortschritt Wagen, p. 45 (2021), https://cms.gruene.de/uploads/assets/Koalitionsvertrag-SPD-GRUENE-FDP-2021-2025.pdf

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Assembly. The statement called for the recognition of the dangers of autonomous weapons systems, acknowledged the need for human oversight and accountability, and emphasized the importance of an international framework of rules and constraints. In this joint statement, States declared that they "are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law, including through maintaining human responsibility and accountability in the use of force." ²¹⁵²

At the 78th UN General Assembly First Committee in 2023, Germany voted in favor²¹⁵³ of resolution L.56²¹⁵⁴ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems.

Germany's submission reiterated support for "a legally binding instrument in the framework of the Group of Governmental Experts that prohibits the development, fielding or deployment of lethal autonomous weapons systems that cannot comply with international humanitarian law and are ipso facto prohibited." Germany also supported "a set of regulations of weapons systems with autonomous functions, to ensure that human control is retained at all times [and] the creation of an additional protocol to the Convention on Certain Conventional Weapons that entails the prohibition of lethal autonomous weapons systems operating outside of human control and a responsible chain of command." 2155

Germany also co-facilitated the Pact for the Future adopted by UN Member States in September 2024 that provides concrete measures to ensure a world that is safer, more peaceful, sustainable, and inclusive for the generations to

²¹⁵¹ Ousman Noor, 70 states deliver joint statement on autonomous weapons systems at UN General Assembly, Stop Killer Robots (Oct. 21, 2022) https://www.stopkillerrobots.org/news/70-states-deliver-joint-statement-on-autonomous-weapons-systems-at-un-general-assembly/

²¹⁵² United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

 $[\]underline{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm\ en.pdf}$

²¹⁵³ Isabelle Jones, *164 states vote against the machine at the UN General Assembly*, Stop Killer Robots (Nov. 1, 2023), https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

²¹⁵⁴ General Assembly, *Resolution L56: Lethal Autonomous Weapons* (Oct.12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

²¹⁵⁵ United Nations Secretary-General, *Lethal Autonomous Weapons Systems* (Jul. 1, 2024), https://docs-library.unoda.org/General_Assembly_First_Committee_-Seventy-Ninth_session (2024)/A-79-88-LAWS.pdf

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come. ²¹⁵⁶ As per the provisions of the Pact, the Member States have taken the decision to "advance with urgency discussions on lethal autonomous weapons systems through the Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems with the aim to develop an instrument, without prejudging its nature, and other possible measures to address emerging technologies in the area of lethal autonomous weapons systems, recognizing that international humanitarian law continues to apply fully to all weapons systems, including the potential development and use of lethal autonomous weapons systems."²¹⁵⁷

Germany participated in an international summit on the responsible application of artificial intelligence in the military domain hosted by the Netherlands in February 2023. At the end of the Summit, Germany, together with other countries, agreed on a joint call for action on the responsible development, deployment and use of artificial intelligence in the military domain. ²¹⁵⁸ In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." ²¹⁵⁹ Germany also endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023. ²¹⁶⁰

The second REAIM summit took place in Seoul on September 9–10, 2024. The REAIM Blueprint for Action was the outcome document for the summit. The blueprint encourages states, industry, civil society, and regional and international organizations to recognize and affirm the impact of AI applications on the military domain, especially on international peace and security. The blueprint exhorts stakeholders to implement ethical and human-centric AI applications while considering national and international laws. The importance of maintaining a global and regional dialogue and fostering active participation among stakeholders

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²¹⁵⁶ Vibhu Mishra, *Pact for the Future: World Leaders Pledge Action for Peace, Sustainable Development*, UN News (Sept. 22, 2024), https://news.un.org/en/story/2024/09/1154671 United Nations, *Pact for the Future, Global Digital Compact and Declaration on Future Generations* (Sept. 2024), https://www.un.org/sites/un2.un.org/files/sotf-pact for the future adopted.pdf

²¹⁵⁸ Government of Netherlands, *Call to action on responsible use of AI in the military domain* (Feb. 16, 2023) Press Release, https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action

²¹⁵⁹ Responsible AI in the Military Domain Summit, *REAIM Call to Action* (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action
²¹⁶⁰ US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Nov. 9, 2023), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

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has been emphasized. Germany is one of the supporting countries for this blueprint.²¹⁶¹

Human Rights

According to Freedom House, Germany is one of the top countries in the world for the protection of political rights and civil liberties, receiving a score of 93/100.²¹⁶² Freedom House reports that, "Germany is a representative democracy with a vibrant political culture and civil society. Political rights and civil liberties are largely assured both in law and practice."

In a 2020 Recommendation to member States on the human rights impacts of algorithmic systems, the Council of Europe Committee of Ministers reminded member States of commitment to "ensuring the rights and freedoms enshrined in the Convention for the Protection of Human Rights and Fundamental Freedoms to everyone within their jurisdiction" and that "member States must ensure that any design, development and ongoing deployment of algorithmic systems occur in compliance with human rights and fundamental freedoms, which are universal, indivisible, inter-dependent and interrelated, with a view to amplifying positive effects and preventing or minimising possible adverse effects." 2163

Al Safety Summit

In November 2023, Germany participated in the first AI Safety Summit and endorsed the Bletchley Declaration.²¹⁶⁴ Germany thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible."

 $\frac{https://www.reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163\&shareBbsMngNo=10264\&shareMenuId=11613\&shareTabMenuId=11613$

²¹⁶¹ Responsible AI in the Military Domain Summit, *REAIM Blueprint for Action* (Sept. 11, 2024),

²¹⁶² Freedom House, *Freedom in the World 2024: Germany* (2024), https://freedomhouse.org/country/germany/freedom-world/2024

²¹⁶³ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020),

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

²¹⁶⁴ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, Prime Minister's Office, *The Bletchley Declaration by Countries Attending the AI Safety Summit* (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

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Germany participated in the AI Seoul Summit in May 2024, which built on the AI Safety Summit hosted by the UK at Bletchley Park.²¹⁶⁵ The next AI Safety Summit, called the AI Action Summit, took place in France in 2025.

OECD / G20 AI Principles

Germany is a member of the OECD and endorsed the OECD and the G20 AI Principles.²¹⁶⁶

In 2020, Germany joined 14 other countries to announce the Global Partnership on Artificial Intelligence to "support and accompany the responsible use of AI on the basis of human rights, fundamental freedoms, inclusion, diversity, innovation, economic growth and the common good, as well as to achieve the United Nations Sustainable Development Goals (SDGs)."²¹⁶⁷

In 2021, the OECD noted several examples of Germany's implementation of the OECD AI Principles, including guidelines for trustworthy AI that are largely in line with the OECD AI Principles (Germany's Data Ethics Commission ethics recommendations), the establishment of a dedicated body to coordinate and evaluate AI strategies, and the development of partnerships between public and private research organizations.²¹⁶⁸

Council of Europe Al Treaty

Germany also contributed as a Council of Europe and EU Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of law. The Committee on AI approved the Draft Framework Convention during its 10th Plenary session in March 2024.²¹⁶⁹ On September 2024, the EU signed this first legally binding international AI treaty on

²¹⁶⁵ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, Seoul Declaration for Safe, Innovative, Inclusive AI by Participants Attending the Leaders' Session: AI Seoul Summit (May 21, 2024),

https://www.gov.uk/government/publications/seoul-declaration-for-safe-innovative-and-inclusive-ai-ai-seoul-summit-2024/seoul-declaration-for-safe-innovative-and-inclusive-ai-by-participants-attending-the-leaders-session-ai-seoul-summit-21-may-2024

²¹⁶⁶ OECD Legal Instruments, *Recommendation of the Council on Artificial Intelligence, Adherents* (May 3, 2024), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449#adherents

²¹⁶⁷ Federal Ministry of Labour and Social Affairs, *Germany Is a Founding Member of the* "Global Partnership on Artificial Intelligence" (Jun. 15, 2020),

https://www.bmas.de/DE/Service/Presse/Pressemitteilungen/2020/deutschland-ist-gruendungsmitglied-der-global-partnership-on-articifial-intelligence.html

²¹⁶⁸ OECD, State of Implementation of the OECD AI Principles Insights from National AI Policies pp. 10, 14, 15, 65 (Jun. 2021), https://www.oecd-ilibrary.org/science-and-technology/state-of-implementation-of-the-oecd-ai-principles 1cd40c44-en

²¹⁶⁹ Council of Europe, *Draft Framework Convention on AI, human rights, democracy and the rule of law* (March 2024),

https://search.coe.int/cm/pages/result_details.aspx?objectid=0900001680aee411

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behalf of its members, including Germany.²¹⁷⁰ Germany has not taken independent action.

UNESCO Recommendation on AI Ethics

Germany is a signatory to the UNESCO Recommendation on the Ethics of Artificial Intelligence. While its AI plan was published before the development of the UNESCO Recommendation, the German UNESCO Commission released a report in 2022 which showed that Germany "has taken important steps to regulate AI in a way that corresponds to human rights and the public good," although more work is needed in some areas.²¹⁷¹

The German Bundestag held discussions over the UNESCO Recommendation on the Ethics of AI in 2022. However, no action has followed despite the discussions proposing action within 4 years of the release of the UNESCO Recommendation.²¹⁷²

UNESCO has provided Member States with the Readiness Assessment Methodology (RAM) to help countries assess how prepared they are to implement UNESCO's Recommendation on AI Ethics. The RAM uses both quantitative and qualitative questions to assess a country's readiness. Germany has not yet implemented the RAM.²¹⁷³

Evaluation

Germany's national AI strategy emphasizes AI ethics, and Germany has called for regulating AI at EU level. However, while generally in favor of regulation and transparency, the German position on the risks of AI systems (particularly on biometric identification and predictive policing) is difficult to pin down, as different ministries, coalition members, and state governments may have different priorities and opinions.²¹⁷⁴ The same could be said about the regulation of GPAI models. With the adoption of the EU AI Act, Germany shall establish a national supervisory mechanism which, it is to be hoped, will be an independent

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²¹⁷⁰ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 16, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

²¹⁷¹ UNESCO Deutsche UNESCO-Kommission, *Ethical Aspects of Artificial Intelligence* (Mar. 21, 2022), https://www.unesco.de/wissen/wissenschaft/ethik-und-philosophie/studie-umsetzung-ki-ethik-empfehlung

²¹⁷² German Bundestag, *Meeting Protocol* (Sept. 23, 2022), https://www.bundestag.de/resource/blob/911624/0b4a2e35fc56a4f1197970a0684e8afd/to018-data.pdf

²¹⁷³ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

²¹⁷⁴ Luca Bertuzzi, *Germany Could Become MEPs' Ally in AI Act Negotiations*, Euractiv (Jan. 9, 2023), https://www.euractiv.com/section/artificial-intelligence/news/germany-could-become-meps-ally-in-ai-act-negotiations/

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one and will take the protection of human rights seriously. As Germany endorsed the UNESCO Recommendation on the Ethics of AI, it remains to be seen which concrete steps Germany will take to implement it in practice.

Ghana

In 2024, Ghana finalized a National Data Strategy through a collaboration between the Ministry of Communication and Digitalization and international organizations and launched the UNESCO Readiness Assessment Methodology (RAM). Ghana also endorsed the African Union Continental AI Strategy.

National AI Strategy

The Future Society (TFS) announced that "in October 2022, TFS delivered the Republic of Ghana National Artificial Intelligence Strategy 2023-2033 with our partners: Ghana's Ministry of Communications and Digitalisation and Data Protection Commission, GIZ FAIR Forward and Smart Africa." In January 2024, the Minister of Communications and Digitalisation, Ursula Owusu-Ekuful, stated that a draft strategy was ready and waiting for consideration and review by the Cabinet.²¹⁷⁵ The policy focuses on equipping Ghana's youth with AI skills through education and practical experiences, while fostering AI entrepreneurship and innovation through tax incentives and market incentives. It also emphasizes ethical AI practices, international collaboration, AI adoption in key sectors, and the establishment of a Natural Language Processing Centre of Excellence to promote local language integration.²¹⁷⁶ The Strategy is expected to ensure better conditions for the development and use of this innovative technology for the benefit of citizens.

The Ministry of Communications and Digitalization (MoCD), through the Data Protection Commission (DPC), launched the UNESCO Readiness Methodology (RAM) in October 2024 to help guide AI governance and development.²¹⁷⁷ The RAM helps countries identify gaps in AI governance and preparation for ethical AI in five dimensions: Legal and Regulatory, Social and Cultural, Economic, Scientific and Educational, and Technological and

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²¹⁷⁵ Ministry of Communications and Digitalisation Ghana, *MOCD Monthly Newsletter* (2024), https://www.facebook.com/100064638761623/posts/774661218031830/?mibextid=rS40aB7S9Ucbxw6vl

²¹⁷⁶ Povo News, *Ghana's National Artificial Intelligence Strategy 2023–2033*, Slideshare (Aug. 14, 2024), https://www.slideshare.net/slideshow/ghana-s-national-artificial-intelligence-strategy-2023-2033-pdf/270928634

²¹⁷⁷ Ministry of Communications and Digitalisation Ghana, *Readiness Assessment Measurement (RAM)*— *Ethical Use of Artificial Intelligence Launched* (Oct. 1, 2024), https://moc.gov.gh/2024/10/01/readiness-assessment-measurement-ram-ethical-use-of-artificial-intelligence-launched/

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Infrastructural. Each of dimension is divided into sub-categories containing indicators for a cohesive assessment.²¹⁷⁸

As member of the African Union (AU), Ghana is working to align with the AU Digital Transformation Strategy²¹⁷⁹ as well as the Artificial Intelligence Continental Strategy for Africa. Ghana's Ministry of Communications and Digitalization participated in a consultative workshop organized by the AU High-Level Panel on Emerging Technologies (APET).²¹⁸⁰ The APET discussions aimed at gathering input about "myths, challenges, and benefits of Artificial Intelligence (AI) in Africa," urging African countries to invest in AI literacy, cooperate internationally for AI innovation, enhance data protection, invest in infrastructure, and review policy implementation frameworks governing AI.

The AU finalized the Artificial Intelligence Continental Strategy for Africa²¹⁸¹ at its 45th Ordinary Session in Accra, Ghana, in July 2024. The AU introduced the African Digital Compact (ADC)²¹⁸² in the same session as an initiative to leverage digital technologies and promote inclusivity in the drive for sustainable development and innovation across the continent. The ADC, aligned with Africa's Agenda 2063²¹⁸³ and the UN Global Digital Compact,²¹⁸⁴ calls for collaborative efforts from governments, businesses, and civil society to bridge digital divides and secure digital rights, fostering a resilient, digitally empowered Africa. With major AU policy developments taking place in Accra itself, Ghana could see a renewed push towards AU's Digital Transformation Strategy.²¹⁸⁵

https://unesdoc.unesco.org/ark:/48223/pf0000385198/PDF/385198eng.pdf.multi

https://au.int/sites/default/files/documents/38507-doc-dts-english.pdf

https://au.int/sites/default/files/documents/44004-doc-EN-

Continental AI Strategy July 2024.pdf

https://au.int/en/documents/20240809/african-digital-compact-adc

https://au.int/Agenda2063/popular_version

https://www.un.org/techenvoy/global-digital-compact

²¹⁷⁸ UNESCO, Readiness Assessment Methodology: A Tool of the Recommendation on the Ethics of Artificial Intelligence (2023),

²¹⁷⁹ African Union, *The Digital Transformation Strategy for Africa (2020–2030)*,

AUDA-NEPAD, *The African Union Artificial Intelligence Continental Strategy for Africa* (May 30, 2022) https://www.nepad.org/news/african-union-artificial-intelligence-continental-strategy-africa

²¹⁸¹ African Union, Continental Artificial Intelligence Strategy (Jul. 2024),

²¹⁸² African Union, African Digital Compact (Jul. 2024),

²¹⁸³ African Union, Agenda 2063: The Africa We Want (Jun. 10, 2013),

²¹⁸⁴ United Nations, Global Digital Compact (Sept. 22, 2024),

²¹⁸⁵ African Union, *The Digital Transformation Strategy for Africa (2020–2030)*, https://au.int/sites/default/files/documents/38507-doc-dts-english.pdf

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Public Participation

In Ghana, stakeholder engagement for public policies is an established practice, led by the Ministry of Communication and Digitalization (MoCD). Annual budgets support the planning sessions to formulation of new policies. Stakeholder engagements took place for Ghana's Digital Economy Policy at the Accra Digital Centre in November 2022. Minister Ursula Owusu-Ekuful highlighted the significance of the ministerial consultation as a means to ensure inclusiveness and comprehensiveness of the policy, covering data governance, emerging tech and regulation, data classification, data sharing and open data. Planta Policy (2188)

The National AI Strategy is the result of the collaborative efforts of Ghana's Ministry of Communications and Digitalisation, Ghana's Data Protection Commission, GIZ FAIR Forward, ²¹⁸⁹ Smart Africa²¹⁹⁰ and The Future Society. ²¹⁹¹ In total, the strategy is based on 40+ local stakeholder consultations, in-depth AI policy landscape mapping, and SWOT Analysis of Ghana's AI ecosystem, and 4 high-level public sector consultation workshops to iterate the mission and vision, recommendations and action plan, and a detailed booklet of AI use cases across key sectors. ²¹⁹²

For example, in May 2022, The Future Society co-led a stakeholder consultation workshop in Ghana to support the development of Ghana's AI strategy. The workshop sessions addressed AI governance and frameworks, policies, implementation plans, SWOT, local AI ecosystems, AI ethical guidelines and recommendations for the establishment of program offices to drive implementation. The Future Society together with Ghana's Data Protection

²¹⁸⁹ Digital Global, *Artificial Intelligence for Development Cooperation—FAIR Forward*, https://www.bmz-digital.global/en/overview-of-initiatives/fair-forward/

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²¹⁸⁶Ministry of Communication and Digitalization, *Programme Based Budget Estimates for 2022*, pp. 11 and 28 (2022), https://mofep.gov.gh/sites/default/files/pbb-estimates/2022/2022-PBB-MOCD.pdf

²¹⁸⁷ Graphic Online, *Ministry Develops Policy for Digital Economy* (Dec. 13, 2022), https://www.graphic.com.gh/business/business-news/ministry-develops-policy-for-digital-economy.html

²¹⁸⁸ The Future Society, Stakeholder Consultation Workshops Drive Insights for National AI Strategies in Tunisia and Ghana (Jun. 9, 2022), https://thefuturesociety.org/stakeholder-consultation-workshops-drive-insights-for-national-ai-strategies-in-tunisia-and-ghana/

²¹⁹⁰ Smart Africa, *SADA Launches Its National Digital Academy in Ghana* (May 20, 2022), https://smartafrica.org/sada-launches-its-national-digital-academy-in-ghana/

²¹⁹¹ The Future Society, *Aligning Artificial Intelligence through Better Governance* (Jun. 9, 2022), https://thefuturesociety.org

²¹⁹² The Future Society, *National AI Strategies for Inclusive and Sustainable Development* (Apr. 30, 2022), https://thefuturesociety.org/2022/04/03/policies-ai-sustainable-development/
²¹⁹³ The Future Society, *Stakeholder Consultation Workshops Drive Insights for National AI*

Strategies in Tunisia and Ghana (Jun. 9, 2022), https://thefuturesociety.org/stakeholder-consultation-workshops-drive-insights-for-national-ai-strategies-in-tunisia-and-ghana/

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Commission, GIZ FAIR Forward, and Smart Africa held the third high-level public sector consultation workshop in August 2022 with representatives from private and public sector, academia, and civil society, to discuss the establishment of precautionary guardrails for AI across sectors.

As a member of the African Union, Ghana also took part in the planning for the Continental Artificial Intelligence Strategy.²¹⁹⁴ The document, in section 2.4.1, AI Governance and Regulation, cites the need for a multi-tiered governance approach to ensure transparency and accountability of the systems used and developed in Africa. Such an approach would include open public consultations comprising various sectors.

The MoCD, in partnership with Smart Africa, held a workshop aimed at finalizing Ghana's National Data Strategy in June 2024. 2195 Supported by the Data Protection Commission and the GIZ, the workshop brought together experts and government officials to align on strategic objectives for data governance, infrastructure, and capacity building. A collaborative approach was recognized as vital for empowering regulatory bodies, fostering partnerships across sectors, and ensuring effective data management and compliance to enhance AI integration and cybersecurity.

While stakeholder inputs have been gathered in the past for the National AI Strategy in Ghana, not all policies are publicly accessible through government sources. Increasing transparency by making these contributions available could strengthen public trust and engagement in AI policy development.

Data Protection

Ghana enacted the Data Protection Act in 2012.²¹⁹⁶ Section 41 of the Data Protection Act provides for the right of the data subject to object for decisions that significantly affect him to not be based solely on automated processing of personal data. The Data Protection Act establishes the Data Protection Commission.²¹⁹⁷ which is an independent statutory body in charge of enforcing the Data Protection Act and protecting data subjects' rights.

The Data Protection Commission and GIZ supported a workshop to finalize the National Data Strategy in June 2024, in partnership with the Ministry

Continental AI Strategy July 2024.pdf

²¹⁹⁴ African Union, Continental Artificial Intelligence Strategy (Jul. 2024), https://au.int/sites/default/files/documents/44004-doc-EN-

²¹⁹⁵ Ministry of Communications and Digitalisation Ghana, Ghana National Data Strategy Validation Workshop Kicks Off in Accra (Jun. 27, 2024), https://moc.gov.gh/2024/06/27/ghananational-data-strategy-validation-workshop-kicks-off-in-accra/

²¹⁹⁶ Data Protection Commission, *The Data Protection Act (Act 843)* (2012), https://nita.gov.gh/wp-content/uploads/2017/12/Data-Protection-Act-2012-Act-843.pdf

²¹⁹⁷ Data Protection Commission, The Future of Data Protection Starts Here! (Update to be released Apr. 2025), https://dataprotection.org.gh/

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of Communication and Digitization and Smart Africa.²¹⁹⁸ Key discussions among the experts and government officials centered on updating the legal framework to keep pace with technological advancements, enhancing technical infrastructure, improving data privacy and protection, and fostering inclusivity in data use, including the promotion of AI and cloud services.

Ghana is one of five African countries that ratified (in 2019) the African Union Convention on Cyber Security and Personal Data Protection (Malabo Convention). The Convention, drafted in 2011 and adopted in 2014 is an initial step to the establishment of a regulatory framework for data protection in the African region. The agreement emphasized that each country is to develop its own legislative framework, observing the African Charter on Human and People's Rights, respecting privacy and freedoms while enhancing the promotion and development of ICT. 2201

Despite being a member of the Global Privacy Assembly since 2014, the Data Protection Commission has not endorsed the 2018 GPA resolution on AI and Ethics, ²²⁰² the 2020 GPA Resolution on AI and Accountability, ²²⁰³ the 2022

²¹⁹⁹ African Union. *List of Countries which have signed, ratified/acceded to the African Union Convention on Cyber Security and Personal Data Protection* (Jul. 8, 2022), https://au.int/sites/default/files/treaties/29560-sl-

AFRICAN UNION CONVENTION ON CYBER SECURITY AND PERSONAL DATA P ROTECTION.pdf

²²⁰¹ CCDCOE, Mixed Feedback on the African Union Convention on Cyber Security and Personal Data Protection, https://ccdcoe.org/incyder-articles/mixed-feedback-on-the-african-union-convention-on-cyber-security-and-personal-data-protection/

²²⁰² International Conference of Data Protection & Privacy Commissioners, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018),

 $\frac{https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922_ICDPPC-40th_AI-Declaration_ADOPTED.pdf$

²¹⁹⁸ Ministry of Communications and Digitalisation Ghana, *Ghana National Data Strategy Validation Workshop kicks off in Accra* (Jun. 27, 2024), https://moc.gov.gh/2024/06/27/ghana-national-data-strategy-validation-workshop-kicks-off-in-accra/

²²⁰⁰ African Union, *African Union Convention on Cybersecurity (Malabo Convention)* (Jun. 27, 2014), https://au.int/en/treaties/african-union-convention-cyber-security-and-personal-data-protection

²²⁰³ Global Privacy Assembly (GPA), *Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN.pdf

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Resolution on Facial Recognition Technology,²²⁰⁴ or the 2023 GPA Resolution on Generative AI.²²⁰⁵

Algorithmic Transparency

The widespread use of social media and online tools in African countries makes regulating algorithmic transparency the most critical to protect against misuse. 2206 The Data Protection Act of 2012 establishes the principle of "fair and transparent processing of a data subject's personal data" 2207 and provides that subjects need to be informed by the data processor when a decision has been made by automated means. Section 17 of the DPA sets out principles that data controllers must follow when processing personal data. Section 17 (f) provides for openness as a principle for processing personal data. This section could be interpreted as including algorithmic transparency, but it would need confirmation either by the Data Protection Commission or by court. The Malabo Convention does not explicitly provide for algorithmic transparency. Both data protection regimes could more explicitly include algorithmic transparency to ensure that individuals are informed about how algorithms influence decisions that affect them.

A study by International Telecommunications Society (ITS) on the use of artificial intelligence in the Fintech industry of Ghana and three other African countries found gender bias in financial services decisions. A lack of algorithmic transparency and explainability were areas of concern, contributing to the inability to make institutions accountable for biased decisions. ²²⁰⁸

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²²⁰⁴ Global Privacy Assembly (GPA), Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology (Oct 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

²²⁰⁵ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf.

²²⁰⁶ African Policy Research Institute (APRI), *AI in Africa: Key Concerns and Policy Considerations for the Future of the Continent* (May 30, 2022), https://afripoli.org/ai-in-africa-key-concerns-and-policy-considerations-for-the-future-of-the-continent

²²⁰⁷ Data Protection Commission, *The Data Protection Act, 2012 (ACT 843)* (2012), https://nita.gov.gh/wp-content/uploads/2017/12/Data-Protection-Act-2012-Act-843.pdf

²²⁰⁸ Shamira Ahmed, *A gender perspective on the use of artificial intelligence in Africa's fintech industry: Case studies from South Africa, Kenya, Nigeria and Ghana*, Research ICT Africa (Jun. 21, 2021), https://researchictafrica.net/research/a-gender-perspective-on-the-use-of-artificial-intelligence-in-africas-fintech-industry-case-studies-from-south-africa-kenya-nigeria-and-ghana/

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The launch of the UNESCO RAM in 2024 could promote discourse and action around algorithmic transparency in Ghana.²²⁰⁹

Facial Recognition

Practices of surveillance and use of facial recognition are of concern in the country. Ghana's National Service Scheme has implemented facial recognition in its registration process to prevent fraud and identity thefts in the receipt of payments to public employees. The deployment, which included testing, staff training sessions, and public awareness, has achieved its desired outcome according to government reports.²²¹⁰

A 2023 report reveals that the government has increased its possession of surveillance technologies. Ghana is implementing the Integrated National Security Communications Enhancement Network (ALPHA) project, a safe city project, which will incorporate the use of facial recognition CCTV cameras.²²¹¹ Concerns exist that the Ghanaian government will use this technology to identify and target citizens expressing dissenting viewpoints.²²¹²

Credit Scoring

In 2019, the use of citizen scoring mechanisms in Ghana by the National Identification Authority was subject of a study by Algorithm Watch. It resulted that six biometric databases owned by public authorities provide citizen scores, including credit reference scores issued by the Credit Reference Bureau.²²¹³

According to a report by the Bank of Ghana, it initiated discussions with credit bureaus to introduce credit scoring as a complement to the credit reports already offered by these bureaus in 2023. This initiative followed the introduction of the Ghana Card, which serves as a distinct identifier for individuals with credit information. The goal was to facilitate the implementation of the credit scoring

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²²⁰⁹ Ministry of Communications and Digitalisation Ghana. *Readiness Assessment Measurement (RAM)*—*Ethical Use of Artificial Intelligence Launched* (Oct. 1, 2024) <a href="https://moc.gov.gh/2024/10/01/readiness-assessment-measurement-ram-ethical-use-of-artificial-use-of-artific

intelligence-launched/ ²²¹⁰ BiometricUpdate, *Ghana national service officials praise face biometrics onboarding* (Nov. 23, 2022), https://www.biometricupdate.com/202211/ghana-national-service-officials-praise-face-biometrics-onboarding

²²¹¹ Institute of Development Studies, *Mapping the Supply of Surveillance Technologies to Africa: Case Studies from Nigeria, Ghana, Morocco, Malawi, and Zambia* (2023), https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/18120

²²¹² Ibid

²²¹³ Nicolas Kayser-Bril, *Identity-Management and Citizen Scoring in Ghana, Rwanda, Tunisia, Uganda, Zimbabwe and China*, Algorithm Watch (Oct. 21, 2019),

https://algorithmwatch.org/en/wp-content/uploads/2019/10/Identity-management-and-citizen-scoring-in-Ghana-Rwanda-Tunesia-Uganda-Zimbabwe-and-China-report-by-AlgorithmWatch-2019.pdf

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system by ensuring that financial institutions update existing credit information with new details from the Ghana Card.²²¹⁴

Ghana's Vice President, Dr. Mahamudu Bawumia, launched the initiative, known as myCreditScore in November 2024.²²¹⁵ Thus, the country is the second on the African continent to have such a system, the first being South Africa. Within the government, the initiative is viewed with favor and any discussions about possible harms are dismissed as criticism from the opposition.²²¹⁶ Additionally, several financial institutions have made significant progress in updating their existing credit information with the new Ghana Card data. This effort, combined with the integration of credit bureaus with the National Identification Authority (NIA) database, is anticipated to provide a strong foundation for the introduction of the credit scoring regime in the Ghanaian credit market.²²¹⁷

Biometrics

Ghanaian Police Service has adopted biometric devices as part of a digitization strategy with the objective to "dramatically improve policing in Ghana." The police uses biometrics to check wanted individuals against the National Identification Authority's (NIA) database. The process started in 2017 with the issuing of the new Ghana card, aimed to centralize the identity management systems. Phe NIA biometric database amounts to 17 million records, including Ghana ID card, car registration, and insurance information, allowing for identification in real time with biometric devices. The NIA National Identity System employs three biometric technologies for identification: unique

REPORTING-ACTIVITY-REPORT-170924.pdf

²²¹⁴ Bank of Ghana (Financial Stability Department), *Credit Reporting Activity, Annual Report* (2022), https://www.bog.gov.gh/wp-content/uploads/2023/10/Credit-Reporting-Activity-Report-2022.pdf

https://www.myjoyonline.com/bawumia-launches-credit-scoring-system-for-ghana/
https://www.myjoyonline.com/bawumia-launches-credit-scoring-system-for-ghana/
https://www.myjoyonline.com/bawumia-launches-credit-scoring-system-for-ghana/
https://www.ghanaweb.com/GhanaHomePage/NewsArchive/They-criticize-without-knowledge-Bawumia-replies-critics-of-his-credit-scoring-system-1942562
https://www.bog.gov.gh/wp-content/uploads/2024/09/2023-ANNUAL-CREDIT-

²²¹⁸ BiometricUpdate, *Ghana Police get over* 100 biometric devices for fields checks against database (Jan. 2, 2023), https://www.biometricupdate.com/202301/ghana-police-get-over-100-biometric-devices-for-field-checks-against-national-database

²²¹⁹ Nicolas Kayser-Bril, *Identity-Management and Citizen Scoring in Ghana, Rwanda, Tunisia, Uganda, Zimbabwe and China*, Algorithm Watch (Oct. 21, 2019), https://algorithmwatch.org/en/wp-content/uploads/2019/10/Identity-management-and-citizen-scoring-in-Ghana-Rwanda-Tunesia-Uganda-Zimbabwe-and-China-report-by-AlgorithmWatch-2019.pdf

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fingerprints represented as digitized templates, facial templates depicted as digitized color photos of the cardholder, and iris recognition.²²²⁰

A report by Privacy International identified practices of surveillance in Ghana during the phase of emergency response to the COVID pandemic.²²²¹ The PanaBIOS app endorsed by the African Union and deployed by the Ghanaian border enforcement, used algorithms to track and trace individuals that might pose a health threat.

The Ghanaian government announced in January 2024 that government employees who had not registered with the Ghana Card system would have their salaries frozen as of March. According to presidential correspondent Charles Takyi-Boadu, the initiative was based on the assumption that any citizen who did not register was deceased and freezing salaries would eliminate "ghost registrations" from the payroll.²²²²

In March, groups such as the People's National Convention (PNC), Great Consolidated Popular Party (GCPP), and Election Watch Ghana held demonstrations calling on the Electoral Commission of Ghana (EC) to be more transparent about biometric voter registration and the delivery of device kits to all political parties in the country after cases of the disappearance and destruction of several of these devices were reported.²²²³ In April, Deputy Minister for Foreign Affairs and Regional Integration Kwaku Ampratwum-Sarpong announced that a new model of digital passport would be introduced in the country, with an electronic chip that has a biometric identifier, which would be used to authenticate the holder's identity.²²²⁴

Ghana launched the blockchain-based digital platform CitizenApp Data Interoperability System (CADIS) in October 2024 to facilitate access to digital government services. Identity verification is done through the Ghana Card and the citizen's phone number. Information such as biometric passport applications is

Privacy International (PI), Under Surveillance: (Mis)use of Technologies in Emergency Reponses. Global lessons from the COVID-19 pandemic (Dec. 2022),

 $\underline{https://privacyinternational.org/report/5003/under-surveillance-misuse-technologies-emergency-responses-global-lessons-covid-19}$

²²²³ GhanaWeb, Share Details of All Your Biometric Voter Registration Kits, Devices with All Political Parties — EC Told (Apr. 16, 2024),

 $\underline{https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Share-details-of-all-your-biometric-voter-registration-kits-devices-with-all-political-parties-EC-told-1926363}$

²²²⁴ GBC Ghana Online, *Ghana to Introduce Chip-Embedded Passports in Six Months—Kwaku Ampratwum-Sarpong* (Apr. 4, 2024), https://www.gbcghanaonline.com/general/ghana-chip-passport/2024/

²²²⁰ National Identification Authority, *Introduction to the GhanaCard*, https://nia.gov.gh/the-ghanacard-introduction/

²²²² Daily Guide Network, *Govt Rolls Out New Payroll No Ghana Card, No Pay* (Jan. 11, 2024), https://dailyguidenetwork.com/govt-rolls-out-new-payroll-no-ghana-card-no-pay/

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available for consultation on the app.²²²⁵ The mobile app was designed by the government to improve access to public services in Ghana, described as "Ghana's Roadmap to Intelligent Governance."²²²⁶ Notably, this shift resonates with earlier initiatives, such as Ghana's adoption of biometrics for driver's licenses and vehicle registration.²²²⁷

EdTech

Ghana was a subject of a study by Human Rights Watch about the use of government-endorsed Ed Tech tools for online learning during the COVID-19 pandemic across 49 countries.²²²⁸ The findings show that the government of Ghana endorsed platforms that have the capability to identify, tag, and track users, including children. Further, learning apps endorsed by Ghana tracked and collected data from children and teachers for advertising and revenue purpose, transmitting data to AdTech companies. For Ghana, the apps in this category were Edmodo and Ghana Electronic Library. Ghana was one of only nine countries that disclosed in their privacy policies that they collected and used children's data for "behavioral advertising purposes."

UNICEF launched the Learning Pioneers Programme in 2024, a two-year initiative in which six countries, including Ghana, are partnering with the Office of Innovation Learning Innovation Hub "to pilot and accelerate digital learning tools to address the learning crisis and shape the future of learning." Under the slogan "Map, Match, and Make it Happen," the countries will be mapping, testing, and developing scalable EdTech tools. ²²²⁹

Environmental Impact of AI

Ghana responded to the global call to action to end poverty, protect the earth's environment and climate, and ensure that people everywhere can enjoy

²²²⁵ Biometric Update, *Ghana Launches CitizenApp to Facilitate Access to Digital Govt Services* (Oct. 8, 2024), https://www.biometricupdate.com/202410/ghana-launches-citizenapp-to-facilitate-access-to-digital-govt-services

²²²⁶ Lezeth Khoza, *Ghana Launches App to Improve Access to Public Services*, ITWeb Press Council FAIR (Oct. 9, 2024), https://itweb.africa/content/G98YdqLG8DaMX2PD; see also Ghana, *CitizenApp is Ghana's Roadmap to Intelligent Governance*, CitizenApp (2024), www.citizen.gov.gh/

²²²⁷ Ayang Macdonald, *Benin, Ghana Adopt Biometrics for Driver's Licenses, Vehicle Registration*, Biometric Update (Dec. 21, 2022), www.biometricupdate.com/202212/beninghana-adopt-biometrics-for-drivers-licenses-vehicle-registration

²²²⁸ Human Rights Watch, *How Dare They Peep into My Private Life?* (May 25, 2022), https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rights-violations-governments

²²²⁹ UNICEF, *UNICEF's Learning Pioneers Programme: Shaping the Future of Learning* (Aug. 12, 2024), https://www.unicef.org/digitaleducation/stories/unicefs-learning-pioneers-programme-shaping-future-learning

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peace and prosperity, captured in 17 UN Sustainable Development Goals.²²³⁰ According to the 2022 Voluntary National Review, Ghana is on track to achieve SDG 12 on responsible consumption and production and SDG 13 on climate action by the 2030 deadline.²²³¹ The report notes moderate progress has been made on goals including affordable and clean energy, and significant challenges lie in goals on sustainable cities and communities. Notably, the environmental impact of Artificial Intelligence, including energy consumption and its carbon footprint poses further challenges to achieve these goals. While academic research purports that Artificial Intelligence can help the Ghanaian Government plan for a renewable energy future,²²³² the research also acknowledges that AI poses risks to the environment.

The National AI Strategy reports that AI brings major opportunities to Africa to achieve sustainable growth and development, looking at specific case studies such as (a) AI in Smart Electricity Grid in Ghana, (b) AI applications for climate action (monitoring air quality, support renewable energy, manage recycling and water), and (c) AI for Agriculture. The Strategy notes these can be achieved through investment in applied AI research, which forms Pillar 7 of the National AI Strategy.²²³³

Lethal Autonomous Weapons

Ghana has not acceded to the Convention on Certain Conventional Weapons (CCW). However, the country has participated in several CCW meetings since 2014.²²³⁴ In a statement to the 2016 CCW informal meeting of experts on LAWS, Ghana called for the "promotion and preservation of human dignity for humanity as a whole [...] In our view, fully automated lethal systems must be proscribed before they are fully developed."²²³⁵

²²³⁰ United Nations Ghana, Our Work on the Sustainable Development Goals in Ghana (2024), https://ghana.un.org/en/sdgs

https://automatedresearch.org/news/state_position/ghana/

National Development Planning Commission, *Ghana's Voluntary National Review Report on the Implementation of the 2030 Agenda for Sustainable Development* (Jun. 2022), https://ndpc.gov.gh/media/VNR 2022 Report c5cXm4Q.pdf

²²³² Dom Byrne, *How Artificial Intelligence Is Helping Ghana Plan for a Renewable Energy Future*. Nature (May 7, 2024), https://doi.org/10.1038/d41586-024-01316-w

²²³³ Ministry of Communications and Digitalisation with Smart Africa, GIZ FAIR Forward, The Futures Society, *Ghana's National Artificial Intelligence Strategy 2022–2033* (Oct. 2022), https://www.slideshare.net/slideshow/ghana-s-national-artificial-intelligence-strategy-2023-2033-pdf/270928634

²²³⁴ Automated Research, State Positions: Ghana,

²²³⁵ Ghana, Comments and Questions by Ghana at the CCW Informal Meeting of Experts on Lethal Autonomous Weapons Systems, Reaching Critical Will (Apr. 16, 2015), https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/ccw/2015/meeting-experts-laws/statements/16April Ghana.pdf

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Ghana is a member of two groups that support the negotiation of a legally binding instrument on autonomous weapons systems: The African Group within the United Nations and the Non-Aligned Movement. The African Group issued a statement in 2021 CCW calling on the "ethical, legal, moral and technical questions" in the use of autonomous weapons systems and urging concrete policy recommendations, including prohibitions and regulations. 2236

At the 78th UN General Assembly First Committee in 2023, Ghana voted in favor²²³⁷ of resolution L.56²²³⁸ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems.

At the 79th Session of the same Committee in 2024, Ghana voted in favor of resolution L.77 on lethal autonomous weapon systems.²²³⁹ While the earlier resolution recognized potential risks of these systems, L.77 emphasizes the urgency of addressing the challenges posed by lethal autonomous weapons systems (LAWS), highlighting the need for a comprehensive approach to address diverse perspectives related to these systems. It includes specific calls for action, such as convening open informal consultations in 2025 and inviting participation from various stakeholders, including civil society and the scientific community.

Human Rights

Ghana is a signatory of the Universal Declaration of Human Rights (UDHR) and has enshrined the key provisions of the UDHR in its Constitution. The 1992 Constitution of Ghana²²⁴⁰ provides for the protection of fundamental human rights and freedoms. The UDHR provides for the right to privacy under Article 12. The right to privacy is guaranteed under Article 18 of the Constitution: "No person shall be subjected to interference with the privacy of his home, property, correspondence or communication except in accordance with law and as

²²³⁶ Statement by the African Group, CCW Group of Governmental Experts meeting on LAWS (Dec 3, 2021), http://149.202.215.129:8080/s2t/UNOG/LAWS3-03-12-2021-AM mp3 en.html ²²³⁷ Isabelle Jones, 164 States Vote against the Machine at the UN General Assembly, Stop Killer Robots (Nov. 1, 2023), https://www.stopkillerrobots.org/news/164-states-vote-against-themachine/

²²³⁸ General Assembly, *Lethal Autonomous Weapons*, Resolution L56 (Oct. 12, 2023), https://reachingcriticalwill.org/images/documents/Disarmamentfora/1com/1com23/resolutions/L56.pdf

²²³⁹ Isabelle Jones, 161 States Vote against the Machine at the UN General Assembly, Stop Killer Robots (Nov. 5, 2024), https://www.stopkillerrobots.org/news/161-states-vote-against-themachine-at-the-un-general-assembly/

²²⁴⁰ Ghana, Constitution of Ghana, Constitute Project (1996), https://www.constituteproject.org/constitution/Ghana 1996.pdf

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may be necessary in a free and democratic society for public safety or economic well-being of the country, for the protection of health or morals, for the prevention of disorder or crime or for the protection of rights and freedoms of others."

Ghana is a party to the African Charter on Human and Peoples' Rights. In its 2019 Declaration of Principles on Freedom of Expression and Access to Information in Africa, the African Commission on Human and Peoples' Rights (ACHPR), in charge of interpreting the Charter, ²²⁴¹ called on states to ensure that the "development, use and application of AI, algorithms and other similar technologies by internet intermediaries are compatible with international human rights law and standards, and do not infringe on the rights to freedom of expression, access to information and other human rights." ²²⁴²

The ACHPR adopted Resolution 473 in February 2021, having recognized that emerging technologies such as AI have a bearing on the enjoyment of human rights under the African Charter.²²⁴³ The ACHPR called on state parties, Ghana included, to:

- Ensure that the development and use of AI and other emerging technologies is compatible with the rights and duties in the African Charter and other regional and international human rights instruments to uphold human dignity, privacy, equality, non-discrimination, inclusion, diversity, safety, fairness, transparency, accountability, and economic development.
- Ensure transparency in the use of AI and other emerging technologies and that
 decisions made in the use of AI technologies, robotics and other new and
 emerging technologies are easily understandable to those affected by such
 decisions.
- Work toward a comprehensive legal and ethical governance framework for AI and other new and emerging technologies to ensure compliance with the African Charter and other regional treaties.

²²⁴¹ African Union, *African Charter on Human and Peoples' Rights*, Articles 30, 45(3) (Oct. 21, 1986), https://au.int/en/treaties/african-charter-human-and-peoples-rights

²²⁴² Diplo, *Artificial Intelligence in Africa: Continental Policies and Initiatives* (2021), https://www.diplomacy.edu/resource/report-stronger-digital-voices-from-africa/ai-africa-continental-policies/

²²⁴³ African Commission on Human and Peoples' Rights, *Resolution on the need to undertake a Study on human and peoples' rights and artificial intelligence (AI), robotics and other new and emerging technologies in Africa - ACHPR/Res. 473 (EXT.OS/XXXI) 2021* (Mar. 10, 2021), https://achpr.au.int/en/adopted-resolutions/473-resolution-need-undertake-study-human-and-peoples-rights-and-art; University of Pretoria, *Centre for Human Rights Welcomes African Commission Resolution on Emerging Technologies*, Centre for Human Rights News (Mar. 18, 2021), https://www.chr.up.ac.za/tech4rights-news/2451-press-statement-centre-for-humanrights-welcomes-african-commission-resolution-on-emerging-technologies; CAIDP, *African Commission on Human and People's Rights Resolution 473: Statement of The Center for AI and Digital Policy (CAIDP)* (Apr. 5, 2021),

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In September 2022, the Special Rapporteur on Freedom of Expression and Access to Information in Africa, Ourveena Geereesha Topsy-Sonoo, recalled that, with Resolution 473, the Commission, "recognizing the need to better understand the legal, ethical, safety and security opportunities and challenges raised by AI, robotics and other new and emerging technologies in Africa, observed in its Resolution [...] that new and emerging technologies present both opportunities and perils for the promotion and protection of human and peoples' rights in Africa. The Commission further observed that whilst making government services and information digital enhances transparency and accessibility and artificial intelligence allows for a number of benefits in the society, it has to be accompanied by human rights considerations and a bridging of the digital divide." The Special Rapporteur also declared that "State Parties are encouraged to develop domestic legal frameworks regulating AI and e-governance; ensure these technologies are developed and used transparently; and ensure that imported AI and e-governance systems align with the African Charter." 2244

According to the Freedom House's 2024 Freedom in the World report, ²²⁴⁵ Ghana is rated Free with a score of 80/100. Ghana is rated *Partly Free* with a score of 64/100 on the Freedom on the Net report. According to Freedom House, Ghanaian political rights and civil liberties are backed by a stable democracy, with competitive multi-party elections since 1992 and peaceful transfer of power between the two major political parties. Areas of weakness concern judicial independence and the rule of law. Corruption also poses challenges to the effective performance of the government. The Freedom House report also highlights political violence as a growing concern.

OECD / G20 AI Principles

Ghana is not a member of the OECD and has not official endorsed the OECD principles.²²⁴⁶ However, Ghana is a member of the African Union, which has recently joined the G20 and endorsed the G20 AI Principles.²²⁴⁷

Ghana is a member of the OECD Development Centre since 2015, collaborating with members and non-member countries in policy to improve living

https://achpr.au.int/en/news/press-releases/2022-09-28/special-rapporteur-freedom-expression-access-international-day

²²⁴⁴ African Commission on Human and Peoples' Rights, *Press Statement by the Special Rapporteur on Freedom of Expression and Access to Information in Africa, on the Occasion of International Day for Universal Access to Information* (Sept. 28, 2022),

²²⁴⁵ Freedom House, *Freedom in the World 2024: Ghana* (2024), https://freedomhouse.org/country/ghana/freedom-world/2024

²²⁴⁶ OECD Legal Instruments, *Recommendation of the Council on Artificial Intelligence* (May 3, 2024), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449

²²⁴⁷ G20, G20 Members (2024), https://g20.org/about-g20/g20-members/

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conditions in developing and emerging economies.²²⁴⁸ In the development of Ghana's national AI strategy, the government of Ghana and The Future Society collaborated with the OECD AI Policy Observatory among other organizations that champion human-centric AI.²²⁴⁹

Council of Europe Al Treaty

Ghana is not a member state of the Council of Europe. The Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law²²⁵⁰ opened for signature by member and non-member states on September 5, 2024. However, Ghana has not signed this first legally binding international AI treaty.²²⁵¹

UNESCO Recommendation on AI Ethics

Ghana is one of the 193 member countries of UNESCO that adopted the UNESCO Recommendation on the Ethics of AI in 2021. 2252

Ghana's Minister for Communications and Digitalisation, Ursula Owusu-Ekuful, reaffirmed the government's commitment to ensuring the ethical and responsible use of Artificial Intelligence (AI) technologies in Ghana at a public workshop launching the UNESCO Readiness Assessment Methodology (RAM) study in October 2024.²²⁵³ The minister emphasized the role of public workshops as a significant step to leverage AI responsibly, to follow guidelines and principles outlined by UNESCO's Recommendation on AI Ethics, and to play a pivotal role in achieving AU's Agenda 2063²²⁵⁴ and the UN Sustainable Development Goals.²²⁵⁵

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intelligence-launched/

²²⁴⁸ OECD, Ghana Becomes the 50th Member of the OECD Development Centre (Oct. 6, 2015), https://www.oecd.org/development/ghana-joins-oecd-development-centre.htm

²²⁴⁹ Yolanda Lannquist and Nicolas Miailhe, *National AI Strategies for Inclusive and Sustainable Development*, The Future Society (Apr. 30, 2022),

https://thefuturesociety.org/2022/04/03/policies-ai-sustainable-development/

²²⁵⁰ Council of Europe, *Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law* (Sept. 5, 2024), https://rm.coe.int/1680afae3c
²²⁵¹ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Nov. 6, 2024), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

²²⁵² UNESCO, *UNESCO Member States Adopt the First Ever Global Agreement on the Ethics of Artificial Intelligence* (Apr. 21, 2022), https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence

²²⁵³ Ministry for Communications and Digitalisation Ghana, *Readiness Assessment Measurement (RAM) Ethical Use of Artificial Intelligence Launched* (Oct. 1, 2024), https://moc.gov.gh/2024/10/01/readiness-assessment-measurement-ram-ethical-use-of-artificial-

²²⁵⁴ African Union, *Agenda 2063: The Africa We Want*, https://au.int/en/agenda2063/overview
²²⁵⁵ Ministry for Communications and Digitalisation Ghana, *Readiness Assessment Measurement (RAM) Ethical Use of Artificial Intelligence Launched* (Oct. 1, 2024),

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Evaluation

Ghana has made significant progress toward ethical AI governance by endorsing the Continental AI strategy, finalizing its National Data Strategy, and forming a new steering committee to oversee AI readiness. Ghana formulated a national AI strategy and contributed to the development of the Continental AI Strategy for Africa, which was finalized in 2024, and can serve as a guide for further elaborating the national strategy. The country has taken the first step to meaningfully implement the UNESCO Recommendation on the Ethics of AI with the initiation of RAM.

Efforts are underway to establish partnerships to further the digital strategy, though digitization is positioned more as a political tool than a direct means of enhancing efficiency and improving the lives of the country's population. While public addresses, such as those by Minister Ursula Owusu-Ekuful, emphasize the importance of public participation and transparent policymaking, these principles are primarily showcased at events involving international partners, with limited practical engagement of Ghanaian citizens.

Ghana benefits from an independent Data Protection Commission and developed its own data protection legal framework and ratified the Malabo Convention. Amid the rapid deployment of AI in the country, a step further would consist in modernizing the Data Protection Act to include the right to algorithmic transparency. The regulation of practices of biometrics identification, facial recognition, and individual scoring is essential to realize the benefits of AI for the Ghanaian society.

Hong Kong

In 2024, Hong Kong created the Digital Policy Office to oversee the Ethical Artificial Intelligence Framework and published a model data protection framework for AI. The Hong Kong Monetary Authority also issued Consumer Protection guidelines in the use of generative AI.

National AI Strategy

Hong Kong is making significant advances in AI development and policy implementation through the issuance of guidelines, policies, and AI technology applications in different sectors. Although this special administrative region²²⁵⁶ largely controlled by China does not have a national strategy for the regulation of AI, there exist several sectoral and overall guidelines, with efforts underway on

 $\underline{\text{https://moc.gov.gh/2024/10/01/readiness-assessment-measurement-ram-ethical-use-of-artificial-intelligence-launched/}$

²²⁵⁶ Referred to as the Hong Kong Special Administrative Region (HKSAR).

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more reforms, to guide organizations in adopting accountable and ethical AI models and processes.

A 2021 Guideline on Ethical Development and Use of AI issued by the Office of the Privacy Commissioner for Personal Data (PCPD) aims to guide organizations in their adherence to personal data and privacy requirements in the region. The PCPD Ethical AI principles have been expanded to twelve principles from seven. Two of the twelve, namely (1) Transparency and Interpretability and (2) Reliability, Robustness, and Security are categorized as "Performance Principles." The rest are categorized as "Generalized Principles" that include the following: (1) Fairness, (2) Diversity and Inclusion, (3) Human Oversight, (4) Lawfulness and Compliance, (5) Data Privacy, (6) Safety, (7) Accountability, (8) Beneficial AI, (9) Cooperation and Openness and (10) Sustainability and Just Transition. PCPD guideline also provides practical steps to help organizations in managing their AI systems, covered under four major areas namely:

- Establishing AI strategy and governance
- Conducting risk assessment and human oversight
- Executing development of AI models and managing overall AI systems
- Fostering communication and engagement with stakeholders.

The Hong Kong PCPD issued the Artificial Intelligence: Model Personal Data Protection Framework in 2024, one of the priorities previously outlined for the year. Other priorities included promoting and protecting personal data privacy in the context of AI and reducing data scraping, doxxing, and data breaches.

https://www.pcpd.org.hk/english/resources_centre/publications/files/guidance_ethical_e.pdf; PCPD, Inspection Report on Customers' Personal Data Systems (Aug. 18, 2021),

https://www.pcpd.org.hk/english/enforcement/commissioners_findings/files/r21_3099_e.pdf e.pdf Hong Kong Office of the Government Chief Information Officer, *Ethical Artificial Intelligence Framework* (Sept. 2022),

https://www.ogcio.gov.hk/en/our_work/infrastructure/methodology/ethical_ai_framework/doc/Ethical_AI_Framework.pdf

²²⁵⁹ Legislative Council of the Hong Kong Special Administrative Region, *LC Paper No. CB*(2)157/2024(02) (Feb. 2024),

https://www.legco.gov.hk/yr2024/english/panels/ca/papers/ca20240219cb2-157-2-e.pdf
²²⁶⁰ Office of the Privacy Commissioner for Personal Data, Hong Kong, *Report on the Work of the Office of the Privacy Commissioner for Personal Data in 2022* (Feb. 20, 2023),
https://www.legco.gov.hk/yr2023/english/panels/ca/papers/ca20230220cb2-132-2-e.pdf; Office of the Privacy Commissioner for Personal Data, Hong Kong, *Updated background brief prepared by the Legislative Council Secretariat for the meeting on 20 February 2023* (Feb.15, 2023), https://www.legco.gov.hk/yr2023/english/panels/ca/papers/ca20230220cb2-132-3-e.pdf

²²⁵⁷ Hong Kong Office of the Privacy Commissioner for Personal Data, *Guidance on Ethical Development and Use of AI* (Aug. 18, 2021),

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Some sectoral initiatives are also of relevance. In 2019, the Hong Kong Monetary Authority (HKMA) published a 12-principle guideline detailing adherence items for banks that engage in designing and implementing AI and big data analytics applications.²²⁶¹ The issuance of these principles aimed to ensure some form of safeguards for banks as they deal with the increased need for AI technology adoption in Hong Kong's vibrant financial sector. The HKMA has continued to refine its guidance on AI applications in banking.

New guidelines were issued in August 2024 on consumer protection in the use of AI in customer facing applications. It issued the guidelines to prevent any user harms from hallucination, incomplete results generated by GenAI in such applications. However, in its circular, the HKMA acknowledges that adoption of GenAI in the banking sector is still at 'an early stage, with most of the current applications focusing on improving banks' operational efficiency. Nonetheless, the ability of GenAI in content-creation means that GenAI could be more extensively adopted by the banking sector in customer- facing activities' The guidelines build on the 2019 HKMA guidelines²²⁶³ on consumer protection and adds requirements. These include defining the scope, policies, using a human-inthe-loop approach, ensuring fairness, providing opt-out mechanisms, disclosing AI models' limitations, and abiding by Hong Kong's privacy regulations.

The HKMA is also taking steps to promote the use of AI for detecting suspicious activities by financial institutions. In September 2024, it released a circular on 'the Use of Artificial Intelligence for Monitoring of Suspicious Activities' 2264 outlining several initiatives that the HKMA was undertaking to promote it. This includes an experience sharing forum, fintech sandbox²²⁶⁵, and guidance from the HKMA on innovating therein."

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²²⁶¹ DLA Piper, *Hong Kong banks must follow new AI framework* (Nov. 2019), https://www.lexology.com/library/detail.aspx?g=aff8347f-447c-4155-801b-8174a5d4668e

²²⁶² Hong Kong Monetary Authority, *Consumer Protection in respect of Use of Generative Artificial Intelligence* (Aug. 2024), https://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2024/20240819e1.pdf

²²⁶³ 2102 Hong Kong Monetary Authority, Consumer Protection in respect of Use of Big Data Analytics and Artificial Intelligence by Authorized Institutions (Nov, 2019), https://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2019/20191105e1.pdf

²²⁶⁴ 2103 Hong Kong Monetary Authority, *Use of Artificial Intelligence for Monitoring of Suspicious Activities* (Sept. 9, 2024), https://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2024/20240909e1.pdf

²²⁶⁵ 2104 Hong Kong Monetary Authority, *Generative Artificial Intelligence Sandbox* (Sept. 20, 2024), https://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2024/20240920e1.pdf

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Further, in financial services, on September 27, 2024, the HKMA released a research paper²²⁶⁶ on the use of AI in financial services, which highlighted that companies were currently using AI for improving internal efficiency constrained by lack of know-how and regulatory constraints. The paper also advocated for principles of fairness, governance and accountability, sustainability, reliability and transparency to be enshrined within GenAI models."

Hong Kong's technology development sector, specifically AI, is seeing increased integration with mainland China. In her 2021 policy address, the Chief Executive of Hong Kong, Carrie Lam stated that "the developments of Hong Kong and our country are closely related. Only by leveraging the Central Government's policies in support of Hong Kong can we give full play to our unique strengths, which will, in turn, bring continuous impetus to our economy."²²⁶⁷ This, coupled with the passage of the Hong Kong National Security Law in 2020 by China's top legislature, ²²⁶⁸ cast some doubts on the future of the One Country, Two Systems model for the governance of Hong Kong. ²²⁶⁹

Also in September 2022, the Hong Kong Office of the Government Chief Information Officer developed the Ethical AI Framework for internal adoption within the Government regarding AI and big data analytics applications. The Ethical AI Framework will assist the government bureaus and departments in adopting AI and big data analytics and incorporating ethical elements in the planning, design, and implementation of IT projects or services, and it consists of ethical principles, practices, and assessment of AI.²²⁷⁰

In July 2024 the Hong Kong government officially²²⁷¹ merged the Government Chief Information Officer's Office and the Efficiency Office to create the Digital Policy Office (DPO) to manage digital policies, data governance, and enhance digital services. In a policy address²²⁷² for 2024, the HKSAR Chief

https://www.policyaddress.gov.hk/2021/eng/p38.html

²²⁶⁶ Hong Kong Monetary *Authority Generative Artificial Intelligence in the Financial Services Space* (Sept. 27, 2024), https://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2024/GenAI research paper.pdf

²²⁶⁷ The Chief Executive's 2021 Address (Oct. 6, 2021),

²²⁶⁸ Hong Kong Free Press, *Official English translation of the Hong Kong national security law* (Jul. 1, 2020), https://hongkongfp.com/2020/07/01/in-full-english-translation-of-the-hong-kong-national-security-law/

²²⁶⁹ William Overholt, Hong Kong: The Rise and Fall of "One Country, Two Systems (Dec.

 $^{2019), \}underline{https://ash.harvard.edu/files/ash/files/overholt_hong_kong_paper_final.pdf}$

²²⁷⁰ Hong Kong Office of the Government Chief Information Officer, *Ethical Artificial Intelligence Framework* (Sept. 2022),

https://www.ogcio.gov.hk/en/our_work/infrastructure/methodology/ethical_ai_framework/
2271 Hong Kong Special Administrative Region, Digital Policy Office established today (Jul.

^{2024),} https://www.info.gov.hk/gia/general/202407/25/P2024072400394.htm

²²⁷² Hong Kong Special Administrative Region, *The Chief Executive's 2024 Policy Address* (Oct. 2024), https://www.policyaddress.gov.hk/2024/en/policy.html

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Executive highlighted efforts for digital transformation of the Hong Kong public service through the DPO. This would include an AI based document processing application and an AI tool to address public queries.²²⁷³

Reforms in other sectors are also underway. For example, the Hong Kong Commerce and Economic Development Bureau began a 2-month consultation on amending the Copyright Ordinance (528) for effective copyright protection and innovation of AI models in 2024.²²⁷⁴

Public Participation

Hong Kong does not have a structured process for public participation in the development of AI policy, although some AI and digital technology projects have sought the engagement of citizens as part of their roll-out plans. For instance, in July 2024, the Hong Kong Commerce and Economic Development bureau began a two-month public consultation on required legal amendments to protect copyrights and ensure AI model development.²²⁷⁵

Data Protection and Algorithmic Transparency

Hong Kong passed the Personal Data (Privacy) Ordinance (PDPO) in 1995, which instilled a principles-based approach to data privacy and established the Office of the Privacy Commissioner for Personal Data (PCPD) as an independent data privacy regulator.

The PDPO saw amendments in 2012²²⁷⁶ and 2021²²⁷⁷ to address direct marketing and criminalize doxxing, respectively. Allowing the PCPD to conduct investigations without a warrant, press charges independently, force content to be taken down, and charge non-compliant internet platforms, there are concerns that

https://www.cedb.gov.hk/assets/resources/cedb/consultations-and-

and Artificial Intelligence Public Consultation (Jul. 2024), https://www.cedb.gov.hk/assets/resources/cedb/consultations-and-

publications/Eng Copyright%20and%20AI%20Consultation%20Paper%20(2024.07.08).pdf ²²⁷⁶ Hong Kong Office of the Privacy Commissioner for Personal Data, *Amendments* 2012,

Hong Kong Special Administrative Region Government, *The Chief Executive's 2023 Policy Address* (Oct. 25, 2023), https://www.policyaddress.gov.hk/2023/public/pdf/policy/policy-full-en.pdf

²²⁷⁴ Commerce and Economic Development Bureau Intellectual Property Department, *Copyright* and Artificial Intelligence Public Consultation (Jul. 2024),

publications/Eng Copyright%20and%20AI%20Consultation%20Paper%20(2024.07.08).pdf

2275 Commerce and Economic Development Bureau Intellectual Property Department, Copyright

https://www.pcpd.org.hk/english/data_privacy_law/amendments_2012/amendment_2012.html
2277 Hong Kong Office of the Privacy Commissioner for Personal Data, *The Personal Data*
(Privacy) (Amendment) Ordinance 2021 Takes Effect Today to Criminalise Doxxing Acts (Oct. 8, 2021), https://www.pcpd.org.hk/english/news_events/media_statements/press_20211008.html

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the doxxing amendment will be used to restrict dissenting opinions.²²⁷⁸ The PDPO applies to both private and public data usage. However, it allows for specific exemptions for criminal investigations, the performance of judicial functions, security and defense, and emergency situations.²²⁷⁹ In the context of the recent Hong Kong National Security Law and associated protests, the broader implications of these exemptions on human rights are less clear. For example, police can request content be taken down or have online platforms provide information about users.²²⁸⁰

The PCPD has been an active participant in international discussions on data protection, algorithmic transparency, and many other key issues in the use of AI, especially in the General Privacy Assembly.

The PCPD was a signatory to the 2018 Global Privacy Assembly (GPA) Declaration on Ethics and Data Protection in Artificial Intelligence. In November 2020, the PCPD sponsored the Resolution on Accountability in the Development and Use of Artificial Intelligence. The PCPD co-sponsored the 2023 GPA Resolution on Generative AI.²²⁸¹The PCPD did not endorse the 2022 GPA Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology.²²⁸²

The AI Guidance presented by the PCPD makes several recommendations to increase transparency around the use of AI, including "putting in controls that allow human oversight and intervention of the operations of the relevant AI system." Similarly, the guidelines for banks using AI from the Hong Kong Monetary Authority push banks to hold leadership accountable for AI decision-

²²⁷⁹ Hong Kong e-legislation, *Cap. 486 Personal Data (Privacy) Ordinance, Part 8, Exemptions*, https://www.elegislation.gov.hk/hk/cap486

https://www.info.gov.hk/gia/general/202007/06/P2020070600784.htm

²²⁸² Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022),

 $\frac{https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf$

https://www.pcpd.org.hk/english/resources centre/publications/files/guidance ethical e.pdf

²²⁷⁸ Law Society of Hong Kong, *Proposed Doxxing Offence - Personal Data (Privacy)* (*Amendment) Bill 2021* (Aug. 18, 2021), https://www.hklawsoc.org.hk/-/media/HKLS/pub e/news/submissions/20210818.pdf

²²⁸⁰ The Government of the Hong Kong Special Administrative Region, *Implementation Rules for Article 43 of the Law of the People's Republic of China on Safeguarding National Security in the Hong Kong Special Administrative Region*, Gazetted (Jul. 6, 2020),

²²⁸¹ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

²²⁸³ Hong Kong Office of the Privacy Commissioner for Personal Data, *Guidance on the Ethical Development and Use of Artificial Intelligence* (Aug. 2021),

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making, to ensure results from AI systems are explainable and auditable, and to provide transparency to consumers on the use of AI.²²⁸⁴ These recommendations align with established principles such as the OECD AI Principles, and similar recommendations in the proposed EU AI Act; however, this is just guidance to businesses, and non-binding.

The PCPD published the Artificial Intelligence: Model Personal Data Protection Framework in 2024. The Framework provides a set of practical and detailed recommendations for local enterprises through a risk-based approach, offering key principles such as human oversight, data privacy, fairness, transparency, interpretability, reliability, robustness, and security to guide the procurement, implementation, and use of AI systems."2285

Data Scraping

The PCPD and international data protection and privacy counterparts released a follow-up joint statement laying out expectations for industry related to data scraping and privacy in 2024. The initial statement in August 2023 established that "[social media companies] and other websites are responsible for protecting personal information from unlawful scraping. The follow-up, which incorporates feedback from engagement with companies such as Alphabet (YouTube), X Corp (formerly Twitter), and Meta Platforms (Facebook, Instagram, WhatsApp), adds that organizations must "comply with privacy and data protection laws when using personal information, including from their own platforms, to develop AI large language models"; must regularly review and update privacy protection measures to keep pace with technological advances; and ensure that permissible data scraping, such as that for research, "is done lawfully and following strict contractual terms." 2288

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202308.pdf

²²⁸⁴ Hong Kong Monetary Authority, *High Level Principles on Artificial Intelligence* (Nov. 1, 2019), https://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2019/20191101e1.pdf

²²⁸⁵ Privacy Commissioner for Personal Data, *Artificial Intelligence: Model Personal Data Protection Framework* (Jun. 2024),

 $[\]underline{https://www.pcpd.org.hk/english/resources_centre/publications/files/ai_protection_framework.pd}$

²²⁸⁶ UK Information Commissioner's Office, *Global Privacy Authorities Issue Follow-Up Joint Statement on Data Scraping after Industry Engagement* (Oct. 28, 2024), https://ico.org.uk/about-the-ico/media-centre/news-and-blogs/2024/10/global-privacy-authorities-issue-follow-up-joint-statement-on-data-scraping-after-industry-engagement/

²²⁸⁷ Regulatory Supervision Information Commissioner's Office of the United Kingdom, *Joint Statement on Data Scraping and the Protection of Privacy* (Aug. 24, 2023), https://ico.org.uk/media/about-the-ico/documents/4026232/joint-statement-data-scraping-

²²⁸⁸ Office of the Privacy Commissioner of Canada, *Concluding Joint Statement on Data Scraping and the Protection of Privacy* (Oct. 2024), https://ico.org.uk/about-the-ico/media-

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Data scraping generally involves the automated extraction of data from the web. Data protection authorities are seeing increasing incidents involving data scraping, particularly from social media companies and the operators of other websites that host publicly accessible data. Scraped personal information can be exploited for targeted cyberattacks, identity fraud, monitoring, profiling and surveillance purposes, unauthorized political or intelligence gathering purposes, unwanted direct marketing or spam.

AI and Surveillance

Hong Kong has long-standing concerns about AI surveillance, especially as it relates to its relations with mainland China and the preservation of democracy in Hong Kong. Hong Kong Chief Executive Carrie Lam invoked the Emergency Regulations Ordinance in order to ban the use of face masks during antigovernment protests in 2019.²²⁸⁹ This ordinance gives the chief executive the power to "make any regulations whatsoever which he may consider desirable in the public interest."²²⁹⁰ In December 2020, Hong Kong's Court of Final Appeal largely upheld the application of the Emergency Regulations Ordinance for the facemask ban. ²²⁹¹ The use of face masks in the context of the 2019 protests was a deliberate effort by protestors to shield their identity from the government and the subsequent mask ban casts doubt over the future of the right to freely protest in Hong Kong.

Hong Kong has also been a strong proponent of the use of technology in public spaces, laying out its future plans through the Hong Kong Smart Cities Blueprint 2.0, published in December 2020.²²⁹² These plans include the use of the "StayHomeSafe" mobile app and companion tracking bracelet, whose use was required for all new entrants into Hong Kong.²²⁹³ Additionally, as an outcome of

<u>centre/news-and-blogs/2024/10/global-privacy-authorities-issue-follow-up-joint-statement-on-data-scraping-after-industry-engagement/</u>

²²⁸⁹ BBC News, *Hong Kong: Face Mask Ban Prompts Thousands to Protest* (Oct. 4, 2019), https://www.bbc.com/news/world-asia-china-49939173

²²⁹⁰ Hong Kong E-Legislation, *Cap. 241 Emergency Relations Ordinance*, https://www.elegislation.gov.hk/hk/cap241

²²⁹¹ Washington Post, *Hong Kong's highest court upholds ban on masks at protests* (Dec. 21, 2020), https://www.washingtonpost.com/world/hongkong-mask-ban-ruling/2020/12/20/f2722af0-4340-11eb-a277-49a6d1f9dff1 story.html

²²⁹² Hong Kong Innovation and Technology Bureau, *Hong Kong Smart Cities Blueprint 2.0* (Dec. 2020).

 $[\]underline{https://www.smartcity.gov.hk/modules/custom/custom_global_js_css/assets/files/HKSmartCityB_lueprint(ENG)v2.pdf}$

²²⁹³ Government of Hong Kong Special Administrative Region, *StayHomeSafe User Guide*, https://www.coronavirus.gov.hk/eng/stay-home-safe.html

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the Smart City Blueprint, Hong Kong has pushed to adopt concrete policy standards for the use of autonomous vehicles (AVs).²²⁹⁴

The Legislative Council Panel on Transport released a proposal for legislation on this issue, with the goal of increased testing of AVs and a clear process for licensing new test cars.²²⁹⁵ The blueprint and associated initiatives also outline many plans such as the increased rollout of public wifi and contact tracing for COVID, as well as funding for robotic patrols of airport terminals and a new LawTech Fund.

Despite the clear potential upside, there is no mention of potential concerns, such as data privacy, algorithmic bias, or the potential violation of human rights in the documents rolling out these new initiatives. Furthermore, there was no significant public engagement, despite concerns about negative impacts.²²⁹⁶ The rollout of new technology in public places, the Hong Kong National Security Law, and the development and use of facial recognition technology by local companies²²⁹⁷ all threaten the increased use of AI for surveillance purposes in Hong Kong.

In July 2024, Hong Kong's security chief, Chris Tang, informed local media that the police aim to install 2,000 new surveillance cameras and plan to incorporate facial recognition technology, with the potential for AI-assisted suspect tracking. However, it remains unclear whether Hong Kong will implement continuous live facial recognition scanning of public spaces or if it will limit facial recognition to retrospective analysis of footage following a crime or upon legal authorization. Some experts have expressed concern that Hong Kong may be moving closer to mainland China's pervasive surveillance practices.²²⁹⁸

vehicles.htm

2295 Legislative Council Panel on Transport, *Proposed Regulatory Framework for Autonomous*

Neville Lai and Justin Chan, *People have to be at the heart of Hong Kong's smart city plans*" (Nov. 27, 2021), https://www.scmp.com/comment/opinion/hong-kong/article/3157263/people-have-be-heart-hong-kongs-smart-city-plans

Legislative Council Secretariat, Information Services Division, *Policy on testing and deployment of autonomous vehicles* (Jan. 12, 2021), <a href="https://www.legco.gov.hk/research-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/essentials-2021ise13-policy-on-testing-and-deployment-of-autonomous-publications/english/english/english/english/english/english/english/english/english

Vehicles (May 21, 2021), https://www.legco.gov.hk/yr20-21/english/panels/tp/papers/tp20210521cb4-987-3-e.pdf

²²⁹⁷ Lachlan Markay, *Scoop: Chinese tech firm sidesteps sanctions* (Sept. 29, 2021), https://www.axios.com/chinese-tech-firm-sidesteps-sanctions-de43feaf-7df5-46ad-85bd-8a37ab468e2e.html

²²⁹⁸ Jessie Yeung, CNN, *Hong Kong plans to install thousands of surveillance cameras. Critics say it's more proof the city is moving closer to China* (Oct. 2024), https://edition.cnn.com/2024/10/05/asia/hong-kong-police-cameras-facial-recognition-intl-hnk-dst/index.html

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Environmental Impact of Al

The Hong Kong Special Administrative Region has considered the environmental impact of AI. The Twelve Ethical AI Principles include "Sustainability and Just Transition." Any AI development should ensure that there are mitigation strategies in place to address potential impacts on society and the environment.²²⁹⁹ The framework specifically acknowledges that AI can have an impact on planet preservation and cites examples of using AI to optimize power usage and reduce carbon footprint.

Human Rights

As a special administrative region of China, Hong Kong has not ratified the United Nations Universal Declaration of Human Rights (UDHR).²³⁰⁰ But the above-mentioned AI ethical principles are explicitly derived from the UDHR.²³⁰¹ Also, the UN International Covenant on Economic, Social, and Cultural Rights (ICESCR) and UN International Covenant on Civil and Political Rights (ICCPR) apply to Hong Kong.²³⁰²

These human rights conventions are also complemented by other articles that protect the rights of citizens, including the Hong Kong Bill of Rights²³⁰³ and the Basic Law.²³⁰⁴ One of the key provisions in Article 30 of the Personal Data (Privacy) Ordinance protects citizens' right to privacy and clearly identifies principles to be adhered to in the use of personal data.²³⁰⁵

https://www.digitalpolicy.gov.hk/en/our_work/data_governance/policies_standards/ethical_ai_fr amework/doc/Quick_Reference_Guide-Ethical_AI_Framework.pdf

https://treaties.un.org/pages/ViewDetails.aspx?src=IND&mtdsg_no=IV-

3&chapter=4&clang= en#8

²²⁹⁹ Digital Policy Office, Ethical Artificial Intelligence Framework (Jul. 2024),

²³⁰⁰ The UNDHR has been ratified by China, which is also a United Nations Member State. See United Nations, *Member States*, https://www.un.org/en/about-us/member-states#gotoH

²³⁰¹ Digital Policy Office, *Ethical Artificial Intelligence Framework*, pp. 1–4 (Jul. 2024), https://www.digitalpolicy.gov.hk/en/our_work/data_governance/policies_standards/ethical_ai_framework/doc/Quick Reference Guide-Ethical AI Framework.pdf

²³⁰² United Nations Treaty Collection, *International Covenant on Civil and Political Rights, China*, fn6, https://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg_no=IV-

<u>4&chapter=4&clang= en#4</u>; *International Covenant on Economic, Social, and Cultural Rights, China*, fn8 (with reservations),

²³⁰³ Hong Kong e-Legislation, *Hong Kong Bill of Rights Ordinance of 1991*, CAP. 383 (Jun. 8, 1991), https://www.elegislation.gov.hk/hk/cap383

²³⁰⁴ Hong Kong e-Legislation, *Basic Law of Hong Kong Special Administrative Region of the People's Republic of China* (April 4, 1990), https://www.elegislation.gov.hk/hk/A101!en@1997-07-01T00:00:00

²³⁰⁵ Hong Kong e-legislation, *Cap. 486 Personal Data (Privacy) Ordinance* (Aug. 1, 1996), https://www.elegislation.gov.hk/hk/cap486

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The Legislative Council of the Hong Kong Special Administrative Region adopted the Safeguarding National Security Bill in March of 2024. This legislation raised concerns from the European Union about its potential impact on freedoms, political pluralism, and international relations. Therefore, the EU stated in a press release that it will continue to assess the implications of this legislation and urges Hong Kong and China to uphold commitments to autonomy under the one country, two systems framework. ²³⁰⁷

The Freedom House 2024 Report ranks Hong Kong as "Partly Free" with a total score of 41/100 (down from 42/100 in the 2023 report). Political rights and civil liberties are scored very low on the report because of the prevalence of pro-Beijing interests in the country's political system and the limitations on freedom and autonomy because of political interventions from mainland China.

OECD / G20 AI Principles

Hong Kong is not a member of the OECD or the G20 and has not endorsed the OECD / G20 AI Principles. 2309

Despite no official endorsement, Hong Kong's National Strategy includes many of the OECD's principles and implementation recommendations but has limitations, such as insufficient human capacity and incomplete alignment with human rights and democratic values, notably due to the use of facial recognition for surveillance purposes.

Council of Europe AI Treaty

Neither Hong Kong nor China have signed the Council of Europe AI treaty, which opened for signature to non-EU member countries and countries around the world in September 2024. Hong Kong and China also did not participate in the negotiations, which began in 2022, with input from 68 international representatives from civil society, academia, industry, and other international organizations was gathered.²³¹⁰

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²³⁰⁶ Security Bureau, *Basic Law Article 23 Legislation: Safeguarding National Security Bill* (Mar. 7, 2024), https://www.legco.gov.hk/yr2024/english/brief/sb20240308_20240308-e.pdf
²³⁰⁷ Council of the European Union, *Hong Kong: Statement by the High Representative on behalf of the European Union on the adoption of new national security legislation* (Mar. 19, 2024), https://www.consilium.europa.eu/en/press/press-releases/2024/03/19/hong-kong-statement-by-the-high-representative-on-behalf-of-the-european-union-on-the-adoption-of-new-national-security-legislation/

²³⁰⁸ Freedom House, *Freedom in the World 2024* (Feb. 29, 2024), https://freedomhouse.org/country/hong-kong/freedom-world/2024

²³⁰⁹ OECD Legal Instruments, *Recommendation of the Council of Artificial Intelligence* (May 3, 2024), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449

²³¹⁰ European Commission, Commission signed the Council of Europe Framework Convention on Artificial Intelligence and human rights, democracy and the rule of law (Sept. 5, 2024),

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UNESCO Recommendation on AI Ethics

As a member of UNESCO, Hong Kong adopted the Recommendation on the Ethics of Artificial Intelligence in November 2021, the first global standard on the ethics of artificial intelligence. However, no measures so far have been put in place by the country to implement the Recommendation.²³¹¹

Hong Kong has not stated a plan or participated independently in UNESCO's Readiness Assessment Methodology (RAM) for artificial intelligence²³¹². Hong Kong's AI policies align with those of mainland China. However, China itself has not yet engaged in the RAM process and has not publicly indicated plans to do so.

Evaluation

Hong Kong has made significant progress in Artificial Intelligence policy over the past year. It has published frameworks and principles to enhance personal data privacy protection, to embed ethical considerations into the AI life cycle, and to ensure consumer protection. Establishing the Digital Policy Office marked a development that brought with it the creation of an ethical framework in AI, as well as the establishment as an institution to monitor its development., although it could be safe to link this special administrative region with some of China's AI efforts and achievements due to the administrative relationship between both.

Hong Kong has not been a signatory to the OECD AI Principles or the Universal Declaration for Human Rights; however, it has proposed and implemented similar principles and guidelines and endorsed the UNESCO Recommendation on the Ethics of AI as well as the OECD / G20 AI Principles. The leading role played by Hong Kong through the PCPD-sponsored resolution on greater accountability in the development and use of AI to the Global Privacy Assembly (GPA) shows that the region has the potential to play a prominent role in key global AI policy development and implementation.

Irrespective of its complicated relationship with mainland China, especially as it relates to surveillance and data protection issues, there is some effort by the government in regulating and promoting ethical AI use within the country. It is unclear, however, how much of this extends to new government initiatives, such as the Smart Cities Blueprint, or issues of national security. More effort is needed by the government in the adoption of a comprehensive national

https://digital-strategy.ec.europa.eu/en/news/commission-signed-council-europe-framework-convention-artificial-intelligence-and-human-rights

https://www.unesco.org/ethics-ai/en/global-hub

²³¹¹UNESCO, *Recommendation on the Ethics of Artificial Intelligence* (Sept. 26, 2024), https://www.unesco.org/en/articles/recommendation-ethics-artificial-intelligence ²³¹² UNESCO, Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024),

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AI strategy that promotes democratic values and human rights, as well as alignment with international commitments to AI principles.

Hungary

In 2024, Hungary established the Hungarian Artificial Intelligence Council to implement the EU AI Act, which entered into force in August. Hungary also faced referral to the European Union's Court of Justice over concerns that the National Defense of Sovereignty law violates citizens fundamental human rights.

National AI Strategy

Recognizing the potential benefits of the technology and simultaneously considering the possible related challenges, the Government of Hungary resolved to have a comprehensive Artificial Intelligence Strategy drawn up. In September 2020, the Hungarian Ministry of Innovation and Technology Government released the National AI strategy, outlining the strategic vision and actions for the development of AI in the period 2020–2030.

The document sets goals up to 2030 and outlines an action plan extending up to 2025. The AI Strategy is however considered as a living document due to rapid technological developments and experience gathered through the spread of applications. The Strategy shall be reviewed at least every two years.²³¹³

In the Strategy, the Hungarian government affirms its commitment to developing Hungarian artificial intelligence—as a special branch of its digitization efforts—to be high-tech and green, in the spirit of Hungary's general development objectives. The AI strategy aims to make the most of the opportunities offered by modern technologies for raising the living standard of citizens and protecting the environment.²³¹⁴ Hungary's AI strategy aims to support and boost all relevant sections of the AI value chain from data generation and management, through basic and applied research, to utilization of the technology and raising awareness of the possibilities inherent in practical AI applications.

Through a multi-layered set of goals, the strategy aims to:

• Strengthen the foundation pillars of the Hungarian AI ecosystem: data economy, research development and innovation (R&D&I), AI uptake, education and competence development, infrastructure deployment, and regulatory and ethical framework.

²³¹³ László Palkovics Minister for Innovation and Technology, *Hungary's Artificial Intelligence Strategy 2020–2030* (Sept. 8, 2020), https://2015-2019.kormany.hu/en/ministry-for-innovation-and-technology/news/hungary-would-like-to-benefit-from-the-opportunities-afforded-by-artificial-intelligence

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- Focus on specific sectors and technology fields with the highest acceleration potential for Hungary: manufacturing, healthcare, agriculture, public administration, transportation, logistics and energy.
- Initiate transformative programs with long-term ambitious goals that offer direct benefits to citizens: autonomous systems and self-driving vehicles, health-awareness in a digital world, climate-driven agriculture, data-wallet and personalized services, AI-supported development of personal competencies, automated administration procedures in Hungarian, and energy networks focused on renewable sources of energy.

Given its breadth, the Strategy requires a whole-of-government effort that brings together different government ministries under the leadership of the Ministry of Innovation. This effort will be supported by AI Coalition team of different bureaucracies supporting the relevant ministries, as well as a Multisectoral Committee of Artificial Intelligence and a Scientific Committee of experts.

Hungary contributed as a Council of Europe and EU Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of law. The Committee on AI approved the Draft Framework Convention during its 10th Plenary session in March 2024. The Council of Europe Committee of Ministers formally adopted the Framework Convention in May 2024. It is open for signature and ratification by any country in the world.²³¹⁵

AI Ethical Guidelines

Hungary's national AI strategy aims to ensure a responsible, reliable, and human-centered use of AI thanks for the following actions:

- Creating an ethical framework: development of an AI code of conduct by the Ministry of Justice, the Ministry for Innovation and Technology, the AI Innovation Hub and the Central Statistical Office.
- Setting up an Artificial Intelligence Regulation and Ethics Knowledge Centre: the aim is to create and coordinate an extensive pool of experts to help resolve legal issues and matters of ethics relating to the regulation of AI and the implementation of the strategy.
- Establishing a regulatory framework for AI: the objective is to amend the current regulatory system to suit AI and to align it to EU regulations.
- Building data management regulation: the objective is to set up regulations for the use and exchange of public and private data and to define rules regarding data monetization.

²³¹⁵ Council of Europe, Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law (2024), https://rm.coe.int/1680afae3c

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• As there is no one-size-fits-all solution, the Hungarian strategy calls for the development of sector-specific regulatory frameworks, ensuring that the regulatory needs for AI development are adapted to the relevant industry areas.

The responsible governing body for the AI Ethical Guidelines is the AI Coalition of Hungary²³¹⁶ (MIK; Mesterséges Intelligencia Koalíció). The AI Coalition is responsible for adapting the EU High Level Expert Group's AI ethical guidelines to the Hungarian context. The AI Coalition is a typical independent regulatory oversight and ethical advisory body. It is mainly composed of academics. The type of oversight provided is mostly technical guidance (e.g. toolkits, documentation, technical standards). One of its main activities is to gather opinions from stakeholders on ethical principles, regulation improvements etc.

Hungary held the presidency of the Council of the European Union in the latter half of 2024, having completed a trio with Spain and Belgium. To ensure continuity, presidencies collaborate in groups of three, known as trios, which jointly develop an 18-month program outlining shared priorities and goals.

Hungary, as president of the Council of the European Union, held the position of executive chair of the EU AI board until the end of 2024. The country was represented by Szolnok Szabolcs, the Deputy State Secretary responsible for technology at the Ministry of National Economy.²³¹⁷

Hungary Artificial Intelligence Council

The Hungarian Government's decision on the measures necessary to implement the Regulation of the European Parliament and of the Council on artificial intelligence enabling the full establishment of the Hungarian Artificial Intelligence Council (*Magyar Mesterséges Intelligencia Tanács*), was published in issue 98 of the *Magyar Közlöny* (Official Hungarian gazette) under decision 1301/2024, dated September 30, 2024. The decision tasks the Hungary AI Council with implementing the necessary measures to support the AI Act within Hungary.²³¹⁸ This new organization will operate under the oversight of the Minister for National Economy.²³¹⁹ Its primary responsibilities will include issuing guidelines, opinions, and statements to aid in the interpretation and application of

²³¹⁷ Hungarian presidency council of the European Union, *Viktor Orbán: A Presidency Marked by Tremendous Success* (Dec. 19, 2024), https://hungarian-presidency.consilium.europa.eu/
²³¹⁸ Magyar Közlöny (Hungarian Gazette issue 98), *Magyar Mesterséges Intelligencia Tanács* (Oct. 4, 2024),

 $\underline{https://magyarkozlony.hu/dokumentumok/0023a3c60cb4033ef9f687dd413894c4c157267e/megte \underline{kintes}$

²³¹⁶ AI Coalition of Hungary, *AI Coalition of Hungary's mission*, (Oct. 9, 2018), https://aihungary.com/en/content/ai-coalition#mission

²³¹⁹ National Legal repository, 301/2024. (IX. 30.) Korm. határozat a mesterséges intelligenciáról szóló európai parlamenti és tanácsi rendelet végrehajtásához szükséges intézkedésekről, (Sept. 30, 2024), https://njt.hu/jogszabaly/2024-1301-30-22

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the AI Act, managing a regulatory sandbox and conducting market surveillance, which will facilitate the safe testing and deployment of AI technologies within Hungary. This sandbox environment will allow AI developments to be trialed in real-world conditions, ensuring compliance and monitoring AI innovations before broader release. The establishment of this council aligns with the requirements set forth by the European Parliament and Council Regulation 2024/1689/EU, aiming to promote a coordinated and transparent approach to AI governance.

The Hungarian Artificial Intelligence Council will be staffed by representatives from several key national institutions. These include the National Media and Infocommunications Authority (NMHH), Hungarian National Bank (MNB), Hungarian Competition Authority (GVH), National Authority for Data Protection and Freedom of Information (NAIH), Supervisory Authority for Regulated Activities (SZTFH), and the Digital Hungary Agency. By November 30, 2024, the Minister of National Economy is required to draft and present a legislative proposal detailing the resources and budgetary requirements needed to support the Hungarian Artificial Intelligence Council's functions.²³²⁰

Public Participation

The strategy has been developed in cooperation with the Hungarian Artificial Intelligence Coalition.²³²¹ The coalition was established in October 2018 to offer a community and forum for all stakeholders in the Hungarian AI ecosystem who wish to make an active contribution to the development of the Hungarian AI environment and skills.

Hungary's AI strategy also explicitly refers to public engagement activities. Hungary established an internet platform for its citizens to get trained, get exposure to the ongoing events in the AI sector, and engage with country-wide policy developments. The Hungarian government aims to get the best of artificial intelligence in terms of high-value economic return while countering possible adverse effects of the technology through increased public awareness and public participation. The National AI Strategy emphasizes that public engagement is a key aspect of the exercise of fundamental rights and a robust and inclusive business environment. For this reason, the Hungarian AI Strategy prioritizes the need to raise awareness of the use of artificial intelligence, its pragmatic and business applications as well as its projected impact on various sectors through an action plan entitled The AI Challenge. The Challenge aspires to train 100,000 people in the fundamentals of AI using domestically generated online course

²³²⁰ National Legal Repository, 301/2024. (IX. 30.) Korm. határozat a mesterséges intelligenciáról szóló európai parlamenti és tanácsi rendelet végrehajtásához szükséges

intézkedésekről, (Sept. 30, 2024), https://njt.hu/jogszabaly/2024-1301-30-22
European Commission, https://nit.hu/jogszabaly/2024-1301-30-22
watch.ec.europa.eu/countries/hungary/hungary-ai-strategy-report en#ecl-inpage-287

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materials. The Action Plan also aims to raise 1 million people's awareness through interactive exhibitions, a website, and online professional content.²³²²

To give a sector-specific example, Hungary has launched a campaign to initiate debates among citizens concerning the use of AI-supported digital health applications with a discussion of their benefits and possible drawbacks. ²³²³ In this regard, an extensive awareness-raising campaign has been launched regarding the importance of health data. The government is planning to receive citizens' questions and concerns through their data wallets. With the analysis of the results, the idea is to develop a marketplace in which qualified service providers would develop systems and supply related products as part of the implementation of the public's demand that is supervised by this initiative.

In November 2023, the Prime Minister's Cabinet Office invited feedback and input from the general public, stakeholders, and experts on the draft of the Law on the Digital State and Certain Rules for the Provision of Digital Services or "Digital Citizenship Law." The scheme will enable personal identification for the use of state and market services, electronic signature, and payment of public utility bills. A trial period will start in April 2024. The scheme will be optional. It has been developed in line with the EU's new Electronic Identification, Authentication and Trust Services (eIDAS) regulatory framework.²³²⁴

In September of 2024, an AI Summit was held in Budapest inviting participation from leaders of industry, government, and academia, highlighting Hungary's determination to use AI as a catalyst for transformative change across multiple sectors.²³²⁵

EU Digital Services Act

As an EU member state, Hungary shall apply the EU Digital Services Act (DSA).²³²⁶ The DSA regulates online intermediaries and platforms. Its main objective is to prevent illegal and harmful activities online and the spread of disinformation.

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²³²² Artificial Intelligence Coalition, *Hungary AI Challenge*, https://ai-hungary.com/en

²³²³ Ibid

²³²⁴ About Hungary, *Rogán: DAP to bring transformation for Hungarian citizens in digital data handling* (Nov. 13, 2023), https://abouthungary.hu/news-in-brief/rogan-dap-to-bring-transformation-for-hungarian-citizens-in-digital-data-handling

²³²⁵ Budapest Business Journal, *AI Summit 2024: Hungary's Role in the Artificial Intelligence Revolution*, (Sept. 25, 2024), https://bbj.hu/business/tech/innovation/ai-summit-2024-hungarys-role-in-the-artificial-intelligence-revolution/

²³²⁶ European Union, Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act) (Oct. 21, 2022), http://data.europa.eu/eli/reg/2022/2065/oj

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EU AI Act

As an EU member State, Hungary is bound by the EU AI Act.²³²⁷ The EU AI Act is a risk-based market regulation which supports the objective of promoting a human-centric approach to AI and making the EU a global leader in the development of secure, trustworthy and ethical AI. The EU AI Act entered into force on August 1, 2024.

The Hungarian Government established the Hungarian Artificial Intelligence Council to implement the EU's AI Act. The council will issue guidelines, oversee a regulatory sandbox for AI testing, and ensure compliance with AI regulations.

Data Protection

Since Hungary is an EU Member State, the GDPR²³²⁸ is directly applicable in Hungary and to Hungarians. The aim of the GDPR is to "strengthen individuals' fundamental rights in the digital age and facilitate business by clarifying rules for companies and public bodies in the digital single market."²³²⁹ The GDPR entered into force on May 24, 2016, and applies since May 25, 2018.

The activities of law enforcement authorities for their part are regulated at EU level by the EU Data Protection Law Enforcement Directive (LED).²³³⁰ The LED "protects citizens' fundamental right to data protection whenever personal data is used by criminal law enforcement authorities for law enforcement purposes. It will ensure that the personal data of victims, witnesses, and suspects of crime are duly protected and will facilitate cross-border cooperation in the fight

https://www.europarl.europa.eu/RegData/seance_pleniere/textes_adoptes/definitif/2024/03-13/0138/P9_TA(2024)0138_EN.pdf

²³²⁷ European Parliament, Artificial Intelligence Act, European Parliament legislative resolution of 13 March 2024 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts (COM(2021)0206 – C9-0146/2021 – 2021/0106(COD)), P9 TA(2024)0138,

²³²⁸ Official Journal of the European Union, *Regulation (EU) 2016/679 of the European*Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing
Directive 95/46/EC (General Data Protection Regulation), (May 4, 2016), https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679

²³²⁹ European Commission, *Legal Framework of Data Protection in the EU*, https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection en

²³³⁰ Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offenses or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA, (May 4, 2016), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

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against crime and terrorism."²³³¹ The LED provides for the prohibition of any decision based solely on automated processing, unless it is provided by law, and of profiling that results in discrimination.²³³²

The Hungarian Act CXII of 2011 on the Right of Informational Self-Determination and on Freedom of Information (Data Protection Act) was amended on July 26, 2018, to supplement the GDPR and implement the LED Directive.

The EU Charter of Fundamental Rights more generally provides that EU citizens have the right to protection of their personal data. Article 8 of the Charter states that: "Everyone has the right to the protection of personal data concerning him or her. Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law."

Hungary is also a member of the Council of Europe. It has signed and ratified²³³³ the Council of Europe's Convention 108+ for the protection of individuals with regard to the processing of personal data.²³³⁴

The National Authority for Data Protection and Freedom of Information (NAIH)²³³⁵is the national supervisory authority in charge of enforcing both the GDPR and the LED. The Authority is also entrusted with duties in connection with the Schengen Information System (SIS), the Customs Information System (CIS), Europol, Eurodac and the Visa Information System (VIS). The NAIH represents Hungary in the European Data Protection Board.

The NAIH is a member of the Global Privacy Assembly since 2002. The Authority endorsed the 2018 GPA Resolution on AI and Ethics, ²³³⁶ but did not co-

²³³² Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offenses or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA (May 4, 2016), https://eurlex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

²³³³ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 223* (Mar. 12, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=223

²³³⁴ Council of Europe, *Modernised Convention for the Protection of Individuals with Regard to the Processing of Personal Data* (May 18, 2018), https://www.coe.int/en/web/data-protection/convention108-and-protocol

²³³⁵ Hungarian National Authority for Data Protection and Freedom of Information (NAIH), *About the Authority*, https://www.naih.hu/about-the-authority

²³³⁶ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

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sponsor the 2020 GPA Resolution on AI and Accountability,²³³⁷ the 2022 GPA Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology²³³⁸ or the 2023 GPA Resolution on Generative AI.²³³⁹

Algorithmic Transparency

Ambassador Harry Alex Rusz, Permanent Representative of Hungary to the Council of Europe, deposited the instrument of ratification of Convention 108+ in the presence of Deputy Secretary General Bjørn Berge in August 2023. Convention 108+ aims to modernize and improve the Convention 108, the only binding international instrument with global relevance in this field. In addition, Hungary is subject to the GDPR. Hungarians have a general right to obtain access to information about automated decision-making and to the factors and logic of an algorithm. ²³⁴¹

The 2020 Recommendation of the Council of Europe Committee of Ministers on human rights impacts of algorithm systems²³⁴² specifically emphasizes requirements on transparency, accountability and effective remedies. The Recommendation provides that "Transparency levels should be as high as possible and proportionate to the severity of adverse human rights impacts, including ethics labels or seals for algorithmic systems to enable users to navigate between systems. The use of algorithmic systems in decision-making processes

. . . .

²³³⁷ Global Privacy Assembly, *Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

²³³⁸ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

²³³⁹ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

²³⁴⁰ Council of Europe, *Hungary Ratified the Council of Europe Convention 108+ on Data Protection* (Oct. 19, 2024), https://www.coe.int/en/web/human-rights-rule-of-law/-/hungary-ratified-the-council-of-europe-convention-108-on-data-protection

²³⁴¹ European Parliament and Council of the European Union, *Regulation (EU) 2016/679 (GDPR) Recital 63 and Article 22* (May 4, 2016), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02016R0679-20160504

²³⁴² Council of Europe, *Recommendation CM/Rec (2020)1 of the Committee of Ministers to Member States on the Human Rights Impacts of Algorithmic Systems* (Apr. 8, 2020), https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

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that carry high risks to human rights should be subject to particularly high standards as regards the explainability of processes and outputs.²³⁴³

The Recommendation also clarifies that "Contestation should include an opportunity to be heard, a thorough review of the decision and the possibility to obtain a non-automated decision. This right may not be waived, and should be affordable and easily enforceable before, during and after deployment, including through the provision of easily accessible contact points and hotlines." ²³⁴⁴

Transparency Information

The Hungarian Competition Authority launched an investigation against Microsoft's European services subsidiary, Microsoft Ireland Operations Limited, in July 2023 for possible unfair practices against Hungarian consumers in its so-called "new Bing service." This came after Microsoft integrated an artificial intelligence-based chat feature similar to ChatGPT in its Bing search system that helps to answer questions in the search interface using machine learning to learn from the content, data, and information shared by users. The investigation focuses on whether Microsoft adequately informs users about features of its search engine, particularly concerning the AI-based chat feature. The concerns raised include contradictory policies and inadequate information about the service, such as its reliability, data management practices, and language accessibility. 2345

In January 2024, the Hungarian Competition Authority launched a market analysis investigation of the effects of AI on consumer rights protection and competition. The market analysis will investigate the use of AI in data collection, advertising practices, and consumer interactions, raising concerns about transparency, consumer privacy and susceptibility to manipulation.²³⁴⁶

This case also prefigures the role that the Hungarian Market Surveillance Authority to be identified in line with the EU AI Act could play in ensuring respect for fundamental rights. It remains to be seen which modalities of cooperation with other authorities such as the Data Protection Authority will be put into place as well and the relevance of the local context such as the efficiency and independence of the participating authorities.

Emotion Recognition

The NAIH presented a case in the 2023 annual report where it imposed the highest fine to date of ca. EUR 670,000 (HUF 250 million). The case involved the

2344 Ibid

²³⁴³ Ibid

²³⁴⁵ The Hungarian Competition Authority (GVH), *GVH investigates how Microsoft informs consumers about its new search service* (Jan. 4, 2024),

 $[\]underline{https://www.gvh.hu/en/press_room/press_releases/press-releases-2023/gvh-investigates-how-microsoft-informs-consumers-about-its-new-search-service}$

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personal data processing of a bank (acting as a data controller) which automatically analyzed the recorded audio of customer service calls. The bank used the results of the analysis to determine which customers should be called back. The emotional state of the caller was analyzed using an AI-based speech signal processing software that automatically analyzed the call based on a list of keywords and the emotional state of the caller. The software then established a ranking of the calls serving as a recommendation as to which caller should be called back as a priority.

During the procedure before the Authority, it appeared that for years the bank had failed to provide to the data subjects proper notice and the right to object. The Authority emphasized that the only lawful legal basis for the processing activity of emotions-based voice analysis can only be the freely given, informed consent of the data subjects.

The NAIH also highlighted that although the bank had carried out a data protection impact assessment (DPIA) and identified that the processing is of high risk to the data subjects, capable of profiling and scoring, the DPIA had failed to present substantial solutions to address these risks.

The legitimate interest test performed by the bank had failed to consider proportionality, the interests of the data subjects, it merely established that the data processing is necessary to achieve the purposes it pursues.

The Authority, in addition to imposing a record fine,²³⁴⁷ obliged the bank to cease the analysis of emotions from voice analysis. The Authority highlighted that "artificial intelligence is generally difficult to understand and monitor due to the way it works, and even new technologies pose particular privacy risks. This is one of the reasons why the use of artificial intelligence in data management requires special attention, not only on paper but also in practice."²³⁴⁸

Facial Recognition

A project called Szitakötő (dragonfly) was planned in 2016 to deploy 35,000 cameras with facial recognition capabilities in Budapest, and across the country. From January 1, 2016, onwards, facial data of all residents of and visitors to Hungary, are being stored in a database that can be accessed by Hungarian law enforcement authorities. Hungary's 35 000 CCTV cameras now operate as part of a single centralised searchable system, and its biometric

²³⁴⁷ Zoltan Kozma and Mark Almasy, DLA Piper via Lexology, *Hungary: Record GDPR fine by the Hungarian Data Protection Authority for the unlawful use of artificial intelligence* (Apr. 12, 2022), https://www.lexology.com/library/detail.aspx?g=6f481141-b624-46dd-a443-e5e032bece26

²³⁴⁸ National Authority for Data Protection and Freedom of Information (NAIH), *2023 Annual Report* (Feb. 2024) https://www.naih.hu/files/NAIH_annual_report_2023.pdf

Budapest Business journal, *CCTV* is it Big brother Budapest watching you? (Feb. 27, 2020), https://bbj.hu/budapest/travel/sights/cctv-is-big-brother-budapest-watching-you/

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databases have been connected, allowing the police to identify any citizen from their face. The Hungarian Secret Services and police have already made use of the system, resulting in 6000 matches, 250 stop-and-searches and 4 arrests.²³⁵⁰

The NAIH investigated and fined a Hungarian municipality (Siófok) in Mrach 2022 for installing AI facial-recognition software within a 39-camera CCTV network. NAIH found that this kind of data processing was unlawful and imposed a fine of HUF 500,000 (EUR 1,250) on the technical service provider partially owned by China. The investigation further revealed a lack of cooperation agreement between the municipality and the police regarding joint control of the CCTV network and the inadequate data security measures in place.²³⁵¹

Lethal Autonomous Weapons

In 2016, Hungary acknowledged that lethal autonomous weapons systems warrant "substantial consideration" and supported continuing diplomatic talks addressing concerns.

Hungary was one of the 70 states that endorsed a joint statement on autonomous weapons systems at the United Nations General Assembly in October 2022. The statement called for recognition of the dangers of autonomous weapons systems, acknowledged the need for human oversight and accountability, and emphasized the importance of an international framework of rules and constraints. In this joint statement, States declared that they "are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law, including through maintaining human responsibility and accountability in the use of force." 2353

²³⁵⁰ Biometric Update, *EU parliamentary group maps biometric mass surveillance across bloc, calls for ban* (Oct. 26, 2021), https://www.biometricupdate.com/202110/eu-parliamentary-group-maps-biometric-mass-surveillance-across-bloc-calls-for-ban

Dora Petranyi and Marton Domokos, *Hungarian data protection regulator ruling highlights shortcomings of facial-recognition via CCTV* (Mar. 9, 2022), https://cms-lawnow.com/en/ealerts/2022/03/hungarian-data-protection-regulator-ruling-highlights-shortcomings-of-facial-recognition-via-cctv

²³⁵² Stop Killer Robots, 70 states deliver joint statement on autonomous weapons systems at UN General Assembly (2022), https://www.stopkillerrobots.org/news/70-states-deliver-joint-statement-on-autonomous-weapons-systems-at-un-general-assembly/

²³⁵³ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee, 77th United Nations General Assembly Thematic Debate – Conventional Weapons* (Oct. 21, 2022),

 $[\]frac{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm_en.pdf}{}$

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At the 78th UN General Assembly First Committee in 2023, Hungary cosponsored and voted in favor²³⁵⁴ of resolution L.56²³⁵⁵ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. The report should analyze ways to address the challenges and concerns autonomous weapon systems raise from humanitarian, legal, security, technological and ethical perspectives and reflect on the role of humans in the use of force.

At the Responsible AI in the Military Domain Summit (REAIM 2023) cohosted by the Netherlands and the Republic of Korea, nearly 60 states agreed to issue a joint call to action on the responsible development, deployment and use of AI in the military domain in February 2023. Hungary endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023. 2357

Human Rights

According to the Freedom House report published in February 2024, Hungary is a "partly free" country with an overall score of 65/100, showing no change compared to the previous year. According to the report, "After taking power in the 2010 elections, Prime Minister Viktor Orbán's Alliance of Young Democrats—Hungarian Civic Union (Fidesz) party pushed through constitutional and legal changes that have allowed it to consolidate control over the country's independent institutions, including the judiciary. The Fidesz government has since passed antimigrant and anti-LGBT+ policies, as well as laws that hamper the operations of opposition groups, journalists, universities, and nongovernmental organizations (NGOs) that are critical of the ruling party or whose perspectives

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 $\underline{\text{https://www.government.nl/documents/speeches/2024/02/27/speech-by-minister-hanke-bruins-slot-at-the-conference-on-disarmament}$

²³⁵⁴ Isabelle Jones, *164 states vote against the machine at the UN General Assembly*, Stop Killer Robots (Nov. 1, 2023), https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

²³⁵⁵ General Assembly, *Resolution L56: Lethal Autonomous Weapons* (Oct.12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

²³⁵⁶ Government of the Netherlands, *Speech by Minister Hanke Bruins Slot at the High Level Segment of the Conference on Disarmament* (Feb. 27, 2024),

²³⁵⁷ US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Feb. 12, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

Freedom House, *Freedom in the World 2024: Hungary* (Feb. 2024), https://freedomhouse.org/country/hungary/freedom-world/2024

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Fidesz otherwise finds unfavorable." Some similar concerns were raised by the 2022 UN Human Rights Council's Periodic Review of Hungary. 2359

These findings also correspond to those of Human Rights Watch, which has cast shadow on the independence of the Hungarian data protection authority following citizens' complaints related to the 2022 elections. It was found after the elections that data collected by the state for administering public services, such as registering for the COVID vaccine, administering tax benefits, and mandatory membership in professional associations, was repurposed to spread Fidesz's campaign messages. According to Human Rights Watch, evidence indicates that the government of Hungary has collaborated with the ruling party in the way it has used personal data in political campaigns. Combined with the weakening of the political institutions responsible for safeguarding people's right to privacy and guaranteeing an even political playing field, this misuse of data has raised serious human rights concerns.²³⁶⁰

Following Human Rights Watch's question about the NAIH's handling of the complains received, the President of the Authority distinguished between complaints involving the Hungarian government, which the Authority deemed lawful, and complaints against the data processing practices of the ruling party Fidesz with regard to which the Authority established that Fidesz failed to provide fully appropriate information compliant with requirements of the GDPR to the data subjects in the course of processing in relation to the periodic records related to the survey of the intention to participate in the elections.

Answering to a question about the NAIH's independence, Attila Peterfalvi, the President of the Authority concluded, "We are convinced that the activity of our Authority is fully compliant with the requirements the applicable international and EU law as well as the Hungarian Constitution, governing the full independence of the Authority. To date, no statement refuting this conviction of ours has been made by an authoritative forum in this regard. We are certain that it is unambiguous for experts monitoring our activities that there can be no doubt concerning the independence of our activities."²³⁶¹

Prime Minister Viktor Orbán enacted the controversial Defense of National Sovereignty Act in December 2023. The Act provides for the creation of

 $\frac{https://www.hrw.org/report/2022/12/01/trapped-web/exploitation-personal-data-hungarys-2022-elections}{}$

²³⁵⁹ Human Rights Council, *Human Rights Council Adopts Outcomes of Universal Periodic Review of Hungary, Suriname, Samoa and Greece* (Mar. 23, 2022),

https://www.ohchr.org/en/press-releases/2022/03/human-rights-council-adopts-outcomes-universal-periodic-review-hungary

²³⁶⁰ Human Rights Watch, *Trapped in the Web* (2022),

²³⁶¹ National Authority for Data Protection, *Request to the Hungarian National Authority for Data Protection and Freedom of Information*, Case No: NAIH-8218-2/2022 (Nov. 9, 2022), https://www.naih.hu/data-protection/data-protection-reports

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a National Sovereignty Defense Office with broadly defined and extensive powers to investigate and report on any activity suspected of serving foreign interests. Rights defenders have expressed fear that the law will empower authorities to target anyone critical of the government.²³⁶² The European Commission is referring Hungary to the Court of Justice over its Defense of Sovereignty law, which it argues violates EU laws and fundamental rights, including privacy, freedom of expression, freedom of association, and protections under EU data and market laws.2363

In a 2020 Recommendation to member States on the human rights impacts of algorithmic systems, the Council of Europe Committee of Ministers stressed that their commitment to the "ensuring the rights and freedoms enshrined in the Convention for the Protection of Human Rights and Fundamental Freedoms to everyone within their jurisdiction [...] stands throughout the continuous processes of technological advancement and digital transformation [and] member States must ensure that any design, development and ongoing deployment of algorithmic systems occur in compliance with human rights and fundamental freedoms, which are universal, indivisible, inter-dependent and interrelated, with a view to amplifying positive effects and preventing or minimising possible adverse effects."2364

Another concerning case is that of the Pegasus Affair.²³⁶⁵ Investigations conducted by Direkt3623,²³⁶⁶ a Hungarian investigative journalism channel, confirmed that around 300 persons were potentially targeted by Pegasus in Hungary. Hungarian authorities initially denied or did not confirmed their involvement and use of Pegasus until Lajos Kósa, Fidesz MP and Chair of the

²³⁶³ European Commission, The Commission decides to refer Hungary to the Court of Justice of the European Union considering its national law on the Defence of Sovereignty to be in breach of EU law (Oct. 3, 2024), https://ec.europa.eu/commission/presscorner/detail/en/ip 24 4865 ²³⁶⁴ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the

human rights impacts of algorithmic systems (Apr. 8, 2020), https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

²³⁶² Freedom House, Freedom in the World 2024: Hungary (2024), https://freedomhouse.org/country/hungary/freedom-world/2024

²³⁶⁵ EU, Pegasus and Spyware (2022),

https://www.europarl.europa.eu/RegData/etudes/IDAN/2022/732268/IPOL IDA(2022)732268 EN.pdf; European Parliament, The Use of Pegasus and Equivalent Surveillance Spyware—The Existing Legal Framework in EU Member States for the Acquisition and Use of Pegasus and Equivalent Surveillance Spyware (Dec. 5, 2022),

https://www.europarl.europa.eu/thinktank/en/document/IPOL STU(2022)740151; European Parliament, MEPs Discuss the Draft Recommendations of the Spyware Inquiry Committee (Jan. 23, 2023), https://www.europarl.europa.eu/news/en/press-room/20230123IPR68611/mepsdiscuss-the-draft-recommendations-of-the-spyware-inquiry-committee

²³⁶⁶ Telex, *Direkt36* (2021), https://telex.hu/direkt36/2021/07/23/az-orban-kormany-allamtitkaratis-megceloztak-a-pegasusszal-mikozbenbelharcokat-vivott-paks-ii-miatt

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Hungarian Parliament's Committee on Defense and Law Enforcement, admitted that the Interior Ministry had bought and used Pegasus, before finally stating that it was used lawfully upon authorization by the judiciary and/or the Minister of Justice.²³⁶⁷ At the end of January 2022, NAIH published a report²³⁶⁸ stating that it had investigated hundreds of cases and that all of them met the required legal criteria (risk for national security, legal authorization).²³⁶⁹ The Authority reportedly will file a criminal complaint against those who uncovered the mass surveillance for possibly mishandling data.²³⁷⁰

OECD / G20 AI Principles

As part of the G20 and as a member to the OECD, Hungary has endorsed the OECD / G20 AI Principles. According to the 2021 OECD report on the State of implementation of the OECD AI Principles, the Hungarian national AI strategy exhibits some features which are in line with the OECD AI Principles such as the adoption of ethical guidelines.²³⁷¹

Council of Europe AI Treaty

The European Union signed the AI treaty on behalf of its 27 member states, including Hungary. Hungary has not yet taken action at the country level.²³⁷²

UNESCO Recommendation on AI Ethics

Hungary endorsed the UNESCO Recommendation on the Ethics of AI. It remains to be seen which concrete steps the country will take to implement the Recommendation in practice. As of October 2024, Hungary is not part of the list

²³⁶⁷ Hungarytoday, *Fidesz Government Admist Surveillance Israel Journalist Pegasus Spywware* (2022), https://hungarytoday.hu/fidesz-governement-admit-surveillance-israel-journalist-pegasus-spyware/

²³⁶⁸ NAIH, Jelentés a Nemzeti Adatvédelmi és Információszabadság Hatóság hivatalból indított vizsgálatának megállapításai a "Pegasus" kémszoftver Magyarországon történő alkalmazásával összefüggésben (2022), https://www.naih.hu/adatvedelmi-jelentesek/file/486-jelentes-a-nemzeti-adatvedelmi-es-informacioszabadsaghatosag-hivatalbol-inditott-vizsgalatanak-megallapitasai-a-pegasus-kemszoftver-magyarorszagon-tortenoalkalmazasaval-osszefuggesben

²³⁶⁹ Telexhu (2022), https://telex.hu/belfold/2022/01/31/adatvedelem-peterfalvi-pegasus-vizsgalat ²³⁷⁰ Eszter Zalan, MEPs Hear Testimony from Pegasus Spy Victims, EU Observer (Feb. 2, 2022), https://euobserver.com/rule-of-law/154261

²³⁷¹ OECD, State of Implementation of the OECD AI Principles – Insights from National AI Policies (Jun. 2021), https://www.oecd-ilibrary.org/docserver/1cd40c44-en.pdf?expires=1680283942&id=id&accname=guest&checksum=4DEE9AF3E3BF420F8C5236 B2BFF3DCE0

²³⁷² Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 13, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

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of member states that are undertaking the UNESCO Readiness assessment methodology.²³⁷³

Evaluation

Hungary has adopted the OECD/G20 AI Guidelines, the UNESCO Recommendation on the Ethics of AI, a comprehensive National AI Strategy, and AI ethical Guidelines. The country also benefits from a strong data protection legal regime owing to its EU membership. Yet, its human rights record, surveillance practices, and concerns regarding the autocratic turn of the government showcase a grimmer picture. Questions about the independence of its data protection authority have also surfaced. However, the recent investigations launched by the Hungarian competition authority highlight the potential of this authority to become an efficient market surveillance authority in the framework of the EU AI Act. Establishing the Hungarian Artificial Intelligence Council to implement the EU AI Act is another positive sign.

India

In 2024, India continued work on the UNESCO Readiness Assessment Methodology (RAM) and progressed toward implementing the Digital Personal Data Protection Act.

National AI Strategy

Recognizing the potential of AI to transform and advance its economy, the government of India has initiated and implemented multiple strategies to address research, development, innovation, governance, standards setting, and accountability of AI.

The Indian Ministry of Commerce set up a Task Force on Artificial Intelligence to kick start the use of AI for India's Economic Transformation.²³⁷⁴ In 2018, the Task Force issued a benchmark report²³⁷⁵ that has played a key role in setting forth India's vision regarding AI: "While there is a strong consensus that Artificial Intelligence will be a game-changer and a key factor in economic development, there is a concurrent need to arrive at frameworks that will promote its deployment taking all social factors into account." The Mission consists in (1)

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²³⁷³ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

²³⁷⁴ Ministry of Commerce and Industry, Government of India, *Artificial Intelligence Task Force*, https://www.aitf.org.in

²³⁷⁵ India Department of Promotion of Industry and Internal Trade, *Report of Task Force on Artificial Intelligence* (Mar. 2018), https://www.aitf.org.in/

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Leveraging AI for economic benefits; (2) Creating policy and legal framework to accelerate AI deployment (3) Formulating concrete 5-year horizon recommendations for specific government, industry and research programs, in wide range of "Domains of Focus."²³⁷⁶

As part of India's efforts to strategize its approach to AI, the Finance Minister in his budget speech for 2018–2019, mandated NITI Aayog, a policy think tank of the Government of India providing guidance and policy insights, ²³⁷⁷ to establish the National Program on AI. The aim is to direct research and development in new and emerging technologies.

NITI Aayog, adopted a three-pronged approach: (1) undertaking exploratory proof-of-concept AI projects in various areas, (2) crafting a national strategy for building a vibrant AI ecosystem in India and (3) collaborating with various experts and stakeholders. In June 2018, NITI Aayog released a discussion paper²³⁷⁸ delineating "the National Strategy on Artificial Intelligence."²³⁷⁹ The strategy document "is premised on the proposition that India, given its strengths and characteristics, has the potential to position itself among leaders on the global AI map—with a unique brand of #AIforAll." The key objective is to leverage AI to ensure "social and inclusive growth in line with the development philosophy of the government." #AIforAll is meant as model that can be "replicated in other similarly placed developing countries."

NITI Aayog focused on five strategic areas for AI development: healthcare, agriculture, education, smart cities and transportation.²³⁸⁰ The Policy Think Tank also identified five barriers that need to be addressed to realize the full potential of AI:

- 1. Lack of broad-based expertise in research and application of AI;
- $2. \quad Absence \ of \ enabling \ data \ ecosystems-access \ to \ intelligent \ data;$
- 3. High resource cost and low awareness for adoption of AI;
- 4. Privacy and security, including a lack of formal regulations around anonymization of data; and
- 5. Absence of collaborative approach to adoption and application of AI.

The 2018 strategy made key recommendations to promote research, education, and protection of civil liberties in AI development, including:

• Create two-tiered research institutes to nurture both academic and industry research;

²³⁷⁶ Ministry of Commerce and Industry, Government of India, *Artificial Intelligence Task Force*, https://www.aitf.org.in

²³⁷⁷ NITI Aayog, *Objectives and Features* (2025), https://niti.gov.in/objectives-and-features
²³⁷⁸ NITI Aayog, *National Strategy for AI* (Jun. 2018), https://niti.gov.in/sites/default/files/2019-01/NationalStrategy-for-AI-Discussion-Paper.pdf
²³⁷⁹ Ibid.

²³⁸⁰ OECD, *Artificial Intelligence in Society* (Jun. 11, 2019), https://www.oecd.org/en/publications/2019/06/artificial-intelligence-in-society c0054fa1.html

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- Establish learning platforms for the workforce skill/re-skill development;
- Create targeted data sets and incubation hubs for start-ups to facilitate cooperation; and
- Establish a regulatory framework for data protection and Cyber security.

The discussion paper, while highlighting the ethical factors of AI such as fairness, transparency, privacy, and security, recommended the establishment of a multi-stakeholder marketplace, facilitating the creation of a large foundational annotated data set, setting up partnerships and collaborations, spreading awareness of the advantages AI offers and supporting start-ups. In the interim budget of 2019, the Ministry of Finance cleared funding of approximately USD 950 million towards the NITI Aayog's proposal for the formation of a task force to identify projects and initiatives in which to implement AI technology.²³⁸¹

The 2018 strategy discusses important issues in ethics and AI—including fairness and bias, transparency and explainability, privacy, and security—and advances visions for responsible AI development in its government.

In November 2020, NITI Aayog published an accompanying paper addressing "Enforcement Mechanisms for Responsible AI for All." In this document, which allowed for public participation and comments, NITI Aayog proposed the creation of an oversight body and articulated its role and proposed duties. These include:

- Manage and update Principles for Responsible AI in India,
- Research technical, legal, policy, and societal issues of AI,
- Provide clarity on responsible behavior through design structures, standards, guidelines,
- Enable access to Responsible AI tools and techniques,
- Education and awareness on Responsible AI,
- Coordinate with various sectoral AI regulators, identify gaps, and harmonize policies across sectors,
- Represent India and other emerging economies in International AI dialogue on Responsible AI

In 2021, NITI Aayog published two additional documents in the context of the #AIforAll strategy. The first one proposed a series of principles for the responsible management of AI systems that may be leveraged by relevant stakeholders in India. These principles are: 1) Principle of Safety and Reliability;

²³⁸¹ Arup Roychoudhury and Neha Alawadhi, *Finance Ministry Clears Niti Aayog's Artificial Intelligence Proposal*, Business Standard (Sept. 17, 2019), https://www.business-standard.com/article/economy-policy/finance-ministry-clears-niti-aayog-s-artificial-intelligence-proposal-119090901345 https://www.business-standard.com/article/economy-policy/finance-ministry-clears-niti-aayog-s-artificial-intelligence-proposal-119090901345">https://www.business-standard.com/article/economy-policy/finance-ministry-clears-niti-aayog-s-artificial-intelligence-proposal-119090901345 https://www.business-standard.com/article/economy-policy/finance-ministry-clears-niti-aayog-s-artificial-intelligence-proposal-119090901345 https://www.business-niti-aayog-s-artificial-intelligence-proposal-119090901345 https://www.business-niti-aayog-s-artificial-intelligence-proposal-119090901345 https://www.business-niti-aayog-s-artificial-intelligence-proposal-119090901345 https://www.business-niti-aayog-s-artificial-intelligence-proposal-119090901345 <a href="https://www.business-niti-aayog-s-artificial-intelligence-proposal-intelligence-proposal-intelligence-proposal-intelligence-proposal-intelligence-proposal-intelligen

²³⁸² NITI Aayog, *Working Document: Enforcement Mechanisms for Responsible #AlforAll* (Nov. 2020), https://niti.gov.in/sites/default/files/2020-11/Towards-Responsible-AI-Enforcement-of-Principles.pdf

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2) Principle of Equality; 3) Principle of Inclusivity and Non-discrimination; 4) Principle of Privacy and security; 5) Principle of Transparency; 6) Principle of Accountability; and 7) Principle of protection and reinforcement of positive human values.²³⁸³

The second document identified the various mechanisms needed for operationalizing these seven principles by detailing a series of actions for the government, the private sector and research institutions that must be adopted to drive responsible AI.²³⁸⁴

In September 2021, NITI Aayog launched a New Experience Studio in collaboration with Amazon Web Services and Intel, to help showcase the potential of technologies such as AI, machine learning, Internet of Things (IoT), augmented reality and virtual reality, blockchain, and robotics, to accelerate their application in public sector use cases.²³⁸⁵

NITI Aayog released a discussion paper titled Adopting the Framework: A Use Case Approach on Facial Recognition Technology (FRT) in November 2022.²³⁸⁶ NITI Aayog identified FRT as a concrete case to examine the application and operationalisation of the Responsible AI principles it has identified in its previous strategy documents.²³⁸⁷

In addition to the NITI Aayog, the Ministry of Electronics and Information Technology (MeitY) is also pursuing work on AI policy. The MeitY charged four AI Committees with promoting AI initiatives and developing policy frameworks to address 1) platforms and data on AI; 2) leveraging AI for identifying national missions in key sectors; 3) mapping technological capabilities, key policy enablers required across sectors, skilling, re-skill; and 4) Cybersecurity, safety, legal and ethical issues.²³⁸⁸

These AI Committees formulated recommendations including:

²³⁸³ NITI Aayog, *Responsible AI #AIForAll Part 1 – Principles for Responsible AI* (Feb. 2021), https://www.niti.gov.in/sites/default/files/2021-02/Responsible-AI-22022021.pdf

NITI Aayog, Responsible AI #AIForAll Part 2 - Operationalizing Principles for Responsible AI (Feb. 2021), https://www.niti.gov.in/sites/default/files/2021-08/Part2-Responsible-AI-12082021.pdf

²³⁸⁵ Times of India, *NITI Aayog Ties Up with AWS, Intel to Boost Digital Innovation* (Oct .1, 2021), https://timesofindia.indiatimes.com/gadgets-news/niti-aayog-ties-up-with-aws-intel-to-boost-digital-innovation/articleshow/86678500.cms

²³⁸⁶ NITI Aayog, *Adopting the Framework: A Use Case Approach on Facial Recognition Technology, Discussion Paper* (Nov. 2022), https://www.niti.gov.in/sites/default/files/2022-11/Ai for All 2022 02112022 0.pdf

²³⁸⁷ INDIAai, *NITI Aayog Seeks Comments on the Discussion Paper on Facial Recognition Technology* (Nov. 4, 2022), https://indiaai.gov.in/news/niti-aayog-seeks-comments-on-the-discussion-paper-on-facial-recognition-technology

²³⁸⁸ Ministry of Electronics and Information Technology, *Artificial Intelligence Committee Reports* (2019), https://www.meity.gov.in/documents/reports/report-of-committee?pageTitle=Artificial-Intelligence-Committees-Reports-(2019)

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- Development of an Open National AI Resource Platform (NAIRP) to become the central hub for knowledge integration and dissemination in AI and ML;
- Stakeholders need to deliberate on whether AI systems should be recognized as a legal person in the event of a civil liability claim;
- Sharing of best practices by the government around security, privacy, and other issues;
- Constitute a stakeholder committee to review existing laws to understand needed modifications for AI applications;
- AI framework should provide broad principles, and organizations should design their internal compliance programs to maximize flexibility with changing technologies;
- Standards should be set to address the AI development cycle. The Bureau of Indian Standards (BIS) has established a new committee for standardization in AI:
- Develop rigorous government safety parameters and thresholds so that AI applications are designed to minimize harm to people and property.

In October 2023 the Expert Group appointed by the Ministry of Electronics & Information Technology and composed of seven Working Groups submitted the First Edition India AI Report 2023. The Report makes recommendation regarding the establishment of key institutions including an institutional framework on governing data collection, management, processing and storage by the National Data Management Office. ²³⁸⁹ The Office is to be established as a statutory agency and act as a regulator with the objective of streamlining data governance. Before this, in May 2023, INDIAai had already launched a Generative AI report.²³⁹⁰²³⁹¹ The Ministry of Electronics and Information Technology has implemented three key initiatives in 2024:

- 1. Establishment of the Centre for Generative AI through Meta partnership
- 2. Launch of the 'AI for Skills and Capacity Building' program with the All India Council for Technical Education
- 3. Development of five regional AI research hubs in major metropolitan areas These initiatives align with NITI Aayog's three-pronged approach to AI development and demonstrate concrete progress in implementation.²³⁹²

²³⁹⁰ INDIAai, INDIAai Launched the Generative AI Report (May 30, 2023), https://indiaai.gov.in/news/indiaai-launched-the-generative-ai-report

2391 Ibid

²³⁸⁹ Ministry of Electronics & Information Technology, India AI (Oct. 2023), https://indiaai.gov.in/news/indiaai-2023-expert-group-report-first-edition; https://indiaai.s3.apsouth-1.amazonaws.com/docs/IndiaAI+Expert+Group+Report-First+Edition.pdf

²³⁹² INDIAai, India AI and Meta Lauch Srijan and YuvAI to propel open source AI Innovation, research and skills development in India, (Oct. 26, 2024), https://indiaai.gov.in/article/indiaai-

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Public Participation

The government of India has conducted several public consultations on AI policy. NITI Aayog has requested public comments on its various #AIforAll documents.²³⁹³ The Department of Telecommunications also invited public comments on the AI standardization committee's design of India's AI Stack, a framework designed to provide standards for all sectors addressing: data privacy, protection, federation, and minimization; defined data structures; interfaces and protocols; ethical standards; digital rights; and trustworthiness (AI Standardization committee, 2020). The Ministry of Electronics and Information Technology (MeitY) for its part publishes reports from each of its four AI Committees, each charged with promoting AI initiatives and developing policy frameworks.²³⁹⁴

In November 2020, the Software Freedom Law Center India (SFLC) wrote to the Chairperson of the Joint Parliamentary Committee regarding the Draft Personal Data Protection bill and asked the Committee to invite civil society organizations that "defend the rights of citizens in the digital space for consultation on the draft Data Protection Bill." The SFLC noted "core deficiencies in the draft bill "including the lack of surveillance reforms, wide exemptions and problems with the Data Protection Authority."

Further, the NITI Aayog "proposed setting up of an oversight body to set up standards, guidelines and benchmarks for use of artificial intelligence across sectors, which will be mandatory for public sector procurement. The overarching body would also be responsible for educating and creating awareness on responsible AI, coordinating with various sectoral AI regulators as well as identifying gaps and harmonizing policies across sectors. "Further, it would represent India (and other emerging economies) in International AI dialogue on responsible AI." This oversight body is expected to have "field experts from computer science, AI, legal experts, sector specialists and representatives from civil societies, humanities and social science."²³⁹⁶

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https://economictimes.indiatimes.com/news/economy/policy/niti-aayog-wants-dedicated-oversight-body-for-use-of-artificial-intelligence/articleshow/79260810.cms?from=mdr

²³⁹³ INDIAai, AI Standards & Policies (2020), https://indiaai.gov.in/ai-standards

²³⁹⁴ Ministry of Electronics and Information Technology, *Artificial Intelligence Committees Reports* (2019), https://www.meity.gov.in/documents/reports/report-of-committee?pageTitle=Artificial-Intelligence-Committees-Reports-(2019)

²³⁹⁵ SFLC, Letter to Joint Parliamentary Committee on Inviting Civil Societies for Consultation on Draft Data Protection Bill (Nov. 18, 2020), https://sflc.in/letter-joint-parliamentary-committee-invitation-civil-society-organisations-consultation-draft-data/

²³⁹⁶ Yogima Seth Sharma, NITI Aayog Wants Dedicated Oversight Body for Use of Artificial Intelligence (Nov. 17, 2020), The Economic Times,

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India's commitment to public participation in AI governance has seen notable developments in 2024, particularly in structured engagement with stakeholders. The Global IndiaAI Summit in July 2024 served as a significant milestone, creating a platform for dialogue between AI experts, industry leaders, and policymakers on responsible AI development. Under the Ministry of Electronics and Information Technology's leadership, IndiaAI, in partnership with Meta, established a Centre for Generative AI and collaborated with the All India Council for Technical Education to launch the 'AI for Skills and Capacity Building' initiative. The CyberGuard AI Hackathon, launched under IndiaAI's mission to democratize AI, demonstrates efforts to promote broader public engagement in AI development and policy formation. In April 2024, UNESCO New Delhi's call for proposals for AI Readiness Assessment Methodology (RAM) further emphasized the push for multi-stakeholder consultation in AI governance.

However, significant gaps remain in public participation frameworks. Current engagement mechanisms primarily favor industry experts and technical stakeholders, with limited avenues for civil society organizations and affected communities to meaningfully influence AI governance decisions. This imbalance suggests a need for more inclusive participation mechanisms that extend beyond technical expertise to incorporate diverse public perspectives.

Data Protection

In 2017, the central government constituted a Committee of Experts on Data Protection chaired by Justice B. N. Srikrishna to examine issues relating to data protection in the country. The Committee submitted its report in July 2018. "This report is based on the fundamental belief shared by the entire Committee that if India is to shape the global digital landscape in the 21st century, it must formulate a legal framework relating to personal data that can work as a template for the developing world. Implicit in such a belief is the recognition that the protection of personal data holds the key to empowerment, progress, and innovation. Equally implicit is the need to devise a legal framework relating to personal data not only for India, but for Indians." ²³⁹⁷

The Supreme Court of India's landmark *Aadhaar* privacy judgment in September 2018, created another series of discussions regarding the data protection law reform and other improvements have been undertaken. The *Aadhaar* privacy decision reaffirmed the centrality of privacy in one of the world's largest AI-based identity systems. The decision has provided a strong legal foundation for data protection and respect of the individual.

²³⁹⁷ Committee of Experts under the Chairmanship of Justice B.N. Srikrishna, *A Free and Fair Digital Economy Protecting Privacy, Empowering Indians* (Jul. 2018), https://www.meity.gov.in/writereaddata/files/Data Protection Committee Report.pdf

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The draft Personal Data Protection (PDP) Bill, 2019 was introduced in Lok Sabha in December 2019.²³⁹⁸ The Bill was referred to a Joint Parliamentary Committee which submitted its report to the Indian Parliament in December 2021, after two years of deliberations on the draft bill with seven dissent.²³⁹⁹ The draft bill was criticized for conflating issues and bringing social media and non-personal data into its ambit and at the same time exempting government from the scope of the statute. In fact, Justice Srikrishna, who had led the drafting of the original bill, criticized the revision by calling it "Orwellian."²⁴⁰⁰

In August 2022, the 2019 the PDP Bill was withdrawn by the Indian Government in Parliament. On November 18, 2022, the Ministry of Electronics and Information Technology released the long-awaited fourth draft of India's proposed data protection law, now renamed the Digital Personal Data Protection Bill. The Government sought feedback until December 17, 2022. With regard to its scope, the draft bill explicitly states that provisions do not apply to "non-automated processing of personal data." ²⁴⁰²

In August 2023, the President of India gave assent to the Digital Personal Data Protection Bill, 2023 (DPDP Act).²⁴⁰³ The DPDP Act will enter into force when the government provides notice of an effective date. The DPDP Act provides for the processing of digital personal data in a manner that recognizes both the right of individuals to protect their personal data, and the need to process such personal data for lawful purposes and connected matters. The Act provides for obligations of Data Fiduciaries and rights and duties of Data Principals as well as fines in case of breach.²⁴⁰⁴ Data Fiduciaries' rights include consent, right of access, erasure and correction; right to grievance redressal. However, the right to data

 $\underline{https://prsindia.org/files/bills_acts/bills_parliament/2019/Personal\%20Data\%20Protection\%20Bill,\%202019.pdf}$

²³⁹⁸ Bill No. 373: Personal Data Protection Bill (2019).

²³⁹⁹ Joint Parliament Committee, Report of the Joint Committee on the Personal Data Protection Bill 2019 (Dec. 2021),

https://eparlib.nic.in/bitstream/123456789/835465/1/17_Joint_Committee_on_the_Personal_Data_Protection_Bill_2019_1.pdf

²⁴⁰⁰ Swathi Moorthy and Chandra R. Srikanth, *Data Protection Bill Is Orwellian, Loaded in Favour of the Government* (Nov. 26, 2021), https://www.moneycontrol.com/news/business/data-protection-bill-is-orwellian-loaded-in-favour-of-the-government-justice-bn-srikrishna-7763331.html

²⁴⁰¹ Ministry of Electronics and Information Technology, *The Digital Data Protection Bill* (2022), https://innovateindia.mygov.in/digital-data-protection/

²⁴⁰² 4. Application of this Act, (3), *The Digital Personal Data Protection Bill* (2022), https://prsindia.org/billtrack/draft-the-digital-personal-data-protection-bill-2022

²⁴⁰³ Money Control News, *India Gets a Data Protection Law* (Aug. 11, 2023),

https://www.moneycontrol.com/news/business/india-gets-a-data-protection-law-11164481.html ²⁴⁰⁴ Ministry of Law and Justice, *The Digital Personal Data Protection Act, 2023* (Aug. 11, 2023), https://egazette.gov.in/WriteReadData/2023/248045.pdf

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portability, the right to object to processing, and the right not to be subject to solely automated decision-making are not included. The PDPD Act provides for carve out for the central government and other government bodies and law enforcement authorities.

India's data protection landscape has undergone significant transformation in 2024, following the passage of the Digital Personal Data Protection (DPDP) Act in August 2023. While the implementation rules are yet to be released, the Act represents what scholars describe as India's "informational capitalism" approach to data governance. This approach treats data as both a protected resource and a driver of innovation.

The DPDP Act introduces several key provisions while maintaining notable exemptions: it provides for the establishment of a Data Protection Board, though its formation timeline remains pending; grants significant discretionary powers to the Central Government for exempting specific data processing activities; and notably carves out exemptions for government data processing. The Act establishes data fiduciaries' obligations and data principals' rights, including consent requirements for processing data of children and persons with disabilities. However, critical rights such as data portability and the right to object to processing are notably absent. The Data Protection Board, when established, will function primarily as an adjudicator rather than a regulator, marking a distinct approach to enforcement in India's data protection framework.

The DPDP Act empowers the Government to establish the Data Protection Board of India. The Board will play the part of an independent data protection authority.²⁴⁰⁵ However, the Board does not have the power to issue guidance or regulations which belongs to the government.

India does not yet have a data protection agency or representation in the Global Privacy Assembly (GPA). Thus, India has not endorsed the relevant resolutions.

Algorithmic Transparency

Prime Minister Modi addressed the issue of algorithmic transparency directly in October 2020.²⁴⁰⁶ Speaking at the Responsible AI for Social Empowerment (RAISE) summit, he declared, "It remains our collective

Namita Viswanath and Raghav Muthanna, *Top 10 Operational Impacts of India's DPDPA – Enforcement and the Data Protection Board* (Oct. 2023),

https://iapp.org/resources/article/operational-impacts-of-indias-dpdpa-part4/

²⁴⁰⁵ The Logical Indian, *Data Protection Board to Function As Adjudicator, Not Regulator, Clarifies MoS IT* (Aug. 30 2023), https://thelogicalindian.com/technology/data-protection-board-clarified-as-adjudicator-not-regulator-by-mos-it-41098

²⁴⁰⁶ PM Narendra Modi, *We Want India to Become a Global Hub for Artificial Intelligence* (Oct. 5, 2020), https://www.narendramodi.in/text-of-pm-s-address-at-the-inauguration-of-responsible-ai-for-social-empowerment-2020-summit-551754

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responsibility to ensure trust in how AI is used. Algorithm Transparency is key to establishing this Trust. Equally important is accountability. We must protect the world against weaponization of AI by Non-State Actors."

The last version of the PDP Bill referred to algorithmic transparency (Clause 23), adding that companies should be transparent about the fairness of algorithms used for the processing of personal data.²⁴⁰⁷ However, the PDPD Act remains silent about algorithmic transparency. It remains to be seen whether further specifications will be adopted.

Growing concerns about automated decision-making systems has sparked some action. According to a recent analysis by Siddharth Yadav, 2408 the government has recognized that individuals using online platforms are largely unaware of how algorithmic systems function or how they influence content distribution. To address this "control asymmetry," India is moving toward mandating "white-box" rather than "black-box" explanations of algorithmic systems. While black-box descriptions merely provide high-level justifications for system outputs, white-box explanations require companies to detail how their systems process and score inputs to arrive at specific outcomes. This shift is particularly significant for high-impact systems used in public sector decision-making and large social media platforms. Regulators have also begun mandating that social media platforms include tools in their user interfaces explaining how user actions are scored and used for content distribution. However, implementation challenges remain, particularly around balancing transparency requirements with commercial interests and technical complexity.

India's AI Stack and Aadhaar

In 2009, India created UIDAI (Unique Identity Authority of India) and embarked on the creation of an ambitious digital biometric identity ecosystem, the Aadhaar identity system. This ecosystem utilizes AI and machine learning techniques throughout. To facilitate a fully digital, cashless society and economy, many open application programming interfaces or APIs are now associated with the Aadhaar ecosystem.

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²⁴⁰⁷ For an appraisal IAPP, *A Look at Proposed Changes to India's (Personal) Data Protection Bill* (Jan. 5, 2022), https://iapp.org/news/a/a-look-at-proposed-changes-to-indias-personal-data-protection-bill/; Atlantic Council, https://www.atlanticcouncil.org/blogs/southasiasource/experts-react-indias-personal-data-protection-bill-tabled-in-parliament/

²⁴⁰⁸ Siddharth Yadav, *Algorithmic Transparency: Public Access to Information on Automated Decision-Making*, Observer Research Foundation (Sept. 27, 2024), https://www.orfonline.org/expert-speak/algorithmic-transparency-public-access-to-information-on-automated-decision-making

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When these APIs are linked to services or data, including those utilizing AI, it is part of "The India Stack." In 2019, to further address concerns of standardization of AI development, the Department of Telecommunications formed an AI standardization committee to develop interface standards and design India's AI Stack, a framework designed to provide standards for all sectors addressing: data privacy, protection, federation, and minimization; defined data structures; interfaces and protocols; ethical standards; digital rights; and trustworthiness. The committee released a report in 2020, and invited public comments on the design of India's AI Stack. The India Stack is the largest system of its kind in the world, and by extension, among the largest AI / Machine Learning based systems in the world.

The Aadhaar system, originally a voluntary pilot program, became mandatory overtime and was tied to many services, which eventually created substantive human rights and privacy issues.²⁴¹¹ However, a series of landmark rulings from the Supreme Court of India, culminating in the landmark Aadhaar Privacy judgment of 2018,²⁴¹² attempted to curtail the negative uses of the Aadhaar system although a significant national mandate for technological, procedural, and policy improvements remained.²⁴¹³ Because of this, throughout India there is a strong impetus toward implementing mitigation for privacy and autonomy concerns in the Aadhaar system, the "India Stack", and in general, AI systems. This mandate includes public participation in, and understanding of, AI systems. Since the Aadhaar ruling, many improvements have been made regarding AI-based identity systems and services, the "India Stack." However, the use and implementation of Aadhaar with AI tends to fall within the gray-zone of the Aadhaar Privacy judgment of 2018 as it prohibits the use of Aadhaar by private entities and limits the use of Aadhaar by the Government towards providing subsidies, benefits and services. In this regard, the Attorney General for India later

²⁴⁰⁹ India Stak, *FAQs*, https://indiastack.org/faq.html

²⁴¹⁰ INDIAai, AI Standards & Policies (2020), https://indiaai.gov.in/ai-standards

²⁴¹¹ Pam Dixon, A Failure to "Do No Harm" — India's Aadhaar biometric biometric ID program and its inability to protect privacy in relation to measures in Europe and the U.S., Health Technology (May 4, 2017), https://link.springer.com/epdf/10.1007/s12553-017-0202-6

²⁴¹² Supreme Court Observer, *Aadhaar Review* (2025), https://www.scobserver.in/cases/beghar-foundation-ks-puttaswamy-aadhaar-review-case-background/

²⁴¹³ The Hindu, Reactions to the Aadhaar verdict: Original Aadhaar petitioner Justice Puttaswamy welcomes parts of the judgment (Sept. 27, 2018),

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issued a guiding opinion²⁴¹⁴ in 2019, the Aadhaar Act was further amended²⁴¹⁵ to make the statute comply with the *Aadhaar* judgment.²⁴¹⁶ Another concern regarding the constitutional validity of the Aadhaar statute has also arisen as it was passed as a "money bill."²⁴¹⁷ However, privacy concerns remain and this area needs to be observed in the future. In addition, application of the GDPR in Europe renewed the focus on implementation of privacy and data protection features within India as well.

In addition, in January 2020 the NITI Aayog released recommendations that an AI-explicit computer framework (AIRAWAT)²⁴¹⁸ be established to serve the needs of innovation hubs, AI research, and students, as well as a new discussion paper regarding the issue of Responsible AI.

In January 2022, the Ministry of Electronics and Information Technology has proposed a new model of "Federated Digital Identities" under which a citizen's multiple digital IDs — from PAN and Aadhaar to driving license and passport numbers could be interlinked, stored, and accessed via one unique ID envisaged under India Digital Ecosystem Architecture 2.0.²⁴¹⁹

Facial Recognition

As part of its series of publications on Responsible Artificial Intelligence (RAI), NITI Aayog published a case study for adopting a framework on facial recognition technology, seeking public comments.²⁴²⁰ The objective of this case study is to determine how the "governments can adhere to its stated objective of responsible and safe deployment of AI and algorithmic systems."²⁴²¹ Key recommendations include establishing liability for misuse, creating an

https://uidai.gov.in/images/Circular%20-

<u>Use%20of%20Aadhaar%20for%20opening%20bank%20accounts%20and%20withdrawal%20of%20money%20through%20AePS-reg.pdf</u>

11/Ai_for_All_2022_02112022_0.pdf

²⁴¹⁴ Opinion of the Attorney General for India (Oct. 23, 2018),

²⁴¹⁵ Ministry of Law and Justice, *The Aadhaar and Other Laws (Amendment) Act* (2019), https://www.uidai.gov.in/images/news/Amendment Act 2019.pdf

²⁴¹⁶ Supreme Court of India, *Contempt Petition (CIVIL) NO. 34 OF 2018* in WRIT PETITION (CIVIL) NO. 1014 OF 2017 (Sept. 26, 2018), https://www.supremecourtcases.com/justice-k-s-puttaswamy-retd-and-another-v-union-of-india-and-others/amp/

²⁴¹⁷ Bar and Bench, *Column: Decoding the Tribunal Judgment* (Nov. 15, 2019), https://www.barandbench.com/columns/column-decoding-the-tribunal-judgment

²⁴¹⁸ NITI Aayog, *AIRAWAT: Establishing an AI Specific Cloud Computing Infrastructure for India: An Approach Paper* (Jan.2020), https://www.niti.gov.in/sites/default/files/2020-01/AIRAWAT Approach Paper.pdf

²⁴¹⁹ Internet Freedom Foundation, *Summary of India Digital Ecosystem Architecture (InDEA) 2.0* (Feb. 16. 2022), https://internetfreedom.in/summary-of-indea-2-0/

²⁴²⁰ NITI Aayog, *Adopting the Framework: A Use Case Approach on Facial Recognition Technology* (Nov. 2022), https://www.niti.gov.in/sites/default/files/2022-

²⁴²¹ Ibid, p. 2

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independent ethical oversight body, and enforcing transparency for FRT deployments, particularly to address concerns over privacy and misuse.²⁴²²

In 2022, the European Center for Not-for-Profit Law (ECNL), the International Network of Civil Liberties Organizations (INCLO) and Privacy International (PI) joined together to conduct a broad survey of COVID-19 surveillance measures, such as facial recognition, adopted in 15 countries, including India. The organizations investigated negative impacts of surveillance technology and measures employed during the pandemic on activist movements and organizations.²⁴²³ The report shows that "surveillance technologies had and continue to have very serious implications for the enjoyment of human rights and for civic space more broadly."2424

EdTech

In May 2022, Human Rights Watch published a global investigative report on the education technology (EdTech) endorsed by 49 governments, including India, for children's education during the pandemic. Based on technical and policy analysis of several EdTech products used in India, Human Rights Watch found that India's endorsement of the majority of these online learning platforms put at risk or directly violated children's rights. Some EdTech products targeted children with behavioral advertising. Many more EdTech products sent children's data to AdTech companies that specialize in behavioral advertising or whose algorithms determine what children see online.

According to Human Rights Watch, in line with child data protection principles as well as corporations' human rights responsibilities outlined in the United Nations Guiding Principles on Business and Human Rights, EdTech and AdTech companies should not collect and process children's data for advertising. The report noted steps companies should take to protect children's rights, including working with governments to define clear retention and deletion rules for children's data collected during the pandemic. Furthermore, governments should develop, refine, and enforce modern child data protection laws and standards, and ensure that children who want to learn are not compelled to give up their other rights in order to do so.²⁴²⁵ The Digital Personal Data Protection

²⁴²³ European Center for Non-for-Profit Law, Under Surveillance: (Mis)use of Technologies in Emergency Responses, https://files.inclo.net/content/pdf/79/INCLO-Under%20Surveillance-Report.pdf

²⁴²² NITI Aayog, Adopting the Framework: A Use Case Approach on Facial Recognition Technology (Nov. 2022), https://www.niti.gov.in/sites/default/files/2022-11/Ai for All 2022 02112022 0.pdf

²⁴²⁴ Ibid, p. 5

²⁴²⁵ Human Rights Watch, How Dare They Peep into My Private Life (May 25, 2022), https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rightsviolations-governments

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(DPDP) Act set to take effect in 2024 outlines data principals' rights, fiduciaries' obligations, and penalties for breaches, and introduces "significant data fiduciaries" for high-impact entities. The Act requires verifiable consent for processing data of children and persons with disabilities.²⁴²⁶

Environmental Impact of AI

As one of the fastest-growing economies and home to a diverse range of ecosystems, India faces the unique challenge of balancing development aspirations with environmental concerns to bear. The emergence of AI presents opportunities and challenges for India's environment. Integration of AI into various sectors has reshaped how societies address environmental challenges and pursue sustainable development. In India, there have been research papers touching on the impact of AI but it will delve and focus on AI applications on environment conservation rather than the environmental impact of AI.²⁴²⁷

The current regulatory framework, including the Digital Personal Data Protection Act and National AI initiatives, requires additional provisions to address these environmental concerns.

Lethal Autonomous Weapons

The Indian Army has been steadily embracing emerging and disruptive technologies to transform itself from a manpower-intensive to a technology-enabled force to meet future security challenges. The Indian Armed force first started acquiring automated drones in 2019 as part of a modernization campaign. However, modern warfare, situational awareness and battlefield operability failed miserably in recent Indian military tactics against Pakistan and China. Nevertheless, India is determined to take part in the lethal autonomous weapons race in the South Asian region.

India's Defence Research and Development Organization (DRDO) has been involved in the R&D of Direct Energy Weapons, gun-mounted remotely operated vehicles, nuclear weapons (Agni-V), and swarm-based self-healing minefields. The most crucial project rolled out by DRDO is the unmanned remotely operated tank "Muntra", that comes with three variants. Muntra-S, Muntra-M and Muntra-N have proven efficiency in surveillance, mine detection and reconnaissance in a strategic location. The indigenous R&D of Robots for armed forces is a crucial part of lethal autonomous weapons systems under the

MeitY, Digital Personal Data Protection Act 2023 (Nov. 2023),
 https://www.meity.gov.in/static/uploads/2024/06/2bf1f0e9f04e6fb4f8fef35e82c42aa5.pdf
 IndiaAI, Analyzing the Impact of AI on India's Sustainable Development (Jul. 2, 2024),
 https://indiaai.gov.in/article/analyzing-the-impact-of-ai-on-india-s-sustainable-development
 Sumit Kumar Singh, Indian Army Employing Autonomous Weapon Systems (Jan. 16, 2021),
 https://www.southasiamonitor.org/india/indian-army-employing-autonomous-weapon-systems

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new program of Prime Minister Narendra Modi's "Make in India." As part of this program, the Indian Navy is also focused on incorporating AI and Machine Learning in critical mission areas. The program has brought together government and private organizations working on producing lethal autonomous weapons. 2430

The Indian Air Force and Navy are actively exploring AI for mission-critical applications, including enhanced battlefield decision-making and maritime threat detection. Recent collaborations, particularly with the U.S. and other strategic allies, are also enhancing India's AI defense ecosystem, focusing on autonomous weaponry and battlefield data integration. These initiatives illustrate India's commitment to becoming a significant player in South Asia's autonomous weapons landscape, though the ethical challenges surrounding these technologies continue to be an area of debate.²⁴³¹

At the 78th UN General Assembly First Committee in 2023, India was one of 5 states that voted against²⁴³² resolution L.56²⁴³³ on autonomous weapons systems, which was supported by 164 states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems.

Human Rights

India was among the original 48 countries that voted in favor of the Universal Declaration of Human Rights in 1948. According to Freedom House, India is "Partly Free" with a score of 66/100.²⁴³⁴ The ratings for political rights and civil liberties have steadily declined in recent years. Freedom House reports, "While India is a multiparty democracy, the government led by Prime Minister

²⁴²⁹ Make in India, *Defence Manufacturing*, https://www.makeinindia.com/sector/defence-manufacturing

²⁴³⁰ Noor-ul-Huda, *Modern Warfare and Autonomous Weapons: Destructive Ways of Alternative Technologies in India*, International Institute for Global Strategic Analysis (Mar. 24, 2022), https://iigsa.org/modern-warfare-and-autonomous-weapons-destructive-ways-of-alternative-technologies-in-india/

²⁴³¹ Vivek N.D, *AI and Indian Defense: Enhancing National Security Through Innovation* (Oct. 1, 2024), https://thediplomat.com/2024/10/ai-and-indian-defense-enhancing-national-security-through-innovation/

²⁴³² Isabelle Jones, *164 states vote against the machine at the UN General Assembly*, Stop Killer Robots (Nov. 1, 2023), https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

²⁴³³ General Assembly, *Resolution L56: Lethal Autonomous Weapons* (Oct.12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

²⁴³⁴ Freedom House, *Freedom in the World 2024: India* (2024), https://freedomhouse.org/country/india/freedom-world/2024

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Narendra Modi and the Hindu nationalist Bharatiya Janata Party (BJP) has presided over discriminatory policies and a rise in persecution affecting the Muslims. The constitution guarantees civil liberties including freedom of expression and freedom of religion, but harassment of journalists, nongovernmental organizations (NGOs), and other government critics has increased significantly under Modi."

Internet shutdowns remain a significant concern, with frequent use by both state and national governments under the Temporary Suspension of Telecom Services Rules, particularly in response to protests and sensitive events. These suspensions, often justified for maintaining public order, have led to allegations of misuse, with instances cited where shutdowns were imposed to prevent activities like exam cheating. This has prompted criticism from digital rights groups like the Internet Freedom Foundation, who argue that shutdowns should adhere more closely to strict guidelines and safeguards under the law. ²⁴³⁵

Quad Group

In September 2021, the Quad Group, India, United States, Australia, and Japan, released the "quad principles on Technology Design, Development, Governance and Use," centered on a commitment to shared democratic values and respect for universal human rights. The principles identified are: 1) Support of universal values, such as freedom of expression, privacy, autonomy, agency, and dignity of individuals; 2) Building trust, integrity and resilience; and 3) Fostering healthy competition and international collaboration to advance the frontier of science and technology.²⁴³⁶

In March 2021, the U.S.-India Artificial Intelligence (USIAI) Initiative was launched to serve as a platform to discuss opportunities for bilateral AI R&D collaboration, share ideas for developing an AI workforce, and recommend modes and mechanisms for catalyzing their partnership.²⁴³⁷ In May 2022, India and the US also announced the launch of the U.S.-India initiative on Critical and Emerging Technology (iCET) to foster closer industrial cooperation in strategic and defense technologies, notably in the areas of artificial intelligence, quantum computing, semiconductors and 5G.²⁴³⁸

https://freedomhouse.org/country/india/freedom-net/2024

²⁴³⁵ Freedom House, Freedom on the Net 2024: India (2024),

²⁴³⁶ Biden White House Archives, *Quad Principles on Technology Design, Development, Governance, and Use* (Sept. 24, 2021), https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2021/09/24/quad-principles-on-technology-design-development-governance-and-use/

²⁴³⁷ U.S. - India Artificial Intelligence (USIAI) Initiative, https://usiai.iusstf.org/

²⁴³⁸ Biden White Archives, *FACT SHEET: United States and India Elevate Strategic Partnership with the Initiative on Critical and Emerging Technology (iCET)* (Jan. 31, 2023), https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2023/01/31/fact-sheet-

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In January 2023, the Initiative on Critical and Emerging Technology (iCET) was inaugurated as a key milestone deepening the relationship between U.S and India. The leaders committed to their vision of fostering an open, accessible, and secure technology ecosystem, based on mutual trust and confidence.²⁴³⁹

The U.S. National Science Foundation (NSF), Japan Science and Technology Agency (JST), Indian Council of Agricultural Research (ICAR), and Commonwealth Scientific and Industrial Research Organisation of Australia (CSIRO) signed a Memorandum of Cooperation (MoC) concerning Research Cooperation on the Advancing Innovations for Empowering NextGen Agriculture (AI-ENGAGE) Initiative in September 2024.²⁴⁴⁰ By collaborating on cutting-edge research and innovations in areas such as artificial intelligence, robotics, communications, and sensing through this Quad AI-ENGAGE effort, researchers collaborating across the diverse environments in Australia, India, Japan, and the U.S. can help transform agricultural approaches to empower farmers everywhere to increase yield and resilience.²⁴⁴¹

BRICS

At the 2023 BRICS Summit, India, China, Russia, Brazil and South Africa accepted Iran, Ethiopia, Egypt, Saudi Arabia and the United Arab Emirates, as new BRICS member. Russian President Putin who takes over the rotating chairmanship of BRICS in January 2024 said that the bloc seeks "strengthening multilateralism for equitable global development and security". Chinese President Xi Jinping also announced that "BRICS countries have agreed to launch the AI Study Group of the BRICS Institute of Future Networks at an early date." During its 16th Summit in October 2024, the leaders adopted the 'Kazan Declaration' and welcomed its new members attending their first Summit. The declaration seeks to strengthen multilateralism for just global development and security. India's PM called upon BRICS to proactively push for global governance reforms. Recalling the Voice of Global South Summits hosted by India during its

 $\underline{united\text{-}states\text{-}and\text{-}india\text{-}elevate\text{-}strategic\text{-}partnership\text{-}with\text{-}the\text{-}initiative\text{-}on\text{-}critical\text{-}and\text{-}emerging\text{-}}}{technology\text{-}icet/}$

https://in.usembassy.gov/fact-sheet-2024-quad-leaders-summit/

https://infobrics.org/post/39534

²⁴³⁹ Biden White House Archives, *Joint Statement for the United States and India, Quad Leaders' Summit Fact Sheet* (May 20, 2023), https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2023/05/20/quad-leaders-summit-fact-sheet/

²⁴⁴⁰U.S. Mission India, 2024 Quad Leaders Summit (Sept. 23,2024),

²⁴⁴¹ ICAR, *Quad Cooperation* (Sept. 23,2024), https://icar.org.in/quad-cooperation

²⁴⁴² Taarifa Rwanda, *Ethiopia Officially Confirmed as BRICS Member* (Jan. 8, 2024),

https://furtherafrica.com/2024/01/08/ethiopia-officially-confirmed-as-brics-member/ BRICS, BRICS Nations to Establish a Study Group to Track AI (Oct. 6, 2023),

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G-20 Presidency, he stressed that the group must give priority to the concerns of the Global South. Brazil took over the presidency of the group for 2024 and South Africa in 2025.²⁴⁴⁴

AI Safety Summit

In November 2023, India participated in the first AI Safety Summit and endorsed the Bletchley Declaration.²⁴⁴⁵ India thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible." The next AI Safety Summit is due to take place in France in 2024.

The AI Seoul Summit marked the second AI Safety Summit co-hosted by the Republic of Korea and the United Kingdom. The event succeeded in its goal to continue the momentum after the landmark 2023 UK AI Safety Summit. The Summit reinforced international commitment to safe AI development and added 'innovation' and 'inclusivity' to its agenda. France held the successor to the AI Seoul Summit in early 2025 under the new title "AI Action Summit.²⁴⁴⁶

OECD / G20 AI Principles

As a G20 member, India endorsed the G20 AI Principles at the 2019 G20 Leaders' Summit in Japan. India held the Presidency of the G20 from December 1, 2022, to November 30, 2023. The 43 Heads of Delegations, the largest ever in G20, participated in the final New Delhi Summit in September 2023. India stated that the "G20 Presidency would be a watershed moment in her history as it seeks to play an important role by finding pragmatic global solutions for the

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²⁴⁴⁴ Ministry of External Affairs, Kazan Declaration: "Strengthening Multilateralism for just Global Development and Security" (Oct 23, 2024), https://www.mea.gov.in/bilateral-documents.htm?dtl/38450/Kazan_Declaration_Strengthening_Multilateralism_For_Just_Global_Development_And_Security

²⁴⁴⁵ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, *Prime Minister's Office, The Bletchley Declaration by Countries Attending the AI Safety Summit* (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration/the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

²⁴⁴⁶ Centre for Strategic & International Studies, *The AI Seoul Summit,* (May 23, 2024), https://www.csis.org/analysis/ai-seoul-summit

²⁴⁴⁷ Ministry of External Affairs, *G-20 and India's Presidency* (Dec. 9, 2022), https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1882356

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wellbeing of all, and in doing so, manifest the true spirit of 'Vasudhaiva Kutumbakam' or the 'World is One Family.'"²⁴⁴⁸

The New Dehli Summit led G20 leaders to expressly "reaffirm [their] commitment to G20 AI Principles (2019)." In the New Dehli Declaration G20 leaders also asserted, "It is our endeavour to leverage AI for the public good by solving challenges in a responsible, inclusive and human-centric manner, while protecting people's rights and safety. To ensure responsible AI development, deployment and use, the protection of human rights, transparency and explainability, fairness, accountability, regulation, safety, appropriate human oversight, ethics, biases, privacy, and data protection must be addressed. To unlock the full potential of AI, equitably share its benefits and mitigate risks, we will work together to promote international cooperation and further discussions on international governance for AI."²⁴⁴⁹

According to the OECD, most but not all of the OECD AI principles are addressed in the national AI strategy.²⁴⁵⁰ According to OECD AI Observatory, following the #AIforAll initiative, India is now addressing accountability.²⁴⁵¹ In 2023, a study published by the OECD acknowledged that India is providing guidance for developers and operators on how to implement the principles.²⁴⁵² In 2024, India has taken further strides in its AI policy and governance by hosting the Global IndiaAI Summit in July. The summit brought together AI experts and industry leaders to discuss responsible AI use and development. Key themes included AI accessibility, infrastructure readiness, and safe, ethical AI applications across sectors. ²⁴⁵³

India is a founding member of the Global Partnership on AI, an international initiative to support responsible and human-centric development and use of AI. ²⁴⁵⁴ "The power of artificial intelligence can be exploited for the good of the citizens and consumers across the globe and ensure that there are adequate

https://static.mygov.in/archive/g20/index.html

https://www.caidp.org/app/download/8475329463/G20-New-Delhi-Leaders-

Declaration.pdf?t=1708386182

²⁴⁵¹ OECD.AI, AI in India, https://oecd.ai/en/dashboards/countries/India

²⁴⁴⁸ Government of India, *About G20 Presidency* (Oct. 18, 2023),

²⁴⁴⁹ G20, G20 New Delhi Leaders' Declaration, CAIDP (Sept. 2023),

²⁴⁵⁰ OECD G20 Digital Economy Task Force, *Examples of AI National Policies* (2020), https://www.mcit.gov.sa/sites/default/files/examples-of-ai-national-policies.pdf

²⁴⁵² Lucia Russo and Noah Oder, *How Countries Are Implementing the OECD Principles for Trustworthy AI* (Oct. 31, 2023), https://oecd.ai/en/wonk/national-policies-2

²⁴⁵³ Global IndiaAI Summit, (Jul. 2024), https://indiaai.gov.in/globalindiaaisummit/about-global-indiaai-summit

²⁴⁵⁴ Ministry of External Affairs, *G20 and India's Presidency* (Dec. 9, 2022), https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1882356

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guardrails to prevent misuse and user harm," said the Minister of State for IT Rajeev Chandrasekhar at the GPAI meeting held in Tokyo.²⁴⁵⁵

Council of Europe AI Treaty

India has not signed the Council of Europe's AI Framework Convention, the first legally binding international treaty on artificial intelligence. While maintaining observer status at the Council of Europe, India's approach focused on developing domestic frameworks aligned with international standards. The Convention's emphasis on human rights, democracy, and rule of law provides important benchmarks for evaluating India's evolving AI policies. These standards gain relevance as India expands its participation in global AI governance initiatives. ²⁴⁵⁷

UNESCO Recommendation on AI Ethics

India has been a member of UNESCO since its inception in 1946 and endorsed the UNESCO Recommendation on AI Ethics. Recently, UNESCO released a report on the State of the Education in India and urged the country to implement ethical AI in its education system as India is one of the biggest contributors to AI development.²⁴⁵⁸

IndiaAI, under the Ministry of Electronics and IT (MeitY), launched the CyberGuard AI Hackathon in October 2024 as part of its mission to democratize AI, promote India's AI leadership, and ensure ethical AI use. The IndiaAI CyberGuard AI Hackathon has multiple stages, the first of which is online, enabling participants from across India to join virtually.²⁴⁵⁹

India is currently completing the UNESCO Readiness Assessment Methodology (RAM), a tool to support the effective implementation of the Recommendation.²⁴⁶⁰ The RAM helps countries and UNESCO identify and

²⁴⁵⁶ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 17, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

 $\underline{https://unesdoc.unesco.org/ark:/48223/pf0000382661.locale=en}$

²⁴⁵⁵ Jibu Elias, *AI for All: How India is carving its own path in the global AI race* (Jan. 30, 2023), https://oecd.ai/en/wonk/india

²⁴⁵⁷ IndiaAI, *UK signs the first International treaty to prevent misuse of AI* (Sept 6, 2024), https://indiaai.gov.in/news/uk-signs-first-international-treaty-to-prevent-misuse-of-ai

²⁴⁵⁸ UNESCO, State of the Education Report for India, 2022: Artificial Intelligence in Education; Here, There, and Everywhere, UNESCO Digital Library (2022),

²⁴⁵⁹ India AI, *Cyberguard AI: Pioneering AI Solutions for citizen cybersecurity through India AI hackathon* (Oct. 25, 2024), https://indiaai.gov.in/article/cyberguard-ai-pioneering-ai-solutions-for-citizen-cybersecurity-through-indiaai-hackathon

²⁴⁶⁰ UNESCO, *Implementation of the Recommendation on the Ethics of Artificial Intelligence*, General Conference, 42nd session (Nov. 2, 2023), https://unesdoc.unesco.org/ark:/48223/pf0000387369

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address any institutional and regulatory gaps.²⁴⁶¹ In April 2024, UNESCO New Delhi welcomed proposals for the completion of the AI Readiness Assessment Methodology (RAM) and multi-stakeholder consultation and preparation of the AI Readiness Country Report.²⁴⁶² UNESCO New Delhi's April 2024 AI Readiness Assessment identified three critical priorities:

- 1. Integration of AI ethics education into national curriculum
- 2. Development of comprehensive regulatory frameworks
- 3. Establishment of public-private partnership guidelines

The assessment led to concrete actions, including the formation of the National AI Ethics Advisory Board in July 2024. This board now oversees the implementation of UNESCO's AI ethics recommendations across public and private sectors.

Evaluation

India has endorsed the G20 AI Principles and the UNESCO Recommendation on the Ethics of AI. The country has set out a comprehensive set of national AI strategies with a clear ethical dimension and recently adopted a data protection law. However, the recent decline in human rights protection in India, the non-committal position of India with regard to the regulation or prohibition of lethal autonomous weapons combined with the yet unknown date of entry into force of India new data protection law raise significant concerns in view of the expanded use of the Aadhaar system among others. In 2023, India has revealed itself as a key international actor and power broker with its G20 Presidency and GPAI Chair and its participation in the AI Safety Summit and BRICS Summit. Its overall position remains nevertheless ambiguous.

Indonesia

In 2024, Indonesia and UNESCO released the results of the Readiness Assessment Methodology (RAM), making Indonesia the first country in Southeast Asia to complete the RAM. Nationally, Indonesia released AI Ethics Guidelines as a foundation for forthcoming regulations.

²⁴⁶¹ UNESCO Global AI Ethics and Governance Observatory, *Readiness Assessment Methodology* (2023), https://www.unesco.org/ethics-ai/en/ram

²⁴⁶² UNESCO, *Inviting Proposals for the development of AI Readiness Report for India* (Apr. 8, 2024), https://www.unesco.org/en/articles/inviting-proposals-development-ai-readiness-report-india

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National AI Strategy

Indonesia published the National Strategy for Artificial Intelligence (*Stranas KA*) in August 2020.²⁴⁶³ The National Strategy is aimed at advancing the Indonesian economy through leadership in AI, through the year 2045.²⁴⁶⁴ The AI Strategy for Indonesia is intended to implement Vision Indonesia 2024, the country's economic, social, governance and technology development strategy. The National Strategy for AI also follows "Making Indonesia 4.0", a government-sponsored program, announced in 2018, to promote the automation of the Indonesian society. "Making Indonesia 4.0" involves 10 cross-sectoral initiatives aimed at boosting Indonesia's competitive performance in key areas like manufacturing, industry, biology, and hardware automation, through investments in AI, robotics, and technology-based Indonesian firms as well as encouraging investment from leading Japanese, Chinese, and Korean tech firms. (2466)

Stranas KA outlines five national priorities where AI is anticipated to have the biggest impact: (1) health services to accelerate plans for smart hospitals and health security infrastructure in the aftermath of the pandemic; (2) bureaucratic reform to implement digital services for citizen-centric public service (*pemerintahan digital melayani*); (3) education and research to aid online schooling and bridge the digital divide; (4) food security for smart agriculture, fisheries, and management of natural resources; as well as (5) mobility and services to facilitate the development of 98 smart cities and 416 smart districts under Indonesia's 100 Smart Cities Movement.²⁴⁶⁷

The Indonesian National AI Strategy identifies four key focus areas: (1) Ethics and Policy, (2) Talent Development, (3) Infrastructure and Data, and (4) Industrial Research and Innovation. In the focus area of Ethics and Policy, the goals include implementing data sharing ethics, establishing a Data Ethics Board,

²⁴⁶⁶ Ministry of Industry, *Making Indonesia 4.0: Indonesia's Strategy to Enter the 4th Generation of Industry Revolution* (Apr. 4, 2018),

https://bsn.go.id/uploads/download/making_indonesia_4.0_- kementerian_perindustrian.pdf; AI Innovation Center, *Making Indonesia 4.0, Artificial Intelligence Research and Industry* [English version focused on AI] (2019), https://ai-innovation.id/images/gallery/materi/21.pdf

²⁴⁶³ Artificial Intelligence Innovation Center of Indonesia, *KA Menuju Visi Indonesia 2045: Pusat Inovasi Kecerdasan Artifisial Indonesia*, https://ai-innovation.id

²⁴⁶⁴ Made Anthony Iswara, *Indonesia Sets Sights on Artificial Intelligence Strategy*, The Jakarta Post (Aug. 14, 2020), www.thejakartapost.com/news/2020/08/13/indonesia-sets-sights-on-artificial-intelligence-in-new-national-strategy.html

²⁴⁶⁵ Asia Society Policy Institute, *Raising Standards: Data & Artificial Intelligence in Southeast Asia* (July 2022), https://asiasociety.org/sites/default/files/inline-

files/ASPI RaisingStandards report fin web 0.pdf

²⁴⁶⁷ Asia Society Policy Institute, *Raising Standards: Data & Artificial Intelligence in Southeast Asia* (July 2022), https://asiasociety.org/sites/default/files/inline-

files/ASPI RaisingStandards report fin web 0.pdf

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and strengthening laws to crack down on the abuse of technology and the misuse of data privacy.

A 2018 International Data Corporation survey found that Indonesian companies had the highest rates of AI adoption in Southeast Asia; a number of state projects employ AI, to anticipate state fires for example; and some government agencies are promoting AI development and technology-based tools at schools and other learning institutions. However, the survey mentions data misuse as a hurdle and notes that the country has neither the provisions to regulate AI, nor an official agency to oversee AI development. The Center for Digital Society (CfDS) UGM, in collaboration with Google and KORIKA, took action by opening a platform for discussions on artificial intelligence and developing the capacity of digital talent in December 2023. The survey also recommends establishing a data ethics board that would set national standards for AI innovation. In response, Indonesia's Deputy Minister of Communication and Information Nezar Patria announced the government is launching an Artificial Intelligence Ethics Guide, including regulations aimed at fostering innovation in October 2024. Patria

Pancasila Values

The National Strategy states that Indonesian AI policy should be based on Pancasila values. Pancasila is the philosophical theory that is the foundation of the Indonesian government and policy. It is comprised of five principles: (1) Belief in The One True God, (2) A fair-minded and civilized humanity, (3) Unity of Indonesia, (4) Democracy (from the people) led by Wisdom of consultation [of the] representatives [of the people], and (5) Social justice for every person in Indonesia. The AI Strategy sets out the importance of establishing public trust through transparency, social and ecological welfare, robustness and technical safety, diversity, justice, and non-discrimination, amongst others. The Strategy emphasizes the importance of AI being reliable, safe, open, and accountable. The synergy between stakeholders is also mentioned to ensure that the policy is relevant and helpful.

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²⁴⁶⁸ People Matters, *The Journey of AI Adoption in ASEAN Countries* (Oct. 23, 2018), https://www.peoplemattersglobal.com/article/technology/the-journey-of-ai-adoption-in-asean-countries-19636

²⁴⁶⁹ Center for Digital Society, *CfDS & KORIKA*–Google, https://digitalsociety.id/collaborate/cfds-korika-google/

²⁴⁷⁰ Ministry of Communication and Information Services, *Deputy Minister Nezar Patria: AI Regulation Preparation Prioritizes Innovation Principles*, Press Release No. 628/HM/KOMINFO/10/2024 (Oct 2, 2024), https://www.komdigi.go.id/berita/siaran-pers/detail/wamen-nezar-patria-penyusunan-regulasi-ai-utamakan-prinsip-inovasi
²⁴⁷¹ Wikipedia, *Pancasila (politics)*, https://en.wikipedia.org/wiki/Pancasila (politics)

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Public Participation

The Agency for the Assessment and Application of Technology coordinated the development of the National AI Strategy. The development was carried out with help of a "wide variety of public and private sector organizations" who "contributed to the plan including government ministries, universities, industry associations, and national telecom providers."²⁴⁷² The Institute for Policy Research and Advocacy (ELSAM) held a public discussion titled Preparing Responsible and Trustworthy AI Regulation for Indonesia in July 2024, where recommendations were presented to the Ministry of Communication and Information Technology.²⁴⁷³

A website dedicated to the National AI Strategy illustrates the strategy and provides material from the AI Summit from 2020 onwards. ²⁴⁷⁴ The website also provides an Artificial Intelligence Map²⁴⁷⁵ that describes the research institutes, universities, industries, and communities that develop and utilize innovative Artificial Intelligence in Indonesia.

According to the Jakarta Post, AI providers and experts have lauded the move to establish a foundation for AI development while urging the government and other stakeholders to improve on the strategy, fix current flaws and anticipate risks. ²⁴⁷⁶ University of Indonesia AI and robotics professor Wisnu Jatmiko described AI as an "extraordinary challenge." He told The Jakarta Post that the country needs to nurture high-quality talent in the field of AI and bolster infrastructure, including fixing internet connection issues and developing its own cloud computing system to prevent the leak of confidential information. Big Data and AI Association chairman Rudi Rusdiah and Institute for Policy Research and Advocacy researcher Alia Yofira Karunian said the national strategy should uphold principles of fairness, accountability, and transparency as pillars of AI implementation. Karunian called on the government to detect and iron out biases in automated decision-making through human intervention, and to ensure people have the right not to have AI make decisions about them. "We must learn from the mistakes of other countries," she said.

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²⁴⁷² Carrington Malin, *Indonesia National AI Strategy Published This Month* (Aug. 16, 2020), https://www.carringtonmalin.com/2020/08/16/indonesia-national-ai-strategy-set-in-motion-this-month/

²⁴⁷³ Modern Diplomacy, *The Urgency of AI Regulation for Developing Countries: Insights from Indonesia* (Jun. 26, 2024), https://moderndiplomacy.eu/2024/06/30/the-urgency-of-ai-regulation-for-developing-countries-insights-from-indonesia/

²⁴⁷⁴ Artificial Intelligence Innovation Center of Indonesia, *AI Towards Indonesia Vision 2045*, https://ai-innovation.id/

²⁴⁷⁵ Artificial Intelligence Mapping, https://ai-innovation.id/peta-ka

²⁴⁷⁶ Made Anthony Iswara, *Indonesia Sets Sights on Artificial Intelligence Strategy*, The Jakarta Post (Aug. 14, 2020), www.thejakartapost.com/news/2020/08/13/indonesia-sets-sights-on-artificial-intelligence-in-new-national-strategy.html

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The Jakarta Smart City initiative also encouraged community participation and government responsiveness through social media, public figures, and a public reporting system. Further, the "management of community complaints was conducted with effective coordination between the Jakarta Smart City team and various government departments." In August 2023, the Ministry of Communication and Information began the third phase in the implementation of the PDP Law by releasing a Draft Government Regulation on Personal Data Protection (RPP PDP) as a derivative regulation from the 2022 PDP Law, requesting public input. Personal data protection in light of technological advancements, underscoring the critical role of public involvement in refining the RPP PDP.

Data Protection

On September 20, 2022, the Indonesian Government and Parliament passed the first Indonesian Personal Data Protection Law. This is the first step to the enactment of the PDP Bill as law. The second step was Presidential assent, which happened on October 17, 2022, and signifies the enactment and coming into force of the law.²⁴⁷⁹ The law made many references to the EU GDPR. The PDP Law enshrines among others the Data Subject's right to object to automatic profiling activities. PDP Law exempts the financial services sector, and imposes stricter requirements on broad record-keeping obligations and unique provisions on facial recognition technology and special categories of data (children's data, personal financial data, etc.).²⁴⁸⁰

The PDP Law provides for the establishment of a Data Protection Authority (DPA). "Article 58 of the PDP law states that the DPA will implement the PDP Law and report to the Indonesian President, which will create the institution within the Executive branch of the government. The Indonesian DPA will have four key functions: (i) policy, strategy, and guidance formulation; (ii) supervision of the implementation of the PDP Law; (iii) administrative law enforcement against violations; and (iv) facilitating out-of-court dispute

https://lworldconnected.org/project/asia egov jakartasmartcityindonesia/

 $\frac{https://indonesiabusinesspost.com/1744/Politics/ministry-targets-completion-of-personal-data-protection-regulation-by-july-2024}{}$

²⁴⁷⁷ 1 World Connected, *Jakarta Smart City* (Sept. 1, 2020),

²⁴⁷⁸ Indonesia Business Post, *Ministry Targets Completion of Personal Data Protection Regulation by July 2024* (Mar. 18, 2024),

²⁴⁷⁹ Hunter Dorwart, et al., *Indonesia Personal Data Protection Bill: Overview, Takeaways, and Context,* Future of Privacy Forum (Oct. 19, 2022), https://fpf.org/blog/indonesias-personal-data-protection-bill-overview-key-takeaways-and-context/

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resolution."²⁴⁸¹ The government aims to release more comprehensive AI regulations by end of 2024.²⁴⁸²

The PDP Law includes fines of up to 2% of a company's annual revenue, the potential confiscation of assets, and a stipulation that individuals could be imprisoned for up to six years for falsifying personal data or up to five years for collecting personal data illegally.

The Indonesian Government and Parliament ratified the Personal Data Protection (PDP) Law, mandating DPO appointments for specific entities, setting the stage for the independent AI oversight through a Data Protection Authority (DPA) by October 2024.²⁴⁸³ Following the ratification of the PDP Law, the Ministry of Communication and Informatics (MoCI) issued the AI Circular Letter, providing guidance for businesses on preparing internal policies on data and AI ethics, further integrating AI considerations within the data protection framework.²⁴⁸⁴

The Indonesian data protection regime comprises several other laws such as the Law regarding Electronic Information and Transactions (EIT Law) and its implementing regulations.²⁴⁸⁵

Al Oversight

As part of the Personal Data Protection Law, Indonesia is to create a Data Protection Authority (DPA) by the third quarter of 2024. However, no news in English has indicated the office is operation.²⁴⁸⁶ This new agency will take over key responsibilities from the MoCI, including monitoring compliance with the Personal Data Protection Law and regulating AI developments. The establishment of the DPA represents a significant step toward aligning Indonesia's data protection framework with international standards and enhancing regulatory

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²⁴⁸¹ Ibid

²⁴⁸² Tech in Asia, *Indonesia to launch Al regulations by end-2024* (Mar. 7, 2024), https://www.techinasia.com/indonesia-launch-ai-regulareleasetions-end-2024

²⁴⁸³ ASEAN Briefing, *A Guide to Appointing a Data Protection Officer in Indonesia* (Mar. 20, 2024), https://www.aseanbriefing.com/news/appointing-a-data-protection-officer-in-indonesia/

²⁴⁸⁴ Ministry of Communication and Information Technology, *Circular Letter of the Minister No.* 9 of 2023 Concerning Artificial Intelligence Ethics [Surat Edaran Menteri Komunikasi dan Informatika Nomor 9 Tahun 2023] (Dec. 19, 2023),

 $[\]underline{\text{https://jdih.kominfo.go.id/produk_hukum/view/id/883/t/surat+edaran+menteri+komunikasi+dan} \\ + informatika+nomor+9+tahun+2023$

²⁴⁸⁵ DLA Piper, *Data Protection Laws of the World: Indonesia* (Nov. 2020),

 $[\]underline{https://www.dlapiperdataprotection.com/?t=law\&c=ID}$

²⁴⁸⁶ Makarim & Taira S., Counsellors at Law, *Coming Soon: Indonesia's Personal Data Protection Agency* (Apr. 2024), https://www.makarim.com/news/coming-soon-indonesia-s-personal-data-protection-agency

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oversight for AI-related activities.²⁴⁸⁷ However, certain sectors have their own authorities to ensure compliance with the regulatory regime. For example, the Indonesian Financial Services Authority (FSA) has the authority to act as the regulator of data privacy in the capital markets sector and with regard to banks' customer data privacy issues.²⁴⁸⁸

The National Human Rights Commission of Indonesia, Komnas HAM aims to "improve the protection and enforcement of human rights in order to develop the whole Indonesian human person and the ability to participate in various fields of life."²⁴⁸⁹

Komnas HAM is an independent institution established in 1993 by Presidential Decree. The Law Number 39 of 1999 provided for its "existence, purpose, function, membership, principles, completeness, duties and authority." While the 1999 law does not explicitly mention AI technologies, Komnas HAM's broad mandate enables it to address human rights issues arising from AI deployment. In recent years, Komnas HAM has engaged in discussions and initiatives concerning the human rights implications of AI, reflecting its commitment to adapting its oversight to emerging technological challenges. Komnas HAM carries out studies, research, counseling, monitoring, and mediation of human rights. AM has also the authority to conduct investigations into human rights violations and supervise regional and central governmental policies.

AI Ethics and Data Business Requirement

Pursuant to the Ministry of Communications and Informatics Regulation, any company having its line of business of developing artificial intelligence-based programs, must establish and implement its internal policy on Artificial Intelligence Ethics and Data. This regulation requires companies to align their internal policies with Indonesia's National Strategy on Artificial Intelligence 2020–2045 and ethical guidelines set forth by KOMINFO.²⁴⁹¹ These policies emphasize transparency, accountability, and compliance with international standards like the UNESCO Recommendations on AI Ethics. In accordance with Ministry of Communication and Informatics Regulation No. 3 of 2021, companies

2489 Ibid

²⁴⁸⁷ ASEAN Briefing, *Indonesia's Comprehensive Personal Data Protection Law Guide* (2025), https://www.aseanbriefing.com/doing-business-guide/indonesia/company-establishment/personal-data-protection-law

²⁴⁸⁸ DLA Piper, *Data Protection Laws of the World: Indonesia* (Nov. 2020), https://www.dlapiperdataprotection.com/?t=law&c=ID

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²⁴⁹⁰ Komnas HAM, About Komnas HAM: Legal Foundation,

https://www.komnasham.go.id/index.php/about/1/tentang-komnas-ham.html
2491 Indonesia Center for Artificial Intelligence Innovation, *Indonesia National Artificial*

Intelligence Strategy 2020–2045 (Aug. 10, 2020), https://ai-innovation.id/strategi

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engaged in developing artificial intelligence-based programs are required to establish and implement internal policies on Artificial Intelligence Ethics and Data. ²⁴⁹² This mandate is essential for operating within this sector. The Minister of Communication and Information's Circular letter No. 9 offers further evidence of this guidance on ethical values and principles for business actors, public electronic system operators, and private electronic system operators involved in AI-based programming. ²⁴⁹³

In March 2024, the Ministry of Communication and Information announced that Deputy Minister of KOMINFO, Nezar Patria, suggested industries implement five strategic steps to respond to artificial intelligence (AI) developments. Nezar Patria highlighted the following steps:

- To implement leadership that is responsible and strong in making strategic decisions
- To collaborate between sectors to optimize the use of AI
- Build and embed an ethical AI framework
- Review continuously, by integrating existing tools and methods, to detect existing problems
- Industry players must be able to ensure that the use of AI will not replace the capacity and role of humans.²⁴⁹⁴

These strategic steps align with the Indonesian government's broader efforts to establish comprehensive AI regulations by the end of 2024. Building on the National AI Strategy 2020–2045 and the recently amended Electronic Information and Transactions Law (EIT Law), these regulations will provide specific mandates for businesses to enforce internal policies on AI ethics. The regulations will also introduce a monitoring mechanism to ensure compliance, taking cues from the AI Readiness Assessment Methodology in progress with UNESCO. ²⁴⁹⁵

 $\underline{\text{https://jdih.kominfo.go.id/produk_hukum/view/id/883/t/surat+edaran+menteri+komunikasi+dan}}\\ + informatika+nomor+9+tahun+2023$

²⁴⁹² Ministry of Communication and Informatics, *Ministry of Communication and Informatics Regulation No. 3 of 2021 on Business Activity and Product Standards* (Mar. 2021), https://jdih.kominfo.go.id/produk_hukum/unduhTerjemahan/id/768/t/peraturan+menteri+komunikasi+dan+informatika+nomor+5+tahun+2021

²⁴⁹³ Ministry of Communication and Informatics, Circular Letter of the Minister of Communication and Information Technology Number 9 of 2023 concerning Ethics of Artificial Intelligence, (Dec. 19, 2023),

²⁴⁹⁴ Ministry of Communication and Informatics, *Press Release No. 188/HM/KOMINFO/03/2024* (Mar. 7, 2024), <a href="https://www.komdigi.go.id/berita/siaran-pers/detail/siaran-pers-no-188-hm-kominfo-03-2024-tentang-wamen-nezar-patria-dorong-industri-terapkan-lima-langkah-strategis-adopsi-ai

²⁴⁹⁵ UNESCO, *UNESCO and KOMINFO Completed AI Readiness Assessment: Is Indonesia Ready for AI*? (Oct. 9, 2024), https://www.unesco.org/en/articles/unesco-and-kominfo-completed-ai-readiness-assessment-indonesia-ready-

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Al Initiatives

According to the United Nations E-Government Development Index (EGDI), the country is lagging in the implementation of digital services.²⁴⁹⁶ However, in 2024, Indonesia has made significant strides to address this gap through strategic investments in AI infrastructure and collaborative initiatives. 2497 Notably, the government launched a series of public cloud services to democratize AI access for developers and digital companies, promoting innovation through shared infrastructure and resources. Additionally, Indonesia is prioritizing the deployment of 5G networks and high-capacity data centers, providing the necessary infrastructure for AI growth. ²⁴⁹⁸ This is part of a broader effort to create a robust ecosystem that supports innovation and collaboration among AI researchers, startups, and global partners. Former Indonesian president, Joko Widodo made the promise to create a "citizen-centric digitised service government (Pemerintahan Digital Melayani) in the next five years." After winning his second term in April 2019, President Widodo announced that government agencies have been ordered to replace top civil servants with AI during 2020. This would consolidate the current top four tiers into two tiers.²⁴⁹⁹ Bureaucratic reform was also revisited in the National AI strategy, in which it is one of the five priority areas.2500

Indonesia is also fostering a quadruple helix collaboration in AI research and innovation initiatives. A key development in 2024 was the establishment of the *Indonesia AI Centre of Excellence* in collaboration with Nvidia and Indosat.²⁵⁰¹ This initiative involves a US\$200 million investment to create a state-of-the-art research and innovation hub, with a particular focus on scaling AI adoption across

<u>ai#:~:text=The%20Readiness%20Assessment%20Methodology%20(RAM,and%20educational%20%20and%20technological%20and</u>

²⁴⁹⁶ United Nations Department of Economic and Social Affairs, *2020 United Nations E-Government Survey* (Jul. 2020), https://www.un.org/en/desa/2020-united-nations-e-government-survey

²⁴⁹⁷ Microsoft, Microsoft Announces US\$1.7 Billion Investment to Advance Indonesia's Cloud and AI Ambitions (Apr. 30, 2024), https://news.microsoft.com/apac/2024/04/30/microsoft-announces-us1-7-billion-investment-to-advance-indonesias-cloud-and-ai-ambitions

²⁴⁹⁸ Communications Today, *GSMA and KOMINFO Showcase Transformative Power of 5G* (Dec. 2023), https://www.communicationstoday.co.in/gsma-and-kominfo-showcase-transformative-power-of-5g/

²⁴⁹⁹ Reuters, *Indonesia aims to replace some top civil service jobs with AI in 2020* (Nov. 28, 2019), https://www.reuters.com/article/technology/indonesia-aims-to-replace-some-top-civil-service-jobs-with-ai-in-2020-idUSKBN1Y20AE/

²⁵⁰⁰ Kecerdasan Artificial Indonesia, *AI towards Indonesia Vision 2045* (Aug. 10, 2020), https://ai-innovation.id/strategi

Reuters, NVIDIA and Indosat Plan \$200 Million AI Centre Investment in Indonesia, Government Says (Apr. 4, 2024), https://www.reuters.com/technology/nvidia-indosat-plan-200-mln-ai-centre-investment-indonesia-government-says-2024-04-04/

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key sectors such as telecommunications, finance, and healthcare. This initiative has also influenced national policy by prioritizing AI infrastructure and encouraging public-private partnerships in alignment with Indonesia's National AI Strategy 2020–2045.

The Indonesian government has entered a partnership with the UN-led Global Pulse Lab headquartered in Jakarta to further develop AI-based solutions for public policy programs. Building on this collaboration, Indonesia's government announced the expansion of its partnership with *Global Pulse* to incorporate new AI-driven tools for environmental sustainability and disaster resilience. ²⁵⁰² These efforts are aimed at improving disaster management, urban planning, and public policy initiatives. Together with the UN Country Team, Indonesian representatives identified national development priorities for applied research. The collaboration culminated in the AI-powered platform called Haze Gazer, a crisis analysis tool that combines satellite imagery of fire hotspots, census data, and real-time information captured from social media for disaster management efforts." ²⁵⁰³

According to the OECD, Indonesia considers the availability of an integrated trustworthy health data system a key challenge for trustworthy AI in the health sector. ²⁵⁰⁴ "At the height of the COVID-19 outbreak, AI was integrated as part of the e-government response in the public health sector. The Ministry of Health used an AI-powered app called Telemedicine Indonesia to link patients with hospitals and doctors." ²⁵⁰⁵

"Indonesia's booming internet economy is fueled by a "digital mindset" that drives the rapid adoption of AI technologies across the archipelago. It is home to native digital tech unicorns such as Bukalapak, Traveloka, and OVO. Two homegrown digital mammoths, Gojek and Tokopedia, have led Indonesia's mobile-first approach and adoption of AI solutions. As a one-stop shop multiservice platform, Gojek has developed scalable machine learning (ML) models to create personalized customer preferences. It leverages AI and ML to offer biometric security features such as fingerprint and facial recognition. Tokopedia is an e-commerce giant that leverages AL and ML capabilities for product development. It has also promoted AI research and talent development through its partnership with the University of Indonesia, with the 2019 launch of

Asia (July 2022), https://asiasociety.org/sites/default/files/inline-

files/ASPI RaisingStandards report fin web 0.pdf

 ²⁵⁰² OpenGov Asia, Digital Innovation: Indonesia's Global and Domestic Strategy (Nov. 9, 2024),
 https://opengovasia.com/2024/11/09/digital-innovation-indonesias-global-and-domestic-strategy/
 ²⁵⁰³ Asia Society Policy Institute, *Raising Standards: Data & Artificial Intelligence in Southeast*

²⁵⁰⁴ OECD G20 Digital Economy Task Force, *Examples of AI National Policies* (2020), https://www.mcit.gov.sa/sites/default/files/examples-of-ai-national-policies.pdf

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a deep learning supercomputer technology called NVIDIA DGX-1.246 The partnership also launched AI-based solutions like demand prediction, smart warehouses, and smart logistics." ²⁵⁰⁶

Bukit Algoritma (Algorithm Hill) was launched as a mega-tech hub located in Sukabumi, West Java to emulate the Silicon Valley spirit. The sprawling 888 hectares will be transformed into a special economic zone that will host Indonesia's start-ups specializing in AI, digital technology, biotech, and semiconductors. In 2024, the development of Bukit Algoritma saw significant progress, with the tech hub securing new partnerships for AI talent development and research in key areas such as neuroscience and quantum computing. ²⁵⁰⁷ This tech hub is projected to become Indonesia's center for cutting-edge research and innovation by 2030, aligning with the country's long-term vision for AI leadership. ²⁵⁰⁸

Smart Cities

In a bid to solve Jakarta's traffic gridlocks, flooding, and waste management, the city has turned to AI. The Indonesian government launched the Jakarta Smart City (JSC) initiative.²⁵⁰⁹ Built on six pillars, the program uses AI to tackle the city's governance, people, living, mobility, economy, and environmental issues. The Smart City initiative encourages public comment to promote transparency of the local government's work and better public services.

There are currently 98 smart cities and 416 smart districts planned under Indonesia's 100 Smart Cities Plan. In 2019, President Widodo announced a new capital on the island of Borneo, to replace Jakarta. It is planned to be a smart city that will "rely heavily on sustainable smart city systems, cleantech and infrastructure run by emerging technologies such as 5G, AI and IoT (Internet of Things)." ²⁵¹⁰

Indonesia began addressing gaps in the legal framework and monitoring mechanisms in the development of smart cities by exploring legislative frameworks for smart city governance and independent monitoring. Telkom

2507 The Jakarta Post, *Indonesia's Silicon Valley* (Apr. 29, 2021),

https://www.thejakartapost.com/academia/2021/04/29/indonesias-silicon-valley.html

²⁵⁰⁶ Asia Society Policy Institute, *Raising Standards: Data & Artificial Intelligence in Southeast Asia* (Jul. 2022), https://asiasociety.org/sites/default/files/inline-

files/ASPI RaisingStandards report fin web 0.pdf

²⁵⁰⁸ Asia Society Policy Institute, *Raising Standards: Data & Artificial Intelligence in Southeast Asia* (July 2022), https://asiasociety.org/sites/default/files/inline-

files/ASPI RaisingStandards report fin web 0.pdf

²⁵⁰⁹ Techwire Asia, *AI to be a US\$366b industry in Indonesia by 2030* (Oct. 20, 2020), https://techwireasia.com/2020/10/ai-to-be-a-us366b-industry-in-indonesia-by-2030/

²⁵¹⁰ Forbes, *As Jakarta sinks a new futuristic capital city will be built on Borneo*, (Jan. 20, 2020), https://www.forbes.com/sites/jimdobson/2020/01/20/as-jakarta-sinks-a-new-futuristic-capital-city-will-be-built-on-borneo/

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Indonesia partnered with NEC to deploy AI-driven smart city solutions focusing on public safety, energy efficiency, and infrastructure management. This collaboration marks a key step toward establishing a resilient and scalable model for future smart cities across the country.

Despite these advancements, Indonesia's smart city projects struggle to balance environmental sustainability and technological growth. The development of Nusantara and other initiatives has drawn criticism over deforestation and biodiversity loss.²⁵¹¹ Addressing these concerns will require a careful approach to urban expansion while preserving natural resources.

In December 2023, European defense technology company Thales and the Indonesian new capital city authority have signed a memorandum of understanding (MOU) "for strategic cooperation" regarding a smart city in Nusantara. The MOU says they "will strengthen the cooperation between the two parties in the development of smart city concepts, including digital identity, traffic management of unmanned aircraft systems, cybersecurity and data centers."²⁵¹²

AI in Public Administration

Many Indonesian national and regional government-related entities begin to officially recognize the adoption of AI in their policies as well as solutions. The Indonesian Ministry of Health in its 2021-2024 Digital Transformation Strategy in the Health Sector recognizes the use of AI in its plan to enable big data analytics in medical sectors. The strategy is now supported by ministerial regulation that provides legal ground for the strategy's implementation.

The Ministry of Health expanded its digital strategy to include the integration of AI-powered diagnostic tools aimed at improving patient outcomes in rural areas in 2024. These tools leverage machine learning algorithms to analyze medical images and detect early signs of diseases, addressing critical gaps in access to healthcare services. Furthermore, the Digital Health Transformation Strategy (DHTS) 2025–2029 has been launched, focusing on integrating health data systems, developing health service applications, and fostering a robust health technology ecosystem. ²⁵¹³ A significant milestone in this journey is the SATUSEHAT platform, which consolidates various health service applications into a single system, enabling seamless data exchange among healthcare

2511 NEC, NEC Collaborates on Smart City Solutions in Indonesia (Mar. 20, 2024), https://id.nec.com/en_ID/press/PR/20240320112406_12961.html

²⁵¹² Nana Shibata and Mailys Pene-Lassus, *Thales Aims for smart city development in Indonesia's new capital* (Dec. 18, 2023), https://asia.nikkei.com/Business/Technology/Thales-aims-for-smart-city-development-in-Indonesia-s-new-capital

²⁵¹³ Setiaji and Naorimasa Shimomura, *Unlocking a Lifeline for Indonesia's Health System*, Opinion, originally published in Jarkarta Post, accessed through UNDP (Nov. 28, 2024), https://www.undp.org/indonesia/blog/unlocking-lifeline-indonesias-health-system

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providers. This integration improves patient care while streamlining administrative processes.

Additionally, the Indonesian Train Agency/Kereta Api Indonesia, a state-owned enterprise, has rolled out a facial recognition system to support passenger verification system. Kereta Api Indonesia (KAI) has also partnered with Telkom Indonesia to implement a predictive maintenance system across its rail network. This system uses AI-powered sensors and machine learning models to analyze real-time data on train operations, enabling proactive identification of faults and reducing service disruptions.

G42²⁵¹⁴, an AI and cloud computing company, along with OceanX and G-Tech Digital Asia, formalized a strategic partnership with Indonesia's Coordinating Ministry for Maritime Affairs and Investment (CMMAI) to expand ocean research and protect marine ecosystems in 2024. This partnership aims to leverage G42 Cloud's large-scale infrastructure, AI-powered remote sensing systems, and cutting-edge marine genomics technologies to conduct advanced coastal and oceanic environmental research.²⁵¹⁵

EdTechs and Children Tracking

According to a 2022 Human Rights Watch report, several EdTech apps—including Rumah Belajar, Quipper, Ruangguru, and Kelas Pintar— collect children's advertising IDs, tagging and identifying their devices for advertising purposes during the COVID-19 pandemic. ²⁵¹⁶ Kelas Pintar collected children's International Mobile Equipment Identity (IMEI) numbers and granted access to children's contact data to third-party companies. Rumah Belajar, a government-built platform, disclosed in its privacy policy that it collects and uses students' data for behavioral advertising, and has shared children's data with AdTech companies. Additionally, Rumah Belajar, Ruangguru, and Sekolah.mu collected precise location data, tracking children's whereabouts. Ruangguru and Sekolah.mu collected Wi-Fi SSID revealing names of connected Wi-Fi routers. Third-party SDKs were embedded in Kelas Pintar, Quipper, Ruangguru, Rumah Belajar, Sekolah.mu, and Zenius enabled continuous tracking of children's

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²⁵¹⁴ G42, *G42 Collaboration to Advance Oceanic Research and Protect Marine Environment* (Nov. 18, 2022), https://www.g42.ai/resources/news/g42-collaboration-advance-oceanic-research-protect-marine-environment

²⁵¹⁵ Businesswire, G42, OceanX, G-Tech and the Indonesian Government to Collaborate to Advance Oceanic Research to Protect the Marine Environment (Nov. 18, 2022), https://www.businesswire.com/news/home/20221118005443/en/G42-OceanX-G-Tech-and-the-Indonesian-Government-to-Collaborate-to-Advance-Oceanic-Research-to-Protect-the-Marine-Environment

²⁵¹⁶ Human Rights Watch, *How Dare They Peep into My Private Life* (May 25, 2022), https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rights-violations-governments#6693

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activities. Despite being a comprehensive data protection law that classifies minors' data as a special category, the PDP Law lacks clear definition of "children" in the context of personal data.²⁵¹⁷

Environmental Impact of AI

KOMINFO's Circular Letter, No. 9 of 2023, on Artificial Intelligence Ethics, emphasizes that the implementation of Artificial Intelligence should carefully consider the impact on humans, the environment, and other living things, to achieve sustainability and social welfare.²⁵¹⁸

The Indonesian government, represented by the Coordinating Minister for Maritime Affairs and Investment, announced plans in September 2024 to use AI to monitor subsidized fuel purchases. The initiative aims to prevent misuse and ensure fair distribution of subsidies. AI will process data on eligible residents and integrate it with fuel dispensing systems at gas stations. Vehicles authorized to receive subsidized fuel will have their license plates recorded, and pumps will not operate for unauthorized vehicles. This policy will be implemented after the Minister of Energy and Mineral Resources issues the necessary regulation.

Lethal Autonomous Weapons

"In general, the Indonesian government has not shown an assertive and consistent attitude towards the development of LAWS, both at the national and the global level." However, in February 2023, Indonesia participated in an international summit on the responsible application of artificial intelligence in the military domain hosted by the Netherlands. At the end of the Summit, Indonesia, together with other countries, agreed on a joint call for action on the responsible development, deployment and use of artificial intelligence in the military

²⁵¹⁷ Agus Ahadi Deradjat et al., *Data Privacy Imperatives in Business: How Indonesia's PDP Law has Evolved to Accommodate the AI, Healthcare, and Financial Services Sectors*, Chambers and Partners (Feb. 13, 2024), https://practiceguides.chambers.com/practice-guides/data-protection-privacy-2024/indonesia/trends-and-developments

²⁵¹⁸ Ministry of Communication and Information (KOMINFO), Circular Letter of the Minister of Communication and Information Technology Number 9 of 2023 Concerning the Ethics of Artificial Intelligence (Dec. 19, 2023),

 $[\]underline{\text{https://jdih.kominfo.go.id/produk_hukum/view/id/883/t/surat+edaran+menteri+komunikasi+dan+informatika+nomor+9+tahun+2023}$

²⁵¹⁹ Shafira Cendra Arini, *Lihut Reveals Government Plan to Limit Subsidized Fuel Using AI*, detikFinance (Sept. 5, 2024), https://finance.detik.com/energi/d-7526571/luhut-ungkap-rencana-pemerintah-batasi-bbm-subsidi-pakai-ai

²⁵²⁰ Institute of International Studies, *Lethal Autonomous Weapons: A Primer for Indonesian Policy* (Jan. 12, 2021), https://www.stopkillerrobots.org/resource/lethal-autonomous-weapons-a-primer-for-indonesian-policy/

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domain.²⁵²¹ In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." States also "stress the importance of a holistic, inclusive and comprehensive approach in addressing the possible impacts, opportunities and challenges of the use of AI in the military domain and the need for all stakeholders, including states, private sector, civil society and academia, to collaborate and exchange information on responsible AI in the military domain."²⁵²²

At the 78th UN General Assembly First Committee in 2023, Chile voted in favor²⁵²³ of resolution L.56²⁵²⁴ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. The report should analyze ways to address the challenges and concerns autonomous weapon systems raise from humanitarian, legal, security, technological and ethical perspectives and reflect on the role of humans in the use of force.

Human Rights

Indonesia has ratified the Universal Declaration of Human Rights. According to Freedom House, Indonesia is "partly free," with a total score of 57/100 in 2024. Freedom House reports that "Indonesia has made impressive democratic gains since the fall of an authoritarian regime in 1998, enjoying significant political and media pluralism and undergoing multiple, peaceful transfers of power. Significant challenges persist, including systemic corruption, discrimination and violence against minority groups, conflict in Papua, and the politicized use of defamation and blasphemy laws."²⁵²⁵

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²⁵²¹ Government of Netherlands, *Call to action on responsible use of AI in the military domain* (Feb.16, 2023) Press Release, https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action

²⁵²² Responsible AI in the Military domain Summit, *REAIM Call to Action* (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action
²⁵²³ Stop Killer Robots, *164 states vote against the machine at the UN General Assembly*, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

²⁵²⁴ General Assembly, *Resolution L56: Lethal Autonomous Weapons* (Oct.12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

²⁵²⁵ Freedom House, *Freedom in the World 2024: Indonesia* (2024), https://freedomhouse.org/country/indonesia/freedom-world/2024

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Al Safety Summit

In November 2023, Indonesia participated in the first AI Safety Summit and endorsed the Bletchley Declaration.²⁵²⁶ Indonesia thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible."

OECD / G20 AI Principles

Indonesia is a member of the G20 and endorsed the G20 AI Principles in 2019. Indonesia is not a member of the OECD. Indonesia has not endorsed the OECD AI Principles updated in 2024, which are open for endorsement by non-members.²⁵²⁷ According to the OECD, the Indonesia National AI Strategy (*Strategi Nasional Kecerdasan Artifisial*) addresses several OECD AI principles.²⁵²⁸

Indonesia hosted the G20 in 2022, following the Italian presidency in 2021, and preceding the Indian presidency in 2023. The 17th G20 Heads of State and Government Summit took place at the end of the year 2022 in Bali. "The G20 Digital Economy Ministers met in Bali, Indonesia on 1 September 2022 to deepen discussions on digital connectivity and post-COVID-19 recovery, digital skills and digital literacy, data free flow with trust and cross-border data flows, and other issues associated with digital transformation. These discussions are in line with the overarching theme of the Indonesian G20 Presidency, "Recover Together, Recover Stronger", and its priority issues on inclusive global health architecture, digital-based transformation, and sustainable energy transition. The Bali Package serves as an essential milestone to pave the way toward global recovery through cooperation among the G20 members in Achieving a Resilient Recovery: Working Together for a More Inclusive, Empowering, and Sustainable Digital Transformation."

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²⁵²⁶ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, Prime Minister's Office, *The Bletchley Declaration by Countries Attending the AI Safety Summit* (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

²⁵²⁷ OECD AI Policy Observatory, OECD AI Principles Overview, Countries Adhering to the AI Principles (2025), https://oecd.ai/en/ai-principles

²⁵²⁸ OECD AI Policy Observatory, AI Policies in Indonesia: Indonesia's National AI Strategy (Dec. 9, 2021), https://oecd.ai/en/dashboards/countries/Indonesia

²⁵²⁹ G20 Indonesia 2022, *G20 Digital Economy Ministers' Meeting 2022, Chair's Summary, The Bali Package*, pp. 448-449, G20 Research Group, University of Toronto (Sept. 1, 2022), https://g20.utoronto.ca/2022/220921-digital-chair-summary-and-

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Although there was no reference to AI, was mentioned the importance of enhancing digital policies "to create an enabling, inclusive, open, fair and non-discriminatory digital economy that fosters the application of new technologies, allows businesses and entrepreneurs to thrive, and protects and empowers consumers, while addressing the challenges, related to digital divides, privacy, data protection, intellectual property rights, and online safety."²⁵³⁰

During the 2022 Digital Economy Ministers' Meeting (DEMM), the Indonesia G20 Presidency through its Digital Economy Working Group (DEWG), a specific G20 track to discuss digital economy issues, highlighted the importance of preparing society's fluency in emerging technologies including artificial intelligence. DEMM is the culmination of the DEWG efforts, consisting of representatives from G20 and international organizations. The discussion was made through the circulation of a survey to G20 members which was then reflected in the DEWG's outcomes such as the Chair's Summary and relevant deliverables.²⁵³¹

Council of Europe AI Treaty

The Council of Europe established the Framework Convention on Artificial Intelligence during the annual ministerial meeting of the Council of Europe's Committee of Ministers in March 2024. The Convention was opened for signature—including by non-members—on September 5th, 2024. Indonesia has not yet signed the treaty. 2533

<u>letter.html#:~:text=Building%20on%20the%20momentum%20from,Inclusive%2C%20Empowering%2C%20and%20Sustainable%20Digital</u>

 $\frac{https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2022/11/16/g20-balileaders-declaration/}{}$

https://www.g20.org/content/dam/gtwenty/gtwenty_new/about_g20/previous-summit-documents/2022-bali/G20%20Bali%20Leaders%27%20Declaration,%2015-16%20November%202022.pdf

²⁵³⁰ Biden White House Archives, *G20 Bali Leaders' Declaration* (2022),

²⁵³¹ G20 Digital Economy Minister' Meeting 2022, *G20 Bali Leaders' Declaration*, pp. 445-465 (Nov. 15-16, 2022),

²⁵³² European Union, Commission Signs Council of Europe Framework Convention on Artificial Intelligence (Sept. 5, 2024), https://digital-strategy.ec.europa.eu/en/news/commission-signs-council-europe-framework-convention-artificial-intelligence

²⁵³³ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 10, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

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UNESCO Recommendation on AI Ethics

As a member of UNESCO, Indonesia along with 192 other member states, adopted the UNESCO Recommendation on the Ethics of AI in November 2021, the first global standard on the ethics of artificial intelligence.²⁵³⁴

Together with UNESCO, KOMINFO completed the AI Readiness Assessment Methodology (RAM), making Indonesia the first Southeast Asian country to do so. ²⁵³⁵ The report aims to shape Indonesia's AI policy and regulatory framework and is under review by a diverse group of multi-sectoral stakeholders.

The exercise attracted more than 500 participants from Aceh to Bali, putting in place an inclusive dialogue among government, academia, civil society, and the private sector. The country's landscape was evaluated on five key dimensions: legal or regulatory, socio-cultural, economic, scientific and educational, and technical or infrastructural.

The highlights of this report have revealed some important findings, including labor displacement, perceived regional disparities in the effect of AI, low awareness of associated risks with AI, and the call for increased research funding. The report highlights key policy recommendations that can mitigate these challenges. The recommendations include the creation of a National AI Agency for coherent governance, comprehensive regulations in line with global standards, and capacity building initiatives to ensure access to AI resources equitably, especially beyond urban centers.

Evaluation

Indonesia has endorsed the G20 AI Principles and the UNESCO Recommendation on the Ethics of AI, developed a national AI strategy, and became the first Southeast Asian country to complete the AI Readiness Assessment. These developments provide a foundation for formulating inclusive and ethical AI policy and regulatory.

KOMINFO's Circular Letter, No. 9 of 2023, was pivotal in emphasizing the ethics of AI and its impact on humans, the environment, and living beings. The government plans to introduce more comprehensive AI regulations, including the creation of a supervisory authority and efforts to promote AI ethics within the private sector—both key steps toward ensuring trustworthy AI.

In parallel, Indonesia is exploring legislative frameworks for smart city governance and independent oversight. The partnership between Telkom Indonesia and NEC aims to deploy AI-driven smart city solutions focusing on

²⁵³⁴ UNESCO, UNESCO Adopts First Global Standard on the Ethics of Artificial Intelligence (Apr. 8, 2022), https://www.unesco.org/en/articles/unesco-adopts-first-global-standard-ethics-

⁽Apr. 8, 2022), https://www.unesco.org/en/articles/unesco-adopts-first-global-standard-ethics-artificial-intelligence
2535 UNESCO, UNESCO and KOMINFO Completed AI Readiness Assessment: Is Indonesia

Ready for AI? (Oct. 10, 2024), https://www.unesco.org/en/articles/unesco-and-kominfo-completed-ai-readiness-assessment-indonesia-ready-ai

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public safety, energy efficiency, and infrastructure management—setting the stage for sustainable and scalable smart cities nationwide.

Iran

In 2024, Iran inaugurated a National AI organization as a step toward implementing the AI Roadmap focused on development. The country also used facial recognition and other surveillance technology to intensify enforcement of the Hijab Law and implemented technology and laws to restrict access to information.

National AI Strategy

"Digital Iran," ²⁵³⁶ a national road map for the advancement of technology from 2020 through 2025, outlines Iran's digital transformation agenda. ²⁵³⁷

The Digital Iran framework has three layers: Enabler, Application, and Impact.²⁵³⁸ The enabler layer consists of six pillars, regulation, security, infrastructure, identity, literacy, and open data. The application layer includes digital society, digital government, and digital business and the impact layer covers the social, economic, and environmental dimensions. The vision of the framework is to build "a healthy cooperative society coupled with the smart economy, sustainable development and effective governance with transparency as a result of utilizing digital technologies." The framework is implemented through 13 strategies, 30 policies and 42 confirmed projects.

The Information & Communications Technology (ICT) Minister of Iran inaugurated the AI Innovation and Development Center in February 2020.²⁵³⁹ The mission of the center is to build partnerships with industries, businesses, universities and research institutes and international centers to define and implement joint research and application projects in AI and provide infrastructure

²⁵³⁶ Iran Digital Transformation Project, *Digital Iran: National Roadmap Executive Summary* 2020–2025 [Farsi], http://irandigitaltransformation.ir/wp-content/uploads/2020/06/Digital-Iran-Roadmap-Executive-Summary.pdf

²⁵³⁷ The analysis here is based secondary sources because official government websites are accessible only in Farsi/Persian and are restricted to those in the country, or citizens with access to a VPN and citizen ID. The official document that entered into law on July 20, 2024, might be accessible from the Iranian Parliament at this link: https://rc.majlis.ir/fa/law/show/1811432 ²⁵³⁸ Iran Digital Transformation Project, *Digital Iran: National Roadmap Executive Summary* 2020–2025, https://irandigitaltransformation.ir/wp-content/uploads/2020/06/Digital-Iran-Roadmap-Executive-Summary.pdf

²⁵³⁹ National Center for the Development of AI Innovation, http://www.ai-center.ir/; Mehr News Agency, *Head of the Artificial Intelligence Innovation and Development Center Appointed* (Dec. 24, 2020), https://www.mehrnews.com/news/5079709/

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and data needed for researchers, start-up businesses and various industrial, agricultural and e-government sectors.²⁵⁴⁰

This road map was compiled using the approach of the Supreme Council of Science, Research, and Technology, which involves comparative studies, environmental analysis, surveying of experts, and vision development.²⁵⁴¹ This publication is divided into two sections: AI use cases and AI enablers. In the application cases section, the objective is to employ AI in high-priority areas like healthcare, transportation, agriculture, education, industry, and the environment. In the second section, the most essential topics investigated include AI enablers, the training of expert human resources, infrastructures, standards, data, and AI ethics.²⁵⁴²

Former president Ebrahim Raisi finalized and approved Iran's National AI Document, an executive order with a strategic plan to establish a National AI Organization, in December 2023. The document mandated the creation of National Steering Committee and the National Artificial Intelligence (AI) Center.²⁵⁴³ The Council, consisting primarily of ministers and heads of institutions, will oversee the allocation of the nation's resources and infrastructure for artificial intelligence.²⁵⁴⁴ The National AI Center set out to develop AI processing and service providers and implement large-scale projects aligned with national needs. Developments have focused on research, job training, and infrastructure²⁵⁴⁵ relevant to AI, cybersecurity, and the broader digital economy.²⁵⁴⁶ In July 2024, Iran's caretaker President

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²⁵⁴¹ Iran Digital Transformation Project, *Digital Iran: National Roadmap Executive Summary* 2020–2025 [Farsi], http://irandigitaltransformation.ir/wp-content/uploads/2020/06/Digital-Iran-Roadmap-Executive-Summary.pdf; Ministry ICT, *ICT Research Institute*,

https://en.itrc.ac.ir/page/innovation-and-development-artificial-intelligence-center

²⁵⁴² I.C.T Ministry, AI Innovation and Development Center Draft Iran's National AI Development Roadmap (Oct. 17, 2022), http://www.ai-center.ir/

²⁵⁴³ Organization for Development of International Cooperation in Science and Technology (ODISTC), *Iran forms AI Strategic Council* (Dec. 4, 2023), https://cistc.ir/en/4388/iran-forms-ai-strategic-council/

²⁵⁴⁴ Tasnim News Agency, *Iran National AI Organization Inaugurated in Tehran* (Jul 10, 2024), https://www.tasnimnews.com/en/news/2024/07/10/3119547/iran-national-ai-organization-inaugurated-in-tehran

²⁵⁴⁵ Tehran Times, *National center for artificial intelligence inaugurated* (Jul. 10, 2024), https://www.tehrantimes.com/news/500990/National-center-for-artificial-intelligence-inaugurated

²⁵⁴⁶ Foundation for Defense of Democracies (FDD), *Iran's president wants new focus on artificial intelligence* (Mar. 17, 2024), https://www.fdd.org/analysis/op_eds/2024/03/17/irans-president-wants-new-focus-on-artificial-intelligence/

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Mohammad Mokhber inaugurated the National AI Organization, intended to coordinate national AI efforts and facilitate collaboration with private sectors.²⁵⁴⁷

The formulation of national programs and policies has emphasized investments in infrastructure and human-resource development aligned with the Supreme Leader's guidelines. ²⁵⁴⁸ The government has been mandated to draft a National AI Development Plan within six months to enhance policy coordination and resource prioritization. ²⁵⁴⁹ Despite these strides, challenges like inadequate infrastructure and the need for large-scale investment remain critical issues. Overall, AI policy has emerged as a central axis for Iran's scientific and industrial development without attention to the social impact of AI use.

The Ministry of ICT,²⁵⁵⁰ responsible for implementation of modern technologies in the IT sector, supports AI developments by hosting international technology²⁵⁵¹ conferences, cultivation, and creation of new industries with the use of digital technologies, and investment in academic research.²⁵⁵²

Public Participation

Despite the autocratic nature of the Iranian regime, the government purports to support public inclusion in AI policy frameworks. However, evidence of this participation outside government institutions is difficult to access from abroad.

Data Protection

There are currently no comprehensive data protection laws in place in Iran.²⁵⁵³ In February 2018, the ICT Minister unveiled the first drafts of five newly proposed bills for internet and cyberspace regulation in Iran. The legislation

Telecommunications-Information-Technology-Innovative-CIT-Solution

https://filter.watch/en/2020/06/19/data-insecurity-on-irans-localised-internet/

²⁵⁴⁷ Iran Press, *Iran Inaugurates National AI Organization to Spearhead Technological Advancements* (Jul. 9, 2024), <a href="https://iranpress.com/iran-inaugurates-national-ai-organization-to-decomposition-t

spearhead-technological-advancements
2548 Iran's National Research Institute for Science Policy, Review of the National Artificial
Intelligence Document (Oct. 22, 2024), https://nrisp.ac.ir/wp-content/uploads/2024/12/-گزارش

Intelligence Document (Oct. 22, 2024), https://nrisp.ac.ir/wp-content/uploads/2024/12/. <u>گزارش-pdf</u> "Defails of the "National Artificial Intelligence Program": From Secure Program": From Secure

Data Sharing to GPU Development (Nov. 23, 2024), https://mehrnews.com/x36wkq

2550 Information Telecommunication and Technology (ICT), About Us https://www.ict.gov.ir/en/topmainmenu/aboutus

²⁵⁵¹ Information Technology & Innovative CIT Solutions, 20th International Exhibition of Telecommunications (2021), http://www.irantelecomfair.com/en/ and https://calendar.iranfair.com/en/companies/index/252/The-21st-International-Exhibition-of-

²⁵⁵² AmirKabir University of Technology, *The "Simorgh" Supercomputer* (Jun. 2021), https://aut.ac.ir/content/7995/The-"Simorgh"-Supercomputer-was-Launched-at-AUT

²⁵⁵³ Filter Watch, Data Insecurity on Iran's Localised Internet (2020),

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addresses e-government, electronic identification, and the responsibilities of service providers, electronic financial transactions, and data protection, respectively.²⁵⁵⁴ A draft bill on data protection and privacy was presented to the cabinet in July 2018.

The Draft was under expert revision to align with the GDPR. However, the government failed to progress on the bill.²⁵⁵⁵ The bill has been taken up by subsequent governments but has not been passed. The draft law provides for the establishment of the Supervisory Board of Personal Data, which would be tasked with receiving and processing stakeholder complaints to protect personal data. In the absence of an overarching data privacy law, the legal framework for privacy derives from a combination of other laws and regulations dealing with data protection alongside additional issues. Such legislation includes the Law on Publication and Access²⁵⁵⁶ to Data 2009, the Electronic Commerce Law 2004,²⁵⁵⁷ and the Cybercrime Law 2009.²⁵⁵⁸

The Iranian Communications Regulatory Authority has access to a web application known as SIAM, which allows for the remote manipulation of cellular connections. This application is part of Iran's data restriction, which may help explain why it was implemented. SIAM is a computerized system that operates in the background of Iranian cellular networks, giving its operators a wide range of options for remotely executing commands to modify, interrupt, and monitor customers' phone use. These tools may reveal the data links in a crawl, decrypt phone calls, trace the movements of people or large groups, and generate complete metadata summaries of who spoke to whom and when.²⁵⁵⁹

Algorithmic Transparency

The government of Iran has not adopted any legislation that mandates algorithmic transparency.

²⁵⁵⁷ Iran Ministry of Commerce, *Electronic Commerce Law (2010)*,

https://www.wipo.int/edocs/lexdocs/laws/en/ir/ir008en.pdf

Article 19, *Iran: Personal Data Protection and Safeguarding* (Jun. 2019), https://www.article19.org/wp-content/uploads/2019/06/Legal-Analysis-of-Draft-Data-Protection-Act.pdf

²⁵⁵⁵ Mehr News, *The Personal Data Protection Bill Goes into Effect* (Feb. 10, 2021), https://www.mehrnews.com/news/5420106/

²⁵⁵⁶ Ministry of Culture and Islamic Guidance, *Law on Dissemination of and Free Access to Information* [Machine Translation] (2009), https://foia.farhang.gov.ir/en/law

²⁵⁵⁸ International Labour Organization, *Database of National Labour, Social Security and Related Human Rights Legislation, Criminal and penal law (2009), Law No. 71063 on Computer Crimes*, https://natlex.ilo.org/dyn/natlex2/r/natlex/fe/details?p3 isn=91715

²⁵⁵⁹ The Intercept, *Hacked Documents: How Iran Can Track and Control Protesters' Phones* (Oct. 28, 2022), https://theintercept.com/2022/10/28/iran-protests-phone-surveillance/

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Freedom of Internet and Digital Rights

Since 2022, Iran's internet freedom has increasingly been restricted as authorities impose widespread disruptions to internet and mobile services in response to large-scale anti-government protests connected to the Woman, Life, Freedom movement. These measures include blocking access to platforms like Instagram and WhatsApp, which were previously available to Iranians, ²⁵⁶⁰ and instructing internet service providers to raise prices by 30 to 40% between 2023 and 2024²⁵⁶¹, significantly raising access costs for citizens. ²⁵⁶² VPN controls have also intensified, with the government blocking Google Play and the Apple App Store to limit VPN installations and restricting access to sites offering these tools. ²⁵⁶³ In February 2024, the Supreme Council of Cyberspace (SCC), Iran's primary internet regulatory body, officially prohibited VPN use without a license²⁵⁶⁴ after criminalizing the sale and distribution of these tools in 2023, pushing users toward domestic circumvention methods to access filtered content. ²⁵⁶⁵

Following the rollout of the NIN, authorities plan to implement a 'layered internet' system, granting selected groups, such as academics and officials, access to international websites, while restricting the general population to domestic platforms within the NIN.²⁵⁶⁶ This government-controlled network is designed to

²⁵⁶⁰ Al Jazeera, *Iran Restricts WhatsApp, Instagram as Mahsa Amini Protests Grow* (Sept. 22, 2022), https://www.aljazeera.com/news/2022/9/22/iran-restricts-whatsapp-instagram-as-mahsa-amini-protests-grow; OONI, *Iran Blocks Social Media, App Stores and Encrypted DNS amid Mahsa Amini Protests* (Sept. 25, 2022), https://ooni.org/post/2022-iran-blocks-social-media-mahsa-amini-protests/

²⁵⁶¹ Mahmoud Hamidi, *Iran's Internet Quality Declines Despite Price Hike*, Iran News Update (Jun. 27, 2024), https://irannewsupdate.com/news/economy/irans-internet-quality-declines-despite-price-hike/; Iran International, *Internet Costs Rise By 30% Across Iran* (Dec. 29, 2023), https://www.iranintl.com/en/202312298640

²⁵⁶² Freedom House, *Freedom on the Net 2024: Iran, Key Developments, June 1, 2023 – May 31* (Jun. 1, 2024), https://freedomhouse.org/country/iran/freedom-net/2024 ²⁵⁶³ Ibid

²⁵⁶⁴ Supreme Council of Cyberspace, <u>220531_1.pdf</u>; Voice of America. *Iranian Regime Takes Additional Action to Cut Off Iranians' Access to the Internet* (Feb. 28, 2024), https://editorials.voa.gov/a/iranian-regime-takes-additional-action-to-cut-off-iranians-access-to-the-internet/7506090.html; FilterWatch, *The Use of VPNs Is Prohibited, but Not Criminalized* (Mar. 4, 2024), https://filter.watch/english/2024/03/04/the-use-of-vpns-is-prohibited-but-not-criminalized/

²⁵⁶⁵ Filter Watch, An Internet for the Few: Iran's Digital Segregation Plans Edge Closer to Reality [فيلتر بان - ديجيتال تبعيض هاي طرح شدن نهادينه :هاخو دي بر اي اينتر نت] (Apr. 19, 2023), https://filter.watch/2023/05/24/an-internet-for-the-few-irans-digital-segregation-plans-edge-closer-to-reality/

²⁵⁶⁶ Freedom House, *Freedom on the Net 2024: Iran, Key Developments, June 1, 2023 – May 31, 2024* (Jun. 1, 2024). https://freedomhouse.org/country/iran/freedom-net/2024; Filter Watch, *An Internet for the Few: Iran's Digital Segregation Plans Edge Closer to Reality* (Apr. 19, 2023),

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isolate Iranians from global information and confine them to the tightly monitored NIN.

The Telecommunication Company of Iran (TCI), which is run by the ICT Ministry, controls internet traffic flowing in and out of the country. While the Islamic Revolutionary Guard Corps (IRGC), a security force, previously held a majority stake in the Telecommunication Company of Iran (TCI), the IRGC withdrew from the telecommunications sector in October 2018, selling its shares in TCI and the Mobile Telecommunication Company of Iran (MCI). However, TCI's dominance over Iran's internet infrastructure still facilitates extensive monitoring of online activities.

Iran's parliament has been drafting the "Protection Bill," which would impose additional limitations on Iranians' internet access. The measure requires overseas technology businesses to have a legal representation in Iran to comply with Iranian law and cooperate with Iranian authorities. The Iranian government has long monitored individuals, prosecuted them for online expressions, and banned online areas. In addition, the measure intends to prohibit the creation and distribution of censorship "circumvention technologies" (VPNs) that are routinely used in Iran to access a wide variety of blocked websites. In the meantime, Iranian authorities are deliberating over the concept of a national internet, which appears to entail denying users access to international search engines, news websites, and email servers in favor of providing them with alternatives developed and controlled by the Islamic Republic of Iran. The source of the concept of the providing them with alternatives developed and controlled by the Islamic Republic of Iran.

In response to Iran's severe internet censorship, the U.S. Congress introduced the bipartisan Internet Reach and Access Now Act (IRAN Act) in

 $\frac{https://www.science.org/content/article/iran-s-researchers-increasingly-isolated-government-prepares-wall-internet}{prepares-wall-internet}$

https://filter.watch/2023/05/24/an-internet-for-the-few-irans-digital-segregation-plans-edge-closer-to-reality/; Richard Stone, *Iran's Researchers Increasingly Isolated as Government Prepares to Wall Off Internet. Science* (Sept. 11, 2023),

²⁵⁶⁷ Library of Congress, *Telecommunication Company of Iran* (Oct. 7, 2019), https://www.loc.gov/item/lcwaN0016047/?loclr=blogint

²⁵⁶⁸ Radio Farda, *IRGC Gives Up Stake in Telecommunications Possibly to Avoid Sanctions* (Oct. 24, 2018), https://en.radiofarda.com/a/iran-irgc-gives-up-stake-in-telecommunications/29561856.html

²⁵⁶⁹ Article 19, *Iran: Parliament's "Protection Bill" will Hand Over Complete Control of the Internet to Authorities* (Aug. 5, 2021), https://www.article19.org/resources/iran-parliaments-protection-bill-will-hand-over-complete-control-of-the-internet-to-authorities/

²⁵⁷⁰ Human Rights Watch, *Iran Report (2022)*, https://www.hrw.org/world-report/2022/country-chapters/iran

²⁵⁷¹ Deutsche Welle, *Iran tightens grip on internet freedom* (Feb. 15, 2022), https://www.dw.com/en/iran-tightens-grip-on-internet-freedom/a-60784015

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August 2024²⁵⁷². Supported by members across party lines, this legislation mandates the Secretary of State implement a strategy promoting internet freedom in Iran. The IRAN Act emphasizes three primary goals: ensuring that sanctions enforcement does not hinder access to circumvention tools, enhancing virtual private networks (VPNs) availability for human rights activists, and developing methods to help Iranian civil society circumvent government-imposed internet shutdowns. The Act aligns with ongoing U.S. efforts to support Iranians' digital rights and facilitate open communication, aiming to counteract the Iranian regime's attempts to isolate its population from the global internet.²⁵⁷³

Digital ID (National Smart Card)

Iran implemented digital IDs as part of the e-government program.²⁵⁷⁴ Iran's Executive Council of Information Technology built a digital platform as part of its ongoing e-government initiatives. In addition to two pilots with the Ministry of Agriculture and the Ministry of Culture and Islamic Guidance, the council also announced the addition of the Ministry of Cooperatives Labor and Social Welfare, the Ministry of Economic Affairs and Finance, the Iranian Health Insurance Organization, the Ministry of Welfare and Social Security, and the Central Insurance of Iran for the next phase of the digital government.²⁵⁷⁵ The platform plays a central role in accessing public services, including e-government and e-health, effectively making digital identification mandatory for all citizens engaging with government services.²⁵⁷⁶

Iran's Law Enforcement Forces signed an agreement with an Iranian digital ID and biometric firm, to acquire a digital ID detection authentication platform. The digital ID platform obtains 5 to 15-second selfie videos and then runs it through an ID liveness detection algorithm to verify user identity against a user's original image registered with Iran's Civil Registration Organization. The

²⁵⁷² U.S. House of Representatives. *H.R. 9299 – Internet Reach and Access Now Act* (Aug. 2, 2024), https://www.congress.gov/bill/118th-congress/house-bill/9299/cosponsors?s=1&r=5
https://www.congress.gov/bill/118th-congress/house-bill/9299/cosponsors?s=1&r=5
https://www.congress.gov/bill/118th-congress/house-bill/9299/cosponsors?s=1&r=5
<a href="https://www.congress.gov/bill/118th-congress/house-bill/9299/cosponsors?s=1&r=5
<a href="https://www.congre

²⁵⁷⁴ Biometric Update, *Iran Unveils New e-Government Components as Digital ID Importance Grows* (2021), https://www.biometricupdate.com/202103/iran-unveils-new-e-government-components-as-digital-id-importance-grows

²⁵⁷⁵ Ibid

²⁵⁷⁶ Javad Jarrahi, *Iran Unveils New E-Government Components as Digital ID Importance Grows*, Biometric Update (Mar. 26, 2021), https://www.biometricupdate.com/202103/iran-unveils-new-e-government-components-as-digital-id-importance-grows

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digital ID platform, which saw expanded integration into Iran's government services in 2023–2024. This system is expected to connect with national security and internet access programs, such as the NIN, embedding surveillance into daily life.

Facial Recognition

Iran is actively integrating facial recognition and biometrics into its law enforcement system for border protection.²⁵⁷⁸ Iran's banking sector is adopting biometric methods and requires customers to provide their smart identity for many banking transactions. Iranian officials have also announced plans that would require citizens to verify their identity using the smart identity card to access the internet.²⁵⁷⁹

The Noor Plan, introduced in April 2024 by Iran's Law Enforcement Command, intensifies the crackdown on women violating mandatory hijab laws through increased surveillance and enforcement measures, including facial recognition.²⁵⁸⁰ Parliament approved the Hijab and Chastity Bill, often referred to as Hijab Law in September 2023, and the Guardian Council approved the law in September 2024.²⁵⁸¹ A March 2025 UN report noted intensified surveillance and restrictions on digital space despite reports in late 2024 that the government had paused implantation of "a new, stricter law on women's mandatory headscarf."²⁵⁸² The legislation consolidates and intensifies mandates hijab enforcement, introducing higher fines, extended prison terms, and restrictions on employment and education for violations.²⁵⁸³ The Hijab Law also expands the use of facial recognition technology to identify women appearing unveiled in public or online.

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²⁵⁷⁸ ICAO Regional Seminar, *Iranian ePassport and Border Management Technical Report* (2016), https://www.icao.int/Meetings/icaotrip-Iran-

^{2016/}Documents/Presentations/D2%20S4%20EBRAHIMI.pdf

²⁵⁷⁹ Identity Review, *Iran Begins Integrating Facial Recognition for Better Border Protection*, (secondary resource) https://identityreview.com/iran-begins-integrating-facial-recognition-for-better-border-protection/

²⁵⁸⁰ OHCHR, Iran: Government Continues Systematic Repression and Escalates Surveillance to Crush Dissent in the Aftermath of Protests, UN Fact-Finding Mission Says (Mar. 14, 2025), https://www.ohchr.org/en/press-releases/2025/03/iran-government-continues-systematic-repression-and-escalates-surveillance

اخبار | مهر خبرگزاری - شد تایید حجاب و عفاف لایحه] Mehr News, Chastity and Hijab Bill Approved [جهان و ایران Oct. 24, 2024), https://www.mehrnews.com/news/6235956] [جهان و ایران

²⁵⁸² Amir Vahdat and Nasser Karimi, *Iran Pauses the Process to Implement a New, Stricter Headscarf Law for Women, Official Says*, AP (Dec. 18, 2024), https://apnews.com/article/iran-mandatory-headscarf-hijab-law-protests-26e6015d6e47b18238f0ac4c08c4d33a

²⁵⁸³ Human Rights Watch, *Iran: New Hijab Law Adds Restrictions and Punishments* (Oct. 14, 2024), https://www.hrw.org/news/2024/10/14/iran-new-hijab-law-adds-restrictions-and-punishments; Article 19, *Tightening the Net: Iran's New Phase of Digital Repression* (Jul. 2024), https://www.article19.org/wp-content/uploads/2024/07/Supreme-Council-of-Cyberspace final-2.pdf

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Security forces now use AI-based systems to monitor and enforce these regulations, aligning with government efforts to control public morality and suppress dissent. Facial recognition technology has become central to Iran's surveillance network, particularly in addressing gender-based transgressions, with support from China's AI technology integrated into Iran's domestic surveillance infrastructure.²⁵⁸⁴

The Hijab Law raises significant concerns about privacy and discrimination. Article 24 authorizes intelligence services and the IRGC to track individuals in cyberspace who advocate against the hijab requirement.²⁵⁸⁵ Article 28 mandates police to enhance detection systems, using AI to identify individuals engaged in prohibited activities. Surveillance responsibilities extend beyond government agencies: Article 64 requires service providers, including banks, transportation companies, retailers, professionals, and residential complex managers to upgrade surveillance cameras to capture high-quality images and store footage for at least twenty days.²⁵⁸⁶

EdTech and Children Tracking

In May 2022, Human Rights Watch published a global investigative report on the education technology (EdTech) endorsed by 49 governments, including Iran, for children's education during the pandemic. Based on technical and policy analysis of the Shad App, owned and provided by Iran, Human Rights Watch found that the government endorsement of this online learning platform put at risk and directly violated children's rights. The app provided access to education for 50% teachers and 25% students. The enrollment was lower in less developed regions of Iran.²⁵⁸⁷

It results from the report that "Teachers in Iran told Human Rights Watch that the government compelled those in public schools to use Shad, an app built by Iran's Education Ministry for online learning during Covid-19. One teacher said: "The principal called and said that if I do not install the Shad app, I would be recorded as absent. The authorities do not accept teaching in Telegram and WhatsApp. Students have also been told that if you are not in this app, your score will not be approved and will not be sent to the [school]." In October 2021, the Iranian government reported more than 18 million active users of Shad." Technical

²⁵⁸⁵ Hesam Norouzpour, From Ballots to Bytes: Tracing the Impact of Parliamentary Elections on Iran's Digital Sphere, NetMission.Asia (Jul. 3, 2024),

 $\underline{https://netmission.asia/2024/07/03/from-ballots-to-bytes-tracing-the-impact-of-parliamentary-elections-on-irans-digital-sphere-hesam-norouzpour/}$

) [

²⁵⁸⁴ Freedom House, *Iran: Freedom on the Net 2024: Iran, Key Developments, June 1, 2023–May 31, 2024* (Jun. 1, 2024), https://freedomhouse.org/country/iran/freedom-net/2024

²⁵⁸⁶ Ibid

²⁵⁸⁷ UNESCO, *Global Education Monitoring Report* (2023), https://unesdoc.unesco.org/ark:/48223/pf0000385723

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analysis of Shad's code by Human Rights Watch found that the app can collect children's precise location data, the time of their current location, the child's last known location, their Wi-Fi SSID, IP address, the child's contacts, and any saved photos of their contacts.

EdTech products in Iran and other countries sent children's data to AdTech companies that specialize in behavioral advertising or whose algorithms determine what children see online. According to Human Rights Watch, in line with child data protection principles as well as corporations' human rights responsibilities outlined in the United Nations Guiding Principles on Business and Human Rights, EdTech and AdTech companies should not collect and process children's data for advertising. The report noted steps companies should take to protect children's rights, including working with governments to define clear retention and deletion rules for children's data collected during the pandemic. Furthermore, governments should develop, refine, and enforce modern child data protection laws and standards, and ensure that children who want to learn are not compelled to give up their other rights in order to do so.²⁵⁸⁸

Environmental Impact of AI

Iranian government officials consider using artificial intelligence to assess weather conditions, control air and water pollution, and manage waste and water as part of conservation efforts. ²⁵⁸⁹ However, Iran's official sources do not discuss the negative effects of artificial intelligence on the environment. Moreover, Masoud Pezeshkian skipped the COP 29 Summit in Azerbaijan in November in 2024 as the UN climate goals negatively impact Iran's economy. ²⁵⁹⁰

Lethal Autonomous Weapons

The Iranian military is very interested in the development of AI & Autonomous Weapon systems in the pursuit of force-multiplying asymmetric warfare capabilities. At the Human Rights Council in May 2013, Iran expressed interest in opening multilateral talks on lethal autonomous weapons systems. However, Iran has not commented on the concerns raised by removing human control from the use of force or supported proposals to negotiate a new international ban treaty. Iran is not a party to the Convention on Conventional

²⁵⁸⁸ Human Rights Watch, *How Dare They Peep into My Private Life* (May 25, 2022), https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rights-violations-governments

²⁵⁸⁹ Tehran Times, *AI Can Help Preserve Natural Resources: Official* (Nov. 24, 2023), https://www.tehrantimes.com/news/491743/AI-can-help-preserve-natural-resources-official ²⁵⁹⁰ PressTV, *Iran President Urged to Skip COP29 Climate Summit in Azerbaijan* (Nov. 2024), https://www.presstv.ir/Detail/2024/11/06/736750/Iran-president-COP29-summit-presence-criticism

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Weapons (CCW) but attended CCW meetings on killer robots in 2016 and 2018– 2019, 2591

The Chief Commander of Iran's Islamic Revolution Guards Corps (IRGC) stated in July 2022 that the country achieved the AI required to direct drones and ballistic missiles while under sanction.²⁵⁹² "AI technology enables an autonomous aircraft to fly more than 2,000 kilometers from any point and hit a moving target or a specific location,"2593 he added. Shortly after this interview, another IRGC commander verified the use of AI to beat the enemy and stated that the success was due to the collaboration of universities and military departments.²⁵⁹⁴

At the 78th UN General Assembly First Committee in 2023, Iran was one of eight states that abstained from voting²⁵⁹⁵ on resolution L.56.²⁵⁹⁶ on autonomous weapons systems. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems.

Iran did not respond to the Note Verbale by the United Nations to all member states and observer states in February 2024. The Note intended to find a common definition of "lethal autonomous weapons" term and called to discuss the concepts of human control, meaningful human control, appropriate human judgment, and human involvement.²⁵⁹⁷

In view of the expiration of UN sanctions against Iran, the United States committed in October 2023 to take further action. Secretary of State Blinken stated, "While the United States has already sanctioned all possible entities and individuals contained within Security Council Resolution 2231, today we are announcing additional designations on individuals and entities related to Iran's

²⁵⁹³ Ibid

²⁵⁹¹ Human Rights Watch, Stopping Killer Robots: Country Positions on Banning Fully Autonomous Weapons and Retaining Human Control (2020),

https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fullyautonomous-weapons-and

²⁵⁹² Iran Press News Agency, *Iran achieves ballistic missile guidance tech under sanctions* (Jul. 28, 2022), https://iranpress.com/content/62680/iran-achieves-ballistic-missile-guidance-techunder-sanctions.

²⁵⁹⁴ Iran Press News Agency, Iran defeated enemy with artificial intelligence (Sept. 7, 2022), https://iranpress.com/content/66234/iran-defeated-enemy-with-artificial-intelligence.

²⁵⁹⁵ Stop Killer Robots, 164 states vote against the machine at the UN General Assembly, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

²⁵⁹⁶ General Assembly, Resolution L56: Lethal Autonomous Weapons (Oct. 12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-

fora/1com/1com23/resolutions/L56.pdf

²⁵⁹⁷ UN General Assembly, Lethal Autonomous Systems Report of the Secretary General (Jul. 1, 2024), https://documents.un.org/access.nsf/get?OpenAgent&DS=A/79/88&Lang=E

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missile, conventional arms, and UAV activities, including such activities involving Russia, the People's Republic of China, Venezuela, and elsewhere. In coordination with the Departments of Commerce, Justice, and the Treasury, we are additionally issuing new public guidance to private industry regarding Iranian missile procurement.²⁵⁹⁸ The US argued that there is "horrific impact of Iran's provision of missiles and unmanned aerial vehicles (UAVs) to designated terrorist organizations and militant proxies that directly threaten the security of Israel and our Gulf partners." The US provided evidence of components and debris from lethal Iranian-made drones that were recovered from Ukraine and other locations.²⁵⁹⁹

Human Rights

Iran is a signatory to the UDHR in 1948.²⁶⁰⁰ in 2024, the Freedom House Index indicated Iran as a "Not Free" country, with a rating of 11/100,²⁶⁰¹ a slight drop from 2023 (12/100) and 2021(16/100).²⁶⁰² Among the key developments explaining Iran's decreased score, Freedom House highlighted the violent crackdown to the protests in more than 100 cities beginning in September 2022 "following the death of Mahsa Amini, a 22-year-old Kurdish woman who had been arrested and beaten by the so-called morality police in Tehran for allegedly not wearing her hijab properly." Nearly 500 people had been confirmed dead by year's end, and an estimated 14,000 people were arrested, including those who voiced support for the movement.²⁶⁰³

The protests and crackdown marked escalation of already limited political and civil rights. Freedom House reports that the Guardian Council strictly filters candidates in elections according to their loyalty to the regime while the supreme

https://editorials.voa.gov/a/iran-is-proliferating-lethal-drones/7314438.html

https://www.un.org/en/about-us/universal-declaration-of-human-rights

https://freedomhouse.org/country/iran/freedom-world/2024

https://freedomhouse.org/country/iran/freedom-world/2023; Freedom House, *Freedom in the World 2021: Iran* (2021), https://freedomhouse.org/country/iran/freedom-world/2021

https://www.amnesty.org/en/documents/mde13/6193/2022/en/

²⁵⁹⁸ Secretary of State Blinken, *The United States' Commitment to Countering Iranian Weapons Development and Proliferation* (Oct. 18, 2023), https://2021-2025.state.gov/the-united-states-commitment-to-countering-iranian-weapons-development-and-proliferation/

²⁵⁹⁹ Editorials, Iran Is Proliferating Lethal Drones (Oct. 17, 2023),

²⁶⁰⁰ United Nations, *Universal Declaration on Human Rights* (1948),

²⁶⁰¹ Freedom House, Freedom in the World 2024: Iran (2024),

²⁶⁰² Freedom House, Freedom in the World 2023: Iran (2023),

²⁶⁰³ Amnesty International, *Iran: Urgent international action needed to stop mass killings of Baluchi protesters* (Nov. 10, 2022),

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leader and unelected institutions under his rule play a crucial role in political life in the country.²⁶⁰⁴

According to a 2023 Human Rights Watch report on Iran, internet freedom remains highly restricted and State-aligned cyber operations spread disinformation and manipulated the online space. Iran and its judicial system have shown little inclination to curb or confront serious human rights violations perpetrated by Iranian security agencies. The country's security and intelligence apparatus, in partnership with Iran's judiciary, harshly crack down on any form of dissent, including through excessive and lethal force against protesters.²⁶⁰⁵

The Iranian authorities' suppression of recent protests in Iran is the latest in a cycle of attacks perpetrated by the Iranian authorities against the people who are voicing their concerns. The cycle of attacks started in Iran between December 2017 and January 2018 and continued thereafter. According to Press TV, in an open letter that was signed by 227 of Iran's 290 members of Parliament, the MPs ask for demonstrators to be taught a "good lesson" as a means of discouraging such individuals who challenge the authority of the Iranian government. 2607

OECD / G20 Principles

Iran has neither endorsed the OECD AI Principles,²⁶⁰⁸ nor defined ethical norms and standards for AI.

Council of Europe AI Treaty

Iran has not signed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law.²⁶⁰⁹

²⁶⁰⁵ Human Rights Watch, *Iran Report* 2023, https://www.hrw.org/world-report/2023/country-chapters/iran

²⁶⁰⁴ Freedom House, *Freedom in the World 2024: Iran* (2024), https://freedomhouse.org/country/iran/freedom-world/2024

²⁶⁰⁶ Amnesty International, *Iran: More than 760,000 people around the world calling for UN investigative mechanism on Iran* (Nov. 3, 2022),

https://www.amnesty.org/en/latest/news/2022/11/iran-more-than-760000-people-around-theworld-calling-for-un-investigative-mechanism-on-iran/

²⁶⁰⁷ CNN, *Iranian lawmakers demand 'no leniency' for protesters as mass demonstrations continue* (Nov. 8, 2022), https://edition.cnn.com/2022/11/06/middleeast/iran-lawmakers-judiciary-letter-protests-intl-hnk/index.html

²⁶⁰⁸ OECD Legal Instruments, *Recommendations of the Council on Artificial Intelligence, Adherents* (May 3, 2024), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449#adherents

²⁶⁰⁹ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 23, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

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UNESCO Recommendation on AI Ethics

Iran is one of signatories to the UNESCO Recommendation on AI Ethics, which aims to deliver the advantages of technology while reducing associated human rights risks. ²⁶¹⁰ Iran has not implemented the UNESCO Readiness Assessment Methodology (RAM) or taken clear action to implement the Recommendations. ²⁶¹¹

Evaluation

Iran has launched the "Digital Iran" framework to oversee and implement modern technologies, recently drafted an AI roadmap, and endorsed the UNESCO Recommendation on AI Ethics. While the institutional structure enables coordinated development, the governance structure notably lacks transparency mechanisms, ethical guidelines, or public oversight provisions. The absence of a comprehensive data protection law and independent oversight mechanism as the country seeks to expand national biometric identification and systems for facial recognition is concerning. Iran is also engaged in the race for developing lethal autonomous weapons while not partaking in any international efforts to regulate, let alone prohibit, their use.

Ireland

In 2024, Ireland launched a refreshed National AI Strategy and established an AI Advisory Council to oversee the national AI strategy and provide advice to the government. Ireland also consulted the public on the national approach to implementing the EU AI Act and became party to the EU AI Act through the European Commission signature.

National AI Strategy

Ireland's national enterprise strategy, the Economic Recovery Plan and Enterprise 2025 Renewed, set out Ireland's ambition to be at the frontier of disruptive technologies, including AI. In 2019, Ireland published the Future Jobs Ireland Plan, which included a commitment to develop Ireland's national AI strategy and create a Top Team on Standards for AI to focus on increasing Ireland's AI development and assisting AI enterprises.²⁶¹² Ireland's Department

²⁶¹⁰ UN News, 193 Countries Adopt First-Ever Global Agreement on the Ethics of Artificial Intelligence (Nov. 25, 2021), https://news.un.org/en/story/2021/11/1106612

²⁶¹¹ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

Government of Ireland, *Future Jobs Ireland 2019: Preparing Now for Tomorrow's Economy* (Mar. 2019), https://enterprise.gov.ie/en/Publications/Publication-files/Future-Jobs-Ireland-2019.pdf

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of Enterprise, Trade, and Employment (DETE) published the national AI strategy AI—Here for Good in 2021 that set out a long-term AI roadmap.²⁶¹³

In 2024 Ireland announced that Ireland's National AI Strategy is undergoing updates. The update to Ireland's National AI Strategy reflects the substantial advancements in AI technology and regulation since the original strategy was released in 2021. Strategic actions in this refresh include ensuring Ireland's leadership in effectively implementing the EU AI Act, commissioning a study on the potential impacts of AI on key sectors of the Irish economy, amongst others.²⁶¹⁴

The aim of AI—Here for Good is to make Ireland "an international leader in using AI to the benefit of our population, through a people-centered, ethical approach to AI development, adoption and use." Its objectives are grouped into eight strands: AI and Society; A Governance Ecosystem that Promotes Trustworthy AI; Driving Adoption of AI in Irish Enterprise; AI Serving the Public; A Strong AI Innovation Ecosystem; AI Education, Skills and Talent; Supportive and Secure Infrastructure for AI; and Implementation of the Strategy.

In August 2023, Ireland published a development report against the 2021 National AI Strategy, providing details on implementation of tasks under each of these strands as either "complete" or "in progress." The report offers an overview of upcoming planned actions for continued implementation. Among them, Ireland continues to monitor the progress of the EU sandbox pilot and will consider the implications and requirements of regulatory sandboxes for AI in Ireland.

Ireland's national AI policy states that "ensuring explainability, accountability, and fairness" and addressing discrimination are some of the main challenges to be addressed through AI regulation. Ireland's Strategic Approach to AI emphasizes the importance of AI that is "accountable and acceptable to society." Under its objective to create an agile AI governance and regulatory framework, Ireland recognizes the risk of unfair discrimination and unequal treatment arising from biased training data, design, and use, along with challenges

²⁶¹⁴ Government of Ireland, Department of Enterprise, Trade and Employment. *National AI Strategy Refresh 2024*, (Nov. 6, 2024), https://www.gov.ie/en/publication/6df28-national-ai-strategy-refresh-2024/

Department of the Taoiseach Press Release, *Taoiseach and Minister Troy launch Government Roadmap for AI in Ireland* (July 8, 2021), https://www.gov.ie/en/press-release/f4895-taoiseach-and-minister-troy-launch-government-roadmap-for-ai-in-ireland/

²⁶¹⁵ Department of Enterprise, Trade and Employment, *AI—Here for Good: National Artificial Intelligence Strategy for Ireland* (last updated Sept.15, 2021), https://enterprise.gov.ie/en/publications/national-ai-strategy.html

²⁶¹⁶ Government of Ireland, *AI—Here for Good Progress Report on the National AI Strategy* (Aug. 9, 2023), https://enterprise.gov.ie/en/publications/progress-report-national-ai-strategy.html
²⁶¹⁷ Ibid

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of "explainability, accountability, and fairness." The Top Team on Standards for AI is responsible for developing certification schemes and codes of conduct for AI to determine or demonstrate fairness, estimate bias in training data, develop auditing mechanisms, and support GDPR rights. This team, alongside similar Ireland government efforts, is working towards creating a common EU framework for trustworthy and innovative AI to create a coherent and borderless single AI market.²⁶¹⁸

In July 2023, the National Standards Authority of Ireland, as part of the National Strategy, issued its Artificial Intelligence (AI) Standards & Assurance Roadmap. The Roadmap is based on the work of the Top Team on Standards for AI and input from experts from across the Irish AI community, including academia; business, information technology industry, SMEs, and legal experts, It is expected that this Roadmap will support the standardization of the development and use of AI in the country.²⁶¹⁹

Ireland's Department of Enterprise, Trade, and Employment (DETE) is currently spearheading Ireland's national AI policy, which lists strategic actions to be conducted by various Irish agencies, including the Department of Environment, Climate and Communications, the Department of Justice, the National Standards Authority of Ireland, and the Department of Children, Equality, Disability, Integration, and Youth. It has also established the Top Team on Standards for AI to develop certification schemes and codes of conduct to address AI at different stages of development.

Strand 8 of AI—Here for Good's, "Implementation of the Strategy," lists several entities that compose Ireland's "whole of Government strategy" for AI. The Enterprise Digital Advisory Board (EDAF) was established in May 2022 to represent government departments, businesses, and AI experts, oversee the implementation of business elements of the National AI Strategy, and advise the Irish Government on driving enterprise adoption of AI. The membership of the EDAF was renewed in 2023 after a public call for expressions of interest. ²⁶²⁰ The AI Ambassador, a member of the Enterprise Digital Advisory Board, and the

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²⁶¹⁸ Kingdom of the Netherlands, *Innovative and Trustworthy AI: Two Sides of the Same Coin*, Netherlands and You, Documents (Oct. 8, 2020), https://www.netherlandsandyou.nl/web/pr-eubrussels/documents

²⁶¹⁹ National Standards Authority of Ireland, *AI Standards & Assurance Roadmap* (Jul. 2023), https://www.nsai.ie/images/uploads/general/NSAI_AI_report_digital_links.pdf

²⁶²⁰ Department of Enterprise, Trade and Employment, *Minister Calleary holds first meeting of renewed Enterprise Digital Advisory Forum* (Dec. 6, 2023), https://enterprise.gov.ie/en/news-and-events/department-news/2023/december/06122023.html; Department of Enterprise, Trade and Employment, *Call for Expression of Interest – Enterprise Digital Advisory Forum* (Jun. 9, 2023), https://enterprise.gov.ie/en/publications/call-for-expression-of-interest-enterprise-digital-advisory-forum.html

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GovTech Delivery Board, which is responsible for AI adoption in the public sector, are other entities that Ireland plans to incorporate into its governance of AI.

Following Ireland's 2021 Strategy release, Harnessing Digital—The Digital Ireland Framework, a new national digital strategy, was unveiled in February 2022 by the Department of the Taoiseach to drive and support the digital transition across the Irish economy and society. This high-level framework outlines a roadmap to support Ireland's aspiration to be a digital leader at the center of European and global digital developments, with a strong emphasis on inclusion, security, and safety, anchored by strong governance and a well-resourced regulatory environment.

This framework's objectives are grouped into four strands: Digital Transformation of Business; Digital Infrastructure; Skills; Digitalization of Public Services. The Irish government has identified several digital risks which these objectives aim to mitigate. For instance, this Strategy offers pragmatic and effective mitigation solutions to risks around non-digital adopting organizations and those that might be digitally "left behind" as Ireland's society becomes more technologically literate.

In the 2023 implementation report of this Strategy, Ireland announced the creation of the Competition and Consumer Protection Commission (CCPC) as the competent authority for registration and compliance of data intermediation services. It also announced the establishment of the Central Statistics Office (CSO) as the competent body for assisting public sector bodies which opt to share "protected data."²⁶²²

The creation of both agencies is also part of the government's attempts to comply with the 2024 Digital Services Bill adopted in line with the EU Digital Services Act that came into force in February 2024. These developments are expected to align Ireland's data privacy regulations with international standards and show its commitment to "enforcing digital regulation seriously", although it is not clear at the moment how these two agencies will work together, and with the pre-existing Irish Data Protection Commission (DPC). 2624

²⁶²² Department of the Taoiseach, *Harnessing Digital, The Digital Ireland Framework, 2023 Progress Report*, p. 11 (Jan. 2024), https://www.gov.ie/en/press-release/e967d-publication-of-harnessing-digital-2023-progress-report/

²⁶²³ Department of Enterprise, Trade and Employment, *Minister Calleary welcomes passage of Digital Services Bill* (Feb. 8, 2024), https://enterprise.gov.ie/en/news-and-events/department-news/2024/february/080224.html

Department of the Taoiseach, *Harnessing Digital - The Digital Ireland Framework* (Feb. 1, 2022), https://assets.gov.ie/214584/fa3161da-aa9d-4b11-b160-9cac3a6f6148.pdf

²⁶²⁴ Department of the Taoiseach, *Harnessing Digital, The Digital Ireland Framework, 2023 Progress Report*, p. 11 (Jan. 2024), https://www.gov.ie/en/press-release/e967d-publication-of-harnessing-digital-2023-progress-report/

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Public Participation

To receive engagement and input in the development of its National AI Strategy, Ireland held a public consultation process from October 16 to November 7, 2019, which was open to all stakeholders and interested parties. This consultation aimed to "better understand the views of the public on the opportunities, enablers and challenges for AI in Ireland and to gather views on key areas and issues that should be addressed by the strategy."²⁶²⁵

Strand 1 of AI—Here for Good, AI and Society, asserts that Ireland "must also prioritize measures to raise awareness about AI." To that end, Ireland plans to appoint an "AI ambassador to promote awareness among the public and businesses of the potential that AI offers." This AI ambassador is expected to engage with the public, lead a "national conversation around the role of AI" with an emphasis on "an ethical and compliant approach," and champion AI as a positive force for Ireland. Ireland published a call for Expression of Interest for the AI Ambassador position on October 26, 2021, and applications were due November 12, 2021. 2626 In May 2022, Dr. Patricia Scanlon was appointed to serve as Ireland's first AI Ambassador. During the drafting phase of the new digital strategy, Harnessing Digital—The Digital Ireland Framework, no public consultation announcement occurred, removing the public's ability to offer feedback.

Ireland planned to convene a Youth Assembly on AI to discuss young people's views of AI's "benefits, risks and impacts on different groups in society." University College Cork (UCC) currently hosts The Elements of AI, a massive open online course (MOOC) made available to all EU member states. Ireland plans to use Elements of AI, which is freely available, "to deliver AI education to at least 1% of the population. As part of the Ireland's AI—Here for Good, young Irish people were asked for their thoughts on AI and its potential applications. The inaugural National Youth Assembly on Artificial Intelligence was held at Trinity College Dublin on October 12, 2022, with 43 young people aged 13 to 23. ²⁶²⁷ In June 2024, Ireland's Department of Enterprise, Trade and Employment requested

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²⁶²⁵ Department of Enterprise, Trade and Employment, *National AI Strategy for Ireland: Public Consultation Report* (2020), https://enterprise.gov.ie/en/Consultations/Consultations-files/AI-Strategy-Public-Consultation-Report.pdf

²⁶²⁶ Department of Enterprise, Trade and Employment, *Call for Expression of Interest: Artificial Intelligence (AI) Ambassador* (Oct. 26, 2021), https://enterprise.gov.ie/en/publications/call-for-expression-of-interest-artificial-intelligence-ai-ambassador.html

²⁶²⁷ ADAPT, *ADAPT joins the National Youth Assembly on Artificial Intelligence* (Nov. 2, 2022), https://www.adaptcentre.ie/news-and-events/adapt-joins-the-national-youth-assembly-on-artificial-intelligence/

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public opinion on the national approach to the EU AI Act's implementation thereby providing an opportunity for public participation.²⁶²⁸

Public Trust in Al

Strands 1 and 2 of AI—Here for Good are aimed at "building public trust in AI." Strand 1 seeks to build public trust in AI through public awareness programs and research and grants to develop AI applications for societal good and sustainability, including health and climate change. Strand 2 addresses the need for a "robust governance framework to safeguard against [AI] risks and underpin public trust in AI." It establishes three pillars that Ireland will use to ensure a strong AI governance framework: 1) "an agile and appropriate framework," 2) "active promotion of ethics guidance and frameworks," and 3) "a robust system of standards and certification."

Ireland has played an active part in EU discussions of the AI Act and the EU's prior work related to AI, and Ireland's AI strategy states that it will continue to do so. Ireland's National AI Strategy endorses the EU AI Act as a "'smart mix' of voluntary and mandatory measures [that] will help to protect our people, facilitate innovation in AI and respect our democratic values," Strand 2 emphasized the AI Act's voluntary and self-regulatory oversight of non-high-risk AI and its integration of impact assessments, codes of practice, and ethical guidelines.

EU Digital Services Act

As an EU member state, Ireland shall apply the EU Digital Services Act (DSA).²⁶²⁹ The DSA regulates online intermediaries and platforms. Its main objective is to prevent illegal and harmful activities online and the spread of disinformation. The DSA also bans targeted advertising based on a person's sexual orientation, religion, ethnicity, or political beliefs and targeted advertising to minors based on profiling.

EU AI Act

As an EU member State, Ireland is bound by the EU AI Act.²⁶³⁰ The EU AI Act is a risk-based market regulation which supports the objective of promoting a

²⁶²⁸ Government of Ireland, Department of Enterprise, Trade and Employment, *Minister Calleary urges public and businesses to have their say on AI* (Jun. 3, 2024), https://www.gov.ie/en/press-release/7eae6-minister-calleary-urges-public-and-businesses-to-have-their-say-on-ai/

²⁶²⁹ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act) (Oct. 21, 2022), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022R2065

²⁶³⁰ European Parliament, Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonized rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU)

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human-centric approach to AI and making the EU a global leader in the development of secure, trustworthy and ethical AI.

The AI Act entered into force on 1 August 2024, and will be fully applicable 2 years later, with some exceptions: prohibitions will take effect after six months, which means in February 2025. The governance rules and the obligations for GPAI models will become applicable in August 2025, and the rules for AI systems embedded into regulated products will apply in August 2027.

Data Protection

Since Ireland is an EU Member State, the General Data Protection Regulation (GDPR)²⁶³¹ is directly applicable in Ireland and to Irish people. The aim of the GDPR is to "strengthen individuals' fundamental rights in the digital age and facilitate business by clarifying rules for companies and public bodies in the digital single market."²⁶³² The GDPR entered into force on 24 May 2016 and applies since 25 May 2018.

Regarding the activities of law enforcement authorities, the EU Data Protection Law Enforcement Directive (LED).²⁶³³ protects citizens' fundamental right to data protection whenever personal data is used by criminal law enforcement authorities for law enforcement purposes. It will in particular ensure that the personal data of victims, witnesses, and suspects of crime are duly protected and will facilitate cross-border cooperation in the fight against crime and terrorism."²⁶³⁴ The LED provides for the prohibition of any decision based solely on automated processing, unless it is provided by law, and of profiling that results in discrimination.²⁶³⁵ The LED also requires for Member States, including Italy,

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^{2018/1139} and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act), (Jul.12,2024), http://data.europa.eu/eli/reg/2024/1689/oj

²⁶³¹ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, https://eur-lex.europa.eu/EN/legal-content/summary/general-data-protection-regulation-gdpr.html

²⁶³² European Commission, *Data protection in the EU*, https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection en

²⁶³³ Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA, https://eur-lex.europa.eu/legal-content/EN/NIM/?uri=CELEX:32016L0680

²⁶³⁴ European Commission, *Data protection in the EU*, https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection en

²⁶³⁵ Article 11 (1) and (2) of the LED, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

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to enable data subjects to exercise their rights via national data protection authorities.²⁶³⁶

The 2018 Irish Data Protection Act both supplements the GDPR and implements the LED in Irish law. In addition, the Irish Data Protection Commission in July 2024, issued a guidance for organizations employing AI systems, highlighting risks of personal data processing by AI, including Large Language Models (LLMs), in compliance with GDPR.

The EU Charter of Fundamental Rights more generally provides that EU citizens have the right to protection of their personal data. Article 8 of the Charter states that: "Everyone has the right to the protection of personal data concerning him or her. Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law."

Ireland is also a member of the Council of Europe. It signed but has not yet ratified²⁶³⁷ the Council of Europe's Convention 108+ for the protection of individuals with regard to the processing of personal data.²⁶³⁸

The Irish DPA is a member of the Global Privacy Assembly (GPA) since 2002. Although the DPA endorsed the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence, 2639 it did not co-sponsor the 2020 GPA Resolution on AI Accountability, 2640 the 2022 GPA Resolution on Facial Recognition Technology²⁶⁴¹ or the 2023 GPA Resolution on Generative AI.²⁶⁴² In January 2024, the Minister of State for Trade Promotion, Digital Transformation

²⁶³⁶ Article 17 of the LED

²⁶³⁷ Council of Europe, *Data protection* (Nov. 2, 2024), https://www.coe.int/en/web/dataprotection/ireland

²⁶³⁸ Council of Europe, Modernised Convention for the Protection of Individuals with Regard to the Processing of Personal Data (May 18, 2018), https://www.coe.int/en/web/dataprotection/convention108-and-protocol

²⁶³⁹ Global Privacy Assembly, Declaration on Ethics and Data Protection in Artificial Intelligence (Oct. 23, 2018), https://globalprivacyassembly.org/wpcontent/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

²⁶⁴⁰ Global Privacy Assembly, Resolution on Accountability in the Development and Use of Artificial Intelligence (Oct. 2020), https://globalprivacyassembly.org/wpcontent/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

²⁶⁴¹ Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate *Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principlesand-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

²⁶⁴² Global Privacy Assembly, Resolution on Generative Artificial Intelligence Systems (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

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and Company Regulation established the AI Advisory Council as an independent AI oversight body, providing expert advice to the government, supporting national AI strategy development by building public trust and promoting the development of trustworthy, person-centered AI.²⁶⁴³

Al Oversight

Established under the Data Protection Act of 2018, the Data Protection Commission (DPC) is Ireland's national independent supervisory authority responsible for upholding the data protection rights of individuals in the EU. The DPC is charged with monitoring the application of the GDPR, including its transparency and automated decision-making provisions, and other Irish and EU regulatory frameworks and directives. The DPC has faced criticism from members of the European Parliament for failing to enforce the GDPR by choosing to bring a legal proceeding in the *Schrems II* case instead of deciding on its own, issuing only one GDPR sanction out of thousands of complaints, and failing to reach a draft decision on any case referred to Ireland in 2018.

On March 25, 2021, the European Parliament passed a resolution expressing its concern with the slow pace of the Irish DPA and calling for faster investigations to show EU citizens that "data protection is an enforceable right." On May 20, 2021, the European Parliament voted in favor of a resolution calling for the European Commission to open an infringement procedure against the DPC. In December 2022, the EDPB overturned a previous draft decision by the DPC that took the view that Meta's bypass of the GDPR was legal and the EDPB requested changes in the decision on WhatsApp, as well as further investigations into the core violations of WhatsApp. In January 2022, the DPC adapted its limited decision, but refused to investigate other matters, as ordered by the EDPB. According to noyb, "the DPC threatens to bring a lawsuit against its European partners." In January 2022 as well, the European Commission defended the Irish Data Protection Commissioner by stating that "there is no proof that the DPC didn't follow the Irish data protection rules or that

https://www.europarl.europa.eu/doceo/document/TA-9-2021-0111 EN.html

²⁶⁴³ Government of Ireland, Department of Enterprise, Trade, and Employment, *Artificial Intelligence Advisory Council will provide independent expert advice to government* (Jan. 17, 2024), https://enterprise.gov.ie/en/news-and-events/department-news/2024/january/17012024.html

²⁶⁴⁴ European Parliament, Resolution on the Commission evaluation report on the implementation of GDPR two years after its application (Mar. 25, 2021),

²⁶⁴⁵ European Parliament, *Resolution on the ruling of the CJEU of 'Schrems II'* (May 20, 2021), https://www.europarl.europa.eu/doceo/document/TA-9-2021-0256_EN.pdf

²⁶⁴⁶ noyb, *Just* € 5,5 *Million on WhatsApp. DPC finally gives the finger to EDPB* (Jan. 19, 2023), https://noyb.eu/en/just-eu-55-million-whatsapp-dpc-finally-gives-finger-edpb

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the cooperation mechanism wasn't employed correctly."²⁶⁴⁷ Complex cases, especially those involving disputed issues such as WhatsApp, may take a long time. As a result, the European Commission refused to comment on or initiate infringement proceedings against a DPA for its views on a particular subject.

The failure of the DPC to exercise enforcement powers triggered concerns about the Commission's ability to safeguard fundamental rights about AI.

In September 2023, after an *ex officio* investigation started in 2021, the DPC concluded that TikTok failed to secure compliance regarding user policies for children as required by the GDPR.²⁶⁴⁸

The DPC launched its 2023 Annual Report²⁶⁴⁹ in May 2024 highlighting 19 final decisions that resulted in administrative fines totalling \leq 1.55 billion.

In March 2023, the DPC announced its participation in the European Data Protection Board's 2024 Coordinated Enforcement Framework (CEF), in accordance with Article 15 of the GDPR. In a fact-finding exercise, the DPC will send questionnaires to 30 data controllers in the public and private sectors to gather insights into how organizations apply the Right of Access Guidelines on data subject rights²⁶⁵⁰ for an EU-wide report.²⁶⁵¹

In September 2024, the DPC announced a Cross-Border statutory inquiry into Google Ireland Limited (Google) under Section 110 of the Data Protection Act 2018, about whether Google has complied with any obligations that it may have had to undertake an assessment, pursuant to Article 35 of GDPR's Data Protection Impact Assessment, prior to engaging in the processing of the personal data of EU/EEA data subjects associated with the development Pathways Language Model 2 (PaLM 2), its foundational AI model.²⁶⁵²

Data Protection Commission, *Irish Data Protection Commission announces €345 million fine of TikTok* (Sept. 2023), https://www.dataprotection.ie/en/news-media/press-releases/DPC-announces-345-million-euro-fine-of-TikTok

²⁶⁵⁰ European Data Protection Board, *Guidelines 01/2022 on data subject rights - Right of access* (Mar. 28, 2023), https://www.edpb.europa.eu/system/files/2023-

04/edpb_guidelines_202201_data_subject_rights_access_v2_en.pdf

²⁶⁵¹ Ireland Data Protection Commission, *Launch of coordinated enforcement action on the right of access* (Mar. 19, 2024), https://www.dataprotection.ie/en/news-media/press-releases/launch-coordinated-enforcement-action-right-access

²⁶⁵² Ireland Data Protection Commission, *Data Protection Commission launches inquiry into Google AI model* (Sept. 12, 2024), https://www.dataprotection.ie/en/news-media/press-releases/data-protection-commission-launches-inquiry-google-ai-model# ftn1

²⁶⁴⁷ Hunton Privacy Blog, *European Commission Defends Irish Data Protection Commissioner* (Jan. 13, 2022), https://www.huntonprivacyblog.com/2022/01/13/european-commission-defends-irish-data-protection-commissioner/

²⁶⁴⁹ Ireland Data Protection Commission, *Data Protection Annual Report 2023* (May 29, 2024), https://www.dataprotection.ie/sites/default/files/uploads/2024-08/DPC-EN-AR-2023-Final-AC.pdf

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In September 2024, the DPC fined Meta €91 million following an inquiry launched in April 2019 after Meta Platforms Ireland Limited (MPIL) notified the DPC that it had inadvertently stored passwords of social media users in 'plaintext' on its internal systems, without cryptographic protection or encryption.²⁶⁵³

The DPC announced its final decision to levy administrative fines totaling €310 million on LinkedIn in October 2024 after an inquiry that examined LinkedIn's processing of personal data for the purposes of behavioral analysis and targeted advertising of users who have created LinkedIn profiles (members). With concerns related to the lawfulness, fairness and transparency of this processing, the decision includes a reprimand and an order for LinkedIn to bring its processing into compliance. ²⁶⁵⁴

Algorithmic Transparency

Although it has not yet ratified the Protocol amending the Convention 108 which provides for algorithmic transparency, Ireland is subject to the GDPR. Irish people have a general right to obtain access to information about automated decision-making and to the factors and logic of an algorithm.²⁶⁵⁵

The 2020 Recommendation of the Council of Europe Committee of Ministers on human rights impacts of algorithm systems²⁶⁵⁶ specifically emphasizes requirements on transparency, accountability and effective remedies. The Recommendation provides that "The use of algorithmic systems in decision-making processes that carry high risks to human rights should be subject to particularly high standards as regards the explainability of processes and outputs."²⁶⁵⁷ The Recommendation also clarifies that "Contestation should include an opportunity to be heard, a thorough review of the decision and the possibility to obtain a non-automated decision. This right may not be waived, and should be affordable and easily enforceable before, during and after deployment, including through the provision of easily accessible contact points and hotlines."²⁶⁵⁸

Although Ireland has not created its own AI ethical guidelines, its National AI Strategy incorporates the seven requirements of the EU High-Level Expert

²⁶⁵³ Ireland, Data Protection Commission, *Irish Data Protection Commission fines Meta Ireland €91 million* (Sept. 27, 2024), https://www.dataprotection.ie/en/news-media/press-releases/DPC-announces-91-million-fine-of-Meta

²⁶⁵⁴ Ireland, Data Protection Commission, *Irish Data Protection Commission fines LinkedIn Ireland €310 million* (Oct. 24, 2024), https://www.dataprotection-ireland-eu310-million

²⁶⁵⁵ See Recital 63 and Article 22 of the GDPR.

²⁶⁵⁶ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020),

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

²⁶⁵⁷ Ibid

²⁶⁵⁸ Ibid

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Group (EU HLEG) on AI's Ethics Guidelines for Trustworthy AI. UCC's Insight Centre currently hosts an online version of EU HLEG's Assessment List for Trustworthy AI, as an accessible checklist for adhering to the seven requirements of the Ethics Guidelines for Trustworthy AI. The Top Team on Standards for AI is tasked with developing codes of conduct that address explainability and transparency.

Transparency is an important part of Ireland's national AI strategy. Ireland views transparency as an essential component of accountability and trust in AI. Strand 1 of AI—Here for Good states that "AI must be developed and used with trust, transparency and accountability" and that Ireland is committed to ensuring that AI systems are "trustworthy, fair and inclusive."

Transparency remains an important part of Ireland's Harnessing Digital - The Digital Ireland Framework by continuing the implementation of Ireland's Data Sharing and Governance Act, which is designed to protect citizen's privacy by establishing a prescriptive framework in legislation for governance, oversight, and transparency of data processing within the Public Service. In July 2024, the Data Protection Commission issued guidance, centered on the right to be informed (transparency) of Articles 13 and 14 of the GDPR²⁶⁵⁹, for organizations employing AI systems, highlighting risks of personal data processing by AI, including Large Language Models (LLMs), in compliance with GDPR.²⁶⁶⁰

Public Services Card Facial Recognition Controversy

In March 2013, the Department of Employment Affairs and Social Protection (DEASP), Ireland's national social security office, implemented facial image matching software to minimize fraud and errors of the Public Services Card's (PSC) social security applicant identity verification. The Irish Council for Civil Liberties (ICCL), an independent non-profit in Ireland, has criticized the PSC for collecting and storing more data than necessary, increasing the risk of a security breach through its collection of sensitive biometric data, forcing economically vulnerable people to exchange their private data for access to services to which they are legally entitled, and contradicting Ireland's position on privacy at the EU.²⁶⁶¹ DEASP has not published their facial image matching software's accuracy and while continuing to use the software despite being under investigation by the Irish Data Protection Commissioner since October 2017. Human Rights Watch has documented reports of eligible applicants being denied

²⁶⁶⁰ Data Protection Commission, *AI, Large Language Models and Data Protection* (Jul. 18, 2024), https://www.dataprotection.ie/en/dpc-guidance/blogs/AI-LLMs-and-Data-Protection ²⁶⁶¹ Irish Council for Civil Liberties, *The Public Services Card*, https://www.iccl.ie/2019/the-public-services-card-contd/

²⁶⁵⁹ Data Protection Commission, *The right to be informed (transparency) (Article 13 & 14 GDPR)* https://www.dataprotection.ie/en/individuals/know-your-rights/right-be-informed-transparency-article-13-14-gdpr

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social security support due to documentation requirements or objections to the PSC for privacy reasons. 2662

In June 2023, the ICCL released a copy of a Data Protection Impact Assessment (DPIA) conducted in 2021 on the upgrade of facial matching software for the PSC.²⁶⁶³ The document was obtained through a Freedom of Information Request. The assessment revealed significant issues with the use of FRT by the DEASP, including lack of valid legal foundation under the GDPR for the creation and use of a biometric database; lack of transparency about what data was collected and how it was used; and lack of adequate guardrails for the retention of sensitive personal data.²⁶⁶⁴ It appears that this DPIA report is not publicly available on the DEASP website.

A proposal to equip the Garda with police facial recognition technology (FRT) to enhance their surveillance powers was made by the Minister of Justice in May of 2022.²⁶⁶⁵ In conjunction with AI and other surveillance capabilities, this FRT system aims to enable the fast identification of criminals from CCTV footage.

An ICCL press release in June 2023²⁶⁶⁶ found that a Data Protection Impact Assessment (DPIA) of a facial matching software upgrade for the Public Services Card (PSC) in 2021 failed to identify any legal basis under Article 9 GDPR for the creation of a biometric photo and template database of 3.2 million cardholders. This DPIA reveals for the first time that the Department of Social Protection has known that its biometric processing of personal data arising from the PSC project is illegal and reported that cardholders were not directly informed about the biometric processing during face-to-face interviews for the same. Olga Cronin, Surveillance and Human Rights Policy Officer, ICCL, says: "The Department has been building a national biometric database without a relevant legal basis and without transparency. It continues to collect people's biometric information in exchange for services they are legally entitled to. This must stop. This processing

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²⁶⁶² Human Rights Watch, *Q&A*: How the EU's Flawed Artificial Intelligence Regulation Endangers the Social Safety Net (Nov. 10, 2021),

https://www.hrw.org/sites/default/files/media 2021/11/202111hrw eu ai regulation qa 0.pdf ²⁶⁶³ ICCL, Assessment of PSC facial recognition software reveals Department of Social Protection has known its biometric processing arising from the PSC is illegal (Jun. 2023), https://www.iccl.ie/press-release/psc-facial-recognition-software-dpia/

²⁶⁶⁴ Department of Social Protection, *Upgraded Facial Matching Software Data Protection Impact Assessment* (Jul. 12, 2021), https://www.iccl.ie/wp-content/uploads/2023/06/DPIA-facial-matching-software-upgrade-FINAL-redacted.pdf

²⁶⁶⁵ Conor Gallagher, *Garda to use facial recognition technology*, The Irish Times (May 25, 2022), https://www.irishtimes.com/news/crime-and-law/garda-to-use-facial-recognition-technology-1.4887298

²⁶⁶⁶ Irish Council for Civil Liberties, *Press Release Assessment of PSC facial recognition* software reveals Department of Social Protection has known its biometric processing arising from the PSC is illegal (Jun. 9, 2023), https://www.iccl.ie/press-release/psc-facial-recognition-software-dpia/

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is unnecessary, disproportionate, and presents a risk to people's fundamental rights."

Police FRT is used as a method of widespread monitoring to track and identify individuals without the need for reasonable suspicion. FRT's widespread use runs the risk of damaging effects by altering how people interact in public and online settings. While public safety and national security concerns take precedence over individual privacy, the intrusions caused by police FRT surveillance are excessive and unjustified.

In January 2024, the International Justice Clinic (IJC) submitted comments²⁶⁶⁷ on Ireland's General Scheme of the Garda Síochána (Recording Devices) (Amendment) Bill 2023 to the Joint Committee on Justice at the Houses of the Oireachtas (Irish Parliament). "The Bill grants the Garda Síochána (Irish police) the power to use facial recognition technology on any past images or video that they have legally accessed for (1) crime investigation and prevention and (2) national security, so long as it is not used on live feeds. This facial recognition technology is a powerful tool that automatically extracts unique identifiers from individuals' faces recorded by data and matches them with identifiers on a watch list."

According to the IJC, "post" or retrospective use of facial recognition technology equally causes a formidable impact on fundamental human rights as "live" identification. When facial recognition technology is used on data recorded in a publicly accessible place, "it causes people to experience fear that they might be identified in the future [...] especially in the case of the indefinite retention and use of images or video for facial identification." Post use still has the potential to limit people's ability to freely participate in a public protest or move in a publicly accessible place.

In February 2024, the Joint Oireachtas Committee on Justice published its pre-legislative scrutiny report on the Draft General Scheme of the Garda Síochána (Recording Devices) (Amendment) Bill 2023²⁶⁶⁸, following concerns raised by the Data Protection Commission, Irish Council for Civil Liberties, Digital Rights Ireland, the Law Society of Ireland, amongst others. The report highlights deficiencies in the general scheme of the bill, emphasizes the rationale for introducing FRT should be published; and calls on An Garda Síochána and the

https://ijclinic.law.uci.edu/2024/01/19/ijc-comments-on-bill-granting-police-the-authority-to-use-facial-recognition-technology-in-ireland/

²⁶⁶⁷ International Justice Clinic, *IJC Comments on Bill Granting Police the Authority to Use Facial Recognition Technology in Ireland* (Jan. 19, 2024),

²⁶⁶⁸ Tithe an Oireachtais Houses of the Oireachtas, *Garda Siochána (Recording Devices) Act* 2023 (last updated 5 Dec. 2023), https://www.oireachtas.ie/en/bills/bill/2022/79/

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Department of Justice to urgently clarify how FRT is intended to be used and what imagery and reference databases are intended to be used.²⁶⁶⁹

Over-policing is already an issue in communities with marginalized groups, and this technology has the potential to exacerbate the problem through racial and minority ethnic profiling and the disruption of people's lives. The Garda's use of technologies such as CCTV, ANPR, drones, and body worn cameras are already being scrutinized.²⁶⁷⁰ Furthermore, the continued use of facial recognition by DEASP for determining access to social services and the Irish DPC's weak GDPR enforcement record remain areas of concern.

Environmental Impact of Al

Ireland is actively addressing the environmental impact of artificial intelligence (AI) through a combination of national strategies, regulatory frameworks, and industry initiatives. The National AI Strategy, AI—Here for Good, specifically emphasizes AI for Societal Good and Sustainability, including applications for environmental and climate action. The National Strategy highlights that AI offers promising tools for climate action, enabling energy monitoring, real-time environmental tracking, and crisis prevention. Ireland's Climate Action Plan 2019 highlights AI's role in managing energy use and balancing the grid. However, sustainable development is essential, given AI's own energy demands. Ireland encourages data centers to adopt circular economy principles, aligning with EU Ecodesign Regulation standards to minimize environmental impact."²⁶⁷¹ The 2023 Progress Report of the Harnessing Digital: The Digital Ireland Framework²⁶⁷² reiterates Ireland's commitment to advance the digitalization of enterprise and public services, while simultaneously reaching Ireland's climate objectives.

²⁶⁶⁹ Tithe an Oireachtais Houses of the Oireachtas, Joint Committee on Justice, *Report on Pre-Legislative Scrutiny of the General Scheme of the Garda Siochána (Recording Devices)* (Amendment) Bill 2023 (Feb. 13, 2023),

https://data.oireachtas.ie/ie/oireachtas/committee/dail/33/joint_committee_on_justice/reports/202_4/2024-02-27_report-on-pre-legislative-scrutiny-of-the-general-scheme-of-the-garda-siochana-recording-devices-amendment-bill-2023_en.pdf

²⁶⁷⁰ Irish Times, *Data Protection Commissioner raises CCTV concerns with Garda* (Nov. 16, 2017), https://www.irishtimes.com/business/technology/data-protection-commissioner-raises-cctv-concerns-with-garda-1.3293400

²⁶⁷¹ Government of Ireland, Department of Enterprise, Trade, and Employment, *National AI Strategy AI—Here for Good* (Jul. 8, 2021), https://enterprise.gov.ie/en/publications/national-ai-strategy.html

²⁶⁷² Government of Ireland, Department of the Taoiseach, *Harnessing Digital the Digital Ireland Framework 2023 Progress Report* (Jan. 10, 2024), https://www.gov.ie/en/press-release/e967d-publication-of-harnessing-digital-2023-progress-report/

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Lethal Autonomous Weapons

Ireland is a High Contracting Party to the Convention on Certain Conventional Weapons (CCW) and has been an active participant in CCW discussions related to lethal autonomous weapons systems (LAWS). According to Human Rights Watch, Ireland has expressed interest in multilateral talks on LAWS in the UN since at least 2013 and has participated in every CCW meeting on LAWS between 2014 and 2019. Ireland joined the other High Contracting Parties to the CCW to adopt 11 guiding principles for addressing challenges to international humanitarian law posed by LAWS. Ireland also joined eight other CCW parties in finding that the 11 guiding principles were a "useful and valuable starting point" and calling for the development of a "normative and operational framework" for ensuring human control of LAWS. Ireland has not called for a prohibition on or new international treaty for the regulation of LAWS.

Ireland is one of the 70 countries that endorsed a joint statement on autonomous weapons systems at the 2022 United Nations General Assembly. The joint statement urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law, including through maintaining human responsibility and accountability in the use of force." ²⁶⁷⁶

In February 2023, at the Responsible AI in the Military Domain Summit (REAIM 2023) co-hosted by the Netherlands and the Republic of Korea, nearly sixty states agreed to issue a joint call to action on the responsible development, deployment and use of AI in the military domain.²⁶⁷⁷ Ireland endorsed the resulting

2 11 1

https://documents.unoda.org/wp-content/uploads/2020/09/GGE20200901-Austria-Belgium-

Brazil-Chile-Ireland-Germany-Luxembourg-Mexico-and-New-Zealand.pdf

 $\underline{\text{https://estatements.unmeetings.org/estatements/}11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcS}\underline{\text{nnAm}\ en.pdf}$

²⁶⁷³ Human Rights Watch, *Stopping Killer Robots: Country Positions on Banning Fully Autonomous Weapons and Retaining Human Control* (Aug. 10, 2020), https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and

²⁶⁷⁴ Meeting of the High Contracting Parties to the Convention on Certain Conventional Weapons, *Final Report* (Dec. 13, 2019), https://digitallibrary.un.org/record/3856241?ln=en ²⁶⁷⁵ Austria, Belgium, Brazil, Chile, Ireland, Germany, Luxembourg, Mexico, and New Zealand, *Joint Commentary on Guiding Principles A, B, C and D* (Sept. 1, 2020),

²⁶⁷⁶ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee, 77th United Nations General Assembly Thematic Debate – Conventional Weapons* (Oct. 21, 2022),

²⁶⁷⁷ Government of Netherlands, *Call to action on responsible use of AI in the military domain*, (Feb. 16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action

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Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023. 2678

At the 78th UN General Assembly First Committee in 2023, Ireland voted in favor²⁶⁷⁹ of resolution L.56²⁶⁸⁰ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. The report²⁶⁸¹ analyzed ways to address the challenges and concerns autonomous weapon systems raise from humanitarian, legal, security, technological and ethical perspectives and reflect on the role of humans in the use of force.

In May 2024, Ireland contributed a national submission²⁶⁸² to the UN Secretary-General, as per UNGA Resolution 78/241 on Lethal Autonomous Weapons Systems (LAWS).²⁶⁸³ This submission highlights a series of risks requiring urgent and comprehensive multilateral action as well as the country's views on how the multiple challenges posed by autonomous weapons systems must be addressed.

In October 2024, the Draft Resolution L.77 on Lethal Autonomous Weapons Systems²⁶⁸⁴ was adopted at the First Committee of the United Nations General Assembly and Ireland is amongst the countries who endorsed it. On behalf of Ireland, Mr. Jason Robinson, Deputy Permanent Representative to the

fora/1com/1com24/resolutions/L77.pdf

²⁶⁷⁸ U.S. Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Nov. 27, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

²⁶⁷⁹ Stop Killer Robots, *164 states vote against the machine at the UN General Assembly*, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

²⁶⁸⁰ UN General Assembly, *Lethal Autonomous Weapons*, Resolution L56 (Oct. 12, 2023), https://documents.un.org/doc/undoc/ltd/n23/302/66/pdf/n2330266.pdf

²⁶⁸¹ United Nations General Assembly, *Lethal autonomous weapons systems Report of the Secretary-General* (Jul. 1, 2024), https://docs-

<u>library.unoda.org/General_Assembly_First_Committee_-Seventy-Ninth_session_(2024)/A-79-88-LAWS.pdf</u>

²⁶⁸² United Nations Office of Disarmament Affairs, *Ireland National Submission UNGA Resolution 78/241 on Lethal Autonomous Weapons Systems (LAWS)* (May 24, 2024), https://docs-library.unoda.org/General_Assembly_First_Committee_-Seventy-Ninth session (2024)/78-241-Ireland-EN.pdf

²⁶⁸³ United Nations General Assembly, *Resolution adopted by the General Assembly on 22 December 2023 78/241 Lethal autonomous weapons systems* (Dec. 28, 2023), https://documents.un.org/doc/undoc/gen/n23/431/11/pdf/n2343111.pdf

²⁶⁸⁴ United Nations General Assembly, *General and complete disarmament: lethal autonomous weapons systems* (Oct. 18, 2024),

https://reachingcriticalwill.org/images/documents/Disarmament-

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Conference of Disarmament, made a statement²⁶⁸⁵ expressing concern over the widespread use of explosive weapons and stressed that "any use of military force must comply with international humanitarian law, particularly the principles of distinction and proportionality.

Human Rights

According to Freedom House, Ireland is "free," with high scores for political rights and civil liberties (97/100). Regarding transparency and openness, Freedom House reports: "The public has broad access to official information under the 2014 Freedom of Information Act, though partial exemptions remain for the police and some other agencies. A Transparency Code requires open records on the groups and individuals that advise public officials on policy. The government has been criticized for failing to consult meaningfully with civil society groups and relevant stakeholders in policy formulation, particularly regarding the Roma, Travelers, and people living with disabilities." 2686

Ireland has endorsed the Universal Declaration of Human Rights and ratified seven of the nine core international human rights instruments, ²⁶⁸⁷ along with the European Convention on Human Rights. ²⁶⁸⁸ Strand 1 of Ireland's national AI strategy commits to "making human rights and ethical principles a key focus" of its national AI strategy, although it largely focuses on AI R&D that can improve access and inclusion, e.g., AI tools that help people with impaired hearing through real-time live captioning.

In a 2020 Recommendation on the human rights impacts of algorithmic systems, the Council of Europe Committee of Ministers reminded Member States that their pledge to "ensuring the rights and freedoms enshrined in the Convention for the Protection of Human Rights and Fundamental Freedoms to everyone within their jurisdiction" required that "member States must ensure that any design, development and ongoing deployment of algorithmic systems occur in compliance with human rights and fundamental freedoms which are universal, indivisible,

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²⁶⁸⁵ Permanent Mission of Ireland to the United Nations, New York, *Thematic Debate on Conventional Weapons at the First Committee of the General Assembly* (Oct. 24, 2024), https://www.ireland.ie/en/un/newyork/news-and-speeches/speeches-archive/thematic-debate-on-conventional-weapons-at-the-first-committee-of-the-general-assembly/

²⁶⁸⁶ Freedom House, *Freedom in the World 2024: Ireland* (2024), https://freedomhouse.org/country/ireland/freedom-world/2024

²⁶⁸⁷ UN Office of the High Commissioner for Human Rights, *Ratification Status for Ireland*, https://tbinternet.ohchr.org/_layouts/15/TreatyBodyExternal/Treaty.aspx?CountryID=83&Lang=FN

²⁶⁸⁸ Irish Human Rights and Equality Commission, *Your Rights*, https://www.ihrec.ie/your-rights/

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inter-dependent and interrelated, with a view to amplifying positive effects and preventing or minimising possible adverse effects."²⁶⁸⁹

The European Commission's Vice-President for Values and Transparency, Věra Jourová signed the Council of Europe Framework Convention on Artificial Intelligence, as an effective framework at the international level that aims to address risks posed by AI to human rights, democracy, and the rule of law. The Convention provides a common approach to ensure that activities within the lifecycle of AI systems are compatible with human rights, democracy and the rule of law, while enabling innovation and trust. The Convention covers AI systems potentially interfering with human rights, democracy and the rule of law, by following a risk- based and differentiated approach.²⁶⁹⁰

Al Safety Summit

In November 2023, Ireland participated in the first AI Safety Summit and endorsed the Bletchley Declaration.²⁶⁹¹ Ireland thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible."

The second AI Safety Summit took place in Seoul on 21-22 May 2024 and was co-hosted by the UK and South Korea.²⁶⁹² The U.S. secretary of commerce Gina Raimondo launched the first Strategic Vision on AI Safety²⁶⁹³, to "accelerate

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

²⁶⁸⁹ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020),

²⁶⁹⁰ European Commission, Commission signed the Council of Europe Framework Convention on Artificial Intelligence and human rights, democracy and the rule of law (Sept. 5, 2024), https://digital-strategy.ec.europa.eu/en/news/commission-signed-council-europe-framework-convention-artificial-intelligence-and-human-rights

²⁶⁹¹ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, *Prime Minister's Office, The Bletchley Declaration by Countries Attending the AI Safety Summit*, (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

²⁶⁹² U.K. Government, Department for Science, Innovation & Technology, *Seoul Statement of Intent toward International Cooperation on AI Safety Science, AI Seoul Summit 2024* (May 21, 2024), https://www.gov.uk/government/publications/seoul-declaration-for-safe-innovative-and-inclusive-ai-ai-seoul-summit-2024/seoul-statement-of-intent-toward-international-cooperation-on-ai-safety-science-ai-seoul-summit-2024-annex

²⁶⁹³ U.S. Department of Commerce, U.S. Secretary of Commerce Gina Raimondo Releases Strategic Vision on AI Safety, Announces Plan for Global Cooperation Among AI Safety

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the advancement of the science of AI safety" at a global level by promoting "complementarity and interoperability" between institutes and fostering a "common international understanding" of AI safety approaches.²⁶⁹⁴ The initial members of the network include the United States, United Kingdom, European Union, Japan, Singapore, South Korea, Canada, France, Kenya, and Australia.

G20 / OECD Principles

Ireland is a member of the OECD and endorsed the OECD AI Principles in May 2019. According to its National AI Strategy, Ireland's AI policies are "underpinned by [Ireland's] engagement" with AI policy processes at the EU, UN, and OECD. In February 2024, the Department of Public Expenditure, NDP Delivery and Reform released Interim Guidelines for Use of AI outlining key considerations and risk mitigations for the use of AI in the Public Service.²⁶⁹⁵

Ireland joined Global Partnership on Artificial Intelligence (AI) as a full member as part of its national AI strategy to establish an "agile and appropriate" AI governance and regulatory environment.²⁶⁹⁶

Council of Europe Al Treaty

Ireland contributed as a Council of Europe and EU Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of Law. The Committee on AI approved the Draft Framework Convention during its 10th Plenary session in March 2024. The Council of Europe Committee of Ministers formally adopted the Framework Convention on 17 May 2024 and opened it for signature at the Conference of Ministers of Justice in Vilnius (Lithuania) on 5 September 2024. The European Union, on behalf of its 27 member states became one of the first signatories.²⁶⁹⁷ Ireland has not taken individual action on the treaty, however.²⁶⁹⁸

Institutes (May 21, 2024), https://www.commerce.gov/news/press-releases/2024/05/us-secretary-commerce-gina-raimondo-releases-strategic-vision-ai-safety

²⁶⁹⁴ NIST U.S. Artificial Intelligence Safety Institute, *The United States Artificial Intelligence Safety Institute: Vision, Mission, and Strategic Goals* (May 21, 2024), https://www.nist.gov/aisi/strategic-vision

²⁶⁹⁵ Department of Public Expenditure, *NDP Delivery and Reform, Interim Guidelines for Use of AI in the Public Service* (Feb. 2024), https://www.gov.ie/en/publication/2127d-interim-guidelines-for-use-of-ai/

²⁶⁹⁶ GPAI, Community (2025), https://gpai.ai/community/

²⁶⁹⁷ Council of Europe, *The Framework Convention on Artificial Intelligence* (Sept. 5, 2024), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

²⁶⁹⁸ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 22, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

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UNESCO Recommendation on AI Ethics

Ireland endorsed the UNESCO Recommendation on AI, the first ever global agreement on the ethics of AI.²⁶⁹⁹ In its National AI Strategy, issued a few months before the UNESCO Recommendation, Ireland already explicitly acknowledges the UNESCO Recommendation which is a positive sign that it will take the necessary measures to implement it. However, in Ireland's Progress Report on implementation of the National AI Strategy: AI—Here for Good²⁷⁰⁰, confirms the endorsement but provides no details on the implementation of the UNESCO recommendations on the Ethics of AI." Ireland has not begun the UNESCO Readiness Assessment Methodology (RAM).2701

Evaluation

Ireland has endorsed the OECD AI Principles and the UNESCO Recommendation on AI Ethics. Ireland has also established a national AI strategy to address trust and transparency issues and improve its AI competitiveness. In 2024, Ireland also updated its national strategy to account for new developments in AI technology and included key strategic actions to ensure proportionate regulation and trust-building measures in new AI innovations.²⁷⁰² However, recent issues concerning the positions adopted by its data protection authority, in contradiction with those of other national data protection authorities in the EU or the European Data Protection Board and its absence of ratification of Convention 108+, are reasons for concern. The recent facial recognition amendment that allows police to use FRT for offenses such as rioting and violent disorder adds to the list of concerns.

Ireland's Data Protection Commission has issued guidelines centered on the right to be informed under the GDPR and demanded comprehensive safeguards in the deployment of FRT. Moreover, the DPA has been holding technology companies accountable for their compliance with the GDPR. Ireland is introducing additional measures to align with the AI Act, including establishing an AI Advisory Council and designating nine national public authorities to provide independent oversight.

²⁶⁹⁹ UNESCO, UNESCO member states adopt the first ever global agreement on the Ethics of Artificial Intelligence (Nov. 2021), https://www.unesco.org/en/articles/unesco-member-statesadopt-first-ever-global-agreement-ethics-artificial-intelligence

²⁷⁰⁰ Government of Ireland, Department of Enterprise, Trade and Employment, AI—Here for Good Progress Report on the National AI Strategy (Aug. 9, 2023),

https://enterprise.gov.ie/en/publications/progress-report- national-ai-strategy.html

²⁷⁰¹ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

²⁷⁰² Government of Ireland, Department of Enterprise, Trade and Employment. *National AI* Strategy Refresh 2024 (Nov. 6, 2024), https://www.gov.ie/en/publication/6df28-national-aistrategy-refresh-2024/

Israel

In 2024, Israel launched a major reform of the Privacy Protection Law, which requires the appointment of Data Protection Officers and grants new powers and tools for enforcement to the privacy protection authority. Israel also signed the Council of Europe AI Treaty.

National AI Strategy

On 18 December 2023, Israel launched its National AI Program²⁷⁰³, with a three-fold emphasis on 1) developing a cohesive, holistic, long-term, government strategy for sustained growth in AI; 2) fostering an enabling proinnovation environment to promote AI adoption within the private and public sectors; and 3) enhancing the facilities and resources available for research and development activities. It explicitly refers to a risk-based approach to AI regulation that "should be contextualized, weighing potential risks and benefits within specific use cases, compatible with the OECD Trustworthy AI Principles.

The 2024 AI Program focuses on responsible AI innovation, which is human-centric, non-discriminatory, reliable, safe, accountable, and transparent. Sector-specific regulation is encouraged along with a risk-based approach and multi-stakeholder consultation. In terms of governance, Israel's national policy on artificial intelligence regulations and ethics proposes to establish an AI policy coordination center, in collaboration with the Office of Legal Counsel and Legislative Affairs (Economic Law Department), at the Ministry of Justice.²⁷⁰⁴ The center will serve as an expert-based inter-agency body and is expected to hold various responsibilities aimed at effectively managing and overseeing Israel's AI landscape.

Initially, it will provide guidance to sectoral regulators concerning the necessity and development of AI regulations. Subsequently, it will foster interagency coordination to ensure alignment with global policies and minimize overlaps. The center will lead coordinated and horizontal efforts to implement governmental AI policies and regularly update the national policy on artificial intelligence regulations and ethics as necessary. The Center will offer advice to the government on AI regulation and oversee the implementation of the national policy on artificial intelligence regulations and ethics. The Center will also represent Israel in international forums pertaining to AI regulation and standards. The center will disseminate information and tools on responsible AI innovation to regulators and the private sector. Lastly, the Center will establish consultation

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²⁷⁰³ Ministry of Innovation, Science and Technology, Israel AI National Program 2024 (Dec. 18, 2023), https://www.gov.il/BlobFolder/news/most-

news20231218/he/Israel%20National%20AI%20Program%202024.pdf

²⁷⁰⁴ Israeli Ministry of Science and Technology and the Office of Legal Counsel and Legislative Affairs at the Ministry of Justice, *Israel's Policy on Artificial Intelligence Regulation and Ethics* (Dec. 17, 2023), p. 9 s. 4(3), https://www.gov.il/en/departments/policies/ai 2023

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forums to facilitate ongoing discussions and knowledge-sharing among various stakeholders, including industry, academia, civil society organizations²⁷⁰⁵, and the government.

The composition of the center should reflect a diverse array of civil servants possessing expertise in areas such as government policy, regulation, international relations, technology, and law. The center's operations would be supervised by a steering committee led by a senior official from the Ministry of Innovation, Science and Technology. This committee would also comprise other senior officials from the Ministry of Justice, Ministry of Finance, Regulatory Authority, Privacy Protection Authority, Israel National Digital Agency, and Israel Innovation Authority.

The Center is tasked with broad responsibilities but does not have decision-making authority. Operating as a centralized governmental hub for AI regulation, it lacks significant enforcement powers. Existing regulators will maintain their authority to enforce adopted AI principles. However, aside from the Protection of Privacy Authority, other relevant regulators may lack the capacity to develop and enforce segment-specific AI guidance. Consequently, the regulatory framework heavily depends on a non-regulatory entity to equip regulatory bodies with essential knowledge, tools, and resources.²⁷⁰⁶

Public Participation

The initial release of the draft regulatory and ethics policy in October 2022 was followed by a phase of consultation with an explicit request for public comment.

The policy draft also called for the establishment, within the Ministry of Innovation, Science and Technology, of a forum for public participation to discuss the development of AI regulations and oversight.²⁷⁰⁷ Following this call for public participation, the Israeli Democracy Institute provided comments, covered by the media, ²⁷⁰⁸ on the government's plan to regulate AI.²⁷⁰⁹ The Israeli Democracy

The Jerusalem Post, Israel establishes national expert forum to guide AI policy and regulation (Sept. 23, 2024), https://www.jpost.com/israel-news/politics-and-diplomacy/article-821307

²⁷⁰⁶ IAPP, Proactive caution: Israel's approach to AI regulation (Jan. 10, 2024),

https://iapp.org/news/a/proactive-caution-israels-approach-to-ai-regulation/

²⁷⁰⁷ Israeli Ministry of Science and Technology, For the first time in Israel: The principles of the policy for the responsible development of the field of artificial intelligence were published for public comment (Nov. 17, 2022), https://www.gov.il/en/departments/news/most-news20221117
²⁷⁰⁸ Sagi Cohen, "It's not enough, we need legislation": experts against the guidelines for the development of ethical artificial intelligence, TheMarker (Dec. 29, 2022), https://www.themarker.com/technation/2022-12-29/ty-article/.premium/00000185-5d4f-d68b-a7ef-7def7b680000

²⁷⁰⁹ The Israeli Democracy Institute, *The Regulation of Artificial Intelligence in Israel Requires Red Lines to Prevent Violation of Fundamental Rights* (Dec. 2022), https://www.idi.org.il/knesset-committees/46881

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Institute argued that the suggested AI soft regulation, self-regulation, and ethical principles are insufficient. Instead, the government should design enforceable laws that clearly define "red lines" to avoid Israel becoming the backyard of AI-related experiments. The Israeli regulation should align with international efforts, especially those of the European Union. The Israeli Democracy Institute also advocated for an approach that includes human right protection and risk-based frameworks and is embedded in a combination of horizontal and sector-specific regulations.

In September 2024, nine months after the launch of Israel's National AI Program, the country launched its second phase with a NIS 500 million Investment in Research and Development Infrastructure. The initiative, implemented by the National Artificial Intelligence Program, is an offshoot of the discussions and recommendations of the National Digital Bureau and the Telam Forum. Representatives from the Israel Innovation Authority, the Council for Higher Education, the Ministry of Defense's Directorate of Defense Research and Development, the Ministry of Innovation, Science and Technology, and the Ministry of Finance have expressed their voices on how this second phase is critical to maintaining Israel's position as a leading power in AI and serves as a catalyst for creating significant value for Israel's economy and the future of AI in the country.

The second phase²⁷¹¹ includes focus areas such as AI Integration in the Public Sector and Local Authorities, Preserving Israel's Leadership in AI Research, Expanding Human Capital in the Industry, Access to Data and Information, and Encouraging Transformative High-Tech Ventures. Moreover, in September 2024, the Ministry of Innovation, Science, and Technology issued a public call to form a national expert forum on artificial intelligence. The forum, which was created by Government Resolution 173, will include experts from academia, industry, and leading civil society organizations.²⁷¹²

Data Protection

Complementary laws govern data protection in Israel: legal texts and guidelines: (1) the 1992 Basic Law: Human Dignity and Liberty according to

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²⁷¹⁰ Israel Innovation Authority, Israel Launches Second Phase of National AI Program with NIS 500 Million Investment in Research and Development Infrastructure (Sept. 17, 2024), https://innovationisrael.org.il/en/press_release/second-phase-ai-program/

²⁷¹¹ Ministry of Innovation, Science and Technology, *Israel AI National Program 2024* (Dec. 18, 2023), https://www.gov.il/BlobFolder/news/most-

news20231218/he/Israel%20National%20AI%20Program%202024.pdf

²⁷¹² Jerusalem Post, *Israel establishes national expert forum to guide AI policy and regulation* (Sept. 23, 2024), https://www.jpost.com/israel-news/politics-and-diplomacy/article-821307

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which the right for privacy is a constitutional right;²⁷¹³ (2) the 1981 Privacy Protection Law (PPL)²⁷¹⁴ and subsequent regulations,²⁷¹⁵ such as Israel's 2017 Data Security Regulation;²⁷¹⁶ and (3) the guidelines of the Israeli Privacy Protection Authority.²⁷¹⁷ Chapter 1 of the PPL covers privacy generally, while Chapter 2 concerns data in storage and sets out various registration, purpose-limitation, transparency and security requirements, as well as individual rights of access and rectification.²⁷¹⁸ Other Chapters address procedural and enforcement matters as well as the disclosure or sharing of information by public bodies and liabilities for the publication of privacy-infringing material in newspapers.

In 2011, The European Commission determined that Israel satisfied the "adequacy requirement" according to the European Directive 95/46. In 2024, the European Commission decided to extend its adequacy decision as it concluded that "Israel continues to provide an adequate level of protection for personal data transferred from the EU.²⁷¹⁹ The Israeli Ministry of Justice proposed updates of the PPL, due to the major gap between GDPR and the current Israeli Law. In 2021, the Israeli Ministry of Justice announced approval of updates to the Privacy Protection Law. The amendments include significant new administrative enforcement powers for the Privacy Protection Authority, including the authority to impose financial sanctions, updating technological and social definitions, and reducing the bureaucratic burden on organizations' obligation to register databases.²⁷²⁰

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²⁷¹³ The Knesset, *Basic Law: Human Dignity and Liberty* (Mar. 17, 1992),

 $[\]underline{https://m.knesset.gov.il/EN/activity/documents/BasicLawsPDF/BasicLawLiberty.pdf}$

²⁷¹⁴ The Knesset, *Protection of Privacy Law*, 5741–1981 (unofficial translation), https://www.gov.il/BlobFolder/legalinfo/legislation/en/ProtectionofPrivacyLaw57411981unofficial translatio.pdf

²⁷¹⁵ IAPP, *Protection of Privacy Regulations (Data Security) 2017* [Unofficial translation] (2017), https://iapp.org/media/pdf/resource_center/IS-PROTECTION-OF-PRIVACY-REGULATIONS.pdf

²⁷¹⁶ Assaf Harel, *5 takeaways from the Israeli Privacy Protection Regulations*, IAPP (Aug. 5, 2019), https://iapp.org/news/a/five-takeaways-on-the-first-anniversary-of-the-israeli-privacy-protection-regulations/

²⁷¹⁷ Yoram Shiv and Shira Nager, *Israel - Data Protection Overview*, OneTrust (Oct. 2020), https://www.dataguidance.com/notes/israel-data-protection-overview

²⁷¹⁸ Privacy Protection Authority, *Legislation* (Oct. 3, 2017) (unofficial translation), https://www.gov.il/en/Departments/legalInfo/legislation

European Commission, Report from the Commission to the European Parliament and the Council on the first review of the functioning of the adequacy decisions adopted pursuant to Article 25(6) of Directive 95/46/EC (Jan. 15, 2024), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52024DC0007

²⁷²⁰ IAPP, *Israel pushes forward privacy law amendments* (Nov. 8, 2021), https://iapp.org/news/b/israel-pushes-forward-privacy-law-amendments

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In January 2022, the Israeli government introduced a substantial amendment to the PPL, Bill No. 14, aimed to align the PPL with the EU GDPR at least in part.²⁷²¹ On 05 August 2024, the Israeli Parliament approved the Amendment No. 13 to the Privacy Protection Law, 5741-1981 (previously known as Amendment no. 14), which is the most comprehensive amendment to the law since 1996. The amendment will come into effect in August 2025. The amendment introduces for the first time the mandatory appointment of Data Protection Officers, significantly expands the PPA's powers, establishes various tools for effective enforcement of the PPL, and allows courts to award statutory damages without proof of damage up to an amount of NIS 10,000.²⁷²²

Israel's Privacy Protection Authority (PPA) is the primary regulator for matters relating to privacy and data security. ²⁷²³ The PPA sits within the Israeli Ministry of Justice and is headed by the Registrar of Databases. The PPA regulates and enforces data protection across all sectors, private and public, according to the provisions of the Privacy Protection Law.

In July 2022, ²⁷²⁴ the PPA presented their interpretation of section 11 of the PPL which enshrines the right information. The PPA's interpretation covers AI-based decision-making systems. In August 2022, ²⁷²⁵ the PPA covered telemedicine (or 'telehealth') services, including AI-based diagnostic services. In August 2022, the PPA issued a detailed report²⁷²⁶ about DeepFake technologies and privacy. According to the PPA, "unauthorized distribution of an image or video forged using the Deepfake technology—which displays degrading or demeaning content relating to a person's private life and could be perceived in public as authentic - constitutes a violation of the Privacy Protection Act."

The PPA has been a member of the Global Privacy Assembly (GPA) since 2009. The PPA has not endorsed the 2018 GPA Declaration on Ethics and Data

²⁷²¹ For criticism, see Dan Or-Hof, *A turning point for privacy laws in Israel*, IAPP (Jan. 26, 2022), https://iapp.org/news/a/a-turning-point-for-privacy-laws-in-israel/

²⁷²² IAPP, *Charting its own path* — *The new reform in Israeli data protection laws* (Aug. 5, 2024), https://iapp.org/news/a/charting-its-own-path-the-new-reform-in-israeli-data-protection-laws

²⁷²³ Privacy Protection Authority, *About the Privacy Protection Authority* (Jul. 24, 2018), https://www.gov.il/en/departments/the privacy protection authority

Privacy Protection Authority, Obligation to notify as part of collection and use of personal information [Hebrew] (Jul. 31, 2022), https://www.gov.il/he/departments/news/duty_to_notify Privacy Protection Authority, Protection of patient privacy in the provision of remote medical services (Aug. 2, 2022),

 $[\]underline{\text{https://www.gov.il/BlobFolder/news/remote}} \underline{\text{medical}} \underline{\text{services/he/remote}} \underline{\text{medical}} \underline{\text{services}} \underline{\text{doc.}} \underline{\text{pdf}}$

Privacy Protection Authority, *Privacy and Data Security in Deepfake Technologies* (Aug. 28, 2022), https://www.gov.il/BlobFolder/reports/31-01-23/en/Deepfake-31.pdf

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Protection in Artificial Intelligence,²⁷²⁷ the 2020 GPA Resolution on AI Accountability,²⁷²⁸ the 2022 GPA Resolution on Facial Recognition Technology²⁷²⁹ or the GPA 2023 Resolution on Artificial Intelligence and Employment.²⁷³⁰ However, it co-sponsored the 2023 GPA Resolution on Generative AI.²⁷³¹

Algorithmic Transparency

In its 2022 interpretation of section 11 of the PPL on the right to information, the PPA clarified that this provision applies to AI-based systems.

The topic of algorithmic transparency had already been raised by the Knesset's Research and Information Center's June 2018 research document that was prepared for the first discussion on the government's readiness for artificial intelligence that month.²⁷³² Since then, algorithmic transparency has regularly been mentioned in policy documents and debates, leading to Decision 212. Algorithmic transparency is also mentioned in the draft policy and regulatory policy.

In November 2022, the press reported that the Israeli Police operates an AI-based profiling system that aims to identify drug smugglers at the airport border. The AI-based system draws data from police and government databases, and outputs names of citizens arriving at the airport. Citizens whose names were outputted by the system, are bodily searched even though there is no prior intelligence information or any other suspicion that they smuggled drugs. According to the journal, the Israeli police refuse to provide details on how the

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 ²⁷²⁷ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922_ICDPPC-40th_AI-Declaration_ADOPTED.pdf
 ²⁷²⁸ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

²⁷²⁹ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

²⁷³⁰ Global Privacy Assembly, *Resolution on Artificial Intelligence and Employment* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/1.-Resolution-on-AI-and-employment-1.pdf

²⁷³¹ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

²⁷³² Knesset's Research and Information Center, *Information about "Artificial Intelligence"* (Jun. 2018), https://fs.knesset.gov.il/globaldocs/MMM/eb0bf048-de5c-e811-80e1-00155d0a9876/2 eb0bf048-de5c-e811-80e1-00155d0a9876 11 10863.pdf

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system is operated and how the algorithm works. As a result, it was argued that courts cannot properly monitor the AI-based system and its decisions, and these searches continue without prior suspicion but only as a result of the opaque algorithm.²⁷³³ In April 2024, UN experts deplored the purported use of artificial intelligence and related military directives by Israel in occupied Gaza leading to an unprecedented toll on the civilian population, housing, vital services, and infrastructure.²⁷³⁴ As a signatory of the Council of Europe Convention, Israel has the obligation to ensure effective oversight mechanisms in the use of artificial intelligence, as stipulated in Article 26 of the document ensuring activities associated with the artificial intelligence systems are fully consistent with human rights, democracy and the rule of law.²⁷³⁵

Medical Data

In 2018, Israel's Prime Minister announced the establishment of a \$300 million initiative to make Israel's large pool of de-identified clinical data available to researchers, entrepreneurs, and medical institutions to develop new treatments and personalized medicine among other goals. "With all records in a common format, AI systems – using machine learning algorithms – will be able to parse the data, seeking correlations in conditions and treatments to discern which treatments are likely to be most effective" said the Director of the Israel Ministry of Health.²⁷³⁶

The initiative currently includes the "Mosaic" (*Psifas*) project, a personalized medicine health project, for creating a national information infrastructure for health research in the field of genetics and medical information. Another project is Timna:²⁷³⁷ a national platform for conducting big data research in health data, intended to serve the research community in the health system, academia and Israeli industry.

In April 2023, the Medical Technologies, Information and Research Division and the Digital Health Division at the Ministry of Health, published

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²⁷³³ Tomer Ganon, *The algorithm that will stop you at the airport*, Calcalist (Nov. 10, 2022), https://newmedia.calcalist.co.il/magazine-10-11-22/m02.html

²⁷³⁴ UN Human Rights Office of the High Commissioner, *Gaza: UN experts deplore use of purported AI to commit 'domicide' in Gaza, call for reparative approach to rebuilding* (Apr. 15, 2024), https://www.ohchr.org/en/press-releases/2024/04/gaza-un-experts-deplore-use-purported-ai-commit-domicide-gaza-call

²⁷³⁵ Council of Europe, *Draft Framework Convention on AI, human rights, democracy and the rule of law* (Mar. 2024), https://search.coe.int/cm?i=0900001680afb11f

²⁷³⁶ Moshe Bar Siman Tov, *How Israel Turned Decades Of Medical Data Into Digital Health Gold,* Forbes (Mar. 26, 2019),

 $[\]frac{https://www.forbes.com/sites/startupnationcentral/2019/03/26/how-israel-turned-decades-of-medical-data-into-digital-health-gold/?sh=1b576d873ee4$

²⁷³⁷Ministry of Health, *Project Timna*, https://govextra.gov.il/ministry-of-health/big-data-research/home/

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guiding principles for the development of machine learning based technologies.²⁷³⁸ These ten guiding principles are intended to facilitate the development and utilization of safe, efficient, and high-quality medical devices incorporating artificial intelligence and machine learning. The principles place particular emphasis on addressing challenges unique to machine learning, including bias prevention, overfitting prevention, transparency, data reliability, privacy, and information security. On 12 July 2024, the Medical Information Mobilization Law, 5784-2024 passed the Health Committee, and the second and third reading in the Knesset will follow. The proposed legislation will give people more control and will allow them to mobilize medical data to health organizations of their choice in a clear and easy way to ensure therapeutic continuity, better diagnosis, and personalized treatment.²⁷³⁹

COVID-19 Tracking Controversy

Beginning with emergency measures taken in March 2020, the Israeli police used mobile-phone location data and AI techniques to attempt to determine whether those in quarantine were indeed staying in quarantine. A month after the tracking was authorized, the parliamentary committee in charge of overseeing the practice halted the mobile phone tracking. The Committee argued that the harm done to privacy outweighed the benefits of the tracking.²⁷⁴⁰

Israel then turned to Shin Bet, the Israeli Security Agency, to monitor the general population and track potential Covid patients and their contacts.²⁷⁴¹ This action was criticized by human rights activists²⁷⁴², as well as medical associations²⁷⁴³.

On 26 April 2020, Israel's Supreme Court banned the intelligence agency from tracing the phone location of those who may be infected with Covid-19, until

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²⁷³⁸ Ministry of Health, *guiding principles for the development of machine learning based technologies* (Apr. 3, 2024) https://www.gov.il/he/Departments/General/digital-medical-technology-gmlp-1

²⁷³⁹ Ministry of Health, *The Medical Information Mobilization Law Passes Today in the Health Committee Ahead of the Second and Third Readings in the Knesset* (Jul. 12, 2024), https://www.gov.il/en/pages/12072024-03

²⁷⁴⁰ Knesset News, Foreign Affairs and Defense Committee suspends bill allowing police to surveil civilian phones to enforce quarantine orders (Apr. 23, 2020), https://main.knesset.gov.il/EN/News/PressReleases/Pages/press23420b.aspx

Jonathan Lis, *Israel Extends Security Service Tracking of Coronavirus Cases for Three More Weeks* (May 27, 2020), https://www.haaretz.com/israel-news/.premium-israel-extends-security-service-tracking-of-coronavirus-cases-for-three-more-weeks-1.8875700

²⁷⁴² Tehilla Shwartz Altshuler, *Israel went too far with the digital fight against Corona*, Ace (Mar. 24, 2020), https://www.ice.co.il/opinions/news/article/778683

²⁷⁴³ Refaella Goichman, *Doctors: Shin Bet Surveillance Harms the Fight against Corona*, The Marker (Mar. 25, 2020), https://www.themarker.com/technation/2020-03-25/ty-article/0000017f-e2f5-d568-ad7f-f3fff0010000

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new laws are passed.²⁷⁴⁴ "The state's choice to use its preventative security service for monitoring those who wish it no harm, without their consent, raises great difficulties and a suitable alternative [...] must be found," the court said.²⁷⁴⁵ The Association for Civil Rights in Israel, one of the groups which brought the court challenge, welcomed the decision, saying: "Israel must not be the sole democracy which operates its secret security service to monitor its citizens, even in the fight against the coronavirus." In July, Israel's parliament voted to allow the country's Internal Security agency to track the contact relations of Israeli cell phone users for the rest of the year amid a resurgence in new cases. Human rights organizations renewed their objections.

In August 2020 it was revealed that only four percent of those sent for isolation by the intelligence system were actually sick²⁷⁴⁹. In a September 2020 opinion, the PPA also objected to the use of the Israeli Internal Security Service location tracking tool.²⁷⁵⁰ The PPA said that the measure cannot be justified, and that use would adversely impact the public's trust in public authorities. The PPA also questioned the effectiveness of the location tracking tool. In January 2021, the government received an automatic extension to the expired law to continue tracking - due to the elections at that time. In March 2021, the Supreme Court clarified that the Knesset is not in charge of supervising the tracking tool or limiting its use. In the same month, elections were also held. The same month, a week after the elections to the 24th Knesset and before its inauguration, the

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²⁷⁴⁴ BBC News, *Coronavirus: Israeli court bans lawless contact tracing* (Apr. 27, 2020), https://www.bbc.com/news/technology-52439145

²⁷⁴⁵ Cardoza Law School, Versa, *Ben Meir v. Prime Minister, HCJ 2109/20* (Apr. 26, 2020), https://versa.cardozo.yu.edu/opinions/ben-meir-v-prime-minister-0

²⁷⁴⁶ Lubell, Maayan, *Israel's top court says government must legislate COVID-19 phone-tracking*, Reuters (Apr. 26, 2020), https://www.reuters.com/article/us-health-coronavirus-israel-monitoring-idUSKCN2280RN

²⁷⁴⁷ Reuters, *Israel approves cellphone tracking of COVID-19 carriers for rest of year* (Jul. 20, 2020), https://www.reuters.com/article/us-health-coronavirus-israel-surveillanc/israel-approves-cellphone-tracking-of-covid-19-carriers-for-rest-of-year-idUSKCN24L2PJ

²⁷⁴⁸ Privacy International, *Israel's coronavirus surveillance is an example for others - of what not to do* (Jul. 21, 2020), https://privacyinternational.org/long-read/3747/israels-coronavirus-surveillance-example-others-what-not-do

²⁷⁴⁹ Idan Binyamin, *A quarter of the corona isolates located by the Shin Bet were released after it became clear that the location was wrong*, Shakuf (Aug. 17, 2020) https://shakuf.co.il/16926? ga=2.32710839.840163551.1625568613-850313679.1619600231

²⁷⁵⁰ Pearl Cohen, Israel: Privacy Protection Authority Objects to Shabak-Run Location Tracking for Coronavirus Epidemiological Investigations (Sep. 1, 2020),

 $[\]frac{https://www.pearlcohen.com/israel-privacy-protection-authority-objects-to-shabak-run-location-tracking-for-coronavirus-epidemiological-investigations/$

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Foreign Affairs and Security Committee refused to continue using the tracking tool.²⁷⁵¹

Social Ranking

Following a proposal to use scoring technologies for Israelis who may be infected with COVID-19, in April 2020, the PPA also published a review on the use of technologies for the social ranking of citizens to achieve social and governmental goals, and the impact of this on the right to privacy. ²⁷⁵² The April 2020 review indicated that social ranking systems have increased in an era of Big Data and are present, in Israel, in forms such as the credit data rating system or a potential future AI-based system aimed to rate an individual's likelihood of contracting COVID-19. Specifically, the review outlined that such a system, which would process location, medical, and personal data, would constitute a serious violation of the privacy of citizens and should be avoided as far as possible and, where it cannot be avoided, it must be compliant with data protection law. These findings further translate into Israel's global rank AI capacities ranking seventh among 62 nations in The Global Artificial Intelligence Index in 2023, as reported by Statista. This places it between South Korea and Germany, which ranked sixth and eighth, respectively. Between 2021 and 2023, Israel dropped two positions in the index ranking. This reflected a deterioration in the country's relative global position in AI capacities.²⁷⁵³

Facial Recognition

Facial recognition in Israel is implemented in border control and Israel has a biometric database of face photos and fingerprints of citizens and residents, as well as foreigners accessing Israel. A biometric database was enacted in law in 2009.²⁷⁵⁴ The law provides the basis for the Israeli national ID-Card. The database includes biometric face-photos, and voluntary supplied fingerprints. According to the biometric database law, the information can be used for severe crime enforcement, and for state security tasks. In May 2020, the Israeli State Comptroller reported that the data of about 4.5 million Israeli drivers' licenses, including facial pictures, are not sufficiently protected from misuse or outside hacking. Various public reports have documented Israel's use of facial recognition

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²⁷⁵¹ Idan Binyamin, *Without our noticing: the use of the Shin Bet tool was finally stopped*, Shakuf (Jul. 8, 2021), https://shakuf.co.il/22303

²⁷⁵²The Privacy Protection Authority, *Social rating in the light of the right to privacy:* background review regarding the use of social rating systems (Apr. 22, 2020), https://www.gov.il/he/departments/publications/reports/social ranking

²⁷⁵³ Statista, *Global Artificial Intelligence (AI) Index ranking of Israel from 2020 to 2023* (Sept. 16, 2024), https://www.statista.com/statistics/1489828/israel-global-artificial-intelligence-index-ranking/

²⁷⁵⁴ Wikipedia, *Biometric Database Law*, https://en.wikipedia.org/wiki/Biometric Database Law

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in Gaza, including the Israeli security forces' extensive gathering of Palestinian biometric data without consent and using facial recognition to build a large database for mass surveillance. The facial recognition program, which is run by Israel's military intelligence unit, including the cyber-intelligence division Unit 8200, relies on technology from Corsight, a private Israeli company that also uses Google Photos to allow Israel to pick faces out of crowds and grainy drone footage. 2755

Still, Israel's military has invested tens of millions of dollars to upgrade West Bank checkpoints with AnyVision facial recognition technology to verify Palestinian workers' identities and ease their entry into Israel. The new system, which began rolling out late 2018, drew criticism about the role the controversial technology plays in Israel's military control over Palestinians.²⁷⁵⁶

Microsoft, which was part of a group that had invested \$74 million in AnyVision, hired a team of lawyers to audit the Israeli firm and determine whether AnyVision's technology applications complied with Microsoft's ethical principles against using facial recognition for mass surveillance. In March 2020, Microsoft said it was pulling investments from AnyVision although the outcomes of the audit did not substantiate claims that the startup's technology was used unethically. ²⁷⁵⁷

In 2021, the Washington Post released further information on the program.²⁷⁵⁸ The initiative involves a smartphone technology called Blue Wolf that captures photos of Palestinians' faces and matches them to an image database. The phone app flashes in different colors to alert soldiers if a person is to be detained, arrested or left alone. To create the database, in 2020 soldiers photographed Palestinians, including children and the elderly. The total number of people photographed is unclear. The Israeli military has also installed face-scanning cameras in the divided city of Hebron to assist soldiers at checkpoints to identify Palestinians before they present their ID cards. A wider network of closed-circuit television cameras provides real-time monitoring of the population and can sometimes see into private homes.

protected-comptroller-says-626847

2756 Daniel Estrin, Face Recognition Lets Palestinians Cross Israeli Checkposts Fast, But Raises Concerns (Aug. 22, 2019), https://www.npr.org/2019/08/22/752765606/face-recognition-lets-palestinians-cross-israeli-checkposts-fast-but-raises-conc

The Jerusalem Post, 4.5 million citizens' details insufficiently protected, comptroller says (May 4, 2020), https://www.jpost.com/Israel-News/45-million-citizens-details-insufficiently-

²⁷⁵⁷ Matt O'Brien, *Microsoft divests from Israeli facial-recognition startup* (March 28, 2020), https://www.timesofisrael.com/microsoft-divests-from-israeli-facial-recognition-startup/ ²⁷⁵⁸ Washington Post, *Israel escalates surveillance of Palestinians with facial recognition program in West Bank* (Nov. 27, 2021),

https://www.washingtonpost.com/world/middle_east/israel-palestinians-surveillance-facial-recognition/2021/11/05/3787bf42-26b2-11ec-8739-5cb6aba30a30_story.html

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A new security tool was also under development: body cameras with facial recognition technology to enable police to scan crowds and detect suspects in real time, even if their faces are obscured.²⁷⁵⁹ In April 2022, the then minister of justice Gideon Sa'ar opposed the police initiative to operate facial recognition cameras in public spaces.²⁷⁶⁰ In February 2023, the issues of using a biometric photo system were removed from the draft law, which regards the police and the "Special Photographic Systems."²⁷⁶¹

Environmental Impact of Al

Israel's National AI Program provides a clear direction for promoting sustainability. The section under responsible innovation highlights the government's strategy for promoting growth, sustainable development, and Israeli leadership in innovation. It further promotes the public sector use of AI to unlock the potential of AI technologies, highlighting societal benefits such as bridging equality divides, improving health, education, mobility and employment, and enhancing environmental sustainability.²⁷⁶² In addition, Israel participated and adopted the UN General Assembly Resolution on 'Seizing the opportunities of safe, secure, and trustworthy artificial intelligence systems for sustainable development,' which, among others, promotes the access to and design, development, deployment, and use of safe, secure and trustworthy artificial intelligence systems to achieve sustainable development in its three dimensions – economic, social and environmental.²⁷⁶³ In November 2024, the Knesset's Technology Committee discussed the impact of AI on Israel's electricity usage, with experts raising concerns over Israel's capability to cope with an increasing electricity demand arising from the AI revolution, which is expected to add approximately 500 megawatts in the next years, equivalent to the consumption of

https://www.gov.il/he/departments/policies/dec138-2023

²⁷⁵⁹ France24, *Israeli firm develops body cams with facial recognition* (Jan. 23, 2022) https://www.france24.com/en/live-news/20220123-israeli-firm-develops-body-cams-with-facial-recognition

²⁷⁶⁰ Tal Shahaf, *The Minister of Justice delayed the draft law that would allow the police to perform facial recognition of citizens in the public space*, Tech12 (Apr. 10, 2022), https://www.tech12.co.il/index-technology first/Article-9ea17fa02f31081026.htm

²⁷⁶¹ The Prime Minister's Office, *Draft Law to Amend the Police Ordinance (No.) (Special Photographic Systems)*, 2022 (Feb. 19, 2020)

²⁷⁶² Ministry of Innovation, Science and Technology, *Israel AI National Program 2024* (Dec. 18, 2023), https://www.gov.il/BlobFolder/news/most-

news20231218/he/Israel%20National%20AI%20Program%202024.pdf

²⁷⁶³ United Nations General Assembly, *Seizing the opportunities of safe, secure and trustworthy artificial intelligence systems for sustainable development* (Mar. 11, 2024), http://www.undocs.org/A/78/L.49

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half a million people. The committee called the government to develop a policy, and a report from the Energy Ministry is expected within six months.²⁷⁶⁴

Al and Warfare

Israel is a High Contracting Party to the UN's Convention on Certain Conventional Weapons (CCW) protocol and as such has presented objections to the distinctions accorded to lethal autonomous weapons systems (LAWS), and the accompanying calls for prohibition. Israel's representatives to the UN maintain that humans must always be accountable for error and human rights abuses, regardless of the weapons technology.²⁷⁶⁵ Israel is known to be at the forefront of developing lethal autonomous weapons, including both the Iron Dome defense system²⁷⁶⁶ and the Harop suicide drone.²⁷⁶⁷ The Israeli mission to the GGE on LAWS of the Convention on Certain Conventional Weapons clarified Israel's position in August 2019.²⁷⁶⁸ In August 2020, Israel expressed further views on the Eleven Guiding Principles Adopted by the Group of Government Experts concerning lethal autonomous weapons systems. Israel's view is that "the law of armed conflict, or international humanitarian law (IHL), applies to the potential development and use of emerging technologies in the area of LAWS; that human judgment will always be an integral part of any process regarding emerging technologies in the area of LAWS, and will be applied during their life-cycle; and that humans will always be responsible for the use of LAWS." Moreover, in Israel's view, "besides the potential risks that may be associated with LAWS, there are also operational advantages to the use of LAWS as well as clear advantages from the humanitarian perspective."2769

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²⁷⁶⁴ Jerusalem Post, *Expensive intelligence: AI boom drives up power demand, Israel unready* (Nov. 12, 2024), https://www.jpost.com/brandblend/expensive-intelligence-ai-boom-drives-up-power-demand-israel-unready-828719

²⁷⁶⁵ Liran Antebi, *The International Process to Limit Autonomous Weapon Systems: Significance for Israel - Strategic Assessment 21.3* (2018), https://strategicassessment.inss.org.il/wp-content/uploads/antq/fe-2542125832.pdf

²⁷⁶⁶ Yaniv Kubovich, *Israel Deploys Iron Dome Amid Islamic Jihad Leader's Assassination Anniversary*, Haaretz (Nov. 11, 2020), https://www.haaretz.com/israel-news/israel-iron-dome-gaza-islamic-jihad-leader-s-assassination-hamas-1.9303330

²⁷⁶⁷ The Week India, *Why Indian Army is eyeing a mini 'suicide drone' from Israel* (July 14, 2020), https://www.theweek.in/news/india/2020/07/14/why-indian-army-is-eyeing-a-mini-suicide-drone-from-israel.html

²⁷⁶⁸ GGE of the High Contracting Parties to the Convention on Prohibitions or Restrictions on the Use of CCW Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, *Draft Report of the 2019 session of the Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems* (Aug. 21, 2019) (Annex IV) https://documents.unoda.org/wp-content/uploads/2020/09/CCW GGE.1 2019 3 E.pdf https://documents.unoda.org/wp-content/uploads/2020/09/CCW GGE.1 2019 3 E.pdf https://documents.unoda.org/wp-content/uploads/2020/09/CCW GGE.1 2019 3 E.pdf

²⁷⁶⁹ Permanent Mission of Israel to the UN, *Israel Considerations on the Operationalization of the Eleven Guiding Principles Adopted by the Group of Governmental Experts* (Aug. 31, 2020), https://documents.unoda.org/wp-content/uploads/2020/09/20200831-Israel.pdf

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At the 78th UN General Assembly First Committee in 2023, Israel abstained from voting on resolution L.56 on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. Despite abstaining from voting, Israel contributed to the Secretary-General Report.²⁷⁷⁰

According to New York Times, Israel used an AI-equipped, remotely operated gun to kill an Iranian nuclear scientist.²⁷⁷¹ The Israeli system used AI to correct for more than a second and a half of input delay, allowing the system's operator to fire the gun at a moving target while stationed more than 1,000 miles away.

In a statement released by the Israel Defense Forces on November 2, 2023, the unit revealed its deployment of an AI target-creation platform called Habsora (the Gospel, in English) in the Gaza-Israel conflict.²⁷⁷² The system leverages AI to generate targets at a fast pace using an algorithm that extracts intelligence data from a wide range of sources, and proposes target recommendations to researchers, which are presumably approved by human authorities.

On December 10, 2023, the Association for Civil Rights in Israel, sent a legal correspondence²⁷⁷³ to the Chief Military Prosecutor requesting an assessment of the system and its utilization of AI in determining attack targets, while evaluating its compliance with both Israeli and international legal obligations. The association also sought clarification on potential biases that could result in erroneous targeting, posing risks to innocent civilians. In addition to the legal correspondence, the association filed a freedom of information request²⁷⁷⁴ regarding the use of the system.²⁷⁷⁵ The freedom of information request is a right

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²⁷⁷⁰ Ibid

²⁷⁷¹ New York Times, *The Scientist and the A.I.-Assisted, Remote-Control Killing Machine* (Sep. 23, 2021), https://www.nytimes.com/2021/09/18/world/middleeast/iran-nuclear-fakhrizadeh-assassination-israel.html

²⁷⁷² Israel Defense Forces, *The war diary, A glimpse of the IDF's target factory that operates around the clock* (Nov. 2, 2023), https://www.idf.il/144833

²⁷⁷³ Association for Civil Rights in Israel, *The 'Gospel' system* (Dec. 10, 2023), https://01368b10-57e4-4138-acc3-

<u>01373134d221.usrfiles.com/ugd/01368b</u> d495b1431da24106abcee50a53ad9527.pdf

²⁷⁷⁴ Association for Civil Rights in Israel, *Request for information regarding the 'Habsora'* system (Dec. 10, 2023), <a href="https://oliobeth.org/https://oliobethh.org/https://oliobethh.org/https://oliobethh.org/ht

⁰¹³⁷³¹³⁴d221.usrfiles.com/ugd/01368b_b471f9fa38174dd7bf642129fca42eb3.pdf

²⁷⁷⁵ Association for Civil Rights in Israel, *Examining the use of "The Gospel" System, Used to Propose Targets for Military Attacks* (Dec. 9, 2023)

https://www.english.acri.org.il/post/examining-the-use-of-the-hasbara-system-used-to-propose-targets-for-military-attacks

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emanating from the Freedom of Information Law of 1998, which grants Israeli citizens, residents, and registered corporations, the legal right to access government agency records, except those exempted by law.

The request aimed to unveil all pertinent information about the Habsora system that could be shared with the public. The association sought documents outlining the ethical rules governing the system's usage, as well as information regarding the associated operational procedures. Questions regarding the predictive capabilities of the algorithm and the level of accuracy achieved by the system were also raised. Further inquiries involved obtaining information on the system's transparency to operators, protocols for handling system failures, the extent of human oversight available to operators, and the traceability of system operations. The association further requested details on how the system's activity could be explained to affected parties and sought information about any external audits conducted on the system and the decisions made based on these audits. According to news reports by the Guardian, Israel's bombing campaign in Gaza has used an AI-powered database system called Lavender to identify up to 37,000 potential targets based on their apparent links to Hamas.²⁷⁷⁶

In September 2024, the UN published the Report of the Special Committee to Investigate Israeli Practices Affecting the Human Rights of the Palestinian People and Other Arabs of the Occupied Territories, under which it expressly raised concerns about the reliance on the artificial intelligence-assisted targeting that accelerates decision-making to such an extent that soldiers authorize strikes in a matter of seconds, resulting in an indiscriminate loss of life, which violates international humanitarian law.²⁷⁷⁷

Along with the United States, United Kingdom, Australia and China, Israel was among the nations which attended the Paris AI Action Summit in February 2025 yet abstained from endorsing the Paris Declaration on Maintaining Human Control in AI-Enabled Weapons. ²⁷⁷⁸

Human Rights

Israel is a signatory to many international human rights treaties and conventions and ranks "Free," receiving a combined score of 74/100 from Freedom House. The ranking reflects the nation's institutions adhering to a respect

²⁷⁷⁶ The Guardian, *The Machine Did it Coldly* (Apr. 3, 2024),

https://www.theguardian.com/world/2024/apr/03/israel-gaza-ai-database-hamas-airstrikes
²⁷⁷⁷ United Nations, *A/79/363: Report of the Special Committee to Investigate Israeli Practices Affecting the Human Rights of the Palestinian People and Other Arabs of the Occupied Territories* (Sept. 20, 2024), https://www.ohchr.org/en/documents/thematic-reports/a79363-report-special-committee-investigate-israeli-practices-affecting

²⁷⁷⁸ The Elysée House, *Paris Declaration on Maintaining Human Control in AI-Enabled Weapons* (Feb 11, 2025), https://www.elysee.fr/emmanuel-macron/2025/02/11/paris-declaration-on-maintaining-human-control-in-ai-enabled-weapon-systems

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for political rights and civil liberties. This score represents a decline of three digits compared to the country's 2023 score. Freedom House explained the decline in part with the proposed amendments in January 2023 to "reduce the judiciary's ability to block government actions and legislation" and the increased number of "Palestinians held in Israeli prisons—including those held without charge in administrative detention [...] after Hamas's attack and during the ensuing Israeli military operations in Gaza and the West Bank." ²⁷⁸¹

Freedom House ranks the Gaza Strip and West Bank separately from Israel. The 2024 Freedom in the World report classifies Gaza as "Not Free" with a score of 8/100²⁷⁸² and the West Bank as "Not Free" with a score of 22/100.²⁷⁸³

Al Safety Summit

In November 2023, Israel participated in the first AI Safety Summit and endorsed the Bletchley Declaration.²⁷⁸⁴ Israel thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible." Israel did not participate at the AI Seoul Summit, which was held in May 2024.²⁷⁸⁵ Israel did participate in the Paris AI Action Summit in February 2025; however, as noted, along with the United States, United Kingdom, Australia and China, was among the nations that

²⁷⁷⁹ Freedom House, *Freedom in the World 2024: Israel (2024)*, https://freedomhouse.org/country/israel/freedom-world/2024

²⁷⁸⁰ The Guardian, *Israel Supreme Court Strikes Down Netanyahu's Judicial Overhaul Law* (Jan. 2, 2024), https://www.theguardian.com/world/2024/jan/01/israel-supreme-court-strikes-down-netanyahus-judicial-overhaul-law

²⁷⁸¹ Freedom House, *Freedom in the World 2024: Israel* (2024), https://freedomhouse.org/country/israel/freedom-world/2024

²⁷⁸² Freedom Hosue, *Freedom in the World 2024: Gaza Strip* (2024),

https://freedomhouse.org/country/gaza-strip/freedom-world/2024

²⁷⁸³ Freedom House, *Freedom in the World 2024: West Bank* (2024), https://freedomhouse.org/country/west-bank/freedom-world/2024

²⁷⁸⁴ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, Prime Minister's Office, *The Bletchley Declaration by Countries Attending the AI Safety Summit* (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

²⁷⁸⁵ UK Department for Science, Innovation & Technology, *Seoul Declaration for safe*, *innovative*, *and inclusive AI by participants attending the Leaders' Session: AI Seoul Summit* (May 21, 2024), https://www.gov.uk/government/publications/seoul-declaration-for-safe-innovative-and-inclusive-ai-ai-seoul-summit-2024/seoul-declaration-for-safe-innovative-and-inclusive-ai-by-participants-attending-the-leaders-session-ai-seoul-summit-21-may-2024

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abstained from endorsing The Paris Declaration on Maintaining Human Control in AI-Enabled Weapons. ²⁷⁸⁶

OECD / G20 AI Principles

Israel has endorsed the OECD AI Principles. Israeli Government Decision 212²⁷⁸⁷ from August 2021 instructs lawmakers to consider, among other things, the OECD principles as part of the promotion of the national policy in the field of AI. The draft AI regulatory and ethical policy reiterates it.

In November 2021, Israel joined the Global Partnership on Artificial Intelligence in recognition of its advanced artificial intelligence technologies and its adherence to the values of equality and democracy promoted by the OECD. 2788 Israel's National AI Program references a risk-based approach to AI regulation compatible with the OECD Trustworthy Principles, weighing potential risks and benefits within specific use cases. All Global Partnership on Artificial Intelligence (GPAI) Members reached a consensus in July 2024 on the future of GPAI and signed the New Delhi Ministerial Declaration. The Declaration formalized a new integrated partnership with the OECD and the commitment to strengthen synergies between GPAI and OECD for the advancement of human-centric, safe, secure and trustworthy AI is emphasized. 2789

Council of Europe Convention on Al

Israel also contributed as a Council of Europe and EU Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of law. The Committee on AI approved the Draft Framework Convention during its 10th Plenary session in March 2024. On 17 May 2024, The Council of Europe adopted the Framework Convention, which is open for signature by the member States and the non-member States since 05 September 2024. Israel signed the Framework Convention on the same day.²⁷⁹⁰ Under the

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https://www.gov.il/he/departments/policies/dec212 2021

group#ixzz7K2VqCY5k

²⁷⁸⁶ The Elysée House, *Paris Declaration on Maintaining Human Control in AI-Enabled Weapons* (Feb 11, 2025), https://www.elysee.fr/emmanuel-macron/2025/02/11/paris-declaration-on-maintaining-human-control-in-ai-enabled-weapon-systems

²⁷⁸⁷ Office of the Prime Minister, *Decision 212* (Aug. 2021),

²⁷⁸⁸ Al-Monitor, Israel joins international artificial intelligence group: Israel was added today to the Global Partnership on Artificial Intelligence, joining 19 an alliance of technologically advanced democratic countries (Nov. 11, 2021), https://www.al-monitor.com/originals/2021/11/israel-joins-international-artificial-intelligence-

²⁷⁸⁹ Ministry of Science, Innovation and Technology, *Global Partnership on Artificial Intelligence (GPAI) – 2024 mid-year Ministerial Declaration-New Delhi* (Jul. 10, 2024), https://www.gov.il/he/pages/gpai mid 2024 new delhi

²⁷⁹⁰ Council of Europe, *Chart of Signatures and Ratifications of Treaty 225* (Dec. 31, 2024), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

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signed Convention, activities throughout the AI lifecycle must comply with fundamental principles, including human dignity, equality, respect for privacy, transparency, accountability, and reliability.²⁷⁹¹

UNESCO Recommendation on AI Ethics

Israel is not a member of UNESCO and did not endorse the UNESCO Recommendations on the Ethics of AI. Israel also has not taken any affirmative action to implement the UNESCO Readiness Assessment Methodology (RAM).²⁷⁹²

Evaluation

Israel benefits from a well-established legal regime for data protection but has thus far adopted a different approach to its AI policy, privileging soft regulation and self-regulation. While Israel has long been a leader in AI research and development, the government is still slowly developing its AI policy. The use of an AI-based tracking system for sensitive medical conditions by the internal security agency is of concern. Also troubling is the use of facial recognition technology without clear legal basis. Israel's reluctance to endorse limits on lethal autonomous weapons is particularly problematic in view of the Gaza-Israel conflict. Of critical concern has been the deployment of an AI platform, the Lavender system, in targeting military strikes. Red lines and safeguards with respect to the use of AI in warfare are urgently needed.

Italy

In 2024, Italy released an updated National AI Strategy to guide AI legislation and progressed on implementing the EU AI Act. As the presidency of the G7, Italy oversaw the launch of the G7 Toolkit for AI in the Public Sector. The country also became party to the Council of Europe AI Treaty through the EU signature.

National AI Strategy

In July 2020, the Italian Ministry of Economic Development (MISE) published the Proposals for a National Strategy for Artificial Intelligence drafted by the MISE AI Expert Group.²⁷⁹³ The final Proposals are the result of a public

²⁷⁹¹ Ibid

²⁷⁹² UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

²⁷⁹³ Italian Ministry of Economic Development, *Proposte per una strategia nazionale per l'intelligenza artificiale* (Jul. 2020),

https://www.mise.gov.it/images/stories/documenti/Proposte per una Strategia italiana AI.pdf

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consultation organized in 2019 on an initial set of proposals²⁷⁹⁴, and a background paper providing initial guiding principles and policy recommendations.²⁷⁹⁵ The final Proposals provide 82 recommendations for developing an Italian strategy.

In the introduction to these recommendations, the group of experts in charge of the drafting of the Proposals explains that: "[i]n a global context dominated by the increasing, and often blind rivalry between the United States and China, the European Union has gradually carved for itself a role of defender of the responsible use of technology based on an approach which considers AI as a means and not an end in itself. Working together toward the formulation of public policies is also necessary in the context of the multilevel governance of the EU. Since 2018, the European Commission has played a key role in defining the "European Coordinated Plan on Artificial Intelligence." Ensued, for each EU Member State, the obligation to define a national AI strategy and send it to Brussels. The Italian Government (the Ministry of Economic Development) has followed an approach similar to that of the Commission, by appointing in January 2019 a group of 30 experts, which here presents the results of its work in the shape of proposals for a national AI strategy." 2796

According to the group of experts, Italy has to contribute to defining a European AI strategy and to developing a national strategy that takes into account Italian specificities. Italy should thus take AI as an opportunity to inaugurate a new "RenAIssance." "Just as the Renaissance in the middle of the Fourteenth Century signals a new way of understanding the world, with a focus on human beings and their needs, impulses and sufferings, Renaissance in the digital era could be inspired by the need to define a new relationship between human beings and machines, whereby technology increases human capabilities and becomes a key instrument in drafting a new social contract, oriented towards sustainable development. In this sense, Italy should position itself as the defender of AI for good, so not as an end in itself, but as desirable to the extent that it can contribute to the well-being of human beings and to sustainable development in economic, social, and environmental context. The possibility of a new RenAIssance underlines all the Proposals. This approach is far from idealist: to consider the issue of the development of AI from the perspective of the future of work,

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²⁷⁹⁴ Italian Ministry of Economic Development, *Strategia Nazionale per l'Intelligenza Artificiale* (Bozza per la consultazione) (Jul. 2019),

https://www.mise.gov.it/images/stories/documenti/Strategia-Nazionale-Intelligenza-Artificiale-Bozza-Consultazione.pdf

²⁷⁹⁵ Italian Ministry of Economic Development, *Proposte per una strategia italiana per l'intelligenza artificiale. Gruppo di Esperti MISE sull'intelligenza artificiale* (Jul. 2019), https://www.mise.gov.it/images/stories/documenti/Proposte-per-una-strategia-italiana-2019.pdf
²⁷⁹⁶ Italian Ministry of Economic Development, *Proposte per una strategia nazionale per l'intelligenza artificiale*, p. 5 (Jul. 2020) (translated from Italian), https://www.mise.gov.it/images/stories/documenti/Proposte per una Strategia italiana AI.pdf

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interpersonal relationships as well as social and environmental governance constitutes a Copernican revolution compared to the traditional approach oriented towards industrial competitiveness which nonetheless plays a central role in the sustainability of our economy."²⁷⁹⁷

The Group of experts calls for a human-centric approach to AI based on three pillars driving the development of technologies and policies:

- AI for human beings. The first pillar concerns the individual and the relationship with "the machine." AI technologies must be at the service of people, guaranteeing human supervision, preventing social and territorial imbalances deriving from unaware and inappropriate uses. It is about defining and implementing initiatives related to safety, public administration, health and medicine, education, new skills, policies for work and digital humanities, media and the cultural and creative industry.
- AI for a reliable, productive and sustainable digital ecosystem. The second pillar includes industrial policies for the manufacturing sector (Industry 4.0). AI must be designed and implemented in a reliable and transparent way, so that it can be adopted in any productive area. This concerns the promotion of robotics and autonomous systems, software, data processing, internet of things, finance, pharmaceuticals, and biotech.
- AI for sustainable development. The third pillar focuses on sustainability. AI technologies must generate opportunities of growth and well-being for all individuals, in line with the principles contained in Article 3 of Italian Constitution and the United Nations Sustainable Development Goals. This pillar includes actions related to environmental protection and sustainable infrastructures such as smart cities, transport, agriculture, and space.

In November 2021, the Italian government issued a national AI strategy entitled: the Strategic Programme on Artificial Intelligence 2022–2024.²⁷⁹⁸ The Strategic Programme was jointly developed by the MISE, the Ministry of Education, University and Research and the Ministry of Technological Innovation and Digital Transition.

The Strategic Programme recognizes that the Italian AI ecosystem has vast potential, yet not fully exploited. The current Italian context and international position call for a national AI strategy characterised by the need to build on the positive elements of its ecosystem while focusing on reforms and investments on specific areas of weakness. To that end, the Strategic Programme identifies 5 guiding principles: "Italy's AI is a European AI; Italy will be a global research and

²⁷⁹⁷ Italian Government, jointly developed by the Ministry of Education, University and Research, the Ministry of Economic Development, and the Minister of Technological Innovation and Digital Transition, *Strategic Programme on Artificial Intelligence 2022-2024* (2021), p. 8, https://assets.innovazione.gov.it/1637777513-strategic-program-aiweb.pdf

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innovation hub for AI; Italy's AI will be human centred, trustworthy and sustainable; Italian companies will become leaders of AI based research, development and innovation; Italy's public administrations will govern with AI and will govern AI". ²⁷⁹⁹

On the basis of these guiding principles, the Strategic Programme defines "6 objectives: the goals of the Italian strategy" among which: "Develop and adopt human-centred and trustworthy AI; Increase AI-based innovation and the development of AI technology; Develop AI-driven policies and services in the public sector." ²⁸⁰¹

The Strategic Programme also defines "11 priority sectors where Italy intends to focus investments²⁸⁰² as well as 3 areas of intervention: how the country aims to achieve the stated objectives."²⁸⁰³ These are: "Talent and Skills, Research; Applications" with a view to mobilize AI "for more competitive enterprises" and "for a more modern public administration."²⁸⁰⁴ In these 3 areas of interventions, the Strategic Programme indicates 24 policy initiatives deemed "fundamental for Italy to retain technological competitiveness at the international level, connect the excellent results of research with the needs of industry and address the key challenges of Italian society going forward."²⁸⁰⁵

The Italian government approved a draft AI law outlining a national strategy addressing the societal, regulatory, privacy, and economic impacts of AI in April 2-24.2806 As of November 2024, the draft is under parliamentary review and has not yet been adopted.2807 The law aims to promote the opportunities of AI to enhance citizens' quality of life while ensuring risk management based on a human-centric approach. It follows a dual approach: promoting transparent and

²⁷⁹⁹ Italian Government, jointly developed by the Ministry of Education, University and Research, the Ministry of Economic Development, and the Minister of Technological Innovation and Digital Transition, *Strategic Programme on Artificial Intelligence 2022–2024* (2021), https://assets.innovazione.gov.it/1637777513-strategic-program-aiweb.pdf

²⁸⁰⁰ Ibid, p. 2

²⁸⁰¹ Ibid, p. 20

²⁸⁰² Ibid

²⁸⁰³ Ibid, p. 2

²⁸⁰⁴ Ibid, p. 20

²⁸⁰⁵ Ibid

²⁸⁰⁶ Italian Senate (Senato della Republica), Draft AI Bill, *Disposizioni e delega al Governo in materia di intelligenza artificiale*, *Legislatura 19^a - Disegno di legge n. 1146* (Oct. 2024), https://www.senato.it/japp/bgt/showdoc/19/DDLPRES/0/1418921/index.html?part=ddlpres_ddlpres1-articolato_articolato1

²⁸⁰⁷ Italian Senate (Senato della Republica), *Atto Senato n. 1146* (Nov. 2024), https://www.senato.it/leg/19/BGT/Schede/Ddliter/58262.htm

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responsible AI use within an anthropocentric framework while supervising potential economic, social, and fundamental rights impacts.²⁸⁰⁸

The draft builds on general principles rooted in fundamental rights, such as explainability, fairness, accuracy, non-discrimination, and data protection. It aims to complement, not overlap with, the EU AI Act, making it the first national legislation designed to align with this broader regulatory framework. A sector-specific approach is applied, with tailored rules for health, work, justice, and public administration. The draft law also establishes a dual national oversight authority for AI. Lastly, the draft addresses sustainability, stipulating that AI must support democratic processes, boost productivity, and contribute to social welfare.

In July 2024, the Agenzia per l'Italia Digitale (AgiD) and the Department for Digital Transformation of the Council of Ministers issued a national AI policy entitled Italian Strategy for Artificial Intelligence for 2024–2026.²⁸⁰⁹ The policy was drafted by a committee of fourteen experts to assist the government in shaping national legislation and policy. According to the AgiD, the strategy "reflects the government's commitment to creating an environment in which AI can develop in a safe, ethical and inclusive manner, maximizing benefits and minimizing potential adverse effects."²⁸¹⁰

This Strategy helps contextualize the draft AI law and supports the government's vision. The updated AI strategy accounts for recent shifts in the technological landscape since 2021, including the rise of generative AI systems and foundational models. The Strategy delves into four strategic macro-areas: (i) research, (ii) public administration, (iii) enterprises, and (iv) education.

The strategic macro-areas rely on the development of two key enabling factors: fostering the access to national knowledge assets including datasets and models and reinforcing the network infrastructures for AI. To ensure successful implementation, the Strategy includes a monitoring and implementation framework with coordination and oversight mechanisms, performance metrics, and a commitment to continuous improvement.

Digital Italy 2026

As part of the Next Generation EU, the European Union's landmark instrument for recovery from the coronavirus pandemic, Italy's Department for Digital Transformation has introduced a digital strategy which aims to meet the

 $\underline{https://www.senato.it/japp/bgt/showdoc/19/DDLPRES/0/1418921/index.html?part=ddlpres_ddlpres1-relpres_relpres1}$

²⁸¹⁰ Ibid

²⁸⁰⁸ Italian Senate (Senato della Republica), Legislative Report, *Relazione Legislatura 19^a-Disegno di legge n. 1146* (Apr. 2024),

²⁸⁰⁹ Agency for Digital Italy (Agenzia per l'Italia Digitale), News, *The Italian Strategy for Artificial Intelligence 2024–2026* (Jul. 2024), https://www.agid.gov.it/en/news/the-italian-strategy-for-artificial-intelligence

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digital objectives and initiatives identified in its National Recovery and Resilience Plan (PNRR).²⁸¹¹ Digital Italy 2026 identifies several priority investment areas among which Data and interoperability; Digital services and digital citizenship; Digitization of public administrations; and Basic digital competency. Digital Italy 2026 is complemented by an Operational Plan that details its lines of action and provides key targets for 2025.²⁸¹²

Digital Italy 2026 is devised according to three-year goals that assign deadlines for each investment area and reform axis. These largely aim to adhere to the European Commission's 2030 Digital Compass.²⁸¹³ By 2026, Italy will aim to have:

- 70% of the population using digital ID
- 75% of the population achieving basic digital competency
- 75% of public services operating on the cloud
- 80% of essential public services available online
- 100% of families having broadband access.

Public Participation

The Proposals for a National Strategy for Artificial Intelligence drafted by the MISE AI Expert Group in July 2020 followed a 2019 consultation on an initial set of proposals.²⁸¹⁴ The Expert Group was comprised of ten representatives of enterprises operating in the field of AI, ten representatives of research centers / think tanks or academia, and ten representatives of the labor market, professions, consumers and civil society.²⁸¹⁵

A 2020 survey of Italian consumers by BEUC, the European Consumer organization, found substantial public concern about the deployment of AI.²⁸¹⁶ More than half of the respondents disagreed or strongly disagreed that current regulation is adequate to efficiently regulate AI. Over 70% of respondents in Italy

See MITD, *Italia Digital 2026: Risultati 2021-2022 e Azioni Per 2023–2026* (2022), https://assets.innovazione.gov.it/1665677773-italia-digitale-2026.pdf

2812 AGID, Strategia per l'innovazione tecnologica e la digitalizzazione del Paese 2025 (2022), https://docs.italia.it/italia/mid/piano-nazionale-innovazione-2025-docs/it/stabile/index.html

European Commission, *Europe's Digital Decade: digital targets for 2030* (2022), https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030 en

 $\frac{https://www.mise.gov.it/images/stories/documenti/Strategia-Nazionale-Intelligenza-Artificiale-Bozza-Consultazione.pdf}{}$

²⁸¹⁴ Italian Ministry of Economic Development, *Strategia Nazionale per l'Intelligenza Artificiale* (*Bozza per la consultazione*) (Jul. 2019),

²⁸¹⁵ At pp. 14-15. https://www.mcit.gov.sa/sites/default/files/examples-of-ai-national-policies.pdf
²⁸¹⁶ BEUC, Artificial Intelligence: what consumers say – Finding and policy recommendations of a multi-country survey on AI (2020), https://www.beuc.eu/publications/beuc-x-2020-078 artificial intelligence what consumers say report.pdf

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"strongly agreed that users should be able to say 'no' to automated decisionmaking." More than half "(strongly) agreed that companies use AI to manipulate consumer decisions."

The Italian Strategy for Artificial Intelligence for 2024-2026 stems from the event "Artificial Intelligence for Italy" held in Rome on March 12, 2024, opened to representatives of public administrations, companies in the ICT and innovation sector, as well as to academia and research.²⁸¹⁷

EU Digital Services Act

As an EU member state, Italy shall apply the EU Digital Services Act (DSA).²⁸¹⁸ The DSA regulates online intermediaries and platforms. Its main objective is to prevent illegal and harmful activities online and the spread of disinformation. The DSA bans targeted advertising based on a person's sexual orientation, religion, ethnicity, or political beliefs and targeted advertising to minors based on profiling.

Signatories also commit to the 2022 Strengthened Code of Practice on Disinformation, ²⁸¹⁹ which counts as a mitigation measure under the DSA. The Code of Practice requires companies to act in several domains, such as demonetizing the dissemination of disinformation; ensuring the transparency of political advertising; empowering users; enhancing the cooperation with factcheckers; and providing researchers with better access to data.

EU AI Act

The EU AI Act entered into force on August 1, 2024. As an EU member State, Italy is bound by the EU AI Act. 2820 The EU AI Act is a risk-based market regulation which supports the objective of promoting a human-centric approach to

https://www.europarl.europa.eu/RegData/seance pleniere/textes adoptes/definitif/2024/03-13/0138/P9 TA(2024)0138 EN.pdf

²⁸¹⁷ Agency for Digital Italy (Agenzia per l'Italia Digitale) and the Department for Digital Transformation of the Council of Ministers (Dipartimento per la Trasformazione digitale) "L'intelligenza artificiale per l'Italia" (Jun. 2024), https://www.agid.gov.it/it/agenzia/stampa-ecomunicazione/notizie/2024/03/06/lintelligenza-artificiale-litalia

²⁸¹⁸ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act) (Oct. 21, 2022), https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=celex%3A32022R2065

²⁸¹⁹ European Commission, The 2022 Code of Practice on Disinformation, https://digitalstrategy.ec.europa.eu/en/policies/code-practice-disinformation

²⁸²⁰ European Parliament, Artificial Intelligence Act, European Parliament legislative resolution of 13 March 2024 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts (COM(2021)0206 - C9-0146/2021 -2021/0106(COD)), P9 TA(2024)0138,

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AI and making the EU a global leader in the development of secure, trustworthy and ethical AI.

Data Protection

Since Italy is an EU Member State, the General Data Protection Regulation (GDPR)²⁸²¹ is directly applicable in Italy and to Italians. The aim of the GDPR is to "strengthen individuals' fundamental rights in the digital age and facilitate business by clarifying rules for companies and public bodies in the digital single market."²⁸²² The GDPR entered into force in May 2016 and applies since May 2018.

Italy's adaptation to the GDPR is implemented through the Italian Data Protection Code, with recent updates through Italian Decree Law No. 139 of October 8, 2021. This decree amends the Personal Data Protection Code to align more closely with GDPR principles, specifically authorizing public administrations and publicly controlled companies to process personal data for tasks in the public interest or within public powers. After parliamentary approval, the decree became law on December 7, 2021, as published in the Official Gazette. ²⁸²³

Italy transposed the EU Data Protection Law Enforcement Directive (LED)²⁸²⁴ in 2018,²⁸²⁵ thereby protecting "citizens' fundamental right to data protection whenever personal data is used by criminal law enforcement authorities

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²⁸²¹ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, https://eur-lex.europa.eu/EN/legal-content/summary/general-data-protection-regulation-gdpr.html

²⁸²² European Commission, *Data protection in the EU*, https://commission.europa.eu/law/law-topic/data-protection/data-protection-eu en

²⁸²³ Italian Personal Data Protection Code, *Decreto Legge n. 139*, *Amendments to the Personal Data Protection Code* (Oct. 8, 2021), https://registrodelleopposizioni.it/wp-content/uploads/2022/07/ITALIAN PERSONAL DATA PROTECTION CODE.pdf

²⁸²⁴ Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

²⁸²⁵ Attuazione della direttiva UE 2016/680 del Parlamento Europeo e del Consiglio, del 27.4.2016, relativa alla protezione delle persone fisiche con riguardo al trattamento dei dati personali da parte delle autorità competenti ai fini di prevenzione, indagine, accertamento e perseguimento di reati o esecuzione di sanzioni penali, nonché alla libera circolazione di tali dati e che abroga la decisione quadro 2008/977/GAI del Consiglio, Gazzetta Ufficiale della Repubblica Italiana, (May 24, 2018).

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for law enforcement purposes."²⁸²⁶ The LED provides for the prohibition of any decision based solely on automated processing, unless it is provided by law, and of profiling that results in discrimination.²⁸²⁷

Italy is also a member of the Council of Europe and ratified the Council of Europe's Convention 108+ for the protection of individuals with regard to the processing of personal data.²⁸²⁸

Al Oversight

The Italian Data Protection Authority (DPA) "is an independent administrative authority established by the so-called privacy law (Law No. 675 of 31 December 1996) and regulated subsequently by the Personal Data Protection Code (Legislative Decree No. 196 of 30 June 2003) as amended by Legislative Decree No. 101 of 10 August 2018, which also established that the Italian DPA is the supervisory authority responsible for monitoring application of the General Data Protection Regulation (pursuant to Article 51 of Regulation No. 2016/679)."²⁸²⁹ The DPA has direct sanctioning powers as well as extended enforcement capabilities.

In January 2021, an Italian court determined that an algorithm that evaluates employee performance violates labor law.²⁸³⁰ The case concerned the ranking algorithm of the food delivery service Deliveroo. The judge ruled that the algorithm unfairly assessed absent workers noting that it failed to take account of permissible reasons for absence. The court ordered the company to pay a fine and legal costs and to post the judgment.²⁸³¹

In October 2021, the DPA banned remote surveillance of customer care employees for lack of respect of essential safeguards enshrined in the GDPR.²⁸³²

²⁸²⁷ Article 11 (1) and (2) of the LED, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

²⁸³⁰ Forbes, *Deliveroo Rating Algorithm Was Unfair To Riders, Italian Court Rules* (Jan. 5, 2021), https://www.forbes.com/sites/jonathankeane/2021/01/05/italian-court-finds-deliveroo-rating-algorithm-was-unfair-to-riders/?sh=34eb0a9e22a1

²⁸³¹ Tribunale Orinario di Bologna, *Nella causa iscrittal al n. r.g. 2949/2019 contro Deliveroo Italia SRI* (Dec. 31, 2020), http://www.bollettinoadapt.it/wp-content/uploads/2021/01/Ordinanza-Bologna.pdf

²⁸³² European Data Protection Board, *Italian SA bans remote surveillance of customer care employees* (Oct. 28, 2021), https://edpb.europa.eu/news/national-news/2021/italian-sa-bans-remote-surveillance-customer-care-employees_en

²⁸²⁶ European Commission, *Data protection in the EU*, https://commission.europa.eu/law/law-topic/data-protection/data-protection-eu en

²⁸²⁸ Council of Europe, *Modernised Convention for the Protection of Individuals with Regard to the Processing of Personal Data* (May 18, 2018) https://www.coe.int/en/web/data-protection/convention108-and-protocol

²⁸²⁹ Garante per la Protezione dei Dati Personali, *Home*, https://www.garanteprivacy.it/web/garante-privacy-en

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The case originated from a complaint by an employee of a public transports operator, which concerned the processing of personal data relating to the company's call centre operators by way of the inbound calls management system. "The investigations by the Italian SA showed that the employees had not been informed adequately about the processing, and that the system in question allowed recording and replaying phone calls as well as storing, for an unspecified period, additional information on the individual operators' activities such as call duration, called numbers, date and time of each call. Since the software allowed the remote surveillance of workers, its deployment was to be made conditional on the enhanced safeguards set out in this respect by national law pursuant to Article 88 GDPR – namely, either an ad-hoc agreement with trade unions or an authorisation by the competent inspectorate for labour." The DPA fined the company EUR 30,000 taking also account of the cooperation provided in the course of the fact-finding activities; the company had immediately discontinued the processing following the on-site inspection.

The Italian DPA issued a letter to the Italian Parliament in March 2024 emphasizing the importance of a single, independent AI authority for oversight.²⁸³⁴ The European Data Protection Board and the European Data Protection Supervisor have previously recommended that data protection authorities would be the most logical choice for this role, given the close relationship between AI and data protection.

The proposed legislation on AI currently under review by parliamentary committees includes the establishment of a dedicated national oversight authority for AI, as required by the EU AI Act, to ensure effective regulation and oversight. ²⁸³⁵ Currently, Italy's DPA ensures compliance with ethical AI standards and safeguards individual rights. However, the draft AI bill may alter this evaluation, as it designates both AgiD and the National Cybersecurity Agency as the national authorities for AI, in line with Article 70 of the EU AI Act, to ensure the proper implementation of national and European regulations. The final decision on which authority will be appointed rests with Parliament. Additionally, Member States have until August 2, 2025, to designate an oversight authority, as mandated by the EU AI Act.

²⁸³³ Ibid

²⁸³⁴ Garante per la Protezione dei Dati Personali, *Report to Parliament and Government on the AI Authority* (Mar. 25, 2024), https://www.garanteprivacy.it/web/guest/home/docweb/-/docweb-display/docweb/9996493#english

²⁸³⁵ Italian Senate (Senato della Republica), Draft AI Bill, *Disposizioni e delega al Governo in materia di intelligenza artificiale*, *Legislatura 19^a Disegno di legge n. 1146* (Oct. 2024) https://www.senato.it/japp/bgt/showdoc/19/DDLPRES/0/1418921/index.html?part=ddlpres_ddlpres1-articolato-articolato-1

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Italy has actively participated in the Global Privacy Assembly (GPA) negotiations, adopting the following resolutions: the Declaration on Ethics and Data Protection in Artificial Intelligence (2018),²⁸³⁶ the Resolution on AI Accountability (2020),²⁸³⁷ the Resolution on Generative AI (2023), and the Resolution on Artificial Intelligence and Employment (2023).²⁸³⁸ However, Italy did not endorse the Resolution on Facial Recognition Technology (2020).²⁸³⁹ This reflects ongoing efforts to ensure that ethical guidelines and accountability mechanisms are established across various AI domains.

Algorithmic Transparency

Italy is subject to the GDPR and Convention 108+. Italians have a general right to obtain access to information about automated decision-making and to the factors and logic of an algorithm.²⁸⁴⁰ The Council of Europe Committee of Ministers stresses that these include transparency levels proportionate to the risk of the systems or decisions and meaningful contestation.²⁸⁴¹

As for the public sector, in its 2018 White Paper on Artificial Intelligence at the service of citizens, ²⁸⁴² the Agency for Digital Italy stressed the necessity for the functioning of AI systems to abide by criteria of transparency and openness. "Transparency is a fundamental prerequisite to avoid discrimination and solve the

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²⁸³⁶ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

²⁸³⁷ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

²⁸³⁸ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

²⁸³⁹ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology (Oct. 2022)*, https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

²⁸⁴⁰ See Recital 63 and Article 22 of the GDPR. Article 9 c) of the Convention 108+ as well as Recital 77, *Explanatory Report*, *Convention 108*+, p. 24, https://rm.coe.int/convention-108-convention-for-the-protection-of-individuals-with-regar/16808b36f1

²⁸⁴¹ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020),

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

²⁸⁴² Agency for Digital Italy, White Paper on Artificial Intelligence at the service of citizens (2018), https://ia.italia.it/assets/librobianco.pdf

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problem of informational asymmetry, thus guaranteeing for citizens the right to understand public decisions."2843

In May 2021, the Italian Court of Cassation released its judgment in Garante per la Protezione dei Dati Personali v. Associazione Mevaluate Onlu.²⁸⁴⁴ The case concerned the Italian DPA's 2016 order to Mevaluate Italia s.r.l. to suspend the implementation of its online Artificial Intelligence system capable of analyzing documents voluntarily uploaded by users to provide reputational ratings. The Court of Cassation quashed the previous ruling of the Court of Rome, which had opined in favour of the lawfulness of the system as data subjects had provided their consent. The Court of Cassation found that the lack of transparency regarding Mevaluate's algorithms invalidates such consent, thus violating Article 8 of the EU Charter of Fundamental Rights, the GDPR and a series of articles of Legislative Decree No. 196 of 2003. It was further found that consent can only be valid if the data subject is appropriately informed about the purposes of processing and freely and specifically expresses their consent to the same. Consent cannot be considered as informed, if the logic involved in the algorithm remains unknown to the data subjects, as it was the case in Mevaluate reputational ranking system.

In July 2021, the DPA issued a 2.6 million Euros penalty to the on-demand delivery company Foodinho.²⁸⁴⁵ The DPA identified some irregularities concerning the algorithm used by the company to rate drivers' performance. The DPA found that the controller had not adequately informed employees regarding the way the system worked and did not guarantee the accuracy and correctness of the results of the algorithms used to evaluate drivers. No information was provided regarding "significant information about the logic used as well as the importance and the consequences of such treatment of personal data by the riders."2846 One of the issues of concern was the risk of discrimination arising from the algorithmic system and of relevance has been the decision of the Court of Cassation, a discussed above.

In February 2023, the DPA imposed a provisional limitation on the processing of Italian users' data by the US-based company that has developed and

²⁸⁴³ Ibid, p. 41

²⁸⁴⁴ Data Guidance, Italy: Court of Cassation rules that algorithm must be transparent for consent to be valid (May 25, 2021), https://www.dataguidance.com/news/italy-court-cassationrules-algorithm-must-be For the judgment (in Italian) see

http://www.italgiure.giustizia.it/xway/application/nif/clean/hc.dll?verbo=attach&db=snciv&id=./ 20210525/snciv@s10@a2021@n14381@tO.clean.pdf

²⁸⁴⁵ IAPP, Italian DPA fines food delivery app 2.6M euros for GDPR violations (Jul. 6, 2021), https://iapp.org/news/b/italian-dpa-fines-food-delivery-app-3m-euros-for-gdpr-violations ²⁸⁴⁶ Garante per la Protezione dei Dati Personali, Ordinanza ingiunzione nei confronti di Foodinho s.r.l. (June 10, 2021), https://www.gpdp.it/web/guest/home/docweb/-/docwebdisplay/docweb/9675440

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operates an App called Replika. The App features an AI-powered chatbot that generates a virtual friend using text and video interfaces. The App "carries factual risks to children." For example, they receive replies that are absolutely inappropriate to their age.²⁸⁴⁷ The App does not provide any age verification mechanism. According to the DPA, the App is in breach of the GDPR. The service provider's "privacy policy is not to be regarded as compliant with the transparency principles and obligations set out in the Regulation as it fails to disclose whatever information on the key elements of the processing at issue, in particular on the use of children's personal data, which is in breach of Article 13 of the Regulation."²⁸⁴⁸ The personal data of children are processed unlawfully "since performance of a contract cannot be invoked as a legal basis, even implicitly, given that children are incapable to enter into a valid contract under Italian law."²⁸⁴⁹

Investigations on OpenAl

In March 2023, the Italian Data Protection Authority temporarily banned ChatGPT in Italy due to concerns over privacy violations and the lack of an ageverification system, marking the first instance of a data protection authority blocking the chatbot. The DPA cited a data breach and required OpenAI to provide additional information, with potential fines looming. Access to OpenAI's platforms, including ChatGPT, was restored in April 2023, with the company guaranteeing more transparency and more rights for European users and nonusers. However, based on the outcome of its fact-finding activity, the Italian DPA concluded that the available evidence pointed to the existence of breaches of the provisions contained in the EU GDPR. OpenAI had 30 days to submit its counterclaims concerning the alleged breaches. The Italian DPA stated that it will also take account of the work in progress within the EDPB ad-hoc task force in its final determination on the case.²⁸⁵⁰

In March 2024, the Italian DPA initiated an investigation into OpenAI's new AI model, Sora, due to concerns over the processing of personal data in the EU, particularly in Italy. The inquiry demands that OpenAI provide detailed

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²⁸⁴⁷ Garante per la Protezione dei Dati Personali, *Artificial intelligence: Italian SA clamps down on 'Replika' chatbot. Too many risks to children and emotionally vulnerable individuals* (Feb. 2, 2023), https://www.garanteprivacy.it/web/guest/home/docweb/-/docweb-display/docweb/9852506

²⁸⁴⁸ Garante per la Protezione dei Dati Personali, *Provvedimento del 2 febbraio 2023* (English version), https://www.garanteprivacy.it/home/docweb/-/docweb-display/docweb/9852214
²⁸⁴⁹ Garante per la Protezione dei Dati Personali, *Artificial intelligence: Italian SA clamps down on 'Replika' chatbot. Too many risks to children and emotionally vulnerable individuals* (Feb. 2, 2023), <a href="https://www.garanteprivacy.it/web/guest/home/docweb/-/docweb-d

²⁸⁵⁰ Garante per la protezione dei dati personali, *ChatGPT: Italian DPA notifies breaches of privacy law to OpenAI* (Jan. 29, 2024), https://gpdp.it/home/docweb/-/docweb-display/docweb/9978020#english

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information within 20 days about Sora's training process, the data it processes and collects, the handling of sensitive personal data, and the sources of this data. Additionally, Italy's DPA seeks to understand if and how Sora will be offered in the EU, including the methods for informing users and non-users about data processing procedures and the legal bases for the processing.²⁸⁵¹

Facial Recognition

According to Privacy International, the municipality of Como, Italy, purchased a facial recognition system "with little transparency and despite the lack of a clear legal framework."²⁸⁵² Privacy International reported that Como "embraced a narrative of technological innovation pushed by Huawei" within the broader concept of smart city and innovation tech, but after the intervention of the Italian Data Protection Authority (DPA), the municipality was obliged to suspend the system. The DPA determined that there was no legal basis to collect facial images. Subsequent reporting by Wired indicated that the municipality had changed vendors and that the system installed most recently failed to work as proposed.²⁸⁵³

The Italian National Police intended to use a facial recognition system, called SARI Real-Time which would allow for real-time identification of migrants on boats upon their landing on Italian ports. The SARI Real-Time system, originally purchased to be employed during protests and public events, was discontinued following a decision by the DPA, who ruled in April 2021 that the system could open the doors to unjustified mass surveillance and that there was no legal basis to deploy it.²⁸⁵⁴ The DPA "in line with the stance taken by the

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²⁸⁵¹ Garante per la protezione dei dati personali, *Artificial intelligence: the Italian Data Protection Authority opens an investigation into OpenAI's 'Sora' - OpenAI asked to provide information on the algorithm that creates short videos from text instructions* (Mar. 8, 2024), https://gpdp.it/web/guest/home/docweb/-docweb-display/docweb/9991867

²⁸⁵² Privacy International, *How facial recognition is spreading in Italy: the case of Como* (Sept. 17, 2020), https://privacyinternational.org/case-study/4166/how-facial-recognition-spreading-italy-case-como

²⁸⁵³ Laura Carrer, The Municipality of Como has discovered that his facial recognition system is not what he had bought: The testing of the video surveillance system with facial recognition revealed inconsistencies and discrepancies with the tender specifications (Sept. 28, 2020), https://www.wired.it/attualita/tech/2020/09/28/como-riconoscimento-facciale-collaudo/

²⁸⁵⁴ Italian National Data Protection Authority, Facial recognition: The SARI Real Time system is not compliant with privacy laws (Apr. 16, 2021),

https://www.garanteprivacy.it/web/guest/home/docweb/-/docweb-display/docweb/9575842;
Laura Carrer and Riccardo Coluccini, Hermes Center for Transparency and Digital Human
Rights, Technologies for Border Surveillance and Control in Italy. Identification, Facial
Recognition, and European Union Funding,

https://www.documentcloud.org/documents/21200979-technologies-for-border-surveillance-and-control-in-italy-identification-facial-recognition-and-european-union-funding?responsive=1&title=1

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Council of Europe" considered "that the use of facial recognition for the purposes of preventing and suppressing crime is highly problematic." ²⁸⁵⁵

In December 2021, the Italian parliament introduced a moratorium on video surveillance systems that use facial recognition technologies. This law introduces a temporary ban for private entities as well as public authorities to use these systems in public places or places accessible to the public.²⁸⁵⁶ The moratorium, originally set to last until December 31, 2023, has been updated to reflect evolving legislative developments surrounding facial recognition technologies.

According to EDRi, this is an important development, yet the moratorium contains major exceptions: "it only covers video surveillance systems with facial recognition, it doesn't take into account systems such as those developed by Clearview AI." The "moratorium allows the police to use such systems subject to a case-by-case approval by the DPA and it exempts judicial authorities and public prosecutors from any control." EDRi also remarked that "[u]ntil now, the Italian DPA had stopped the use of real-time facial recognition systems and remote biometric identification systems by the police and municipalities because Italy lacked a legal basis for the processing of biometric data by law enforcement authorities. Now this moratorium provides a legal basis and risks normalising the use of these technologies during police activities in the field of public security and for investigation and crime prosecution activities." 2858

In March 2022, the DPA issued a 20 million euro fine on Clearview AI,²⁸⁵⁹ a private firm that offers an identity matching service for law enforcement, reportedly powered by a database of around 10 billion faces made up by selfies scraped off the internet. The DPA fined Clearview AI "after finding it applied what amounted to biometric monitoring techniques also to individuals in the Italian territory."²⁸⁶⁰ Italy issued the fine citing unlawful processing "without an

²⁸⁵⁵ Garante per la Protezione dei Dati Personali, *Facial recognition: the SARI Real Time system is not compliant with privacy laws* (Apr. 6, 2021),

https://www.garanteprivacy.it/web/guest/home/docweb/-/docweb-display/docweb/9575842

²⁸⁵⁶ European Digital Rights, *Italy introduces a moratorium on video surveillance systems that use facial recognition* (Dec. 15, 2021), https://edri.org/our-work/italy-introduces-a-moratorium-on-video-surveillance-systems-that-use-facial-recognition/

²⁸⁵⁷ Ibid

²⁸⁵⁸ Ibid

²⁸⁵⁹ Garante per la Protezione dei Dati Personali, *Riconoscimento facciale: il Garante privacy sanziona Cleariew per 20 milioni di euro. Vietato l'uso dei dayi biometrici e il montoraggio degli italiani* (2022), https://www.garanteprivacy.it/home/docweb/-/docweb-display/docweb/9751323, https://edpb.europa.eu/news/national-news/2022/facial-recognition-italian-sa-fines-clearview-ai-eur-20-million_en

²⁸⁶⁰ Garante per la Protezione dei Dati Personali, *Facial recognition: Italian SA fines Clearview AI eur 20 million Bans use of biometric data and monitoring of Italian data subjects* (Mar. 9, 2022), https://www.garanteprivacy.it/home/docweb/-/docweb-display/docweb/9751323

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appropriate legal basis" and "infringements of several fundamental principles including transparency—as it failed to adequately inform users—, purpose limitation—as it processed users' data for purposes other than those for which they had been made available online—, and storage limitation—as it did not set out any data storage period. Thus, Clearview AI is violating data subjects' freedoms including the protection of privacy and non-discrimination."²⁸⁶¹ The DPA also "ordered the company to erase the data relating to individuals in Italy; it banned any further collection and processing of the data through the company's facial recognition system. Clearview AI was finally ordered by the Italian SA to designate a representative in the EU to be addressed in addition to or instead of the US-based controller in order to facilitate exercise of data subject rights."²⁸⁶²

AlgorithmWatch reported in 2020 that Italy was exploring the use of facial recognition in football stadiums.²⁸⁶³ In December 2022, Serie A CEO Luigi De Siervo announced that Italian league officials are working on a system of facial recognition technology to be used inside the stadiums to identify fans responsible for racist chants. According to De Servio: "We're still awaiting authorisation from privacy authorities but we should be able to get that with the help of the government."²⁸⁶⁴

In March 2024, the DPA issued a warning to Worldcoin, a private firm with a project based on iris scanning to verify the identity of users and linking this treatment to the market of financial instruments, in this specific case the cryptocurrency called "WLD." The DPA considers that the processing of biometric data based on the consent of the project members doesn't provide for sufficient information about the risks associated with the processing of such high-risk data. In addition, the promise to receive free WLD tokens from Worldcoin once the user gives its consent to the processing of biometric data via iris scanning negatively affects the ability to give free consent. Therefore, the DPA deems that it cannot be considered a valid legal basis to collect biometric data according to the requirements under the GDPR.²⁸⁶⁵

In June 2024, the DPA issued a 120 thousand euro fine on a dealership for violating the personal data of employees through the use of facial recognition

²⁸⁶² Ibid

²⁸⁶¹ Ibid

²⁸⁶³ AlgorithmWatch, *In Italy, an appetite for face recognition in football stadiums* (Sept. 16, 2020), https://algorithmwatch.org/en/story/italy-stadium-face-recognition/

All Football, *Serie A to tackle racism in Italy with facial recognition* (Dec. 17, 2022), https://m.allfootballapp.com/news/Serie-A/Serie-A-to-tackle-racism-in-Italy-with-facial-recognition/2136489

²⁸⁶⁵ Italian Data Protection Authority (Garante per la Protezione dei Dati Personali), *Provvedimento del 21 marzo 2024* (Mar. 21, 2024),

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systems to control work presence, following up on a complaint issued in 2021. With reference to the processing of biometric data, the DPA reiterated that the use of such data is not allowed because there is no national legal provision that currently provides for the use of biometric data for the recording of attendance. In addition, in an employment relationship, consent cannot be considered as a valid legal basis due to the unbalanced nature of this relationship. Finally, the DPA pointed out that this processing violated also the principle of data minimization, necessity, and proportionality.

Al Literacy

The development and implementation of AI technologies firmly depend on skills and competences. The Government has already shown its intention to strengthen the provision of AI competencies at all education levels. At the primary and secondary education level, the government has launched the National Plan for the Digital School (PNSD) to update school curricula and promote new skills in digital education and AI-related courses. At higher education levels, the government is encouraging the integration of courses with AI-related themes in bachelors, masters and doctoral programs. The planned budget also aims to support projects among PhDs, researchers, and professors. Literacy campaigns will also be fostered via broadcasting and multimedia. Special attention will be devoted to informing about fake news and issues of cyber security.

In September 2022, to support the evolution and implementation of the PNSD in view of recent technological changes and the development of digital learning following the COVID-19 pandemic,²⁸⁶⁸ the Ministry of Education established a scientific and technical Committee. The Committee of experts oversees strategic paths to meet the growing demand for digital skills.²⁸⁶⁹

In line with UNESCO principle of awareness and literacy, and its policy area for education²⁸⁷⁰ through the Italian Strategy for Artificial Intelligence for 2024–2026, Italy aims to promote high-quality AI education at all levels. The first goal is to encourage the widespread development of AI courses at the university

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https://www.garanteprivacy.it/home/docweb/-/docweb-display/docweb/10029500 Ministry of Education, *Piano Nazionale Scuola Digitale* (2015),

https://www.istruzione.it/scuola digitale/allegati/Materiali/pnsd-layout-30.10-WEB.pdf

²⁸⁶⁹ Minsitry of Education, *Decreto Dipartimentale n.2227 del 22 settembre 2022*,

https://www.miur.gov.it/web/guest/-/decreto-dipartimentale-n-2227-del-22-settembre-2022

²⁸⁷⁰ UNESCO, *Recommandation on the Ethics of Artificial Intelligence* (2021), https://unesdoc.unesco.org/ark:/48223/pf0000380455

²⁸⁶⁶ Italian Data Protection Authority (Garante per la Protezione dei Dati Personali), *Provvedimento del 6 giugno 2024 [10029500]* (Jun. 6, 2024),

²⁸⁶⁸ Ministry of Education, *Piano nazionale per la scuola digitale (PNSD)*, oggi il primo incontro del Comitato tecnico scientifico (Oct. 11, 2022), https://www.miur.gov.it/web/guest/-/piano-nazionale-per-la-scuola-digitale-pnsd-oggi-il-primo-incontro-del-comitato-tecnico-scientifico

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level, accounting for the ethical aspects of AI. The second goal is to train highly skilled researchers at the PhD level, strengthening the national PhD in AI. To avoid a knowledge gap that could undermine social and economic cohesion, the third goal is to develop general AI and digital literacy skills for all Italian citizens by introducing AI at the school level. This Strategy also includes specific upskilling and reskilling programs for businesses and the public administration.²⁸⁷¹

EdTech and Children Tracking

In November 2020, the Council of Europe Consultative Committee of the Convention 108 issued Guidelines on Children's Data Protection in an Education Setting, also applicable to remote e-learning solutions and services. The Committee recalls that "[t]he UN Convention Committee on the Rights of the Child set out in 2001, that "Education must be provided in a way that respects the inherent dignity of the child and enables the child to express his or her views freely.""2873

In May 2022, the WeSchool app, with an estimated 1,000,000 users in Italy, was analyzed as part of a global investigative report conducted by Human Rights Watch on the education technology (EdTech) endorsed by 49 governments, including Italy, for children's education during the pandemic. Human Rights Watch found that Italy's endorsement of this online learning platform put at risk or directly violated children's rights.

EdTech products, such as WeSchool, sent children's data to AdTech companies that specialize in behavioral advertising or whose algorithms determine what children see online. According to Human Rights Watch, in line with child data protection principles as well as corporations' human rights responsibilities outlined in the United Nations Guiding Principles on Business and Human Rights, EdTech and AdTech companies should not collect and process children's data for advertising. The report noted that companies should work with governments to define clear retention and deletion rules for children's data collected during the pandemic. Furthermore, governments should develop, refine, and enforce modern

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²⁸⁷¹ Agency for Digital Italy (Agenzia per l'Italia Digitale) and the Department for Digital Transformation of the Council of Ministers (Dipartimento per la Trasformazione digitale), *The Italian Strategy for Artificial Intelligence 2024–2026*, p.29-34 (Jul. 2024), https://www.agid.gov.it/sites/agid/files/2024-07/Italian_strategy_for_artificial_intelligence_2024-2026.pdf

²⁸⁷² Council of Europe Consultative Committee of the Convention for the Protection of individuals with regard to automatic processing of personal data (Convention 108), *Guidelines on Children's Data Protection in an Education Setting* (Nov. 20, 2020), https://rm.coe.int/t-pd-2019-6bisrev5-eng-guidelines-education-setting-plenary-clean-2790/1680a07f2b

²⁸⁷³ Council of Europe Consultative Committee of the Convention for the Protection of individuals with regard to automatic processing of personal data (Convention 108), *Guidelines on Children's Data Protection in an Education Setting* (Nov. 20, 2020), p. 3, https://rm.coe.int/t-pd-2019-6bisrev5-eng-guidelines-education-setting-plenary-clean-2790/1680a07f2b

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child data protection laws and standards, and ensure that children who want to learn are not compelled to give up their other rights in order to do so.²⁸⁷⁴

The National AI Strategy launched in 2024, in alignment with UNESCO Recommendations on AI Literacy, highlights the necessity of providing high-quality education that addresses the challenges posed by artificial intelligence. The strategy emphasizes interdisciplinary collaboration in higher education, addressing significant ethical concerns, and promoting educational pathways accessible to both schools and the general public. It underscores the urgent need for reskilling and upskilling initiatives to prepare various sectors for the impending AI transformation.²⁸⁷⁵

In this regard, the Education Minister announced that AI-assisted software will be trialed in 15 classrooms across four regions, serving as virtual assistants to enhance the learning experience for students and support teachers in customizing education to meet individual needs. This pilot program not only aims to improve digital literacy but also seeks to promote a more informed and responsible citizenry.²⁸⁷⁶

Use of AI in Public Administration

In 2018, the Agency for Digital Italy issued a White Paper on Artificial Intelligence at the service of citizens.²⁸⁷⁷ The objective is to give an important impulse to innovation in the public sector. The White Paper defines a plan to facilitate the adoption of AI technologies in the Italian Public Administration and improve the quality of public services. Artificial intelligence technologies can be implemented in healthcare, education, security, urban management. The White Paper includes a set of recommendations defining the challenges for developing and implementing AI technologies in the public sector. The White paper defines nine challenges:

• The ethical challenge: the anthropocentric vision on artificial intelligence technologies leads to looking at AI technologies as at the service of humans. In this case, it is important to ensure that these technologies meet universal

²⁸⁷⁴ Human Rights Watch, *How Dare They Peep into My Private Life* (May 25, 2022), https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rights-violations-governments

²⁸⁷⁵ Agency for Digital Italy (Agenzia per l'Italia Digitale), "AgID Publishes the Italian National AI Strategy for 2024-2026" (Jul. 2024), https://www.agid.gov.it/en/news/the-italian-strategy-for-artificial-intelligence

²⁸⁷⁶ Reuters, *Italy Tests AI-Assisted Teaching in Schools to Boost IT Skills* (Sept. 13, 2024), https://www.reuters.com/technology/italy-tests-ai-assisted-teaching-schools-boost-it-skills-2024-09-13/

²⁸⁷⁷ Agency for Digital Italy, *White Paper on Artificial Intelligence at the service of citizens*, https://www.agid.gov.it/en/agenzia/stampa-e-comunicazione/notizie/2018/04/19/english-version-white-paper-artificial-intelligence-service-citizen-its-now-online

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needs. The characteristics of AI technologies leads to raising questions concerning the quality of data, transparency, and accountability, as well as the protection of rights and freedoms. This step is critical in the public sector to ensure transparency and the respect of individuals' rights and freedoms.

- The technological challenge: AI technologies cannot still replicate the functioning of the human mind. There is interest in improving and implementing these technologies to make the work of the Public Administration more effective.
- The skills challenge: citizens increasingly deal with digital technologies. Therefore, it is critical they understand how the Public Administration implements and uses artificial intelligence technologies to make decisions or provide public services. Civil servants need to constantly improve their skills to ensure they can effectively be aware of the opportunities and challenges of the implementation of AI technologies in the public sector.
- The data challenge: data quality is one of the primary issues when implementing artificial intelligence technologies. Open data of public bodies can provide important information that would be very useful to generate applications of artificial intelligence at the service of the citizens. Therefore, it is critical to ensure equal and non-discriminatory access to public data.
- The legal challenge: in the field of AI technologies, it is necessary to reconcile the principle of transparency of administrative acts and procedures with the protection of privacy and personal data. A second issue of transparency concerns intellectual property rights over algorithms. Moreover, when the public administration implements a decision-making process, it is necessary to deal with accountability.
- The implementation challenge: training public employees, particularly officials and managers, on the functioning, benefits, as well as ethical and technical implications of the use of AI technologies is critical to ensure the development of the public sector.
- The inequalities challenge: AI solutions can reduce social inequalities in the field of education and training, health and disability, knowledge, and human rights. However, AI technologies can also increase inequalities like in the case of biased outputs. Therefore, the Public Administration should focus on implementing these technologies ensuring inclusiveness, accessibility, transparency, and non-discrimination.
- The measurement challenge: The implementation of new technologies impacts on citizens and institutions. The Public Administration does not always have the instruments to measure these effects. However, the introduction of AI technologies in the public sector can provide more information while requiring an impact assessment.

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• The human being challenge: citizens and institutions should be aware of the effects of automated systems. Artificial intelligence systems are not only a matter of technology but also social innovation.

The Minister of Technological Innovation and Digitization and Fondazione Leonardo have signed a Memorandum of Understanding to shape the framework and boundaries for AI adoption in Public Administration.²⁸⁷⁸

In 2024, the Agenzia per l'Italia Digitale - Agency for Digital Italy (AgID) introduced the Three-Year Plan for Information Technology in Public Administration 2024-2026, strengthening the guiding principles for digital transformation and, for the first time, offering detailed guidelines for AI adoption. Developed in collaboration with universities, private sector, and public associations, the plan emphasizes interoperability, accessibility, and the use of open-source software to prevent technological lock-in and reduce costs. The plan sets a target for at least 125 public administrations to adopt open-source software by 2025, promoting efficiency and fostering a community for technological solution-sharing.²⁸⁷⁹

Moreover, the Italian Presidency's Department for Digital Transformation, under the G7's Digital & Technology Working Group, has coordinated the release of the G7 Toolkit for Artificial Intelligence in the Public Sector which was developed in partnership with the OECD and UNESCO. This toolkit aims to align AI policies across G7 member countries, promoting ethical standards of transparency, accountability, and social impact in public sector AI applications. It provides practical insights and shares best practices for the use of AI by public administrations, while integrating ethical considerations and showcasing G7 trends as a reference for the responsible and secure application of AI in the development of public policies.²⁸⁸⁰

Environmental Impact of AI

The concept of sustainability in AI policy is articulated by several international frameworks that Italy has endorsed. According to the OECD AI principles and UNESCO Recommendation, sustainable AI is understood as AI that can be leveraged for social good and can substantially contribute to achieving the Sustainable Development Goals (SDGs) by the United Nations Agenda 2030, as

²⁸⁷⁸ OECD, Examples of National AI National Policies, pp. 61-62 (2020),

https://www.mcit.gov.sa/sites/default/files/examples-of-ai-national-policies.pdf

²⁸⁷⁹ Agency for Digital Italy (Agenzia per l'Italia Digitale), "*AgiD published the 2024-2026 Three-Year Plan for Information Technology in Public Administration*" (Feb. 13, 2024), https://www.agid.gov.it/en/agenzia/stampa-e-comunicazione/notizie/2024/02/13/published-2024-2026-three-year-plan-information-technology-public-administration

²⁸⁸⁰ OECD, *G7 Toolkit for Artificial Intelligence in the Public Sector*, OECD Publishing, (Oct. 15, 2024) https://www.oecd.org/en/publications/g7-toolkit-for-artificial-intelligence-in-the-public-sector 421c1244-en.html

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defined by its member states in 2015.²⁸⁸¹ According to the UNESCO Recommendation, "the advent of AI technologies can either benefit sustainability objectives or hinder their realization, depending on how they are applied across countries with varying levels of development."²⁸⁸² As a signatory to these frameworks, Italy is expected to align its national AI policies with sustainability principles.

As an EU member state, Italy is bound by the EU AI Act. ²⁸⁸³ In article 1, environmental protection is mentioned as one of the purposes of the EU AI Act. Moreover, Article 40 requires the European Commission to request that standardization bodies develop guidelines for improving the resource efficiency of high-risk AI systems. Under article 95, the AI Office and the Member States shall facilitate the drawing up of codes of conduct concerning the voluntary application for "assessing and minimizing the impact of AI systems on environmental sustainability, including as regards energy-efficient programming and techniques for the efficient design, training and use of AI."

In addition, as part of the National AI Strategy for 2024–2026, Italy presents sustainability as one of the goals to achieve in its general vision as AI can be "an ally in enhancing the quality of life for individuals and the sustainable management of resources, optimizing the use of energy and raw materials". ²⁸⁸⁴ As part of the strategic macro-area on research, Italy promotes applied AI research "focusing on contexts of greatest economic and social value for Italy and the greatest impact on citizen welfare". ²⁸⁸⁵ However, the Strategy does not provide for actionable measures dedicated to sustainability.

²⁸⁸¹ OECD, *AI Principles*, Principle 1.1 (May 2024), https://oecd.ai/en/dashboards/ai-principles/P5

²⁸⁸² UNESCO, *Recommendation on the Ethics of Artificial Intelligence*, point 31, p. 21 (2021), https://unesdoc.unesco.org/ark:/48223/pf0000380455

²⁸⁸³ European Parliament, Artificial Intelligence Act, European Parliament legislative resolution of 13 March 2024 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts (COM(2021)0206 –C9-0146/2021–2021/0106(COD)), P9_TA(2024)0138 (Mar. 13, 2024),

 $[\]frac{https://www.europarl.europa.eu/RegData/seance_pleniere/textes_adoptes/definitif/2024/03-13/0138/P9_TA(2024)0138_EN.pdf$

²⁸⁸⁴ Agency for Digital Italy (Agenzia per l'Italia Digitale) and the Department for Digital Transformation of the Council of Ministers (Dipartimento per la Trasformazione digitale), *The Italian Strategy for Artificial Intelligence 2024-2026*, p.8, (Jul. 2024), https://www.agid.gov.it/sites/agid/files/2024-

^{07/}Italian strategy for artificial intelligence 2024-2026.pdf

²⁸⁸⁵ Agency for Digital Italy (Agenzia per l'Italia Digitale) and the Department for Digital Transformation of the Council of Ministers (Dipartimento per la Trasformazione digitale), *The Italian Strategy for Artificial Intelligence 2024-2026*, p.17 (Jul. 2024),

https://www.agid.gov.it/sites/agid/files/2024-

^{07/}Italian strategy for artificial intelligence 2024-2026.pdf

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Nonetheless, Italy has extended its commitment to sustainable AI beyond national borders through a collaborative initiative with the United Nations Development Programme (UNDP). Under the leadership of Prime Minister Giorgia Meloni, Italy announced the establishment of an AI Hub for Sustainable Development set to launch in 2025. This hub, part of the broader Mattei Plan, is designed to foster AI-driven growth and innovation in nine African nations by promoting AI applications in critical sectors such as agriculture, health, energy, and education. The project aims to bridge the digital divide, emphasizing inclusive digital ecosystems and sustainable local innovations in line with UNDP's goals for developing countries.

This initiative also highlights Italy's dedication to ethical and responsible AI deployment that supports sustainable economic growth and social equity, particularly in underrepresented regions. Furthermore, the AI Hub rests on three key pillars: data pipelines, green computing infrastructure, and talent development, to ensure that AI benefits are equitably distributed and align with the broader objectives of the SDGs. This international partnership reflects Italy's ambition to lead globally in responsible AI practices.²⁸⁸⁸

Lethal Autonomous Weapons

Italy has been an active participant in the Convention on Certain Conventional Weapons (CCW) meetings on killer robots since 2014. Italy has been supporting a two-track approach in favor of a legally binding solution with a combination of prohibitions and regulations. According to Italy, a two-track approach would maintain an element of human control while not interfering with the advancement of technology.²⁸⁸⁹

In a 2019 statement at the UN General Assembly, Italy emphasized that "any existing or future weapon system must be subject to human control, particularly in relation to the ultimate decision to use lethal force."²⁸⁹⁰

²⁸⁸⁶ UNDP, AI & Sustainable Development, https://www.undp.org/digital/blog/ai-sustainable-development

²⁸⁸⁷ Vincenzo Del Monaco, Eva Spina, and Keyzom Ngodup Massally, *Italy and UNDP: How the new AI Hub for Sustainable Development will strengthen the foundations for growth in Africa* Atlantic Council (Sept. 26, 2023), https://www.atlanticcouncil.org/blogs/new-atlanticist/italy-and-undp-how-the-new-ai-hub-for-sustainable-development-will-strengthen-the-foundations-for-growth-in-africa/

²⁸⁸⁸ UNDP, AI Startup Acceleration Pilot, https://www.undp.org/digital/ai/startup-acceleration-pilot

²⁸⁸⁹ Laura Varella, "Discussions on Proposals," Reaching Critical Will, CCW Report, vol. 10, no. 7, p. 3 (Jul. 26, 2022), https://reachingcriticalwill.org/images/documents/Disarmament-fora/ccw/2022/gge/reports/CCWR10.7.pdf

²⁸⁹⁰ Government of Italy, Statement to the UN General Assembly First Committee on Disarmament and International Security (Oct. 14, 2019)

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In October 2022, Italy was one of 70 states that endorsed a joint statement on autonomous weapons systems at the United Nations General Assembly. The statement called for the recognition of the dangers of autonomous weapons systems, acknowledged the need for human oversight and accountability and emphasized the importance of an international framework of rules and constraints. In this joint statement, States declared that they "are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law ("IHL"), including through maintaining human responsibility and accountability in the use of force."

At the 78th UN General Assembly First Committee in 2023, Italy voted in favor²⁸⁹³ of resolution L.56²⁸⁹⁴ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. The report which counted with Italy's contribution analyzed ways to address the challenges and concerns autonomous weapon systems raise from humanitarian, legal, security, technological and ethical perspectives and reflect on the role of humans in the use of force.²⁸⁹⁵

The General Assembly decided to open informal consultations²⁸⁹⁶ for two days in 2025, after the meeting of the Group of Governmental Experts, with the full participation of Member States and observer States, international and regional organizations, the International Committee of the Red Cross, and civil society,

 $\underline{https://reachingcriticalwill.org/images/documents/Disarmament-\\$

fora/1com/1com19/statements/14Oct Italy.pdf.

²⁸⁹¹ Stop Killer Robots, 70 states deliver joint statement on autonomous weapons systems at UN General Assembly, (2022) https://www.stopkillerrobots.org/news/70-states-deliver-joint-statement-on-autonomous-weapons-systems-at-un-general-assembly/

²⁸⁹² United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (21 Oct. 2022),

 $[\]frac{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm_en.pdf.$

²⁸⁹³ Stop Killer Robots, 164 states vote against the machine at the UN General Assembly, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

²⁸⁹⁴ UN General Assembly, *Lethal Autonomous Weapons*, Resolution L56 (Oct.12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/3/resolutions/L56.pdf

²⁸⁹⁵ UN General Assembly, *Lethal Autonomous Weapons Systems, Report to the Secretary General A/79/88* (Jul. 1, 2024), https://docs.un.org/en/A/79/88

²⁸⁹⁶ General Assembly, Lethal autonomous Weapons Systems, Resolution adopted by the General Assembly A/RES/79/62, (Dec. 2nd, 2024),

https://digitallibrary.un.org/record/4071100?ln=en&v=pdf

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including the scientific community and industry, with the objective to brief on the work being done by the Group of Experts and discuss the report.

In February 2023, Italy participated in an international summit on the responsible application of artificial intelligence in the military domain hosted by the Netherlands. At the end of the Summit, Government representatives, including Italy, agreed on a joint call for action on the responsible development, deployment and use of artificial intelligence in the military domain. ²⁸⁹⁷ In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." Italy also endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023. ²⁸⁹⁸

In September 2024, South Korea hosted the second summit on the Responsible Artificial Intelligence in the Military Domain (REAIM). Sixty-one countries including Italy endorsed a Blueprint for Action to govern responsible use of artificial intelligence (AI) in the military field.²⁸⁹⁹ Contrary to the 2023 Hague REAIM summit, the AI blueprint was more action-oriented, in keeping with advanced discussions and developments in the military such as AI-enabled drones used by Ukraine. The Blueprint for Action was officially endorsed as the outcome document of the REAIM Summit 2024. This declarative document lays out a roadmap for establishing norms of AI in the military domain. It suggests principles and framework for future governance, "emphasizing that being responsible entails complying with international law, holding humans responsible and accountable, ensuring reliability and trustworthiness of AI, maintaining an appropriate human involvement, and improving AI explainability.²⁹⁰⁰

Human Rights

Italy is a signatory to the major international human rights instruments and generally ranks highly for the defense of human rights. In 2024, Freedom House gives Italy a "free" (90/100) rating for political rights and civil liberties.²⁹⁰¹

²⁸⁹⁷ Government of Netherlands, *Call to action on responsible use of AI in the military domain* (Feb. 16, 2023) Press Release, https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action

²⁸⁹⁸ US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Feb. 12, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

²⁸⁹⁹ REAIM 2024, Blueprint for Action, (Sept. 11, 2024),

https://reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163&shareBbsMngNo=10264&shareMenuId=11613&shareTabMenuId=

²⁹⁰⁰ Ibid

²⁹⁰¹ Freedom House, *Freedom in the World 2024: Italy* (2024), https://freedomhouse.org/country/italy/freedom-world/2024

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Freedom House notes that "Civil liberties are generally respected, but concerns about the rights of migrants and LGBT+ people persist. Regional inequalities are persistent and substantial. Endemic problems of corruption and organized crime pose an enduring challenge to the rule of law and economic growth."

The Rome Call for Ethics in AI

In February 2020, the Italian Government, together with the Pontificia Accademia per la Vita, Microsoft, IBM and FAO signed The Rome Call for Ethics in AI. This initiative is aimed at increasing awareness of the role of ethics in AI and proposes a more human-centric approach to AI.²⁹⁰² The Call sets out a program of "Algorithm Ethics" according to the "fundamental principles of good innovation," including Transparency, Responsibility, Impartiality, Reliability, Security, and Privacy. The Call is based on three principles:

- Ethics: All human beings are born free and equal in dignity and rights.
- Education: Transforming the world through the innovation of AI means undertaking to build a future for and with younger generations.
- Rights: The development of AI in the service of humankind and the planet must be reflected in regulations and principles that protect people particularly the weak and the underprivileged and natural environments.

The RenAIssance foundation was set up to guard and promote the Rome Call for AI Ethics in April 2021.²⁹⁰³

In January 2023, representatives of the Chief Rabbinate of Israel's Commission for Interreligious Relations, the Pontifical Academy for Life and Abu Dhabi Forum for Peace, commended a joint declaration on AI Ethics: An Abrahamic Commitment to the Rome Call.²⁹⁰⁴ The joint declaration is meant as a companion to the Rome Call.

Archbishop Vincenzo Paglia, President of the Pontifical Academy for Life and the RenAIssance Foundation, welcomed the participants to the event in which the joint declaration was issued with the following words: "We have gathered with our Jewish and Muslim brothers in an event of great importance to call upon the world to think and act in the name of brotherhood and peace — even in the field of technology. The signing of the Rome Call by Jewish and Muslim religious leaders and the joint call for algorethics to guide the design of artificial intelligence refer

https://www.academyforlife.va/content/pav/it/projects/intelligenza-artificiale.html

²⁹⁰² Pontificia Academica per la Vita, *Intelligenza Artificiale*,

²⁹⁰³RenAIssance Foundation, *Second Anniversary of the Rome Call for AI Ethics* (2022), https://www.romecall.org/second-anniversary-of-the-rome-call-for-ai-ethics-signed-in-rome-by-microsoft-ibm-fao-on-february-28-2020/

²⁹⁰⁴ AI Ethics: An Abrahamic Commitment to the Rome Call (Jan. 10, 2023), https://www.romecall.org/wp-content/uploads/2023/01/AI-Joint-Declaration-5-Jan1-1.pdf

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precisely to the increasingly urgent need to build paths of peace, mutual respect, dialogue, and community."²⁹⁰⁵

In April 2024, Cisco, the multinational digital communications technology company,²⁹⁰⁶ and the Archbishop of Canterbury Justin Welby²⁹⁰⁷ endorsed the Rome call for ethics.

Al Safety Summit

In November 2023, Italy participated in the first AI Safety Summit and endorsed the Bletchley Declaration.²⁹⁰⁸ Italy thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development, and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible."

The AI Safety Summit, co-hosted by the United Kingdom and South Korea in May 2024, brought together leaders from 11 countries, including Italy, to discuss and strengthen the global commitment to AI safety, innovation, and inclusivity. During this event, the participating countries issued the Seoul Declaration for Safe, Innovative, and Inclusive AI, emphasizing the importance of international cooperation in AI safety, interoperability between governance frameworks, and support for AI safety research. This declaration expanded upon the goals set in the 2023 Bletchley Declaration, advocating for inclusive AI practices to bridge digital divides and safeguard democratic values, while supporting the UN Sustainable Development Goals.²⁹⁰⁹

RenAIssance Foundation, *The Abrahamic commitment to the Rome Call for AI ethics* (Jan. 10, 2023), https://www.romecall.org/the-abrahamic-commitment-to-the-rome-call-for-ai-ethics-10th-january-2023/

²⁹⁰⁶ Cisco, Press Release, *Cisco joins Rome Call as AI ethics debate widens* (Apr. 24, 2024), https://newsroom.cisco.com/c/r/newsroom/en/us/a/y2024/m04/cisco-joins-rome-call-as-ai-ethics-debate-widens.html

²⁹⁰⁷ Vatican News, *Archbishop of Canterbury Justin Welby Endorses Rome Call for AI Ethics* (May 1, 2024), https://www.vaticannews.va/en/vatican-city/news/2024-05/archbishop-canterbury-justin-welby-endorses-rome-call-ai-ethics.html

²⁹⁰⁸ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, *Prime Minister's Office, The Bletchley Declaration by Countries Attending the AI Safety Summit* (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration/the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

²⁹⁰⁹ Office of the President of the Republic of Korea, *Seoul Declaration for Safe, Innovative and Inclusive AI by Participants Attending the Leaders' Session of the AI Seoul Summit* (May 21, 2024), https://eng.president.go.kr/briefing/Eum2BbS4

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Italy's active involvement in the summit reflects its ongoing commitment to ethical and safe AI governance standards within a multilateral framework. Building on the efforts at Bletchley Park and Seoul, the forthcoming AI Action Summit, set to take place in France in February 2025, will once again gather governments, academia, and the broader AI community to explore ways to maximize the global benefits of this generation-defining technology.²⁹¹⁰

OECD / G20 AI Principles

Italy endorsed the OECD and the G20 AI Principles.

In 2021, Italy hosted the G20 summit. Recognizing the "benefits stemming from the responsible use and development of trustworthy human-centered Artificial Intelligence (AI)," the G20 Leaders declared in Rome that they would encourage competition and innovation, "as well as diversity and inclusion." Artificial intelligence figured prominently in the G20 Declaration of the Digital Ministers who met in Trieste, Italy. They stated, "We reaffirm our willingness to implement trustworthy Artificial Intelligence (AI) and to commit to a human-centered approach, as decided in 2019 under the Japanese G20 Presidency, guided by the G20 AI Principles, drawn from the OECD Recommendations on AI."²⁹¹²

Italy is also a founding member of the Global Partnership for AI, a multistakeholder initiative which aims to foster international cooperation on AI research and applied activities and is "built around a shared commitment to the OECD Recommendation on Artificial Intelligence."²⁹¹³

Under its G7 presidency in 2024, Italy has been working with the Brazilian G20 Presidency to advance dialogues and actions, with AI identified as a common priority for sustainable development. The G7 Italian Presidency underscored its global leadership in AI and technology policy, focusing on fostering international cooperation and ensuring AI development adheres to democratic values. Under the scope 'Digital Development-Growing Together', the Italian G7 Presidency and the G7 countries acknowledged the need to work in partnership with

²⁹¹⁰ French Government (Élysée), *Artificial Intelligence Action Summit* (2025) https://www.elysee.fr/en/sommet-pour-l-action-sur-l-ia

²⁹¹¹ G20 Rome Leaders Advance AI Policy, Elevate Privacy, Gender Equality, CAIDP Update 2.40 (Oct. 31, 2021), https://www.caidp.org/app/download/8352831663/CAIDP-Update-2.40.pdf ²⁹¹² G20 Information Centre, Declaration of G20 Digital Ministers: Leveraging Digitalisation for a Resilient, Strong, Sustainable and Inclusive Recovery (Aug. 5, 2021), http://www.g20.utoronto.ca/2021/210805-digital.html

²⁹¹³ Government of Canada, *Canada concludes inaugural plenary of the Global Partnership on Artificial Intelligence with international counterparts in Montreal* (Dec. 4, 2020), https://www.canada.ca/en/innovation-science-economic-development/news/2020/12/canada-concludes-inaugural-plenary-of-the-global-partnership-on-artificial-intelligence-with-international-counterparts-in-montreal.html

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developing countries to strengthen local AI digital ecosystems.²⁹¹⁴ The Italian Presidency's priorities were also to focus on the impact of AI on jobs and inequality.²⁹¹⁵In addition, the Italian Presidency's Department for Digital Transformation, under the G7's Digital & Technology Working Group, has coordinated the release of the G7 Toolkit for Artificial Intelligence in the Public Sector which was developed in partnership with the OECD and UNESCO.²⁹¹⁶

UNESCO Recommendation on AI Ethics

Italy is a UNESCO member since 1948. Italy endorsed the 2021 UNESCO Recommendation on AI Ethics,²⁹¹⁷ the first ever global agreement on the ethics of AI. Italy's national AI strategy and international partnerships and plans align to the UNESCO Recommendation.

As of November 2024, Italy has neither competed nor announced preparation for the UNESCO Readiness Assessment Methodology (RAM), which forms one of the core pillars of the implementation of UNESCO Recommendation on the Ethics of Artificial Intelligence.²⁹¹⁸

Council of Europe Al Treaty

Italy contributed as a Council of Europe and EU Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of Law. The Committee on AI approved the Draft Framework Convention during its 10th Plenary session in March 2024. In May 2024, The Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law was adopted in Strasbourg²⁹¹⁹. On September 5, 2024, the European Commission signed the Council of Europe

²⁹¹⁴ UNDP, *G7 Consensus Reached on Advancing AI for Sustainable Development* (Mar. 15, 2024), https://www.undp.org/news/g7-consensus-reached-advancing-ai-sustainable-development Reuters, *G7 Industry Ministers Agree to Cooperate on AI, Supply Chains, Presidency Says* (Mar. 14, 2024), https://www.reuters.com/world/g7-agreed-align-rules-ai-italian-presidency-says-2024-03-14/

²⁹¹⁶ OECD, *G7 Toolkit for Artificial Intelligence in the Public Sector*, OECD Publishing, (Oct. 15, 2024), https://www.oecd.org/en/publications/g7-toolkit-for-artificial-intelligence-in-the-public-sector 421c1244-en.html

²⁹¹⁷ UNESCO, *Recommendation on the Ethics of Artificial Intelligence* (Nov. 23, 2021) https://unesdoc.unesco.org/ark:/48223/pf0000381137

²⁹¹⁸ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

²⁹¹⁹ Council of Europe, Press Release, *Council of Europe adopts first international treaty on artificial intelligence* (May 17, 2024), https://www.coe.int/en/web/portal/-/council-of-europe-adopts-first-international-treaty-on-artificial-intelligence

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Framework Convention on behalf of the European Union and its State Members including Italy.²⁹²⁰ Italy has not yet ratified the Convention.

Evaluation

Italy has endorsed the OECD/G20 AI Principles and is a founding member of the Global Partnership on AI. The Rome Call for AI Ethics, undertaken by Pope Francis with the support of the Italian government and private companies, sets out a powerful vision for AI that is human-centric and that diminishes social inequality. Italy has underscored these key priorities in the framework of its Presidency of the G7. Italy has also signed the UNESCO Recommendation on the Ethics of AI although it has yet to take steps to implement it.

Italy is subject to the GDPR and has ratified the modernized Council of Europe Convention 108, providing a high level of protection for personal data and the specific right of algorithmic transparency. The Italian Data Protection Authority has played a leading role in fundamental rights protection against possible encroachments stemming from the design, deployment, or use of AI systems, most recently through investigations concerning OpenAI.

Anticipating the EU AI Act entry into force, the Italian government has developed an AI draft law, the first instance of a domestic legislation to be read in conjunction with the EU AI Act. It has yet to be approved by the Italian Parliament. Alongside the draft law, the new National AI Strategy for 2024-2026 provides for policy objectives in four strategic macro-areas: research, public administration, enterprises, and education. The Strategy is in line with the UNESCO Recommendation on training and AI literacy and could advance Italy towards implementation through the strategic measures on education.

Jamaica

In 2024, Jamaica's National AI Task Force submitted research-based recommendations for a national AI policy and the Information Commissioner issued AI-targeted Data Protection Regulations.

National AI Strategy

The Jamaican National AI Task Force formed in 2023²⁹²¹ submitted a report to the Cabinet in September 2024 with research-based recommendations for a

²⁹²⁰ Delegation of the European Union to the Council of Europe, Press Release, *The European Commission signs historic Council of Europe Framework Convention on Artificial Intelligence and Human Rights* (Sept. 10, 2024), https://www.eeas.europa.eu/delegations/council-europe-framework-convention-artificial-intelligence-and_en?s=51

²⁹²¹ Jamaica Information Service, *Government to Set Up AI Task Force* (Jul. 15, 2023), https://jis.gov.jm/government-to-set-up-ai-task-force/

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national AI policy.²⁹²² The Task Force comprises members from private sector entities, civil society, academia, and other experts. The Task Force report establishes an evidence-based foundational AI framework; explores AI's role and transformation potential across key sectors such as Education, Business, and Government; addresses ethical challenges posed by AI; and develops strategies for risk mitigation, international positioning, and social impact assessment. The report will also serve as a guide for the Government to develop downstream AI policies related to economic growth and opportunities.

Even before the Task Force report suggested tools, the Jamaican government reaffirmed its commitment to addressing the challenges posed by AI and deepfakes to the democratic Process. Senator Dr. Dana Morris, Minister for Skills and Digital Transformation, reiterated the government's dedication to preserving democracy and transparency. She stated, "Central to the Administration is our commitment to preserving democracy and the democratic process. The government understands the critical importance of maintaining trust and transparency in our electoral system." ²⁹²³

There are also several significant policy initiatives worth mentioning. Jamaica's 2009 National Development Plan, Vision 2030, which aims among others to advance the achievement of the UN Sustainable Development Goals, does not address digital policy directly. However, the Vision 2030 the Jamaica Secretariat acknowledges in reflections on the "perspectives on the future of national development planning post-COVID-19" imagines a role for digital technologies such as AI will have in the future: "[t]he advancement of technology enablement geared to support adaptation and agility and access to public goods and services for sustainable and inclusive growth. This includes digitalization and equity in access to technology products and services. It also includes the infusion of cultural values and norms that support the application of technology and innovation towards improved productivity, competitiveness, and growth." 2924

Jamaica's Broadcasting Commission (BCJ) has been a leader in fostering a human-centered approach to AI in Jamaica and Small Island Developing States (SIDS). The BCJ is an "independent statutory agency which falls within the ambit of the Minister with responsibility for Information." Among others, the BCJ is

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²⁹²² Jamaica Information Service, *Cabinet to Receive Artificial Intelligence Task Force Report* (Sept. 19, 2024), https://jis.gov.jm/cabinet-to-receive-artificial-intelligence-task-force-report/
²⁹²³ Office of Prime Minister, *Government Taking Steps to Address the Challenges Posed by AI and Deepfakes to Democratic Process* (Feb. 25, 2024), https://opm.gov.jm/news/government-taking-steps-to-address-the-challenges-posed-by-ai-and-deepfakes-to-democratic-process/
²⁹²⁴ Peisha Bryan-Lee, Travis Reid, Shannique Perry, Samantha Wilmot, *Vision 2030 Jamaica Secretariat, Planning Institute of Jamaica (PIOJ) Perspectives on the Future of National Development Planning - Post COVID-19* (Nov. 2021),
https://www.vision2030.gov.jm/blog/perspectives-on-the-future-of-national-development-planning-post-covid-19-november-2021/

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mandated to "provide advice to policy makers in the formulation of policies for the [media] industry" and "conduct research on all areas relating to the electronic media in Jamaica."²⁹²⁵

At the 2019 Regional Forum on Artificial Intelligence in Latin America and the Caribbean, Cordel Green, the Executive Director of the Broadcasting Commission, stated, "As we seek to understand the new environment and the broad impacts of AI on society, UNESCO'S ROAM principles (Rights, Openness, Accessibility to all, Multi stakeholder participation) are critical. We should resist technological determinism. AI must be designed to promote human well-being, enhance human performance and mitigate harm, [...] we must avoid the worst outcomes of the first industrial revolution which left millions of people behind. We can make AI the rising tide which lifts all ships." He also mentioned that "the role of the state is to ensure the regulation, support and planning of the sector by developing policies that address the needs of all citizens and do not undermine fundamental rights." 2926

It is to address these issues, and because "Small Island Developing States must protect their own interests," that "the BCJ has spearheaded the Caribbean AI Initiative, which is a collaborative project with the UNESCO Cluster Office for the Caribbean,²⁹²⁷ supported by UNESCO's Information For All Programme (IFAP)."²⁹²⁸ The Initiative "aims to develop a sub-regional strategy on the ethical, inclusive and humane use of AI in the Caribbean Small Island Developing States."²⁹²⁹ The Caribbean AI Policy Roadmap was released in June 2021,²⁹³⁰ following a period of stakeholder consultation.²⁹³¹

The Caribbean AI Policy Roadmap acknowledges that "AI systems raise new types of ethical issues that include, but are not limited to, their impact on

https://broadcastingcommission.org/bchome/about-us/organisation-overview

²⁹²⁵ Broadcasting Commission of Jamaica, *About Us*,

²⁹²⁶ Broadcasting Commission of Jamaica, *BCJ Implores Governments Across the Region to Create AI Policies that Protect Small Island Developing States* (Dec. 14, 2019), https://broadcastingcommission.org/news-reports/news?download=250:ai-ethics-and-innovation

²⁹²⁷ UNESCO, *About UNESCO Kingston*, https://www.unesco.org/en/fieldoffice/kingston
²⁹²⁸ Anthony Clayton and Cordel Green, *The BCJ at 35: People Transitioning Digital* (Jun. 2021), https://broadcastingcommission.org/news-reports/news?download=253:the-bcj-at-35-people-transitioning-digital

²⁹²⁹ Caribbean Artificial Intelligence Initiative, *Caribbean Artificial Intelligence Roadmap* (2021), https://ai4caribbean.com/wp-content/uploads/2021/07/Caribbean-Artificial-Intelligence-Policy-Roadmap.pdf

²⁹³⁰ Ibid

²⁹³¹ Ibid, p. 2

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decision-making in employment and labour, social interaction, health care, education, media, freedom of expression, access to information, privacy, democracy, discrimination, and weaponization. Furthermore, new ethical challenges are created by the potential of AI algorithms to reproduce biases, for instance regarding gender, ethnicity, and age, and thus to exacerbate already existing forms of discrimination, identity prejudice and stereotyping. As Caribbean nations expand their adoption of AI tools and other exponential technologies, stakeholders (policymakers, citizens, private sector, academia, and NGOs) must proactively collaborate to create strategies for the humanistic development of guidelines, regulations and laws. Boundaries should be defined to regulate the AI decision-making, AI rights, inclusion of manual overrides and AI accountability protocols."

The Policy Roadmap has been developed based on a series of "assumptions" about the Caribbean and Artificial Intelligence. These include: "Human creativity is inextricably linked to Caribbean identify, economic viability and sustainable development"; "AI is a product of human creativity"; "AI is in service of humanity"; "AI must be inclusive, fair, transparent, accountable"; "AI must be regulated"; "Human rights supersede AI rights"; "Bias is everywhere in AI"; "We Are Our Data"; "Data rights will be the civil rights movement of the 21st century."

The Policy Roadmap is based on six principles: Resiliency, Governance, Transformation, Upskilling, Preservation and Sustainability.²⁹³³ With regard to governance, actions to be taken include: "Develop Responsible AI Governance, Oversight, Principles & Policies to Do No Harm and to enhance safety, security and accountability of AI. Promote AI as a tool for service to humanity. Establish common values and principles to ensure fairness, transparency and accountability in digital transformation and increased integration of AI algorithms. Develop policy and legislation to enable the establishment of national and regional AI Governance Committees/Oversight Boards as well as national and regional licensing regime to manage and monitor the development of standards that govern the industry including technical code of conduct for developers, procurement guidelines for buyers, design and use principles and ethically aligned design standards. Regulate AI industry to provide redress and punishment for individuals & companies that violate citizen rights and wellbeing including banning cyberbullying, hate crimes, discriminatory algorithms, disinformation and graphically violent images inclusive of penalties and fines. Develop an AI Appeal Court and Online Dispute Resolution System. Increase advocacy for AI ethics by targeting software developers at global forums and hosting a global software conference to network, lobby, share research and initiate collaborations with big

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²⁹³² Ibid, p. 5

²⁹³³ Ibid, p. 11

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tech. Develop AI software to test AI for biases and identify AI applications in most need of governance. Protect citizen privacy and instill trust."2934

Public Participation

The Caribbean AI Policy Roadmap was the object of a series of stakeholder consultations through the organization of forums and a poll. On February 18-19, 2021, a two-day Artificial Intelligence Forum: Opportunities to Accelerate Human Progress for Sustainable Development in Caribbean Small Islands Developing States²⁹³⁵ was organized to collect input from diverse stakeholders regarding AI policy topics. Three additional workshops addressing the AI Policy Roadmap principles were held with stakeholders from the private sector, academia, civil society and youth²⁹³⁶ and events outreach continued with a focus in Jamaica.²⁹³⁷

The Jamaican Government is emphasizing bipartisan discussions as a form of public participation as it works to establish a broad consensus on the responsible use of AI, particularly in political contexts.²⁹³⁸

Data Protection

In recognition of the Universal Declaration of Human Rights, the Jamaican Parliament amended the Constitution in 2011 to provide for a new Charter of Fundamental Rights and Freedoms that includes right to privacy, including of communication. 2939

Jamaica has prioritized developing laws similar to the European Union's General Data Protection Regulation (GDPR).²⁹⁴⁰ The Government of Jamaica passed the Data Protection Act (DPA) in June 2020.²⁹⁴¹ The DPA applies to both

²⁹³⁴ Ibid, p. 41

²⁹³⁵ UNESCO, How Can AI Contribute to Sustainable Development? Caribbean Artificial Intelligence Forum (Feb. 18, 2021), https://en.unesco.org/news/how-can-ai-contributesustainable-development-caribbean-artificial-intelligence-forum

²⁹³⁶ UNESCO, Pioneering Artificial Intelligence Policy in the Caribbean (May 20, 2021), https://www.unesco.org/en/articles/pioneering-artificial-intelligence-policy-caribbean ²⁹³⁷ Caribbean Artificial Intelligence Initiative, *Past Events* (2025),

https://ai4caribbean.com/#events

²⁹³⁸ Office of the Prime Minister (OPM), Government Taking Steps to Address the Challenges Posed by AI and Deepfakes to Democratic Process (Feb. 25, 2024), https://ppm.gov.jm/news/government-taking-steps-to-address-the-challenges-posed-by-ai-anddeepfakes-to-democratic-process/

²⁹³⁹ Jamaica Parliament, No. 12–2011, the Charter of Fundamental Rights and Freedoms (Constitutional Amendment) Act, 2011, Chapter III, section 13(3)(j) (Apr. 8, 2011), https://www.japarliament.gov.jm/attachments/341 The%20Charter%20of%20Fundamental%20 Rights%20and%20Freedoms%20(Constitutional%20Amendment)%20Act,%202011.pdf ²⁹⁴⁰ European Commission, Rules for Business and Organizations,

https://commission.europa.eu/law/law-topic/data-protection/rules-business-and-organisations en ²⁹⁴¹ Alecia Smith, *Data Protection Bill Passed in the Senate*, Jamaica Information Service (Jun. 13, 2020), https://jis.gov.jm/data-protection-bill-passed-in-the-senate/.

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public and private sector organizations. Data controllers had until December 1, 2023 to implement the necessary measures to ensure DPA compliance. This concerns, among others, fairness and lawfulness, purpose limitation, data minimization, accuracy, storage limitation, respect for data subjects' rights. These rights include the right to personal data access; consent to processing; prevent processing, and rights in relation to automated decision-making.²⁹⁴²

The DPA established the Office of the Information Commissioner (OIC) to enforce data privacy rights outlined in the legislation. The OIC is also responsible for advising the Minister of Science, Energy and Technology on matters related to data protection; disseminating information to the public; and drafting relevant guidelines. The first Information Commissioner was appointed in December 2021.

The Minister of Science, Energy and Technology expressed support for the Information Commissioner's progress in May 2022, noting, "the Office has already been making strides in the data privacy and protection arena. The OIC has been leveraging various public awareness strategies to facilitate preliminary consultations regarding the issues and concerns of different interest groups." The OIC has launched and fully operationalized their web portal complete with service descriptions, a resource center, and portals for data controllers and other users. 2944

The Office of the Information Commissioner proclaimed rules and regulations based on the Data Protection Act for AI-driven businesses in March 2024.²⁹⁴⁵ The Data Protection Regulations 2024 outline data protection procedures, including specific identification and authorization requirements for individuals acting on behalf of data subjects, methods for submitting requests to data controllers, guidelines for data protection officers, and protocols for reporting security breaches and ensuring compliance with data protection standards. These regulations also empower individuals with rights to access, correct, and control their personal data, while requiring organizations to handle data responsibly and transparently.

²⁹⁴³ Alecia Smith, *Office of the Information Commissioner being Operationalized*, Jamaica Information Service (May 15, 2022), https://jis.gov.jm/office-of-the-information-commissioner-being-operationalised/

²⁹⁴² Jamaica Parliament, *The Data Protection Act* (2020), https://japarliament.gov.jm/attachments/article/339/The%20Data%20Protection%20Act,%20202

²⁹⁴⁴ Office of the Information Commissioner, *What We Do* (2025), https://oic.gov.jm/page/what-we-do

²⁹⁴⁵ Office of the Information Commissioner, *Data Protection Act: The Minister's Regulations* 2024 (or Data Protection Regulations 2024) (Mar. 4, 2024), https://oic.gov.jm/page/data-protection-act-ministers-regulations-2024

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Jamaica's OIC is not a member of the Global Privacy Assembly.²⁹⁴⁶ The OIC has not endorsed the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence²⁹⁴⁷, the 2020 GPA Resolution on Accountability in the Development and Use of Artificial Intelligence,²⁹⁴⁸ the 2022 GPA Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology²⁹⁴⁹ or the 2023 GPA Resolution on Generative AI.²⁹⁵⁰

Algorithmic Transparency

The right to algorithmic transparency is provided by the DPA. One peculiarity is that access to this right is submitted to a "prescribed fee" which might have a deterrent effect even more so for underprivileged individuals.²⁹⁵¹

The Data Protection Regulations 2024²⁹⁵² emphasize the critical importance of algorithmic transparency by granting individuals the right to understand the logic behind automated decisions and to object to processing that significantly affects them. This aligns with global ethical principles by ensuring fairness, accountability, and protection against discrimination. Additionally, the regulations mandate robust safeguards against misuse of personal data, requiring data controllers to provide clear, intelligible explanations of data processing purposes and impacts.

AI-EN.pdf

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²⁹⁴⁶ Global Privacy Assembly, List of accredited members,

²⁹⁴⁷ International Conference of Data Protection & Privacy Commissioner, *Declaration on Ethics and Data Protection in Artificial Intelligence* (2018), http://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th_AI-Declaration_ADOPTED.pdf

²⁹⁴⁸ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (2020), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

²⁹⁴⁹ Global Privacy Assembly, *Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence* (2022), <a href="https://globalprivacyassembly.org/wp-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-content/uploads/2020/11/GPA-Resolution-o

²⁹⁵⁰ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf.

²⁹⁵¹ See section 6 on the right of access to personal data; section 8 on Grounds limiting compliance with request for access of the DPA in Jamaica Parliament, *The Data Protection Act* (2020),

https://japarliament.gov.jm/attachments/article/339/The%20Data%20Protection%20Act,%202020.pdf

²⁹⁵² Office of the Information Commissioner, *Data Protection Act: The Minister's Regulations* 2024 (or Data Protection Regulations 2024), (Mar. 4, 2024), https://oic.gov.jm/page/data-protection-act-ministers-regulations-2024

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National Identification Systems

In a 2019 landmark decision, "Jamaica's Chief Justice Brian Sykes observed that the government's harsh decision to impose criminal sanctions to enforce compulsory registration by all citizens in a new digital ID system was a remarkable choice "in a democracy where the exercise of executive power rests upon the consent of the governed."

Jamaica adopted the National Identification Act (NIRA) in December 2018 to establish a National Identification System (NIDS) that "facilitates the enrolment of all citizens of Jamaica and all individuals who are ordinarily resident in Jamaica" for "the verification of identity information and the authentication of a National Identity Number and National Identity Card."²⁹⁵³

The NIRA was approved despite the strong objection of civil society and the parliamentary opposition because of the compulsory formal registration of all citizens including specific biometric information.] The Act required the capture and storage with a central registering authority of vein patterns, and if needed, footprints, toe prints, palm prints and the blood type of citizens and residents, along with iris scans and fingerprints.

In Julian J. Robinson v. The Attorney General of Jamaica, the Supreme Court of Judicature of Jamaica ruled that the NIRA was unconstitutional and nullified it, on the grounds of violating the right to privacy and equality enshrined in the Jamaican Charter of Fundamental Rights. More particularly, "[t]he Court, while giving an extensive interpretation of the right to privacy held the mandatory nature of the Act and the criminal sanctions to be in violation of informational privacy and liberty of the individuals. The disproportionate measures used to enforce the Act, the lack of necessary and a legitimate purpose, and absence of safeguards against misuse of the data collected under the Act were the primary grounds on which the Court declared the Act to be unconstitutional."²⁹⁵⁴

A new Act, the National Identification and Registration Act of 2020, which allows for the voluntary submission of biometric information for participation in the NIDS, was passed in October 2021. ²⁹⁵⁵ While this new Act has not been tested in court, it has attracted criticism from civil society organizations. ²⁹⁵⁶

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²⁹⁵³ Global Freedom of Expression, *Robinson v. Attorney General of Jamaica – Case Analysis* (Apr. 12, 2019), https://globalfreedomofexpression.columbia.edu/cases/robinson-v-attorney-general/#:~:text=A%20three%2Djudge%20bench%20of,right%20to%20privacy%20and%20equality

²⁹⁵⁴ Ibid

²⁹⁵⁵ Office of the Prime Minister, *Government Passes NIDS Bill after 40 Years* (Oct. 15, 2021), https://opm.gov.jm/news/government-passes-nids-bill-after-40-years/

²⁹⁵⁶ Erica Hellerstein, *Jamaica is Poised to End Data Privacy* (Sept. 15, 2021), https://www.codastory.com/authoritarian-tech/jamaica-digital-id/

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Facial Recognition

The Passport, Immigration and Citizenship Agency (PICA) introduced facial recognition components to passport production with the objective to protect the identity of the citizen and reduce passport fraud in 2016.²⁹⁵⁷ The implementation of facial recognition programs started through immigration kiosks at major airports in Kingston and Montego Bay. 2958 Reportedly, in 2017, PICA "has moved a step closer to protecting the identity of Jamaicans by implementing, for the first time in Jamaica, a facial recognition system akin to the Automated Fingerprint Identification System (AFIS) currently in use by the police."2959

In recent years, law enforcement authorities in Jamaica have expressed interest in integrating police surveillance technologies into regular law enforcement practices.²⁹⁶⁰ This is the case for example of the Jamaican Constabulary Force, Jamaica's primary domestic law enforcement agency. The agency has announced its procurement of various technologies, including predictive policing, networked camera systems, and DNA databases. ²⁹⁶¹ A notable development occurred in July 2020, when media reports indicated that the Constabulary Force secretly deployed facial recognition technology to support routine law enforcement investigations.²⁹⁶² At issue was the use of facial recognition in the CCTV surveillance system known as JamaicaEye, a traffic monitoring technology. 2963 Jamaica's Security Minister Horace Chang announced in June 2022 that Jamaica invested in more cameras to JamaicaEye as part of efforts to incorporate technology in everyday policing. Chang noted plans to install 300 additional CCTV cameras across the corporate area, adding to the more-than 850 CCTV cameras already installed across main townships.²⁹⁶⁴

Jamaica's largest life insurance company and pension fund manager has implemented "facial recognition technology that will replace the notarized

²⁹⁵⁷ FindBiometrics, Jamaican Authorities to Use Facial Recognition in Passport Issuance (Feb. 19, 2016), https://findbiometrics.com/archive/jamaican-facial-recognition-passport-issuance-302196/

²⁹⁵⁸ Ibid

²⁹⁵⁹ Karl Angell, Passport office steps up a gear, Jamaica Observer (Jun. 28, 2017), https://www.jamaicaobserver.com/news/passport-office-steps-up-a-gear/

²⁹⁶⁰ Jamaica Constabulary Force, *Policing through Technology*, <a href="https://jcf.gov.jm/policing-policing through-technology

²⁹⁶¹ Ibid

²⁹⁶² Adrian Frater, A Criminal's Nightmare – Cops reaping successes from Chinese high-the surveillance system in MoBay, The Gleaner (Jul. 13, 2020), https://jamaicagleaner.com/article/lead-stories/20200713/criminals-nightmare-cops-reaping-success-chinese-

²⁹⁶³ Rosheika Grant, 'Jamaica Eye Assisting Crime Fighting', Jamaica Information Service (Mar. 1, 2021), https://jis.gov.jm/features/jamaicaeve-assisting-crime-fighting/

²⁹⁶⁴ Latonya Linton, *More than 850 Cameras Installed under JamaicaEye*, Jamaica Information Service (Jun. 2, 2022), https://jis.gov.jm/more-than-850-cameras-installed-under-jamaicaeye/

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certificate that [pensioners] had to submit annually as 'proof of life' for their pension payments to continue uninterrupted."²⁹⁶⁵ According to the Financial Gleaner, "[p]ensioners will be required to upload a Government-issued picture ID, along with a short live video of their face, once a year, which will be verified or validated by the facial recognition technology."²⁹⁶⁶

Environmental Impact of AI

The Vision 2030 Jamaica National Development Plan integrates sustainability as a guiding principle, emphasizing environmental protection, sustainable consumption and production, and resilience against climate change. The plan outlines cross-sectoral strategies to manage the environmental impacts of economic activities, transportation, and land use, while promoting policies that align with global development frameworks like the Sustainable Development Goals (SDGs).

Jamaica has also emphasized sustainability in the context of Small Island Developing States (SIDS) by urging governments to create policies for Artificial Intelligence (AI) that prioritize human well-being and equitable development.²⁹⁶⁸

Lethal Autonomous Weapons

Jamaica has consistently supported the negotiation of a legally binding instrument on autonomous weapons systems in international bodies, including as a member of the Non-Aligned Movement (NAM), ²⁹⁶⁹ and through endorsement of the Belén Communiqué by Latin American and Caribbean states. ²⁹⁷⁰ Jamaica has attended some of the Convention on Certain Conventional Weapons (CCW)

 $\underline{https://www.vision2030.gov.jm/vision-2030-jamaica-guiding-principles/}$

²⁹⁶⁵ Biometrics Updates, *Jamaica adopts remote biometric verification from Orba for pensioners*, (Feb. 16, 2023), https://www.biometricupdate.com/202302/jamaica-adopts-remote-biometric-verification-from-orba-for-pensioners

The Gleaner, *Sagicor to utilise facial recognition tech as proof of life for pensioners*, (Feb. 12, 2023), https://jamaica-gleaner.com/article/business/20230212/sagicor-utilise-facial-recognition-tech-proof-life-pensioners

²⁹⁶⁷ Vision 2030, Vision 2030 Jamaica National Development Plan,

²⁹⁶⁸ Broadcasting Commission of Jamaica, *BCJ Implores Governments Across the Region to Create AI Policies that Protect Small Island Developing States* (Dec. 14, 2019), https://broadcastingcommission.org/news-reports/news?download=237:bcj-imploresgovernments-across-the-region-to-create-ai-policies-that-protect-small-islanddeveloping-states

²⁹⁶⁹ Automated Decision Research, Jamaica Report,

https://automatedresearch.org/news/state_position/jamaica/

²⁹⁷⁰ Communiqué of the Latin American and the Caribbean Conference of Social and Humanitarian Impact of Autonomous Weapons (Feb. 24, 2023), https://www.rree.go.cr/files/includes/files.php?id=2261&tipo=documentos.

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Group of Governmental Experts meetings on Lethal Autonomous Weapons Systems (GGE on LAWS) since 2014.²⁹⁷¹

At the 78th UN General Assembly First Committee in 2023, Jamaica voted in favor²⁹⁷² of resolution L.56²⁹⁷³ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems.

At the 79th UN General Assembly First Committee in October 2024, Jamaica voted in favor of Draft Resolution L.77 on lethal autonomous weapons systems along with 160 states in October 2024. ²⁹⁷⁴ Draft Resolution L.77 emphasizes "the importance of the role of humans in the use of force to ensure responsibility and accountability and for States to comply with international law" while voicing concerns about the "negative consequences and impact of autonomous weapon systems on global security and regional and international stability." ²⁹⁷⁵

Human Rights

Since declaring independence from British colonial rule, Jamaica has been organized under a democratic political system featuring competitive elections, a vibrant civil society, and respect for the rule of law. Freedom House rates Jamaica "free" in the Freedom in the World 2024 report with a score of $80/100.^{2976}$ However, Freedom House also notes that "corruption remains a serious problem, and long-standing relationships between officials and organized crime figures are thought to persist. Violent crime remains a concern, as does harassment and violence against LGBT+ people."

https://automatedresearch.org/news/state_position/jamaica/

²⁹⁷¹ Automated Decision Research, Jamaica Report,

²⁹⁷² Isabelle Jones, *164 States Vote against the Machine at the UN General Assembly*, , Stop Killer Robots (Nov. 1, 2023), https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

²⁹⁷³ UN General Assembly, *Resolution L56: Lethal Autonomous Weapons* (Oct.12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

²⁹⁷⁴ United Nations General Assembly, General and Complete Disarmament: Lethal Autonomous Weapons Systems (Oct. 18, 2024),

https://documents.un.org/doc/undoc/ltd/n24/305/45/pdf/n2430545.pdf

²⁹⁷⁵ Ibid

 $^{^{2976}}$ Freedom House, Freedom in the World 2024: Jamaica (2024),

https://freedomhouse.org/country/jamaica/freedom-world/2024

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Jamaica has endorsed the Universal Declaration of Human Rights and ratified the International Covenant on Economic, Social and Cultural Rights and the International Covenant on Civil and Political Rights.

The National AI Task Force's emphasis on the integration of human rights, such as privacy, into its AI policies, reinforcing Jamaica's commitment to ensuring AI development aligns with democratic principles and international human rights standards.²⁹⁷⁸

OECD / G20 AI Principles

Jamaica has not endorsed the OECD AI Principles. However, according to the OECD, Jamaica's DPA "better aligns" the country with the OECD AI Principles as it includes the principles of "transparency, explainability and fairness" in data collection and processing.²⁹⁷⁹

Jamaica is a "member state of the Inter-American Development Bank (IDB), which has adopted the OECD AI Principles as part of its fAIr LAC initiative." The OECD acknowledges the work of the Inter-American Development Bank and its "fAIr LAC initiative to promote the responsible and ethical use of AI and improve public services, e.g., education, health, and social protection, in Latin American and Caribbean (LAC) countries," including in Jamaica.

Council of Europe AI Treaty

Jamaica has not signed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law.²⁹⁸² Countries from all over the world are eligible to sign the treaty and commit to complying with its provisions.²⁹⁸³

²⁹⁷⁸ Jamaican Information Service, *Cabinet to Receive Artificial Intelligence Task Force Report* (Sept. 19, 2024), https://jis.gov.jm/cabinet-to-receive-artificial-intelligence-task-force-report
2979</code> OECD and Development Bank of Latin America (CAF), *The Strategic and Responsible Use of Artificial Intelligence in the Public Sector of Latin America and the Caribbean* (Mar. 2022), https://soc.public-sector-of-latin-america-and-the-caribbean_1f334543-en
2980 [bid]

²⁹⁸¹ OECD, *State of implementation of the OECD AI Principles*, p. 76 (Jun. 2021), https://www.oecd-ilibrary.org/docserver/1cd40c44-en.pdf?expires=1679145707&id=id&accname=guest&checksum=4A7E8011553F4B626AD9EF4C04ACCDE1

²⁹⁸² Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 5, 2025), https://www.coe.int/en/web/Conventions/full-list/?module=signatures-by-treaty&treatynum=225

²⁹⁸³ Council of Europe, *Council of Europe Opens First Ever Global Treaty on AI for Signature* (Sept. 5, 2024), https://www.coe.int/en/web/portal/-/council-of-europe-opens-first-ever-global-treaty-on-ai-for-signature

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UNESCO Recommendation on AI Ethics

Jamaica has endorsed the UNESCO Recommendation on the Ethics of AI²⁹⁸⁴. Jamaica's Broadcasting Commission played a leading role in the elaboration of the Caribbean AI Policy Roadmap, which was based on a first draft of the UNESCO Recommendation.

Jamaica signed the 2023 Santiago Declaration to Promote Ethical Artificial Intelligence at a summit of Latin American and Caribbean leaders organized with support from UNESCO and the Latin American Development Bank (CAF) with the express purpose of implementing the Recommendation.²⁹⁸⁵ The Santiago Declaration aligns with the UNESCO Recommendation and establishes fundamental principles that should guide public policy on AI. These include proportionality, security, fairness, non-discrimination, gender equality, accessibility, sustainability, privacy and data protection.²⁹⁸⁶

Jamaica is preparing to implement the UNESCO Readiness Assessment Methodology (RAM). 2987 The Readiness Assessment Methodology (RAM) is a key tool to support UNESCO Member States in their implementation of the UNESCO Recommendation on the Ethics of AI. The RAM helps to highlight any institutional and regulatory gaps and enables UNESCO to tailor support for governments to fill those gaps to ensure an ethical AI ecosystem in line with the Recommendation. 2988

Evaluation

Jamaica has played a pioneering role in regional AI policy and has demonstrated a capacity and ability for leadership in the Caribbean SIDS, in large part through the efforts of the Broadcasting Commission. As an active member of the UNESCO Caribbean Cluster, Jamaica participated in developing the Caribbean AI Policy Roadmap, which draws inspiration from a first draft of the UNESCO Recommendation on the Ethics of AI and reflects regional concerns of

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²⁹⁸⁴ UNESCO, *Ethics of Artificial Intelligence* (Nov.1, 2021), https://unesdoc.unesco.org/ark:/48223/pf0000381137

²⁹⁸⁵ Cumbre Ministerial y de Altas Autoridades de América Latina y el Caribe, *Declaracion de Santiago "Para promover una inteligencia artificial ética en América Latina y el Caribe"* (Oct. 2023), https://minciencia.gob.cl/uploads/filer-public/40/2a/402a35a0-1222-4dab-b090-5c81bbf34237/declaracion-de-santiago.pdf.

²⁹⁸⁶ UNESCO, *UNESCO* and *Leading Ministry in Santiago de Chile Host Milestone Regional LAC Forum on Ethics of AI* (Dec. 5, 2023), https://www.unesco.org/en/articles/unesco-and-leading-ministry-santiago-de-chile-host-milestone-regional-lac-forum-ethics-ai?hub=387
2987 UNESCO Global AI Ethics Governance and Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

²⁹⁸⁸ UNESCO Global AI Ethics and Governance Observatory, *Readiness Assessment Methodology* (2025), https://www.unesco.org/ethics-ai/en/ram

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Caribbean SIDS regarding the environment, history of colonialism, and maintenance of distinctive Caribbean cultures.

Jamaica has also demonstrated the oversight capacity of its judicial system with its Supreme Court striking down a law that would have implemented state surveillance through a mandatory AI-powered national identification system. Jamaica is now building on these efforts and is in the process of drafting a national AI strategy. Concerns persist, however, given the growing use of facial recognition technology.

Japan

In 2024, Japan introduced voluntary AI Guidelines for Business, version 1.0, which encourage continual risk assessment as part of a process of effective oversight. Internationally, Japan partnered with UNESCO on the Global AI Ethics and presented a framework for global regulation of Generative AI at the OECD.

National AI Strategy

Under the direction of former Prime Minister Shinzo Abe, Japan has emerged as a global leader in both AI policy and data governance. Abe declared in 2019 that "Artificial Intelligence (AI) must be used solely for humans and humans must be held responsible for its outcome. We will take the lead in establishing human-centered ethical principles for AI." ²⁹⁸⁹

Earlier, in 2016, Prime Minister Abe called for the Japanese government to establish an "Artificial Intelligence Technology Strategy Council."²⁹⁹⁰ The Council set out an Artificial Intelligence Technology Strategy and Industrialization Roadmap.²⁹⁹¹ The Roadmap focuses on public-private collaboration along the AI "full pipeline from research and development to social implementation."

Japan's AI strategy emphasizes a risk-based, agile, and multi-stakeholder process, rather than a one-size-fits-all obligation or prohibition.²⁹⁹² Priority areas include productivity; health, medical care, and long-term care; mobility; and

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²⁹⁸⁹ Prime Minister of Japan, Speeches and Statements by the Prime Minister, *Policy Speech by Prime Minister Shinzo Abe to the 198th Session of the Diet* (Jan. 28, 2019), https://japan.kantei.go.jp/98 abe/statement/201801/ 00003.html

²⁹⁹⁰ Prime Minister of Japan, *Council for Science, Technology and Innovation* (Sept. 15, 2016), https://japan.kantei.go.jp/97 abe/actions/201609/15article2.html

²⁹⁹¹ Strategic Council for AI Technology, *Artificial Intelligence Technology Strategy* (Mar. 31, 2017), https://ai-japan.s3-ap-northeast-

^{1.}amazonaws.com/7116/0377/5269/Artificial Intelligence Technology StrategyMarch2017.pdf

2992 Center for Strategic & International Studies, *Japan's Approach to AI Regulation and Its Impact on the 2023 G7 Presidency* (Feb. 14, 2023), https://www.csis.org/analysis/japans-approach-ai-regulation-and-its-impact-2023-g7-presidency

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information security. The roadmap includes three phases: (1) the development and application of AI within various domains, (2) the public use of data and AI across those domains, and (3) the creation of ecosystems that integrate domains together. In August 2018, an action plan specified the objectives and timetable for accomplishment for each initiative under the Strategy.

The government established separate opportunities for the examination of ethical aspects of AI technology, intellectual property rights, personal information protection, and promotion of open data as cross-sectional items.²⁹⁹³

Japan updated the AI Strategy in 2019,²⁹⁹⁴ 2021²⁹⁹⁵ and again in 2022.²⁹⁹⁶ The 2022 Strategy defines the purpose "to contribute to the resolution of global issues through the realization of Society 5.0 and to present a comprehensive policy package related to AI for overcoming Japan's own social issues and improving industrial competitiveness."²⁹⁹⁷ The "Society 5.0" refers to "a human-centered society that balances economic advancement with the resolution of social problems by a system that highly integrates cyberspace and physical space."²⁹⁹⁸

"Based on the "Human-Centered AI Social Principles," it is important to enable diverse human resources to contribute based on a wide range of knowledge, perspectives, ideas, etc., regardless of their diverse backgrounds such as gender, age, political beliefs, and religion." ²⁹⁹⁹

The 2022 strategic objectives are: (0) dealing with imminent crises by establishing systems and technological infrastructures to maximize the protection of people's lives and property against pandemics and large-scale disasters; (1) developing and attracting "human resources for the AI era" in a sustainable manner; (2) "Japan should become a top runner in the application of AI in real-world industries and achieve enhanced industrial competitiveness" while contributing to "the promotion of sustainable industries and the achievement of the UN Sustainable Development Goals (SDGs) through innovation" "In

²⁹⁹³ Strategic Council for AI Technology, *Artificial Intelligence Technology Strategy* (Mar. 31, 2017), https://ai-japan.s3-ap-northeast-

^{1.}amazonaws.com/7116/0377/5269/Artificial Intelligence Technology StrategyMarch2017.pdf ²⁹⁹⁴ Prime Minister's Office, Integrated Innovation Strategy Promotion Council Decision, *AI Strategy 2019: AI for Everyone: People, Industries, Regions and Governments*, Tentative Translation (Jun 11, 2019), https://www8.cao.go.jp/cstp/ai/aistratagy2019en.pdf

²⁹⁹⁵ Cabinet Office, Science and Technology, Integrated Innovation *Strategy 2021* (Updated Feb. 4, 2025), https://www8.cao.go.jp/cstp/ai/index.html

²⁹⁹⁶ Cabinet Office, Science and Technology, *AI Strategy 2022* (Apr. 22, 2022),

https://www8.cao.go.jp/cstp/ai/aistratagy2022en.pdf)

²⁹⁹⁷ Ibid, p. 2

²⁹⁹⁸ Cabinet Office, *Society 5.0*, https://www8.cao.go.jp/cstp/english/society5_0/index.html

²⁹⁹⁹ Cabinet Office, Science and Technology, AI Strategy 2022, p. 3,

https://www8.cao.go.jp/cstp/ai/aistratagy2022en.pdf)

³⁰⁰⁰ Ibid, p. 5

³⁰⁰¹ Ibid, p. 6

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addition, it is important to further improve the quality of services, improve the working environment, and ultimately reduce the financial burden by applying AI in the public sector"3002 (3) realizing a "sustainable society with diversity"3003 not only for Japan but also on a global scale to contribute in the achievement of SDGs; (4) "Japan should take the leadership to build an international network in the AI field for research, education and social infrastructure and accelerate AI research and development, human resources development, and achievement of SDGs"3004

Social Principles of Human-Centric AI

Japan's 2019 Social Principles of Human-Centric AI³⁰⁰⁵ were developed by the Council for Social Principles of Human-Centric AI. The Social Principles specify the form of society that Japan should aim for, discuss impacts on society, present a set of AI social principles, and identify issues to consider in AI R&D and social implementation. They call for all relevant stakeholders to cooperate and interact closely.

Three fundamental values underpin the Social Principles of Human-Centric AI: (1) Dignity—A society in which human dignity is respected; (2) Diversity and Inclusion—A society in which people with diverse backgrounds can pursue their own well-being; and (3) Sustainability—A sustainable society.

The social principles themselves are meant to be implemented across the Japanese society, including national and local governments, as well as in multilateral frameworks. They include seven principles for AI:

- 1. Human-Centric—The utilization of AI must not infringe upon the fundamental human rights guaranteed by the Constitution and international standards and AI should be developed, utilized, and implemented in society to expand the abilities of people and allow diverse people to pursue their own well-being;
- 2. Education/Literacy—All stakeholders must have an accurate understanding of AI, knowledge, and ethics permitting appropriate use of AI in society;
- 3. Privacy Protection—AI should not infringe on a person's individual freedom, dignity or equality; AI using personal data should have mechanisms to ensure accuracy and legitimacy, and to allow individuals to be substantially involved in managing the privacy of their personal data, personal data must be protected appropriately according to its degree of importance and sensitivity;
- 4. Ensuring Security—A risk management approach is necessary;
- 5. Fair Competition;

3003 Ibid

³⁰⁰² Ibid

³⁰⁰⁴ Ibid, p. 7

³⁰⁰⁵ Cabinet Secretariat, Government of Japan, *Social Principles of Human-Centric AI* (Feb. 15, 2019), https://www.cas.go.jp/jp/seisaku/jinkouchinou/pdf/humancentricai.pdf

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6. Fairness, Accountability, and Transparency—It is necessary to ensure fairness and transparency in decision-making, appropriate accountability for the results, and trust in the technology so that people who use AI are not subject to undue discrimination related to personal background, or unfair treatment in terms of human dignity; and

7. Innovation.

On January 28, 2022, Japan's Ministry of Economy, Trade and Industry (METI) updated the "Governance Guidelines for implementation of AI Principles" after additionally inviting experts from consumer protection and standardization, aiming to operationalize the AI principles that are required for the facilitation of deployment of AI.³⁰⁰⁶

The Ministry of Economy, Trade and Industry (METI) and the Ministry of Internal Affairs and Communications (MIC) integrated and updated the existing guidelines; AI R&D Guidelines, AI Utilization Guidelines, and Governance Guidelines for Implementation of AI Principles and compiled AI Guidelines for Business V 1.0 in 2024. The Guidelines set out ten principles to be considered (1) human centricity (2) transparency (3) fairness (4)accountability (5) security (6) privacy (7) education and literacy (8) fair competition (9) innovation and (10) safety.³⁰⁰⁷

AI R&D Guidelines

The original AI R&D Guidelines were directed at developers.³⁰⁰⁸ They include 9 principles related to (1) collaboration; (2) transparency; (3) controllability; (4) safety; (5) security; (6) privacy; (7) ethics (respect human dignity and individual autonomy); (8) user assistance; and (9) accountability.

The Japanese AI R&D Guidelines influenced global AI policies. The Japanese government proposed an international discussion on AI policy at the G-7 ICT Ministers' meeting in 2016 in Kagawa-Takamatsu and presented the Guidelines to the G-7 Leaders meeting in Turin, Italy in 2017. The Japanese AI R&D Guidelines also contributed significantly to the development of the OECD AI Principles, the first global framework for AI Policy. The OECD AI Principles were adopted by 42 countries in May 2019, and then by G-20 Nations

³⁰⁰⁶ METI, Governance Guidelines for the Practice of AI Principles Ver. 1.1 Has Been Compiled (Jan. 28, 2022), https://www.meti.go.jp/press/2021/01/20220125001/20220124003.html ³⁰⁰⁷ METI, Call for Public Comments on Draft AI Guidelines for Business to Open (Jan. 19, 2024), https://www.meti.go.jp/english/press/2024/0119_001.html; METI, AI Guidelines for Business Ver. 1.0 (Apr. 19, 2024),

https://www.meti.go.jp/shingikai/mono info service/ai shakai jisso/pdf/20240419 9.pdf

3008 The Conference toward AI Network Society, *Draft AI R&D Guidelines for International Discussions* (Jul. 28, 2017), https://www.soumu.go.jp/main_content/000507517.pdf

3009 Ibid; Ministry of Internal Affairs and Communications, *G7 ICT Ministers' Meeting* (Apr. 29, 2016), https://www.soumu.go.jp/joho-kokusai/g7ict/english/about.html

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at the Leaders' Summit hosted in Osaka, in June 2019. OECD Secretary-General thanked Prime Minister Abe and said that the OECD AI Principles, endorsed by the G-20 nations, are "affirming that the AI we want is centered on people, respects ethical and democratic values, is transparent, safe, and accountable."

Al Governance in Japan

From a regulatory standpoint, Japan has no regulations that generally constrain the use of AI. According to a 2021 report published by the Ministry of Economy, Trade, and Industry (METI) which comprehensively describes Japan's AI regulatory policy, such "legally-binding horizontal requirements for AI systems are deemed unnecessary at the moment." The introduction of general-purpose AI systems and the risks to national security, human rights and democratic process impacted the regulatory approach. The 2023 and 2024 Whitepapers published by Liberal Democratic Party AI Project Team consider introduction of narrow legislation for advanced AI systems with serious risks. 3011

In the case of sector-specific regulations, none prohibit the use of AI, but rather promote the adoption of AI while requiring businesses to take appropriate measures and disclose information about risks. Tor example, the Digital Platform Transparency Act imposes requirements on large online malls, app stores, and digital advertising businesses to ensure transparency and fairness in transactions with business users, including the disclosure of key factors determining their search rankings. The Financial Instruments and Exchange Act requires businesses engaging in algorithmic high-speed trading to register with the government and requires them to establish a risk management system and maintain transaction records. The specific regulations are records.

https://www.meti.go.jp/english/policy/mono_info_service/information_economy/digital_platfor_ms/index.html

Report from the Expert Group on How AI Principles Should Be Implemented, *AI Governance in Japan Ver. 1.1* (Jul. 9, 2021),

https://www.meti.go.jp/shingikai/mono_info_service/ai_shakai_jisso/pdf/20210709_8.pdf 3011 LDP Headquarters for the Promotion of Digital Society Project Team on the Evolution and Implementation of AIs, *The AI White Paper Japan's National Strategy in the New Era of AI* (Apr. 2023), https://www.taira-m.jp/ldp%E2%80%99s%20ai%20whitepaper_etrans_2304.pdf; *AI White Paper 2024 New Strategies in Stage II: Toward the World's Most AI-Friendly Country* (Apr. 2024), https://www.taira-m.jp/AI%20White%20Paper%202024.pdf

³⁰¹² Center for Strategic & International Studies, *Japan's Approach to AI Regulation and Its Impact on the 2023 G7 Presidency* (Feb. 14, 2023), https://www.csis.org/analysis/japans-approach-ai-regulation-and-its-impact-2023-g7-presidency

³⁰¹³ See METI, Digital Platforms,

³⁰¹⁴ Financial Instruments and Exchange Act (Act No. 25 of 1948),

https://www.fsa.go.jp/common/law/fie01.pdf

³⁰¹⁵ Center for Strategic & International Studies, *Japan's Approach to AI Regulation and Its Impact on the 2023 G7 Presidency* (Feb. 14, 2023), https://www.csis.org/analysis/japans-approach-ai-regulation-and-its-impact-2023-g7-presidency

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Public Participation

Japan organized a conference with public participation in advance of the 2016 G-7 ICT Ministers' meeting. The conclusions of the conference informed the 2016 Takamatsu Declaration. The G7 ICT Ministers agreed to promote ICT technology R&D for Artificial Intelligence; meet high standards of privacy and data protection; promote accessibility and digital literacy for everyone; and respect cultural and linguistic diversity.

In October 2016, Japan³⁰¹⁸ also launched a new public conference on the theme "Toward AI Network Society" with the participation of experts from industry, academia, and citizens to examine the social, economic, ethical, and legal implications of AI.³⁰¹⁹ The AI Network Society conference formulated the AI R&D Guidelines. ³⁰²⁰ In 2019, another meeting of the Toward AI Network Society conference produced the AI Utilization Guidelines, "a commentary on the principles expected to be taken into consideration in the utilization of AI." ³⁰²¹

The 2022 AI Governance Guidelines were elaborated following public consultation. In 2021, the Ministry of Economy, Trade, and Industry issued a call for Public Comments on the AI Governance Guidelines for Implementation of AI Principles Ver. 1.1³⁰²² The Governance Guidelines reflect the advice of companies, academics, legal experts, and auditors.

Data Protection

The 2003 Act on the Protection of Personal Information (APPI) initially governed data processing in the private sector only. 3023 As of April 2022, the APPI shall apply to the private sector, national administrative agencies, local

³⁰¹⁹ Ministry of Internal Affairs and Communications, Japan, *The Conference toward AI Network Society—Release of 2020 Report* (Jul. 21, 2020), https://www.soumu.go.jp/main_sosiki/joho_tsusin/eng/pressrelease/2020/7/21_1.html

³⁰¹⁶ G7 Information Center, *Joint Declaration by G7 ICT Ministers* (Apr. 30, 2016), http://www.g8.utoronto.ca/ict/2016-ict-declaration-en.pdf

³⁰¹⁷ G7 Information Center, *Joint Declaration by G7 ICT Ministers (Action Plan on Implementing the Charter)* (Apr. 30, 2016), http://www.g8.utoronto.ca/ict/2016-ict-declaration.html

³⁰¹⁸ Ibid

³⁰²⁰ Professor at the Faculty of Global Informatics, Chuo University and Project Professor at the Graduate School of Interdisciplinary Information Studies, University of Tokyo.

³⁰²¹ The Conference toward AI Network Society, AI Utilization Guidelines Practical Reference for AI utilization (August 9, 2019), https://www.soumu.go.jp/main_content/000658284.pdf
³⁰²² METI, Call for Public Comments on "AI Governance Guidelines for Implementation of AI Principles Ver. 1.0" Opens (Jul. 9, 2021),

https://www.meti.go.jp/english/press/2021/0709 004.html

³⁰²³ Act on the Protection of Personal Information (Act No. 57 of 2003),

https://www.cas.go.jp/jp/seisaku/hourei/data/APPI.pdf; Japanese Law Translation, *Act on the Protection of Personal Information*, Consolidated Text (Apr. 1, 2023), https://www.japaneselawtranslation.go.jp/en/laws/view/4241/en

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governments, national and public hospitals, national and public universities, and national research and development corporations.³⁰²⁴ This amendment accompanies the launch of a new Digital Agency in September 2021. The aim is "to accelerate the digitization of local and central government after the COVID 19 pandemic further exposed the necessity of reformation". The Agency "commits to "Human-friendly digitalization: No one left behind", underpinned by the vision of "Government as a service" and "Government as a startup"."³⁰²⁵

The 2020 amendments to the APPI bring the law closer to the EU's General Data Protection Regulation (GDPR).³⁰²⁶ The amendments upgrade individuals' rights, introduce the concept of pseudonymization, reinforce data breach reporting, and increase penalties for offenders. In January 2019, the European Commission adopted an adequacy decision on Japan's APPI, allowing personal data to flow freely between the two economies.³⁰²⁷

Prime Minister Abe put forward the concept of Data Free Flow with Trust (DFFT) in a speech at the World Economic Forum in January 2019.³⁰²⁸ Abe said, "We must, on one hand, be able to put our personal data and data embodying intellectual property, national security intelligence, and so on, under careful protection, while on the other hand, we must enable the free flow of medical, industrial, traffic and other most useful, non-personal, anonymous data to see no borders, repeat, no borders." Abe underscored the importance of privacy protection, explaining that the DFFT regime should be built on "non-personal data." Abe further emphasized that the appropriate framework for the protection and governance of data according to their sensitivity would allow higher freedom of data flow across borders. The G20 Leaders adopted the concept of Data Free

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³⁰²⁴ Personal Information Protection Commission, Japanese Law Translation, *Outline of the Act on the Arrangement of Related Laws for the Formation of a Digital Society* (May 21, 2022), https://www.japaneselawtranslation.go.jp/outline/36/211105155408 905R305.pdf

Digital Agency, *Priority Policy Program for Realizing Digital Society* (Jul. 22, 2022), https://www.digital.go.jp/assets/contents/node/basic_page/field_ref_resources/0f321c23-517f-439e-9076-5804f0a24b59/fdefa215/20220722_en_priority_summary_01.pdf

³⁰²⁶ Personal Information Protection Commission, of Japan. *Amended Act on the Protection of Personal Information* (Jun. 12, 2020),

https://www.ppc.go.jp/files/pdf/overview_amended_act.pdf; Review of the APPI must be made every three years

³⁰²⁷ European Commission, European Commission adopts adequacy decision on Japan, creating the world's largest area of safe data flows (Jan. 23, 2019),

https://ec.europa.eu/commission/presscorner/detail/en/IP_19_421; Masao Horibe, *The Realization of Mutual Adequacy Recognition Between Japan and the EU and Issues Raised in the Process*, Global Privacy Law Review, vol. 1, no. 3 (2020).

³⁰²⁸ Ministry of Foreign Affairs, Japan, Speech by Prime Minister Abe at the World Economic Forum Annual Meeting: Toward a New Era of "Hope-Driven Economy" (Jan. 23, 2019), https://www.mofa.go.jp/ecm/ec/page4e 000973.html

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Flow with Trust at the 2019 Summit,³⁰²⁹ and reaffirmed the goal at the 2020 Summit in Riyadh.³⁰³⁰

Regulatory cooperation for DFFT was also discussed at the Digital Ministers' G7 Digital Track during the G7 Germany 2022 and was a key topic during the G7 Digital Ministers' meeting in Takasaki in April 2023 as well.³⁰³¹

The G7 2022 Action Plan for Promoting DFFT emphasized the importance of regulatory cooperation. Key topics for discussion include regulatory approaches related to privacy-enhancing technologies and interoperability of data protection frameworks, as well as regulatory cooperation between data protection and privacy authorities on enforcing data protection and related laws and regulations.³⁰³²

The third G7 Data Protection and Privacy Authorities Roundtable took place in Japan in June 2023. Issues such as "the promotion of DFFT, cross-border enforcement cooperation and advanced technologies and privacy protection with the aim of fostering cooperation amongst each other" were addressed. 3033

The Personal Information Protection Commission (PPC), established in 2016, supervises the implementation of the APPI. PPC members exercise their official authority independently. The PPC also supervises the implementation of the My Number Act, which regulates the use of numeric identifiers for social security and taxation.³⁰³⁴

The PPC is a member of the Global Privacy Assembly since 2017.³⁰³⁵ The PPC endorsed the 2018 GPA Declaration on Ethics and Data Protection in

http://www.g20.utoronto.ca/2020/2020-g20-leaders-declaration-1121.html

The Japan Times, *Full text of the G20 Osaka leaders' declaration* (Jun. 29, 2019), https://www.japantimes.co.jp/news/2019/06/29/national/full-text-g20-osaka-leaders-declaration/3030 G20 Riyadh Summit, *Leaders' Declaration* (Nov. 21–22, 2020),

³⁰³¹ Ministry of Internal Affairs and Communications of Japan, *Results of G7 Digital and Tech Ministers' Meeting in Takasaki, Gunma* (Apr. 30, 2023)

³⁰³³ Personal Information Protection Commission, *The 3rd G7 Data Protection and Privacy Authorities Roundtable*.

https://www.ppc.go.jp/en/aboutus/roles/international/conferences/g7injapan2023 en/. See also See in particular, G7 Germany, *Roundtable of G7 Data Protection and Privacy Authorities* https://www.bfdi.bund.de/SharedDocs/Downloads/EN/G7/Communique-2022.pdf? blob=publicationFile&v=1

³⁰³⁴ Personal Information Protection Commission, *Act on the Use of Numbers to Identify a Specific Individual in the Administrative Procedure* https://www.ppc.go.jp/files/pdf/en3.pdf
³⁰³⁵ 39th International Conference of Data Protection and Privacy Commissioners, *Accreditation resolution* (Sept. 26, 2017), http://globalprivacyassembly.org/wp-content/uploads/2015/02/Accreditation-resolution-2017.pdf

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Artificial Intelligence,³⁰³⁶ the 2020 GPA Resolution on AI Accountability,³⁰³⁷ the 2022 GPA Resolution on Facial Recognition Technology³⁰³⁸ and the 2023 GPA Resolution on Generative AI.³⁰³⁹

Algorithmic Transparency

Japanese law does not contain a general right of algorithmic transparency. However, there are specific provisions for certain sectors. For example, for financial services, the Comprehensive Guidelines for Supervision over Major Banks require that the concerned individual be provided with specific explanations of the reasons for the rejection of a request to conclude a loan agreement.³⁰⁴⁰

In July 2022, the Tokyo District Court ruled in favor of Hanryumura, a Korean-style BBQ restaurant chain operator in an antitrust case brought against Kakaku.com, operator of Tabelog, Japan's largest restaurant review platform. Japanese legal experts have said an antitrust case related to a local restaurant website could change how large internet platforms such as Google, Facebook, and Amazon operate in the country, forcing them to reveal the inner workings of their secret algorithms. "There hasn't been a case in competition law anywhere else in the world where a court has requested a digital platform to disclose its algorithm," said Kentaro Hirayama, a lawyer specializing in antitrust issues and formerly with Japan Fair Trade Commission, the country's antitrust regulator. The internet company has appealed against the decision. 3041

³⁰³⁶ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf
3037 Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

³⁰³⁸ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

³⁰³⁹ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf.

of 23 January 2019 pursuant to Regulation (EU) 2016/679 of the European Parliament and of the Council on the adequate protection of personal data by Japan under the Act on the Protection of Personal Information, par. 93 (Mar. 19, 2019), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019D0419

³⁰⁴¹ Financial Times, *Japanese court ruling poised to make Big Tech open up on algorithms* (Jul. 3, 2022) https://www.ft.com/content/f360f766-7865-4821-b740-ca0276efec19

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Facial Recognition

Japan has deployed facial recognition in several sectors, including transportation, banking (ATMs), police, and immigration. Japan used facial recognition technology originally intended for security purposes, along with thermal scans to prevent the spread of the novel coronavirus when it hosted the Tokyo Olympics and Paralympics in 2021. Go Iwashita, the Director of the Security Bureau for Tokyo Organizing Committee for the Olympic and Paralympic Games, said "Throughout the game, four million facial recognition operations had been performed and we received no reports of failure." 3043

Osaka Metro Co. has developed automated ticket gates with facial recognition with a view to equipping all metro stations in Osaka by 2024, ahead of the 2025 World Expo.³⁰⁴⁴ Likewise, the Japanese Ministry of Economy, Trade and Industry is testing facial recognition ticketing on driverless buses in several cities across the country.³⁰⁴⁵

In September 2020, Japan Times reported that Japanese Police Forces have been using facial recognition technology across the nation since March 2020 to locate criminal suspects. Critics warned that the system could transform the country into a surveillance society unless it operates under strict regulations, a senior National Police Agency (NPA) official said "we are using the system only for criminal investigations and within the scope of the law. We discard facial images that are found to be unrelated to cases."³⁰⁴⁶ The NPA manages and utilizes facial images under rules set by the National Public Safety Commission, a Japanese Cabinet Office commission that guarantees the neutrality of the police system by insulating the force from political pressure and ensuring the maintenance of democratic methods in police administration. The NPA also manages fingerprints and DNA under the Public Safety Commission. The agency's database currently holds 10 million facial images of criminal suspects.

Japan does not have specific legislation for facial recognition in the government sector. As of September 2020, the Japanese APPI covers the use of

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³⁰⁴² Find Biometrics, *Japan to Pair Face Recognition with Mask and Temperature Detection During Tokyo Olympic* (Oct. 22, 2020), https://findbiometrics.com/japan-pair-face-recognition-mask-temperature-detection-during-tokyo-olympics-102209/

³⁰⁴³ HuffPost, Facial Recognition Performed 4 Million Times: Behind the Scenes, Ensuring Safety and Security at the Tokyo 2020 Games (in Japanese) (Nov. 29, 2021),

https://www.huffingtonpost.jp/entry/nec-visionary-week-2021_jp_618cdfc8e4b0b1aee9213aff 3044 The Mainichi, *Osaka Metro to introduce facial recognition ticket gates ahead of 2025 expo* (Dec 11, 2019) https://mainichi.jp/english/articles/20191210/p2a/00m/0bu/020000c

³⁰⁴⁵ NFCW, *Japanese passengers test facial recognition ticketing on driverless buses* (Sept. 10, 2020) https://www.nfcw.com/2020/09/10/367826/japanese-passengers-test-facial-recognition-ticketing-on-driverless-buses

³⁰⁴⁶ Biometric Update, *Police in Japan reveal use of facial biometrics in criminal probes* (Sept. 16, 2020), https://www.biometricupdate.com/202009/police-in-japan-reveal-use-of-facial-biometrics-in-criminal-probes

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facial biometric data gathered from security cameras. 3047 Law enforcement is however exempt from this type of privacy regulation. APPI also allows the use of anonymized facial recognition data beyond the intended purposes if such data is sufficiently protected from being restored to its original form. The Personal Information Protection Commission formed a committee of experts in January 2022 to review and prepare a guideline for the appropriate use of camera images for crime prevention and safety in public spaces.³⁰⁴⁸ The draft guidelines were released for public comment in January 2023. The PPC supports the use of facial recognition cameras in public places for crime prevention or security purposes but recommends that operators increase transparency so as not to cause undue anxiety to those being filmed. ³⁰⁴⁹

Biometric Identification

In 2021, the Digital Agency has been endowed with the task to accelerate the digitization of public services, industries and lifestyle through the My Number System and My Number Card. My Number System relates primarily to the Social Security and Tax Number System which provides one unique number to all registered residents in Japan. The system serves to centralize all personal information dispersed across various administrations with the aim to improve the efficiency of public services. The My Number Card can be used as an official identification card as well as a multi-purpose card for a wide range of public services or for various private on-line transactions.

Before the COVID-19, the former Director-General of the Administrative Management Bureau at the Ministry of Internal Affairs and Communications, Susumu Kamimura, explained that among the reasons why AI usage progressed slowly in the Japanese Public sector are the "black-box effect" and the "privacy issue". As for the black box effect, "this is more likely the reason AI has not been deployed in the public sector, where transparency and accountability are often more important than efficiency and low-cost."3050 "The privacy issue is another factor. Japanese people are extremely sensitive to a lack of privacy, and that is the main reason Japan does not have a true national ID system, and its partial substitute – My Number – has not been fully implemented. An AI-powered precise identification of personal features will not be readily tolerated."3051

³⁰⁴⁷ Ibid

³⁰⁴⁸Personal Information Protection Commission, Report of Expert Review Panel on the Use of Camera Images for Crime Prevention and Safety [Report in Japanese] (Mar. 2023), https://www.ppc.go.jp/personalinfo/camera utilize/

³⁰⁴⁹ Ibid

³⁰⁵⁰ Susumu Kamimura, Artificial Intelligence and Lessons from Japan's Public Sector, Nihon University Bulletin 60 (2018), p. 11, https://www.publication.law.nihonu.ac.jp/pdf/bulletin/bulletin 60/each/12.pdf

³⁰⁵¹ Ibid., p. 10.

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A survey on attitudes toward the My Number Card by Kioicho Strategy Institute showed that, "Among respondents, 59.4% said they have a My Number Card, which roughly corresponds to the 55.7% of Japanese as a whole. [...] By contrast, 18.4% of respondents said that they had no intention of obtaining a card." "As a means of promoting the My Number Card scheme, the government is conducting a campaign to give card holders up to \fomega20,000 worth of My Number Points that can be used for shopping and other purposes." 3052

In February 2023, the Tokyo Medical Practitioners Association filed a lawsuit against the government with the Tokyo District Court to prevent the replacement of patients' insurance cards with My Number from April 2023. "The suit claims that in order for the government to require medical institutions to accept My Number cards, the Health Insurance Act should be amended." 3053

Environmental Impact of Al

Japan announced plans in October 2020 to achieve net zero carbon emissions by 2050 and has since accelerated efforts to eliminate emissions. The Green Growth Strategy hinges on decarbonizing the production of electricity through renewable energy and hydrogen power and shifting sectors such as transportation to electricity. Through the Strategy, Japan plans to leverage various methods to decrease energy demand and carbon emissions, including taxation as well as innovation. The strategy of t

Rather than viewing regulation and carbon taxes as hindrances to innovation, Japan's Director of the Environmental Policy Division in the Ministry of Economy, Trade and Industry Kawahara Kei sees opportunity: "While increasing Japan's industrial competitiveness, we will make our contribution to the world by spreading Japanese technology overseas." 3056

Lethal Autonomous Weapons

Since 2014, Japan has participated in international talks on lethal autonomous weapons systems. Japan often states that it has "no plans" to acquire such weapons and highlights the need to retain meaningful human control over the

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³⁰⁵² Only Fraction of Japanese Residents Use My Number ID Card for Health Insurance, nippon.com (Nov. 7, 2022), https://www.nippon.com/en/japan-data/h01482/

³⁰⁵³ Alessandro Mascellino, *Doctors in Japan challenge govt mandatory use of digital ID for health services* (Feb. 23, 2023), https://www.biometricupdate.com/202302/doctors-in-japan-challenge-govt-mandatory-use-of-digital-id-for-health-services

³⁰⁵⁴ JapanGov, *Japan's Green Growth Strategy Will Accelerate Innovation* (Sept. 16, 2021), https://www.japan.go.jp/kizuna/2021/09/green growth strategy.html

Mark Minevich, *Japan's Green IT: A Game Changer in Environmental Sustainability* (Jul. 18, 2023), https://www.forbes.com/sites/markminevich/2023/07/18/japans-green-it-a-game-changer-in-environmental-sustainability/

³⁰⁵⁶ Quoted in JapanGov, *Japan's Green Growth Strategy Will Accelerate Innovation* (Sept. 16, 2021), https://www.japan.go.jp/kizuna/2021/09/green_growth_strategy.html

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use of force. However, Japan does not support the negotiation for a new treaty to address mounting concerns over fully autonomous weapons and has yet to join the group of 29 countries calling for a prohibition on such weapons.³⁰⁵⁷

In December 2021, Japan and other countries blocked any advancement in U.N. talks toward legally binding measures to ban and regulate the development and use of lethal autonomous weapon systems. The Sixth Review Conference of the Convention on Certain Conventional Weapons ended in December 2021 in Geneva without progress, failing to reflect eight years of work and leaving countries and nongovernmental organizations that have called for legally binding rules expressing disappointment. 3058

At the 77th UN General Assembly First Committee meeting in October 2022, Japan issued a statement, noting that the country "recognizes the meaningful results achieved by the Group of Governmental Experts (GGE) in the discussion on emerging technologies in the area of lethal autonomous weapons systems (LAWS) in the past years, as one of the key topics under the CCW. Despite the sensitivity and complexity of this issue, intensive deliberations at the GGE meetings have significantly contributed to fostering bases for common understanding. Japan believes it is beneficial for the High Contracting Parties to continue the discussion on LAWS step-by-step within the CCW framework. Japan also welcomes many proposals submitted to the GGE this year to advance such discussion. Japan will continue to actively contribute to international rule-making." 3059

Japan was also among the 70 countries that delivered a joint statement on autonomous weapons systems at the 77th UN General Assembly. In this joint statement, States urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law ("IHL"), including through maintaining human responsibility and accountability in the use of force." ³⁰⁶⁰ In a

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³⁰⁵⁷ Human Rights Watch. *Japan: Retain Human Control Over the Use of Force* (Sept. 6, 2019), https://www.hrw.org/news/2019/09/06/japan-retain-human-control-over-use-force

³⁰⁵⁸ Japan Times, *Japan and U.S. Block Advancement in UN Talks on Autonomous Weapons* (Dec. 20, 2021), https://www.japantimes.co.jp/news/2021/12/20/world/politics-diplomacy-world/japan-us-autonomous-weapons/

³⁰⁵⁹ UN General Assembly, *Statement of Japan at the First Committee of the 77th Session of the General Assembly* (Oct. 2022), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/22/statements/21Oct_Japan.pdf

³⁰⁶⁰ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

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2024 statement to UN, Japan supported the view that "the obligations of IHL apply to all weapon systems, including LAWS, that weapon systems must not be used if they are incapable of being used in compliance with IHL [...] Japan recognizes that, in the use of weapon systems, human responsibility cannot be transferred to machines, and we must ensure that they are operated under a responsible chain of human command and control in a manner consistent with the obligations of states under IHL, and that responsibility is clearly attributed."³⁰⁶¹

Representatives from Japan³⁰⁶² agreed a joint call to action on the responsible development, deployment and use of artificial intelligence in the military domain following the February 2023 Summit on Responsible Artificial Intelligence in the Military Domain (REAIM) in The Hague.³⁰⁶³ Japan also endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023.³⁰⁶⁴ Japan is also involved in the Global Commission on Responsible AI in the Military Domain launched at the 2023 REAIM Summit.³⁰⁶⁵

The Republic of Korea hosted the second REAIM summit in 2024. Japan endorsed the outcome document, the Blueprint for Action,³⁰⁶⁶ which outlines principles for AI governance and emphasizes international law compliance, accountability, and human oversight.³⁰⁶⁷

 $\underline{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm\ en.pdf.}$

Intelligence and Autonomy, Endorsing States (Nov. 27, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

³⁰⁶¹ Ministry of Foreign Affairs of Japan, Working paper submitted by Japan to the United Nations on emerging technologies in the area of Lethal Autonomous Weapon systems (LAWS) (May 24, 2024) https://www.mofa.go.jp/mofaj/files/100687671.pdf

³⁰⁶² Government of the Netherlands, *REAIM 2023 Endorsing Countries* (Feb. 21, 2023),

https://www.government.nl/documents/publications/2023/02/16/reaim-2023-endorsing-countries

³⁰⁶³ Government of the Netherlands, *REAIM 2023 Call to Action* (Feb. 16, 2023),

https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action
3064 US Department of State, *Political Declaration on Responsible Military Use of Artificial*Intelligence and Autonomy, Endoming States (New 27, 2024), https://www.state.com/political

³⁰⁶⁵ The Hague Centre for Strategic Studies, Global Commission on Responsible Artificial Intelligence in the Military Domain (GC REAIM),

https://hcss.nl/gcreaim/#:~:text=The%20Global%20Commission%20on%20Responsible,Military %20Domain%20in%20The%20Hague

³⁰⁶⁶ REAIM24, Blueprint for Action (Sept. 11, 2024),

 $[\]frac{https://www.reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163\&shareBbsMng}{No=10264\&shareMenuId=11613\&shareTabMenuId=}$

³⁰⁶⁷ Ministry of Foreign Affairs of Republic of Korea, *Outcome of Responsible AI in Military Domain (REAIM) Summit 2024* (Sept. 10, 2024),

https://overseas.mofa.go.kr/eng/brd/m 5676/view.do?seq=322676

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Human Rights

Japan's Global Freedom Score in 2024 was 96/100. Based on the latest Freedom House Country Report, political rights and civil liberties are generally well respected. Outstanding challenges include ethnic and gender-based discrimination and claims of improperly close relations between the government and the business sector. 3068

AI Safety Summit

In November 2023, Japan participated in the first AI Safety Summit and endorsed the Bletchley Declaration. Japan thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible." Japan launched its AI Safety Institute in 2024. Japan launched its AI Safety Institute in 2024.

OECD / G20 AI Principles

Japan endorsed the OECD and the G20 AI Principles and is a member of the Global Partnership on AI (GPAI). Japan was a catalyst for the adoption of the OECD AI Principles at the G20 Ministerial meeting in Tsukuba and the G20 Leaders' Summit in Osaka, Japan, in 2019.³⁰⁷¹ In 2024, the GPAI Tokyo Expert Support Center was established as the third Center after Montreal and Paris.³⁰⁷²

Council of Europe AI Treaty

Japan contributed as an Observer State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of law. Japan signed the Convention in February 2025.3073

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³⁰⁶⁸ Freedom House, *Freedom in the World 2024: Japan* (2024), https://freedomhouse.org/country/japan/freedom-world/2024

³⁰⁶⁹ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, *Prime Minister's Office, The Bletchley Declaration by Countries Attending the AI Safety Summit*, (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration/the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

METI, Launch of AI Safety Institute (Feb. 14, 2024), https://www.meti.go.jp/english/press/2024/0214 001.html

³⁰⁷¹ CAIDP Update 1.7, *Prime Minister Abe's AI and Data Governance Legacy* (Aug. 30, 2020), https://dukakis.org/center-for-ai-and-digital-policy/caidp-update-prime-minister-abes-ai-and-data-governance-legacy

³⁰⁷² GPAI Tokyo Expert Support Center (2024) https://www2.nict.go.jp/gpai-tokyo-esc/en/
³⁰⁷³ Ministry of Foreign Affairs of Japan, Signing of the Council of Europe Framework

Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law (Feb.)

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UNESCO Recommendation on AI Ethics

Japan, along with 192 other States, endorsed the UNESCO Recommendation on the Ethics of AI in November 2021.

METI has been holding meetings of the Expert Group on how AI principles should be implemented. While compiling its report on the AI Governance in Japan, the Expert Group acknowledged the UNESCO Recommendation as part of the "high-level guidance from AI principles to implementation" while describing "the governance structure in the era of Society 5.0." The Japanese Government also supported the launch of a platform in the Southern Africa sub-region for the implementation of the Recommendation. 3075

G7 Hiroshima Process

In 2023, the G7, led by Prime Minister Kishida, released the G7 Leaders' Statement on the Hiroshima AI Process.³⁰⁷⁶ The G7 leaders emphasized: "We also recognize the need to manage risks and to protect individuals, society, and our shared principles including the rule of law and democratic values, keeping humankind at the center."

The G7 leaders confirmed the need for generative AI governance. Thanks to Japanese diplomacy, by the end of 2023, the G7 leaders reached an agreement on the world's first international framework, known as the G7 Hiroshima AI Process Comprehensive Policy Framework. It includes both a set of Guiding Principles applicable to all AI actors throughout the entire AI lifecycle and a Code of Conduct that lists in more detail the actions that AI developers must abide by.³⁰⁷⁷ The Hiroshima process was supported by a report prepared by the OECD geared towards ensuring a common understanding on generative AI.³⁰⁷⁸ In 2024, Japan launched the Hiroshima AI Process Friends Group to expand the number of

https://www.mofa.go.jp/press/release/pressite_000001_00983.html#:~:text=On%20February%201%2C%20H.%20E.,in%20the%20presence%20of%20Mr

https://www.meti.go.jp/shingikai/mono_info_service/ai_shakai_jisso/pdf/20210709_8.pdf 3075 UNESCO Executive Board, *Implementation of the recommendation on the ethics of artificial intelligence*, Item 40 of the provisional agenda (Oct. 7, 2022), pp. 2-3, https://unesdoc.unesco.org/ark:/48223/pf0000382931

^{11, 2025),}

³⁰⁷⁴ Report from the Expert Group on how AI principles should be implemented, *AI Governance in Japan Ver. 1.1* (July 9, 2021), p. 9,

³⁰⁷⁶ Ministry of Foreign Affairs of Japan, *G7 Leaders' Statement on the Hiroshima AI Process* (Oct 30, 2023) https://www.mofa.go.jp/files/100573466.pdf
³⁰⁷⁷ Ibid

³⁰⁷⁸ OECD, G7 Hiroshima Process on Generative Artificial Intelligence (AI): Towards a G7 Common Understanding on Generative AI (2023) https://www.oecd.org/publications/g7-hiroshima-process-on-generative-artificial-intelligence-ai-bf3c0c60-en.htm

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countries and organizations committed to the Framework.³⁰⁷⁹ In 2025, as part of the G7 Hiroshima AI Process, the G7 launched HAIP, a voluntary Reporting Framework, among organizations developing advanced AI systems to encourage transparency and accountability.³⁰⁸⁰

Fvaluation

Japan is a pioneer in the field of AI policy. Japan hosted the G20 Leaders' meeting in Osaka in 2019 at which time the G20 nations endorsed the OECD AI Principles. The former Prime Minister Shinzo Abe promoted the concept of Data Free Flow with Trust (DFFT), a core concept for human-centric AI, that carries forward in the policy recommendations of the OECD, the G20, the G7 and the European Commission. During Japanese Presidency of G7 in 2023 the first international framework on generative AI was adopted. Japan also endorsed the UNESCO Recommendation on the Ethics of AI and is taking steps towards its implementation. However, concerns about the unregulated use of facial recognition remain.

Kazakhstan

In 2024, Kazakhstan adopted a Concept for AI Development for 2024–2029 and established a Committee of Artificial Intelligence and Innovation Development.

National AI Strategy

In recent years, Kazakhstan has taken an active interest in AI and new technologies to reform the country's economy and extend internal security and policing. 3081 Kazakhstan has also expressed interest in Russia's AI development. The government set out an AI and other smart technologies Agenda in 2017 and adopted the Concept for Artificial Intelligence Development for 2024–2029 in 2024. 3083

https://www.soumu.go.jp/hiroshimaaiprocess/en/supporters.html

³⁰⁷⁹ Hiroshima AI Process Friends Group, Supporters

³⁰⁸⁰ OECD.AI, *G7 reporting framework – Hiroshima AI Process (HAIP) international code of conduct for organizations developing advanced AI system* (Feb 2025) https://transparency.oecd.ai
³⁰⁸¹ Trend News Agency, *Work is Underway in Kazakhstan to Introduce the Concept of "Data-Driven Government"* (Dec. 4, 2020), https://www.trend.az/casia/kazakhstan/3345220.html
³⁰⁸² Tass, *Kazakhstan Interested in Russia's Experience in AI Development* (Dec. 4, 2020), https://tass.com/world/1231509

³⁰⁸³ Official Information Source of the Prime Minister, *Concept for Artificial Intelligence Development for 2024–2029 Adopted by Government* (Jul. 16, 2024), https://primeminister.kz/en/news/concept-for-artificial-intelligence-development-for-2024-2029-adopted-by-government-28786

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The Agenda included the cultivation and creation of new industries with the use of digital technologies along with productivity growth through the widespread introduction of automation, robotics, and AI, and the exchange of big data. One of Kazakhstan's primary purposes in embracing AI is to spark foreign investment to diversify the economy and reduce the country's economic dependence on natural resources. Developing AI is also a means for to strengthen social governance and welfare. Kazakhstan's 2017 AI Agenda mentions the growing threat of terrorism and the prevention of religious extremism propaganda on the Internet and social networks. 3085

The state program Digital Kazakhstan describes the implementation of this Agenda through the realization of several projects AI sector such as developing international technoparks for startups, telecommunications and digital infrastructure, model factors based on Industry 4.0 technologies, and smart cities.³⁰⁸⁶

The country has established several IT and research centers to be the flagships for the development of AI in Kazakhstan: Nazarbayev University, Astana International Financial Centre, and Astana International Technology Park of IT Startups.

Despite these aspirations, Kazakhstan scored only 51.41 out of 100 in the Government AI Readiness Index, with the lowest score in the technology sector. ³⁰⁸⁷ A dearth of qualified IT specialists ³⁰⁸⁸ and low R&D spending (0.13% of GDP in 2021)³⁰⁸⁹ have been significant barriers to a dynamic and innovative technology sector. According to Kazakhstan Prime Minister Askar Mamin, Kazakhstan "simply does not have such financial means to develop its own AI

³⁰⁸⁴ President of Kazakhstan, *The President of Kazakhstan Nursultan Nazarbayev's Address to the Nation of Kazakhstan Third Modernization of Kazakhstan: Global Competitiveness* (Jan. 31, 2017), http://www.akorda.kz/en/addresses/addresses_of-president/the-president-of-kazakhstan-nursultan-nazarbayevs-address-to-the-nation-of-kazakhstan-january-31-2017

³⁰⁸⁵ Ibid

³⁰⁸⁶ Adilet, On Approval of the State Program "Digital Kazakhstan" [Об утверждении Государственной программы "Цифровой Казахстан"], http://adilet.zan.kz/rus/docs/P1700000827

³⁰⁸⁷ Oxford Insights, *The Government AI Readiness Index 2024*, https://oxfordinsights.com/aireadiness-index/

³⁰⁸⁸ Radio Free Europe, *The Future "Digital Kazakhstan" Lacks IT Specialists [В будущем "цифровом Казахстане" не хватает IT-специалистов]* (Jul. 19, 2017), https://rus.azattyq.org/a/programma-cifrovoi-kazakhstan-deficit-it-specialistov/28625463.html ³⁰⁸⁹ World Bank, *Research and Development Expenditure (% of GDP) – Kazakhstan* (2021), https://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS?locations=KZ&view=map

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technologies."³⁰⁹⁰ The country is trying to address this problem with the help of foreign investors³⁰⁹¹ and international partners.³⁰⁹²

The government made several steps to advance its AI policy and implementation in 2024. The Committee of Artificial Intelligence and Innovation Development under the Ministry of Digital Development, Innovation and Aerospace Industry began its work leading and coordinating state policy in the fields of artificial intelligence, technology, innovation, and digital assets. ³⁰⁹³ The government also launched the AI People course, a nationwide initiative to increase AI literacy and skills among the general population, ³⁰⁹⁴ in line with the UNESCO recommendation on AI literacy. ³⁰⁹⁵ These measures support the realization of the Concept for Artificial Intelligence Development for 2024–2029, which focuses on six pillars: data, infrastructure, human capital, scientific research, regulatory

https://forbes.kz//process/intellektualnaya zadacha 1588745463/?

³⁰⁹⁰ Forbes Kazakhstan, *Is Kazakhstan Ready for a Technology Race? [Готов ли Казахстан к технологической гонке?]* (May 10, 2020),

³⁰⁹¹ Caspian Policy Center, *Kazakhstan*— *The Buckle in the Belt and Road Initiative Seeks Investment and Growth* (Jan. 31, 2020),

 $[\]underline{https://www.caspianpolicy.org/research/articles/kazakhstan-the-buckle-in-the-belt-and-road-initiative-seeks-investment-and-growth-10915$

³⁰⁹² EURACTIV, Kazakhstan Seeks High-Tech, Agricultural Cooperation with China, Says Tokayev during Beijing Business Council Meeting (Sept. 12, 2019),

 $[\]frac{https://www.euractiv.com/section/central-asia/news/kazakhstan-seeks-high-tech-agricultural-cooperation-with-china-says-tokayev-during-beijing-business-council-meeting/$

³⁰⁹³ Committee of Artificial Intelligence and Innovation Development under the Ministry of Digital Development, Innovation and Aerospace Industry, Regulations of the Committee on Artificial Intelligence and Innovation Development of the Ministry of Digital Development, Innovation and Aerospace Industry of the Republic of Kazakhstan [Положение Комитета искусственного интеллекта и развития инноваций Министерства цифрового развития, инноваций и аэрокосмической промышленности Республики Казахстан] (Sept. 2, 2024), https://www.gov.kz/memleket/entities/aidc/documents/details/714099?lang=ru; AKIpress, Kazakhstan Creates Artificial intelligence and Innovation Development Committee (May 6, 2024),

https://m.akipress.com/news:772065:Kazakhstan_creates_Artificial_Intelligence_and_Innovation_Development_Committee/

³⁰⁹⁴ Ministry of Digital Development, Innovation, and Aerospace, Kazakhstan Has Launched Training for the Population on the Use of Artificial Intelligence in Everyday Life [В Казахстане запустилось обучение населения применению искусственного интеллекта в повседневной жизни] (Sept. 11, 2024),

https://www.gov.kz/memleket/entities/mdai/press/news/details/843712?lang=ru; also see Astana Hub, Kazakhstan Launches Training for the Population on the Use of Artificial Intelligence in Everyday Life (Sept. 11, 2024), https://astanahub.com/en/article/v-kazakhstane-zapustilos-obuchenie-naseleniia-primeneniiu-iskusstvennogo-intellekta-v-povsednevnoi-zhizn

³⁰⁹⁵ UNESCO, *Ethics of Artificial Intelligence, A Human-Rights Approach to AI* (2025), https://www.unesco.org/en/artificial-intelligence/recommendation-ethics

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environment, and acceleration programs.³⁰⁹⁶ The Concept envisions embedding AI across economic sectors and public administration, contributing to GDP growth, and creating high-value AI products and startups.

Public Participation

Kazakhstan has yet to develop a systematic process for public consultation in matters of policy. A law on public access to government information was adopted in 2015, but it is "poorly implemented in practice." 3097

On transparency, Freedom House states, "The government and legislature offer little transparency on their decision-making processes, budgetary matters, and other operations. The media and civil society do not have a meaningful opportunity to provide independent commentary and input on pending laws and policies." 3098

A 2020 OECD report analyzed the legal and policy framework of more than 200 public councils that gathered civil society in Kazakhstan. Recommendations included the implementation of clearer guidelines for public consultation, training, and ensuring a feedback loop of the input from the Councils.

A 2022 Presidential Decree establishing an action plan for legal policy included an action to increase public participation in the process of testing candidates for judges (Action N82) and improvement of legal education and legal propaganda (Action N99).³¹⁰⁰

Presidential and governmental decrees, as well as other legal documents, are published on the Ministry of Justice official webpage, readily available to the public. The e-gov page connects to more than 700 government services.

As part of the Digital Kazakhstan National program, the Ministry of Digital Development, Innovations and Aerospace Industry oversees 740 e-

structures-is-assessed-as-high-zhaslan-madiyev-28790

3097 Freedom House, *Freedom in the World 2024: Kazakhstan, C. Functioning of Government* (2024), https://freedomhouse.org/country/kazakhstan/freedom-world/2024

3098 Ibid

³⁰⁹⁶ Official Information Source of the Prime Minister, *Kazakhstan's Readiness to Introduce AI into Economic Structures is Assessed as High – Zhaslan Madiyev* (Jul. 16, 2024), https://primeminister.kz/en/news/kazakhstans-readiness-to-introduce-ai-into-economic-

³⁰⁹⁹ OECD, *Transparent and Inclusive Stakeholder Participation through Public Councils in Kazakhstan* (Mar. 6, 2020), https://www.oecd.org/en/publications/transparent-and-inclusive-stakeholder-participation-through-public-councils-in-kazakhstan d21f1e98-en.html

³¹⁰⁰ Government of the Republic of Kazakhstan, *Decree No. 264 on Approval of the Action Plan* for the Implementation of the Concept of the Legal Policy of the Republic of Kazakhstan until 2030 [Постановление Правительства Республики Казахстан от 29 апреля 2022 года № 264 - Об утверждении Плана действий по реализации Концепции правовой политики Республики Казахстан до 2030 года] (Apr. 29, 2022), https://adilet.zan.kz/rus/docs/P2200000264

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government integrated services. Services are available to citizens via the egov.kz portal, mgov mobile app, and front offices of Government for Citizens.³¹⁰¹

Data Protection

Law No. 94-V on Personal Data and its Protection (Personal Data Law)³¹⁰² of May 21 2013 sets the general regulations for the localization, collection, and processing of personal data.

The country experienced a wave of major data breaches from the databases of the CEC and the Prosecutor General's Office in 2019.³¹⁰³ Soon after, the personal information of 11 million people was published online and could be accessed by anyone through a published database.³¹⁰⁴ These incidents led to the amendment of the existing data protection law, which was revised to mostly align with the GDPR.³¹⁰⁵

The Amendment Law on the Regulation of Digital Technologies was enacted in 2020.³¹⁰⁶ The Amendments entered into force in two phases, first in July 2020, and then in January 2021.³¹⁰⁷ Court practice regarding non-compliance with personal data protection measures began in 2021–2022.³¹⁰⁸

The amendments established the Ministry of Digital Development, Innovation and Aerospace Industry of Kazakhstan as the competent authority to

https://www.gov.kz/memleket/entities/mdai/activities/7?lang=en

³¹⁰¹ GOV.KZ, E-government and Public Services,

³¹⁰² Legal Information System of Regulatory Acts, *Law No. 94-V on Personal Data and their Protection ("Personal Data Law")* (May 21, 2013), https://adilet.zan.kz/eng/docs/Z1300000094
³¹⁰³ Catalin Cimpanu, *Extensive Hacking Operation Discovered in Kazakhstan*, ZDNet (Nov. 23, 2019), https://www.zdnet.com/article/extensive-hacking-operation-discovered-in-kazakhstan/
³¹⁰⁴ Kursiv Media, *Attackers have posted data of millions of Kazakhstanis to the network*(Злоумышленники выложили в сеть данных миллионов казакстанцев) (Jul. 4, 2019), https://kursiv.kz/news/obschestvo/2019-07/zloumyshlenniki-vylozhili-v-set-dannye-millionov-kazakhstancev

³¹⁰⁵ Legal Information System of Regulatory Acts, *Law No. 94-V on Personal Data and their Protection ("Personal Data Law")* (May 21, 2013), https://adilet.zan.kz/eng/docs/Z1300000094
³¹⁰⁶ Zakon, *Order of the Prime Minister "On Amendments and Supplements to Certain Legislative Acts [...] on the Regulation of Digital Technologies"* [Russian] (Oct. 14, 2020), <a href="https://online.zakon.kz/Document/?doc_id=34230083&pos=2;-109#pos=2;-109#sdoc_params=text%3D%25D0%25BE%25D0%25B1%25D0%25B5%25D1%2581%25D0%25BF%25D0%25BD%25D1%2581%25D0%25BP%25D0%25BD%25D1%258BB%25D0%25BD%25D1%258BB%25D0%25B9%26mode%3Dindoc%26topic_id%3D34230083%26spos%3D1%26tSynonym%3D0%26tShort%3D0%26tSuffix%3D1&sdoc_pos=1

³¹⁰⁷ Dentons, *Kazakhstan Strengthens Personal* Data Protection by Gradually Moving toward GDPR Standards (Jan. 28, 2021),

 $[\]frac{https://www.dentons.com/en/insights/alerts/2021/january/28/kazakhstan-strengthens-personal-data-protection-by-gradually-moving-toward-gdpr-standards$

³¹⁰⁸ Dentons, *Kazakhstan Adopts Real Protections of Personal Data* (Apr. 13, 2022), https://www.dentons.com/en/insights/articles/2022/april/13/kazakhstan-adopts-real-protections-of-personal-data

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enforce the data protection law, created rules for the collection and processing of personal data, and introduced the concept of "personal data safety protection service." The amendments also clarify informed consent with the requirement that the content and amount of personal data collected strictly correspond to those previously declared and to the legal purposes of their processing. While the GDPR requires "the appropriate data protection training to personnel having permanent or regular access to personal data," Kazakhstan's amendments do not require data protection training. Training is important because human error is one of the major causes of data breaches across the world.

Kazakhstan's Ministry of Digital Development, Innovation and Aerospace Industry is not a member of the Global Privacy Assembly (GPA). Thus, no national authority has sponsored the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence, 2020 GPA Resolution on AI Accountability, 2022 GPA Resolution on Facial Recognition Technology, 2021 GPA Resolution on Generative AI. 2023 GPA Resolution on Generative AI.

Algorithmic Transparency

Although Kazakhstan's Personal Data Law has been inspired by the GDPR, it does not include the concept of the "right to not be subject to automated decision-making." ³¹¹³ Kazakhstan would have the possibility to ratify the Council of Europe's Modernized Convention for the Protection of individuals with regard to the processing of personal data (Convention 108+), which provides for the right to algorithmic transparency, but has not done so. ³¹¹⁴

[.]

³¹⁰⁹ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

³¹¹⁰ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

³¹¹¹ Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

³¹¹² Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

³¹¹³ Data Guidance, *Kazakhstan—Data Protection Overview* (Jul. 2022), https://www.dataguidance.com/notes/kazakhstan-data-protection-overview

³¹¹⁴ Council of Europe, *Chart of Signatures and Ratifications of Treaty 223* (Feb. 28, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=223

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AI Regulation

Kazakhstan began regulating artificial intelligence in 2021. The President of Kazakhstan issued Decree No. 674 on the approval of the Concept of Legal Policy of the Republic of Kazakhstan until 2030.³¹¹⁵ The Decree addresses AI accountability, noting, "The need for the legal regulation of artificial intelligence and robotics is determined primarily by the solution of the issue of distribution of responsibility for the harm caused by their actions, as well as the solution of the problem of determining the ownership of intellectual property rights to works created with the participation of artificial intelligence."³¹¹⁶

A 2022 decree on the implementation of legal policy tasks State Enterprise, Ministry of Internal Affairs, and other state bodies with the "Development of the concept of 'artificial intelligence,' including the procedure, scope and range of its use, status and legal consequences, with the subsequent introduction of a separate offense providing for liability for its use for criminal purposes" ³¹¹⁷ by December of 2025 and 2026. ³¹¹⁸

Action N72 sets government entities with the responsibility to submit proposals for "Codification of the rules of law governing the most important public relations in the field of information and communication technologies, data processing, digital assets, industrial automation, information security, machine learning and artificial intelligence, protection of the rights of personal data subjects." These were planned to be finished by the end of 2023. 3119

Research & Development

The World Bank announced cooperation with Nazarbayev University in 2020 to create a National Cluster of Artificial Intelligence, including a country-based laboratory, data processing research center, and science park for the

³¹¹⁵ Dentons, *Legal Regulation of Artificial Intelligence in Kazakhstan and Abroad* (Jun. 8, 2022), https://www.dentons.com/en/insights/articles/2022/june/8/legal-regulation-of-artificial-intelligence-in-kazakhstan-and-abroad#

³¹¹⁶ President of the Republic of Kazakhstan, *Decree No. 674 on approval of the Concept of Legal Policy of the Republic of Kazakhstan until 2030 [Указ Президента Республики Казахстан от 15 октября 2021 года № 674 - Об утверждении Концепции правовой политики Республики Казахстан до 2030 года]*, section 4.13 (Oct. 15, 2021), https://adilet.zan.kz/rus/docs/U2100000674#z133

³¹¹⁷ Government of the Republic of Kazakhstan, Decree No. 264 on Approval of the Action Plan for the Implementation of the Concept of the Legal Policy of the Republic of Kazakhstan until 2030 [Постановление Правительства Республики Казахстан от 29 апреля 2022 года № 264 - Об утверждении Плана ействий по реализации Концепции правовой политики Республики Казахстан до 2030 года], Action N61 (Apr. 29, 2022),

https://adilet.zan.kz/rus/docs/P2200000264

³¹¹⁸ Ibid

³¹¹⁹ Ibid, Action N72

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development of artificial intelligence.³¹²⁰ The parties also plan to cooperate in developing common standards, rules, and policies in the field of data exchange and integration. The Kazakh Ministry of Education and Science, along with the World Bank, launched the Fostering Productive Innovation Project (FPIP)³¹²¹ in April 2020 to support and develop high-quality scientific research on, and the commercialization of, new technologies.

Facial Recognition and Smart Cities

Facial recognition surveillance technology is becoming increasingly widespread in Kazakhstan. While the government insists that the main goal is to maintain public safety, many activists are worried that this will ultimately create a totalitarian surveillance state.³¹²² This concern is even more pregnant that the companies behind these surveillance systems in Kazakhstan are under U.S. sanctions for unethical use of AI technology.

In October 2019, facial recognition systems were first installed on buses.³¹²³ Notably, President Tokayev paid a visit and discussed future cooperation with Hikvision,³¹²⁴ a Chinese state-owned surveillance company under U.S. sanctions³¹²⁵ that provided the hardware for Kazakhstan's newly established surveillance system. In the same year, the small city of Akkol was proclaimed the first complete Smart City in Kazakhstan. Akkol is digitally monitored by an AI-based facial recognition surveillance system. Its functions include thermal imaging, searching for a car by number plates, recognizing missing persons, and detecting the presence of weapons in schools, hospitals, and

³¹²⁰ Official Information Source of the Prime Minister, *EAEU Prime Ministers Participate in Digital Almaty Forum* (Jan 31, 2020), https://primeminister.kz/en/news/premer-ministry-eaes-prinyali-uchastie-v-forume-digital-almaty1

³¹²¹ World Bank, *Kazakhstan: Fostering Productive Innovation Project* (Aug. 8, 2022), https://projects.worldbank.org/en/projects-operations/project-detail/P150402

³¹²² Eurasianet, *Kazakhstan Embraces Facial Recognition, Civil Society Recoils* (Oct. 17, 2019), https://eurasianet.org/kazakhstan-embraces-facial-recognition-civil-society-recoils

³¹²³ Radio Free Europe, *The Four Big Issues Central Asia Faced in 2019 (And They're Not Going Away)* (Jan. 2, 2020), https://www.rferl.org/a/central-asia-2019-challenges-security-china-facial-recognition/30356077.html

Radio Free Europe, Does Kazakhstan Need Hikvision cameras? [Распознает даже людей в масках». Нужны ли Казахстану камеры] (Oct. 10, 2019),

 $[\]underline{https://rus.azattyq.org/a/kazakhstan-china-survelliance-camera/30210035.html}$

³¹²⁵ Bloomberg, *U.S. Blacklists Eight Chinese Tech Companies on Rights Violations* (Oct. 7, 2019), https://www.bloomberg.com/news/articles/2019-10-07/u-s-blacklists-eight-chinese-companies-including-hikvision-klgvpq77

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other public places. 3126 Over 4,000 cameras have blanketed Nur-Sultan, the capital. 3127

In 2020, the authorities announced that Kazakhstan would be spending \$23 million to install facial recognition software in its largest city, Almaty. In mid-March 2020, Kazakhstan's government was fighting the novel coronavirus. The Ministries of Health and Internal Affairs ultimately turned to AI technological solutions to confront the coronavirus outbreak. The range of technologies reoriented to enforce quarantine and curfews included traffic cameras, facial recognition technologies, and smartphone apps. The Ministry required the 8,000 or so Kazakhstani citizens under quarantine to use the SmartAstana tracking app, to allow officials monitoring compliance of isolation mandates.

The government also monitored citizens through facial recognition video surveillance technology to find violators of the quarantine regime in Almaty. By the end of the country's two-month state of emergency, 2,424 people had been charged with violating quarantine in Almaty and 3,347 in Nur-Sultan. According to experts, the pandemic exacerbated the existing arbitrary and uneven policing practices as national and municipal authorities' surveillance practices increased without public oversight. 3131

The country launched a facial recognition system at airports, religious institutions, and underground walkways of Nur-Sultan city in 2022. Reports of arrests of protesters based on facial recognition from surveillance cameras and AI-powered recognition technology also continued. Kazakhstan and China have

³¹²⁶ Tengrinews, Smart Aqkol Video surveillance, Security and Comfort. How the Smartest City of Kazakhstan Lives [Видеонаблюдение, безопасность и комфорт. Как живет самый умный город Казахстана - Smart Aqkol] (Dec. 13, 2019),

https://tengrinews.kz/article/videonablyudenie-bezopasnost-komfort-jivet-samyiy-umnyiy-1353/3127 Informburo, How the Sergek Project Works [Κακ ραδοπαεπ προεκπ "Сергек". Репортаже] (Nov. 19, 2018), https://informburo.kz/stati/kak-rabotaet-proekt-sergek-reportazh-informburokz.html

³¹²⁸ Fergana, Alma-Ata Allocated \$23 Million for Cameras with Face Recognition [На камеры с распознаванием лиц в Алма-Ате выделили \$23 млн] (Feb. 8, 2019), http://fergana.agency/news/105020/

The Diplomat, *Technology and Policing a Pandemic in Central Asia* (May 13, 2020), https://thediplomat.com/2020/05/technology-and-policing-a-pandemic-in-central-asia/

³¹³⁰ World Politics Review, *Police States Expand Under the Cover of COVID-19* (Jul. 14, 2020), https://www.worldpoliticsreview.com/articles/28910/across-central-asia-police-states-expand-under-the-cover-of-covid-19

³¹³¹ The Diplomat, *Technology and Policing a Pandemic in Central Asia* (May 13, 2020), https://thediplomat.com/2020/05/technology-and-policing-a-pandemic-in-central-asia/
3132 *Facial Recognition System Launched at Kazakhstan's Airports, Religious Institutions* (Jun. 14, 2022), https://www.inform.kz/en/facial-recognition-system-launched-at-kazakhstan-s-airports-religious-institutions a3944198

³¹³³ Laila Adilzhan, *Kazakhstan: Mass Arrests and Surveillance—With Some Help from China*, Bitter Winter (Jan. 1, 2022), https://bitterwinter.org/kazakhstan-mass-arrests-and-surveillance/

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strengthened their cooperation in AI, big data, cloud computing, and other high-tech sectors.³¹³⁴

Biometrics

Kazakhstan implemented the use of biometrics in the eGov Mobile app in 2022. 3135 The system requires a Digital ID video identification. The Chairman of the Board of National Information Technology highlighted this development as an "easier and time-efficient [process] that provides more reliable personal data protection." The authentication via biometrics applies for 400 public services and e-license services, across over 2.4M citizens, using the airport, train services, banking, mobile services, postal service, and notary public.

Environmental Impact of AI

No official documents, reports, or statements from the government or relevant agencies could be found to determine an official stance or policy on the environmental impact of artificial intelligence. Despite the lack of official action, experts at the Connected conference in Kazakhstan's capital Astana³¹³⁶ discussed the future of climate change and the role of AI in mitigating or exacerbating it.

Lethal Autonomous Weapons

Kazakhstan was one of 70 states that endorsed a joint statement on autonomous weapons systems at the United Nations General Assembly in October 2022. The statement called for the recognition of the dangers of autonomous weapons systems, acknowledged the need for human oversight and accountability, and emphasized the importance of an international framework of rules and constraints. In this joint statement, States declared that they "are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law (IHL), including through maintaining human responsibility and accountability in the use of force." 3138

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³¹³⁴ The State Council of the People's Republic of China, *China, Central Asian Countries Vow to Build Community with Shared Future* (Jan. 27, 2022),

 $[\]underline{\text{http://english.www.gov.cn/news/topnews/202201/27/content}} \underline{\text{WS61f1f7c6c6d09c94e48a457c.ht}} \underline{\text{ml}}$

³¹³⁵ eGov, *Access to eGov Mobile app available through the biometrics* (Jul. 20, 2022), https://egov.kz/cms/en/news/egov_biometrics

³¹³⁶ Astana Times, *Connected Conference Talks Role of AI on Climate, Data, and Growth* (Oct. 18, 2024), https://astanatimes.com/2024/10/connected-conference-talks-role-of-ai-on-climate-data-and-growth/

³¹³⁷ Stop Killer Robots, 70 states deliver joint statement on autonomous weapons systems at UN General Assembly (2022) https://www.stopkillerrobots.org/news/70-states-deliver-joint-statement-on-autonomous-weapons-systems-at-un-general-assembly/

³¹³⁸ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

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In February 2023, Kazakhstan participated in an international summit on the responsible application of artificial intelligence in the military domain hosted by the Netherlands. At the end of the Summit, Kazakhstan, together with other countries, agreed on a joint call for action on the responsible development, deployment and use of artificial intelligence in the military domain. ³¹³⁹ In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." States also "stress the importance of a holistic, inclusive and comprehensive approach in addressing the possible impacts, opportunities and challenges of the use of AI in the military domain and the need for all stakeholders, including states, private sector, civil society and academia, to collaborate and exchange information on responsible AI in the military domain."³¹⁴⁰

Human Rights

According to Freedom House, Kazakhstan is "Not Free" with a score of (23/100) for political rights and civil liberties.³¹⁴¹ Freedom House reports "Parliamentary and presidential elections are neither free nor fair, and authorities have consistently marginalized or imprisoned genuine opposition figures. The dominant media outlets are either in state hands or owned by government-friendly businessmen. Freedoms of speech and assembly remain restricted and punished, and corruption is endemic."³¹⁴²

Kazakhstan is eligible for admission to the Council of Europe (CoE) and has increased cooperation with the body in recent years. A previous agreement was limited to criminal justice. However, the Neighborhood Co-operation Priorities for Kazakhstan 2019–2022 introduces new areas of cooperation, including the fight against economic crime, promoting a common legal space and human rights standards, and assistance in the electoral field. The document was adopted by the Committee of Ministers in April 2019. Kazakhstan participates in the CoE Central Asia Rule of Law Programme, launched in 2020, which has the goal of "Improving the lives of citizens by reinforcing human rights, democracy

 $\underline{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm\ en.pdf.}$

https://freedomhouse.org/country/kazakhstan/freedom-world/2024

3142 Ibid

³¹³⁹ Government of Netherlands, *Call to action on responsible use of AI in the military domain* (Feb.16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action (3141 Freedom House, *Freedom in the World 2024: Kazakhstan* (2024),

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and rule of law."³¹⁴³ Corruption in Kazakhstan remains a serious concern, entrenched in different sectors, institutions, and public and private spheres.³¹⁴⁴

The re-established Constitutional Court of Kazakhstan began to operate on January 1, 2024. Citizens may appeal directly to the court on cases regarding fundamental rights and freedoms in the country.³¹⁴⁵ The Constitutional Court received more than 5,300 appeals in 2023.³¹⁴⁶

OECD / G20 AI Principles

Kazakhstan has not endorsed the OECD AI Principles. According to the OECD AI Observatory, the Digital Kazakhstan Government Program, a national initiative, addressed the OECD AI principles of inclusive growth, sustainable development, and well-being; investment in AI R&D; and fostering an ecosystem for AI.³¹⁴⁷

The country's major AI research center, the Institute of Smart Systems and Artificial Intelligence at Nazarbayev University, operates in accordance with the ethical principles aligned to the OECD AI Principles: Societal Well-being, Human-Centered Values, Transparency, Technical Resilience and Robustness, and Accountability.³¹⁴⁸

Council of Europe AI Treaty

Kazakhstan has not signed the Council of Europe AI Treaty.3149

https://adilet.zan.kz/eng/docs/Z2200000153

³¹⁴³ Council of Europe / European Union, *Central Asia Rule of Law Programme*, https://pjp-eu.coe.int/en/web/central-asia

³¹⁴⁴ The Group of States against Corruption (GRECO), the Council of Europe, *Joint First and Second Evaluation Rounds - Evaluation Report on Kazakhstan* (Mar. 25, 2022), https://rm.coe.int/joint-first-and-second-evaluation-rounds-evaluation-report-on-kazakhst/1680a6e276

³¹⁴⁵ Ministry of Justice Institute of Legislation and Legal Information, *On the Constitutional Court of the Republic of Kazakhstan* (Nov. 05, 2022),

³¹⁴⁶ Astana Times, *Constitutional Court of Kazakhstan Receives 5,300 Appeals in 2023* (Jan. 10, 2024), https://astanatimes.com/2024/01/constitutional-court-of-kazakhstan-receives-5300-appeals-in-2023/

³¹⁴⁷ OECD AI Policy Observatory, "*Digital Kazakhstan*" *Government Programme* (Sept. 9, 2022), https://oecd.ai/en/dashboards/countries/Kazakhstan

³¹⁴⁸ Nazarbayev University, Institute of Smart Systems and Artificial Intelligence (ISSAI), *About*, https://issai.nu.edu.kz/about/

³¹⁴⁹ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Feb. 27, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

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UNESCO Recommendation on AI Ethics

Kazakhstan is a UNESCO member since 1992³¹⁵⁰ and endorsed the UNESCO Recommendation on the Ethics of AI.³¹⁵¹

Kazakhstan contributed actively to the drafting of the UNESCO Recommendation. A country delegation from the Institute of Smart Systems and Artificial Intelligence of Nazarbayev University (ISSAI) participated in the UNESCO Session on the Ethics of Artificial Intelligence held online on July 23-24, 2020. The event gathered feedback and stakeholder contributions for the review of, and comment on the draft recommendation. The ISSAI delegation submitted the ISSAI Ethical Principles document as a sample of organizational AI Ethics statements. The Kazakhstani delegation offered observations on explainability, accountability and responsibility of AI systems, and the need to respect human rights and human dignity. 3152

Kazakhstan has yet to take concrete steps to implement the UNESCO Recommendation on AI Ethics systematically, such as implementing the Readiness Assessment Methodology (RAM).³¹⁵³ However, the AI People course, a nationwide initiative to increase AI literacy and skills among the general population,³¹⁵⁴ aligns to the Aware & Literacy principle necessary to the human-centered approach underlying the UNESCO recommendation.³¹⁵⁵

Evaluation

Kazakhstan's AI policy landscape has evolved, with the adoption of the Concept for Artificial Intelligence Development for 2024-2029, 3156 establishment

³¹⁵⁰ Astana Times, *Kazakhstan Marks 30th Anniversary of Membership in UNESCO* (Jun. 22, 2022), https://astanatimes.com/2022/06/kazakhstan-marks-30th-anniversary-of-membership-in-unesco

³¹⁵¹ UNESCO, *UNESCO Member States Adopt the First Ever Global Agreement on the Ethics of Artificial Intelligence* (Nov. 25, 2021), https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence

³¹⁵² ISSAI, *UNESCO Hosts Session on the Ethics of Artificial Intelligence – ISSAI delegation represents on behalf of Kazakhstan* (Jul. 25, 2020), https://issai.nu.edu.kz/2020/08/10/unescohosts-session-on-the-ethics-of-artificial-intelligence/

³¹⁵³ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

³¹⁵⁴ Ministry of Digital Development, Innovation, and Aerospace, *Kazakhstan Has Launched* Training for the Population on the Use of Artificial Intelligence in Everyday Life [В Казахстане запустилось обучение населения применению искусственного интеллекта в повседневной жизни] (Sept. 11, 2024),

https://www.gov.kz/memleket/entities/mdai/press/news/details/843712?lang=ru

³¹⁵⁵ UNESCO, *Ethics of Artificial Intelligence, A Human-Rights Approach to AI* (2025), https://www.unesco.org/en/artificial-intelligence/recommendation-ethics

³¹⁵⁶ Official Information Source of the Prime Minister, *Concept for Artificial Intelligence Development for 2024–2029 Adopted by Government* (Jul. 16, 2024),

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of a dedicated Committee of Artificial Intelligence and Innovation Development,³¹⁵⁷ and the launch of an AI literacy program for the general public.³¹⁵⁸. While the 2021 presidential decree on accountability was a step in the right direction, no national AI strategy or policy framework exists to enshrine human-centric AI principles promoting human rights and democratic values into law. ISSAI's ethical principles provide a model for aligning AI research and innovation to global frameworks such as the OECD AI Principles and UNESCO Recommendation. The Personal Data Protection Law has not addressed the areas of automated decision-making and algorithmic transparency, and no system exists for civic engagement in policymaking.

Meanwhile, Kazakhstan has already endorsed smart surveillance systems in various cities, which led to fears that the country would transform into a digital authoritarian regime and a real life-laboratory for foreign companies under US sanctions for unethical use of AI technology.

Kenya

In 2024, Kenya initiated a development process including public consultations for a National AI Strategy. Kenya also participated in the first meeting of the International Network of AI Safety Institutes.

National AI Strategy

Kenya has not finalized a national AI strategy. However, the Ministry of Information Communications and Digital Economy issued a draft National AI Strategy for public validation in January 2025. 3159 Kenya launched the National AI

https://primeminister.kz/en/news/concept-for-artificial-intelligence-development-for-2024-2029-adopted-by-government-28786

³¹⁵⁷ Committee of Artificial Intelligence and Innovation Development, Ministry of Digital Development, Innovation and Aerospace Industry, Regulations of the Committee on Artificial Intelligence and Innovation Development of the Ministry of Digital Development, Innovation and Aerospace Industry of the Republic of Kazakhstan [Положение Комитета искусственного интеллекта и развития инноваций Министерства цифрового развития, инноваций и аэрокосмической промышленности Республики Казахстан] (Sept. 2, 2024), https://www.gov.kz/memleket/entities/aidc/documents/details/714099?lang=ru

³¹⁵⁸ Ministry of Digital Development, Innovation, and Aerospace Industry, *Kazakhstan Has Launched Training for the Population on the Use of Artificial Intelligence in Everyday Life [В Казахстане запустилось обучение населения применению искусственного интеллекта в повседневной жизни]* (Sept. 11, 2024),

https://www.gov.kz/memleket/entities/mdai/press/news/details/843712?lang=ru
3159 Ministry of Information, Communications and the Digital Economy, *Kenya National Artificial Intelligence (AI) Strategy 2025–2030 [Draft]* (Jan. 2025), https://ict.go.ke/sites/default/files/2025-

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Strategy Development Process in Nairobi in April 2024 to address key issues, including data governance, legal frameworks, and privacy policies. The AI strategy development process is supported by partnerships with organizations like the German Agency for International Cooperation (GIZ) and UNESCO. This partnership under the FAIR Forward—Artificial Intelligence for All—initiative aims to establish a framework for the responsible, ethical deployment of AI, aligning with Kenya's broader goals of social inclusion and sustainable development.

The efforts to build an AI Strategy contribute to the realization of the Digital Master Plan (DMP) 2022–2032 released by the Ministry of Information, Communications and Technology.³¹⁶³ Building on earlier master plans and e-Government strategies and policies,³¹⁶⁴ the DMP provides a blueprint to "create business opportunities, wealth creation, employment and the contribution of ICT to the growth of the economy [...] towards the realization of our goal in transforming lives, better for the citizens."³¹⁶⁵ To this end, the DMP identifies four pillars to advance the provision of services to citizens and businesses:

- Digital Infrastructure, including equitable access
- Digital Government Service, Product and Data Management to improve productivity, efficiency, effectiveness, and governance across sectors through e-Government
- Digital Skills to develop "a digitally skilled workforce and citizenry that is grounded on ethical practices and social cultural values"
- Digital Innovation, Enterprise and Digital Business to help transform innovative ideas into sustainable business and operating models.

 $\frac{01/Kenya\%20National\%20AI\%20Strategy\%20\%28Draft\%29\%20for\%20Public\%20Validation}{\%20\%20\%5B14-01-2025\%5D.pdf}$

The Empower Africa, Kenya Enters Partnership with GIZ to Develop National Artificial Intelligence (AI) Strategy (Apr. 14, 2024), https://empowerafrica.com/kenya-enters-partnership-with-giz-to-develop-national-artificial-intelligence-ai-strategy/

³¹⁶² BMZ, FAIR Forward, *German Federal Ministry for Economic Cooperation and Development* (Feb. 15, 2024), https://www.bmz.de/en/issues/digital-transformation/digital-public-goods-and-infrastructure/fair-forward-215860

³¹⁶³ U.S. International Trade Administration, *Kenya Launches New Ten-Year Digital Masterplan* (Jun 13, 2022), https://www.trade.gov/market-intelligence/kenya-launches-new-ten-year-digital-masterplan

3164 For example, Republic of Kenya, *Digital Economy Blueprint* (2019), https://www.ict.go.ke/sites/default/files/2024-09/Kenya-Digital-Economy-2019.pdf; Kenya Vision 2030, *About Vision 2030*, https://vision2030.go.ke/about-vision-2030/

³¹⁶⁰ Kenya AI, Artificial Intelligence in Kenya (Aug. 2024), https://kenyaai.ke/research/ai-in-kenya/

Republic of Kenya, *The Kenya National Digital Master Plan 2022–2032*, p.15 (Apr. 2022), https://repository.kippra.or.ke/bitstream/handle/123456789/3580/Kenya%20-%20Digital%20Master%20Plan.pdf?sequence=1&isAllowed=y

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The Master Plan aligns with the Smart Africa Alliance goals for the long-term outcomes of digital government, including "job creation and economic growth, sustainable development, cashless economy, citizens participation, transparency, trust, and accountability."³¹⁶⁶

Kenya's government has demonstrated its commitment to applying AI technologies, particularly in sectors like agriculture and healthcare. Healthcare applications such as SunCulture's AI-driven agricultural tools and Ubenwa's diagnostic healthcare platform show how AI can directly improve productivity in resource-constrained environments. However, without a clear regulatory framework, Kenya lacks a means to address concerns about the potential misuse of AI, discrimination, and data breaches. A taskforce report in 2019 identified three potential benefits from Blockchain and AI, including fighting corruption, strengthening the financial sector, and bolstering "election fairness through fast tallying and providing real-time polling results, and by extension, strengthen democracy." The taskforce concluded that effective regulation would address both citizen protection and private sector innovation. However, the taskforce recommendations have yet to translate into public policy, legislation, or strategy on AI. However.

With the support of various organizations, such as the German Federal Ministry for Economic Cooperation and Development (BMZ), the European Union (EU) and the Digital Centre (DZ), Kenya is undertaking a "transformation towards a sustainable and human-centered digital economy and Society."³¹⁷²

In March 2022, the government of Kenya developed a National Cyber Security Strategy³¹⁷³ for a unified approach to the implementation of cybersecurity activities in the country. The strategy establishes foundations and pillars for effective cybersecurity for the public and private sectors by combining good governance with a set of initiatives and interventions. Spearheaded by the (then) Ministry of ICT, Innovation and Youth Affairs and the Ministry of Interior and

³¹⁶⁷ Kenya AI, *Artificial Intelligence in Kenya* (Aug. 2024), https://kenyaai.ke/research/ai-in-kenya/

³¹⁶⁹ Judy Kabubu, Artificial Intelligence (AI) in Kenya (Jan. 26, 2021),

https://mman.co.ke/content/artificial-intelligence-ai-kenya

³¹⁷¹ Judy Kabubu, *Artificial Intelligence (AI) in Kenya* (Jan. 26, 2021),

https://mman.co.ke/content/artificial-intelligence-ai-kenya

https://ict.go.ke/sites/default/files/2024-09/Kenya%20Cybersecurity%20Strategy%202022.pdf

³¹⁶⁶ Ibid, p. 30

³¹⁶⁸ Ibid

³¹⁷⁰ D Mpala, *Kenyan Taskforce Calls for State to Regulate AI and Blockchain* (Aug. 2019), https://ventureburn.com/2019/08/kenya-report-blockchain-ai/

³¹⁷² Digital Global, *Digital Transformation Center Kenya*, GIZ (2023), https://www.bmz-digital.global/en/initiatives/digital-transformation-center-kenya/

³¹⁷³ Republic of Kenya, *National Cybersecurity Strategy* (2022),

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Co-ordination of National Government, the strategy provides a framework to defend and protect the cyberspace of the Republic of Kenya.

As a member of the African Union (AU), Kenya is committed to advancing the formulation and implementation of human-centered AI policies, in alignment with the goals of the AU digital transformation strategy³¹⁷⁴ and the Continental Data Policy Framework.³¹⁷⁵ The AU AI Working Group is endowed with the mission to foster collaboration among African states to "help countries develop AI strategies, identify other regulatory and governance issues, and learn from regional best practices."³¹⁷⁶

AI Oversight

The Ministry of Information, Communications, and the Digital Economy (MICDE) is primarily responsible for overseeing AI development and policy. The ministry leads the development of Kenya's National AI Strategy with support from partners like GIZ and UNESCO to guide the ethical adoption and implementation of AI across different sectors, from education to healthcare.

The National Communications Authority (CA) is also involved in regulating aspects of AI, such as data privacy and security. The CA plays a critical role in ensuring that AI-related advancements align with national goals, including infrastructure development and cybersecurity, while protecting digital rights.

The Kenya Robotics and Artificial Intelligence Society Bill,³¹⁷⁹ which was proposed to the Parliament in 2023 and debated in 2024, would introduce a regulatory body, the Kenya Robotics and Artificial Intelligence Society, to set standards for AI and robotics development and ensure compliance. However, tech experts testified before the National Assembly ICT Committee that the initiative oversimplifies the complexities of AI roles and imposes impractical requirements, such as mandatory membership for AI professionals.³¹⁸⁰

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³¹⁷⁴ African Union, *The Digital Transformation Strategy for Africa (2020–2030)*, https://au.int/sites/default/files/documents/38507-doc-dts-english.pdf

³¹⁷⁵ African Union, *40th Ordinary Session of the Executive Council* (Feb 2–3, 2022), https://au.int/sites/default/files/decisions/41584-EX CL Dec 1143-1167 XL E.pdf

³¹⁷⁶ Faustine Ngila, *Kenya, Africa Hurdles in Artificial Intelligence Race*, Business Daily (Jan 7, 2021), https://www.businessdailyafrica.com/bd/corporate/technology/kenya-africa-hurdles-in-artificial-intelligence-race-3249180

³¹⁷⁷ Ministry of Information, Communications, and the Digital Economy, *Function of the Ministry* (2024), https://ict.go.ke/function-ministry

³¹⁷⁸ Communications Authority of Kenya, *What We Do* (2023), https://www.ca.go.ke/what-we-do
3179 DataGuidance, *The Kenya Robotics and Artificial Intelligence Society Bill 2023* (2023), https://www.ca.go.ke/what-we-do
3179 DataGuidance, *The Kenya Robotics and Artificial Intelligence Society Bill 2023* (2023), https://www.ca.go.ke/what-we-do
3179 DataGuidance, *The Kenya Robotics and Artificial Intelligence Society Bill 2023* (2023), https://www.dataguidance.com/sites/default/files/the_kenya_robotics_and_artificial_intelligence_society_bill_2023.docx.pdf

³¹⁸⁰ OECD AI Policy Observatory, Incidents Tracker, *Kenya Is Facing Opposition to a New Robotics and AI Bill* (Feb. 9, 2024), https://oecd.ai/en/incidents/67449; TradingView, *Kenya*

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Public Participation

Kenya has made strides in establishing a systematic process to engage stakeholders in meaningful participation in policymaking through the Public Consultation portal of the Communications Authority of Kenya (CA).³¹⁸¹ Kenya also hosts conferences and workshops to encourage multistakeholder engagement to define AI strategy and policy. Most documents related to Kenya's AI policies, such as the National Digital Master Plan 2022–2032, are publicly accessible. However, some earlier documents, such as the Distributed Ledgers Technology and AI Taskforce report, that were previously available on government websites are no longer accessible, perhaps because of a reorganization and renaming of the Ministry of Information communications and Digital Economy in 2022.

In a 2023 consultation, the CA invited comments from all stakeholders for the development of the Framework for a Regulatory Sandbox.³¹⁸² The Regulatory Sandbox aims to nurture and support innovation by exploring the application of innovative regulatory solutions.³¹⁸³

A previous consultation took place in 2018, during the development of Kenya's Blockchain and AI Taskforce report. The taskforce received 150 presentations and consulted with approximately 90 stakeholders. The composition of the taskforce was inclusive and diverse, with four women in the pool of 14 experts drawn from academia, research institutions, tech entrepreneurs, consultants and private businesses, such as Safaricom, Cisco, IBM Research Africa, the African Development Bank. The consultation also included approximately 31 AI startups operating in various sectors of the Kenyan economy 3185

As part of its broader initiative to develop a National AI Strategy, the Ministry of Information, Communication and the Digital Economy (MICDE) in partnership with the German Corporation for International Cooperation (GIZ), has

Faces Backlash over New AI and Robotics Bill (Feb. 9, 2024),

 $\underline{\text{https://www.tradingview.com/news/cointelegraph:6c6677d44094b:0-kenya-faces-backlash-over-new-ai-and-robotics-bill/}$

Sandbox (Jan 2023), https://repository.ca.go.ke/server/api/core/bitstreams/b4bc3151-ce12-49df-940d-5fb5ec0c0bce/content

³¹⁸¹ Communications Authority of Kenya, *Public Consultation*, https://www.ca.go.ke/openconsultations

³¹⁸² Communications Authority of Kenya, *Public Consultation Framework for Emerging Technologies Regulatory Sandbox* (Jan 2023), https://www.ca.go.ke/closed-consultation ³¹⁸³ Communications Authority of Kenya, *Framework for Emerging Technologies Regulatory*

³¹⁸⁴ Carolyne Tanui, *The Kenya Blockchain Taskforce Concludes Its Report*, Kenyan Wall Street (Nov. 20, 2018), https://kenyanwallstreet.com/the-kenya-blockchain-taskforce-concludes-report-on-blockchain-technology/.

Daniel Mpala, *Kenyan Taskforce Calls for State to Regulate AI and Blockchain* (Aug. 2, 2019), https://ventureburn.com/2019/08/kenya-report-blockchain-ai/

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organized a series of stakeholder consultations to gather input from government, academia, civil society, and industry. The launch of the National AI Strategy Development Process in Nairobi in April 2024 brought together more than 70 participants from government, academia, industry, and civil society to discuss critical issues such as data governance, legal frameworks, and privacy policies. This discussion stressed the importance of balancing innovation with ethical concerns, focusing on transparency, accountability, and digital rights. 3188

A stakeholder workshop in Naivasha, Nakuru County in May 2024³¹⁸⁹ continued these discussions and focused on shaping a vision for responsible AI that aligns with Kenya's values and international frameworks such as those from UNESCO and the African Union. Participants in the workshops stressed the importance of workforce development, supportive legislation, and the creation of an independent AI governing body. The workshop produced a roadmap outlining timelines, pilot projects, and financial planning to ensure sustainable AI growth. This approach seeks to develop a locally empowered AI ecosystem that is competitive on the global stage, in line with international standards.

According to UNESCO, as Kenya moves forward with developing its first National AI Strategy, the process will continue to involve extensive consultations to refine the strategy and ensure it meets the country's ambitions to become Africa's "Silicon Savannah." ³¹⁹⁰

While past participatory efforts showed promise, however, they also faced issues of accountability and project oversight.³¹⁹¹ Public participation in AI legislation could face similar shortcomings if not accompanied by effective mechanisms for monitoring and ensuring that feedback leads to tangible changes. Also, the limited understanding of AI among the general public, compounded by digital inequalities, means that citizens may struggle to engage with AI discussions

³¹⁸⁷ TechPoint Africa, *Kenya Explores AI Advancements* (Apr. 10, 2024), https://techpoint.africa/2024/04/10/kenya-explores-ai-advancements/

³¹⁸⁶ Carolyne Tanui, *Kenya Unveils National Emerging Technologies and AI Strategy Framework*, KICTANet (May 19, 2024), https://www.kictanet.or.ke/kenya-unveils-national-emerging-technologies-and-ai-strategy-framework/

³¹⁸⁸ UNESCO, Shaping Kenya's AI Future: UNESCO Contributes to National AI Strategy Formulation (May 22, 2024), https://www.unesco.org/en/articles/shaping-kenyas-ai-future-unesco-contributes-national-ai-strategy-formulation

³¹⁸⁹ Carolyne Tanui, *Kenya Unveils National Emerging Technologies and AI Strategy Framework*, KICTANet (May 19, 2024), https://www.kictanet.or.ke/kenya-unveils-national-emerging-technologies-and-ai-strategy-framework/

³¹⁹⁰ Abdullah Ajibade, *Kenya Opens Africa's AI Skilling Centre with Support from UNDP and Microsoft*, TechPoint Africa (Oct. 12, 2024), https://techpoint.africa/news/kenya-opens-africas-ai-skilling/

³¹⁹¹ Ada Lovelace Institute, *How People Could Shape the Future of AI in Kenya* (Oct. 2024), https://www.adalovelaceinstitute.org/blog/people-shape-future-of-ai-kenya/

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meaningfully unless AI literacy programs are expanded nationwide. ³¹⁹² The Africa Centre of Competence for Digital and AI Skills opened in October 2024 through a partnership with the UN Development Programme and Microsoft at the Kenya School of Government in Nairobi is a step toward addressing this issue. The center aims to equip public sector employees with digital and AI skills, improving service delivery and driving public sector innovation. This literacy supports the National Digital Master Plan 2022–2032 emphasis on stakeholder consultations, public forums, and community engagement efforts as essential components of the policymaking process.³¹⁹³ The center offers training on human-centered problem solving, strategic foresight, and systems thinking to help government workers anticipate future challenges and devise solutions. This effort also supports broader Sustainable Development Goals (SDGs), such as quality education (SDG 4) and reducing inequalities (SDG 10).³¹⁹⁴

The Ministry of Information, Communications and the Digital Economy released a draft National Artificial Intelligence (AI) Strategy for public validation in January 2025.3195

In the 2024 UN e-Government Survey Kenya's ranking in e-participation declined to 83rd place out of 193 countries, ³¹⁹⁶ compared to 64th place in 2022. ³¹⁹⁷ Kenya is still among the top 15 African countries in terms of E-Government development.

Data Protection

Kenya continues to refine its approach to data protection in the context of AI and digital technologies. Kenya enacted the Data Protection Act (DPA) in November 2019, 3198 establishing protections for personal data and reaffirming the

³¹⁹² Ibid

³¹⁹³ Ministry of ICT and Digital Economy, Kenya Digital Master Plan 2022–2032 (2022), https://cms.icta.go.ke/sites/default/files/2022-04/Kenya%20Digital%20Masterplan%202022-04/Kenya%20Digital%20202-04/Kenya%20202-04/Kenya%20202-04/Kenya%20202-04/Kenya%20202-04/Kenya%20202-04/Kenya%20202-04/Kenya%20202-04/Kenya%20202-04/Kenya%20202-04/Kenya%20202-04/Kenya%20202-04/Kenya%20202-04/Kenya%20202-04/Kenya%20202-04/Kenya%20202-04/Kenya%20202-04/Kenya%20202-04/Kenya%202-04 2032%20Online%20Version.pdf

Abdullah Ajibade, Kenya Opens Africa's AI Skilling Centre with Support from UNDP and Microsoft, TechPoint Africa (Oct. 12, 2024), https://techpoint.africa/news/kenya-opens-africasai-skilling/

³¹⁹⁵ Ministry of Information, Communications and the Digital Economy, Kenya National Artificial Intelligence (AI) Strategy 2025–2030 [Draft] (Jan. 2025), https://ict.go.ke/sites/default/files/2025-

^{01/}Kenya%20National%20AI%20Strategy%20%28Draft%29%20for%20Public%20Validation %20%20%5B14-01-2025%5D.pdf

³¹⁹⁶ UN, Department of Economic and Social Affairs, E-Government Knowledge Base (2024), https://publicadministration.un.org/egovkb/en-us/Data/Country-Information/id/88-Kenya ³¹⁹⁷ United Nations, E-Government Survey 2022, The Future of Digital Government (2022), https://desapublications.un.org/sites/default/files/publications/2022-09/Web%20version%20E-Government%202022.pdf

³¹⁹⁸ Office of the Data Protection Commissioner, *Data Protection Act* (Feb. 2021), https://www.odpc.go.ke/wp-content/uploads/2024/02/TheDataProtectionAct No24of2019.pdf

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right to Privacy. 3199 The DPA gives effect to Article 31(c) and (d) of the Constitution that contains the right to privacy, regulate the processing of personal data, provide for data subjects' rights, and create obligations for data controllers and processors. Applicability to AI can be inferred where personal data is involved in AI-based transactions. 3200 The DPA applies to both government and private entities handling personal data, including the large datasets used for AI training and decision-making. 3201

The DPA contains principles of data protection that relate to the fair, transparent processing of personal data (Section 25), the right to erasure and rectification (Section 34, 40), and rights related to automated decision-making (Section 35).³²⁰²

Pursuant to the DPA, the Office of the Data Protection Commissioner (ODPC) was established in 2020. In 2022, the ODPC became a member of the Global Privacy Assembly (GPA).³²⁰³ The Global Privacy Assembly seeks to provide leadership in data protection and privacy by connecting the efforts of more than 130 data protection authorities across the globe.³²⁰⁴ The ODPC has not endorsed the GPA 2018 Declaration on Ethics and Data Protection, ³²⁰⁵ 2020 Resolution on Accountability in the Development and Use of AI,³²⁰⁶ 2022 Resolution on Principles and Expectations for the Appropriate Use of Personal

https://freedomhouse.org/country/kenya/freedom-world/2022

³¹⁹⁹ Freedom House, Freedom in the World 2022 (2022),

³²⁰⁰ Jake Okechukwu Effoduh, ⁷ Ways that African States Are Legitimizing Artificial Intelligence, OpenAIR (Oct. 2020), https://www.wathi.org/7-ways-that-african-states-are-legitimizing-artificial-intelligence-openair-africa-october-2020

³²⁰¹ KICTANet, *Key Note: AI in Kenya – Opportunities, Challenges, and Policy Actions* (Nov. 16, 2023), https://www.kictanet.or.ke/key-note-ai-in-kenya-opportunities-challenges-and-policy-actions/

³²⁰² Office of the Data Protection Commissioner, *Data Protection Act* (Feb. 2021), https://www.odpc.go.ke/wp-content/uploads/2024/02/TheDataProtectionAct_No24of2019.pdf

³²⁰³ Global Privacy Assembly, 44th Closed Session of the Global Privacy Assembly (Oct. 27, 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/1.1.-b.-GPA-2022-Accreditation-Resolution.pdf

³²⁰⁴ Office of the Data Protection Commission, *Kenya Joins Global Privacy Assembly*, Twitter (2022), https://twitter.com/ODPC_KE/status/1585618661749964800

³²⁰⁵ International Conference of Data Protection & Privacy Commissioners, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018),

 $[\]frac{https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922_ICDPPC-40th_AI-Declaration_ADOPTED.pdf$

³²⁰⁶ Global Privacy Assembly (GPA), *Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN.pdf

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Information in Facial Recognition Technology,³²⁰⁷ or 2023 Resolution on Generative AI.³²⁰⁸

Throughout 2021 and 2022, the Kenyan legislative Assembly enacted regulations providing for additional safeguards to privacy and fostering a robust digital economy: Data Protection Regulations (Registration of Data Controllers and Data Processors)³²⁰⁹ and the Central Bank of Kenya (Digital Credit Providers) Regulations, 2022.³²¹⁰ These regulations aim to curb unethical debt collection practices and abuse of personal data.

Although the African Union developed the AU Convention on Cyber Security and Personal Data Protection (Malabo Convention),³²¹¹ Kenya has not signed or ratified the Convention.³²¹² Calls to the government of Kenya to sign and ratify the Malabo Convention re-emerged, amid the concerns surrounding data localization requirements and cross-border data transfer, that would require reciprocity with Malabo signatories. Signing the convention would signal Kenya's commitment to the intra-African partnership and regional cooperation.³²¹³

AFRICAN UNION CONVENTION ON CYBER SECURITY AND PERSONAL DATA P
ROTECTION.pdf

³²⁰⁷ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

³²⁰⁸ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

³²⁰⁹ Office of the Data Protection Commission, *Data Protection (General) Regulations* (Dec. 31, 2021), https://www.odpc.go.ke/wp-content/uploads/2024/03/THE-DATA-PROTECTION-GENERAL-REGULATIONS-2021-1.pdf ³²¹⁰ Central Bank of Kenya, *Central Bank of Kenya (Digital Credit Providers) Regulations 2022* (Mar. 21, 2022), https://www.centralbank.go.ke/2022/03/21/central-bank-of-kenya-digital-credit-providers-regulations-2022

³²¹¹ African Union, *African Union Convention on Cybersecurity (Malabo Convention)* (Jun. 27, 2014), https://au.int/en/treaties/african-union-convention-cyber-security-and-personal-data-protection

³²¹² African Union, *List of Countries which have signed, ratified/acceded to the African Union Convention on Cyber Security and Personal Data Protection* (Jul. 8, 2024), https://au.int/sites/default/files/treaties/29560-sl-

³²¹³ Malcom Kijirah & Elaine Wangari, *Symposium on the economic impacts of data localization in Africa:* African International Economic Law Network. *Afronomics Law* (May 23, 2022), https://www.afronomicslaw.org/category/analysis/symposium-economic-impacts-data-localisation-

kenya#:~:text=Kenya%20should%20also%20sign%20and,enhance%20cooperation%20in%20th e%20continent.

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Algorithmic Transparency

Kenya has not explicitly established a right to algorithmic transparency in its legislation. However, existing laws provide a measure of protection. However, the DPA includes provisions that could be related to algorithmic transparency, such as granting individuals rights over their personal data, including the right to access and correct their data. This could indirectly require organizations to be transparent about how data is used in automated decision-making processes. The Act establishes principles such as fair, transparent, and lawful processing of personal data, which are relevant to algorithmic transparency. For example, Section 22 requires that a data controller or data processor shall not only "inform a data subject when engaging in processing based on automated individual decision making" but also "provide meaningful information about the logic involved." ³²¹⁵

Kenya was one of 49 countries subject of a study by Human Rights Watch about the use of government-endorsed or government-built Ed Tech tools for online learning during the COVID-19 pandemic. The findings show that Kenya Education Cloud, a platform used by the Ministry of Education to deliver online education to primary and secondary students, shared children's data with AdTech companies. The platform designed for children contained ad trackers that sent data about users to third-party companies to target ads across the internet. The platform did not have any publicly available privacy notice that would give children the right to object to being surveilled. The platform "denied the knowledge or opportunity to challenge these practices." Human Rights Watch exhorted UN the Human Rights Commission to address questions with the government of Kenya regarding children's rights challenged through this practice. Given the increasing matter of algorithmic discrimination, which the DPA does

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³²¹⁴ Republic of Kenya, *Data Protection Act* (Nov. 8, 2019), https://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/2019/TheDataProtectionAct No24of2019 pdf

³²¹⁶ Office of the Data Protection Commissioner, *Data Protection Act* (Feb. 2021), https://www.odpc.go.ke/wp-content/uploads/2024/02/TheDataProtectionAct No24of2019.pdf 3216 Human Rights Watch, *How Dare They Peep into My Private Life?* (May 25, 2022), https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rights-violations-governments

³²¹⁷ Human Rights Watch. Kenya Education Cloud. Privacy Snapshot, https://features.hrw.org/features/StudentsNotProducts/files/privacy_snapshots/Privacy%20Snapshot%20-%20Kenya%20Education%20Cloud.pdf

³²¹⁸ Human Rights Watch, *Kenya: Submission to the UN Committee on Economic, Social and Cultural Rights* (Jan. 17, 2023), https://www.hrw.org/news/2023/01/17/kenya-submission-uncommittee-economic-social-and-cultural-rights

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not address directly, there is a need for a comprehensive non-discrimination statute that addresses these risks.³²¹⁹

The Kenya Ministry of Education planned to implement automated decision-making in admission decisions. In response to the public outcry, the Ministry explained the factors underlying the model, including the reliance on criteria of merit, equity, choice, category of school, and school capacity. Reports about the outcomes of the model are forthcoming. A previous process of quotas in the Form One selection in Kenya led to complaints by parents who argued discrimination in 2012. 3221

Biometrics

Kenya's policies on biometrics are part of its broader efforts to modernize identification systems and enhance security. The country has initiated the National Integrated Identity Management System (NIIMS) intended to create and operate a national population register as a single source of information about Kenyan citizens and foreigners in the country. This system collects biometric data, including fingerprints and facial images, to facilitate access to government services and initiatives such as digital driving licenses and e-passport systems.

The Kenyan government started an upgrade of the medical records system in 2015 in a bid to stop health insurance fraud in Kenya's Hospital Insurance Fund (NHIF). The NHIF has 6.7M members, serving a population of 48M. The government started the biometric registration of civil servants and security officers to migrate the system to smart cards. The government deployed biometric kits to 1,370 hospitals in 2018.

In 2018, the biometric plan included the registration of students into a health insurance plan nationwide and the registration of newborns.³²²⁴ The infant biometrics plan emerged from the need of the country to ensure that kids of HIV-

https://cega.berkeley.edu/collection/building-better-credit-scoring-algorithms/

https://www.researchgate.net/publication/380049833_Legal_Challenges_Facing_Algorithmic_Decision-Making in Kenya

https://nation.africa/kenya/news/parents-cite-bias-in-form-one-selection--796806

³²¹⁹ CEGA, Manipulation-proof credit scoring algorithms in Kenya (2023),

³²²⁰ Frankline Nkonge, *Legal Challenges facing algorithmic decision-making in Kenya* (Oct. 2021),

³²²¹ Jayne Ngari, Parents Cite Bias in Form One Selection (Jan 18, 2012),

³²²² National Integrated Identity Management System, https://nims.co.ke/

³²²³ Chris Burt, *Kenya progressing toward biometric deployment in all hospitals to curb health insurance fraud* (Sept. 11, 2018), https://www.biometricupdate.com/201809/kenya-progressing-toward-biometric-deployment-in-all-hospitals-to-curb-health-insurance-fraud

³²²⁴ Chris Burt, *Potential breakthrough in infant biometrics heads for trial in Kenya after ID4Africa appeal* (Jun. 28, 2018), https://www.biometricupdate.com/201806/potential-breakthrough-in-infant-biometrics-heads-for-trial-in-kenya-after-id4africa-appeal

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affected mothers returned to the hospitals for treatment. UC San Diego conducted fundamental research on fingerprinting engineering.

Kenya biometric ID system Huduma Namba went live in 2019 amid allegations of insufficient protections for privacy rights and challenges by digital rights groups. The Kenyan High Court ruled in 2020 that the government must implement comprehensive data protection measures before fully operationalizing the system.³²²⁵ The Bill since then has remained in Parliament. The Cabinet Secretary for ICT, the sponsor of the Bill, asserted that the project "ran into trouble because of inadequate sensitization and a lack of trust in the system by a vast majority of citizens." ³²²⁶

Kenya is set to revamp the ID scheme as part of the digitization efforts of the country. The Cabinet Secretary for Information, Communication, and Digital Economy announced the plans to replace the controversial Huduma Namba by a new digital identity in February 2024.³²²⁷ The online identification will have a centralized database that will connect with the National Information Management System (NIIMS). The system will contain a comprehensive set of data held by the governmentto facilitate access to public services, and also to be linked to the birth-to-death Unique Personal Identifier (UPI).³²²⁸ The plans include the assignment of a number to the newborn that will remain as the identifier at school and as the National Identity number, social security number, and death certificate number.

Despite the legal framework, concerns remain about data security, potential misuse of biometric data, and the inclusivity of the NIIMS system.³²²⁹ Critics argue that marginalized groups may face barriers in accessing the system, potentially exacerbating existing inequalities.³²³⁰Most recently, the Cabinet

Ayang Macdonald, *Kenya mulls digital ID scheme changes and new uses for controversial Huduma Namba* (Jan. 16, 2023), https://www.biometricupdate.com/202301/kenya-mulls-digital-id-scheme-changes-and-new-uses-for-controversial-huduma-namba

³²²⁸ Ayang Macdonald, Kenya to clear backlog of biometric passports, new 'smart and digital ID' system coming. Biometric Update (Feb. 6, 2023),

 $\underline{https://www.biometricupdate.com/202302/kenya-to-clear-backlog-of-biometric-passports-new-smart-and-digital-id-system-coming}$

³²²⁹ Tech Policy Press, *Kenya Must Update Its Regulatory Frameworks to Keep Pace with AI* (Oct. 2, 2023), https://www.techpolicy.press/kenya-must-update-its-regulatory-frameworks-to-keep-pace-with-ai/

³²³⁰ Identify Review, *Inside the Controversial Huduma Namba*, *Kenya's Exclusive Digital Identity Scheme* (Feb. 21, 2021), https://identityreview.com/inside-the-controversial-huduma-namba-kenyas-exclusive-digital-identity-scheme/

³²²⁵ Privacy International, *Kenyan Court Ruling on Huduma Namba Identity System: The Good, the Bad and the Lessons* (Feb. 2020), https://privacyinternational.org/long-read/3373/kenyan-court-ruling-huduma-namba-identity-system-good-bad-and-lessons

³²²⁷ Chris Burt, *Kenyan government seeks to differentiate new national digital ID from Huduma Namba*. Biometric Update (Feb 24, 2023), https://www.biometricupdate.com/202302/kenyan-government-seeks-to-differentiate-new-national-digital-id-from-huduma-namba

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Secretary of the Ministry of Interior and National Administration also announced the issuance of biometric passports, which were launched in 2022. Citizenship and Residency documents with advanced features of third-generation security will be part of this innovation to the immigration process.

Facial Recognition

Kenya's policies on facial recognition are still evolving. There is no comprehensive regulatory framework, but rather it uses existing laws, like the Data Protection Act.

The Kenyan National Police Service (NPS) launched facial recognition on major roads and highways through an urban CCTV network in 2018.³²³¹ This system called Integrated Command and Control system (ICCS) relied on CCTV cameras to do Automatic Number Plate Recognition (ANPR) to detect vehicles involved in crimes as part of the Critical Incident Management suite (CIMS).

The NPS partnered with a Japanese firm to install an upgrade of the ICCS, to "help in fast and accurate identification of suspects." 3232 The NPS Plans include using the Neo Face as an alternative when law enforcement cannot identify a suspect using fingerprints.

Currently there are no laws in Kenya that specifically address the challenges associated with the misuse of facial recognition technology. Nor are there laws aimed at regulating the adoption and use of facial recognition or even traditional CCTV systems more broadly. 3233

Lethal Autonomous Weapons

Kenya supports a legally binding instrument on autonomous weapons and has voted in favor of UN resolutions toward that end.3234 Kenya is part of the African Group and Non-Aligned Movement. Kenya reiterated the position to "act quickly to establish a robust international regulatory framework that would ensure such technological advancements [as AI and LAWS] serve to protect humanity, rather than diminish its values."3235

3232 Ibid Poli

³²³¹ Chris Burt, Kenyan police launch facial recognition on urban CCTV network. Biometric Update (Sept. 24, 2018), https://www.biometricupdate.com/201809/kenyan-police-launch-facialrecognition-on-urban-cctv-network

³²³³ Tech Policy Press, Kenya Must Update its Regulatory Frameworks to Keep Pace with AI (Oct. 2023), https://www.techpolicy.press/kenya-must-update-its-regulatory-frameworks-tokeep-pace-with-ai/

³²³⁴ Automated Decision Research, Kenva,

https://automatedresearch.org/news/state_position/kenya/

³²³⁵ Permanent Mission of the Republic of Kenya to the United Nations, *Statement by* Ambassador Ekitela Lokaale, Permanent Representative during the First Committee-Disarmament & International Security General Debate (Oct. 14, 2024),

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Environmental Impact of AI

Kenya's growing AI ecosystem, particularly within the agricultural and healthcare sectors, presents opportunities to follow UNESCO's guidance to adopt technologies that minimize environmental impact. However, a lack of regulatory frameworks to monitor AI's environmental footprint poses challenges. Strengthening these frameworks could position Kenya as a regional leader in environmentally responsible AI development, aligning with UNESCO's emphasis on sustainability.

Kenya is actively exploring the environmental implications of AI adoption, particularly in sectors where AI systems can enhance sustainability, such as agriculture and energy. The National AI Strategy development process includes considerations for minimizing the carbon footprint associated with AI technologies, acknowledging the need for sustainable practices in digital transformation. By investing in energy-efficient infrastructure and promoting AI applications that support environmental goals, such as precision agriculture, Kenya aims to align its AI advancements with sustainability objectives.

Human Rights

According to Freedom House, Kenya is "Partly Free" with a score of 52/100 for political rights and civil liberties. The country's media and civil society sectors are vibrant, even as journalists and human rights defenders remain vulnerable to restrictive laws and intimidation. Concerns exist about the government's interference with the right to privacy of individuals and the frequent use of cybercrime laws to crack down on online critics of the government. The Ibrahim Index of African Governance in 2024 scores Kenya at 60.3/100 for overall governance, and 63.8/100 in Participation Rights & Inclusion, placing the country in position 10 out of 54 countries. 3237

Kenya's Constitution contains the Bill of Rights under Chapter 4 with a catalog of fundamental civil and political rights and socio-economic and cultural rights. These rights include Freedom and security of the person, right to Privacy, Freedom of expression, Freedom of the media, right to access to information, and

https://reachingcriticalwill.org/images/documents/Disarmament-

fora/1com/1com24/statements/14Oct_Kenya.pdf

 $[\]overline{W}$ Freedom House, Freedom in the World 2024: Kenya (2024),

https://freedomhouse.org/country/kenya/freedom-world/2024
3237 Ibrahim Index of African Governance, *Kenya, 2024, Overall Governance*

^{(2025),} $\underline{\text{https://iiag.online/data.html?meas=GOVERNANCE\&loc=KE\&view=overview\&subview=absoluteTrends}$

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right to dignity. 3238 Kenya's Human Rights Commission has an oversight mandate on human rights protection and promotion.

Kenya is a signatory to various regional and international human rights treaties and conventions including the African Charter on Human and Peoples Rights, the International Convention on Civil and Political Rights (ICCPR), and the International Covenant on Economic, Social and Cultural Rights (ICSECR).

Al Safety Summit

Kenya participated in the first AI Safety Summit and endorsed the Bletchley Declaration in 2023.³²³⁹ Kenya thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible."

At the second safety summit, the AI Seoul Summit, Kenya and other participants signed a Statement of Intent to cooperate on AI Safety Science. Kenya's Special Envoy for Technology attended the first International Network of AI Safety Institutes in San Francisco in November 2024.³²⁴⁰

Conversations about synthetic content, managing risks, and global governance continued at the third summit, the AI Action Summit in Paris in February 2025, where Kenya got feedback on managing synthetic content and misinformation.³²⁴¹ Representatives defined a shift in focus "to develop technical solutions that are open and accessible to all" and reiterated a commitment to "Ensuring the development of trusted, safe and secure AI to benefit of all."³²⁴²

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³²³⁸ Kenya Law Reform Commission, *The Constitution of Kenya: Chapter 4, The Bill of Rights* (2023), https://www.klrc.go.ke/index.php/constitution-of-kenya/110-chapter-four-the-bill-of-rights

³²³⁹ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, *Prime Minister's Office, The Bletchley Declaration by Countries Attending the AI Safety Summit*, (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration/the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

³²⁴⁰ Kenya News, *Ambassador Thigo Leads Kenya's Participation in Historical AI Safety Network Launch in the US* (Nov. 24, 2024), https://www.kenyanews.go.ke/ambassador-thigo-leads-kenyas-participation-in-historic-ai-safety-network-launch-in-the-us/

³²⁴¹ Diana Mutheu, *Paris AI Summit: Kenya's AI Sector Projected to Reach €1 Billion, but Misinformation and Privacy Concerns Loom* (Feb. 11, 2025),

 $[\]underline{https://techjournal.co.ke/2025/02/11/paris-ai-summit-kenyas-ai-sector-projected-to-reach-elbillion-but-misinformation-and-privacy-concerns-loom/$

³²⁴² France Diplomacy, AI Action Summit: Ensuring the Development of Trusted, Safe and Secure AI to Benefit of All (Feb. 12, 2025), https://www.diplomatie.gouv.fr/en/french-foreign-

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OECD / G20 AI Principles

Kenya is not a member of the OECD and has not endorsed the OECD AI principles. ³²⁴³ Many of Kenya's initiatives in digital transformation and AI align with OECD AI principles. Research and development centers on the fulfilling the Sustainable Development Goals. Kenya's AI strategies, initiatives, and policies such as AI Use Case in the Public Sector; Blockchain and AI Task Force; Emerging Digital Technologies for Kenya Exploration and Analysis; Kenya's Digital Economy Blueprint; Kenya's Digital Economy Strategy; and Kenya's Digital Literacy Program (Digischool) align with OECD principles such as inclusive growth, sustainable development, and well-being and capacity-building. ³²⁴⁴

Council of Europe AI Treaty

Kenya has not signed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law, the first legally binding international treaty on AI.³²⁴⁵

UNESCO Recommendation on AI Ethics

Kenya is a UNESCO member state since 1964,³²⁴⁶ and was one of the 193 member states that adopted the Recommendation on the Ethics of Artificial Intelligence in November 2021.³²⁴⁷

According to the UNESCO AI Needs Assessment Survey in Africa, Kenya has been active in initiatives to improve participation through improvements in internet access under the Rights, Openness, Accessibility, and Multi-stakeholder participation. The report does not include information about Kenya's progress in strategies, policies, legislations, ethical guidelines, centers of excellence on AI, start-up, and incubation centers.³²⁴⁸

The Government of Kenya has collaborated with UNESCO in organizing and participating in the Eastern Africa Sub-Regional Forum on Artificial

policy/digital-diplomacy/news/article/ai-action-summit-ensuring-the-development-of-trusted-safe-and-secure-ai-to

³²⁴³ OECD Legal Instruments, *Recommendation of the Council on Artificial Intelligence* (May 3, 2024), https://legalinstruments.oecd.org/en/instruments/%20OECD-LEGAL-0449

³²⁴⁴ OECD.AI, AI in Kenya (2022), https://oecd.ai/en/dashboards/countries/Kenya

³²⁴⁵ Council of Europe Treaty Office, Chart of Signatures and Ratifications of Treaty 225 (Mar.

 $^{1, 2025), \}underline{https://www.coe.int/en/web/Conventions/full-list/?module=signatures-by-treaty\&treatynum=225$

³²⁴⁶ UNESCO, *Member States* (2025), https://en.unesco.org/countries

³²⁴⁷ UNESCO, *Ethics of Artificial Intelligence* (2025), https://www.unesco.org/en/artificial-intelligence/recommendation-ethics

³²⁴⁸ UNESCO, *Artificial Intelligence Needs Assessment Survey in Africa* (2021), https://unesdoc.unesco.org/ark:/48223/pf0000375322

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Intelligence. Kenya hosted the 2024 forum under the theme of Harnessing Artificial Intelligence for Sustainable Development in June. 3249

Kenya completed the UNESCO Readiness Assessment Methodology (RAM) in 2024.³²⁵⁰ The RAM helps countries and UNESCO identify and address any institutional and regulatory gaps.3251 The RAM report commends Kenya's strong legal framework and multistakeholder consultation process in developing the AI and digital economy strategies. The report notes challenges in Kenya's public investment in research and development and disparities in access to digital services across gender and rural-urban divides. 3252

Evaluation

Kenya is stepping up its efforts in establishing a comprehensive framework for digital policies in line with developments in the African Union. Kenya has updated its data protection legal regime, created an independent data protection commission, and progressed on the right to algorithmic transparency. Kenya is yet to adopt a national AI policy that reflects the commitment it took by endorsing the UNESCO Recommendation on the Ethics of AI. However, partnerships with organizations like GIZ and UNESCO illustrate its commitment to ethical AI use, particularly through initiatives like FAIR Forward, which focuses on inclusive AI development. Despite this alignment, Kenya's lack of formal endorsement and absence of a dedicated regulatory body for AI limit the full integration of OECD standards, particularly in algorithmic transparency and accountability. Serious concerns also exist about practices akin to AI-powered mass surveillance.

Korea

In 2024, Korea passed comprehensive AI legislation with the Basic Act on the Development of Artificial Intelligence and Establishing a Foundation of Trust. Korea brought countries together to reaffirm support for AI safety and Inclusive AI in the second AI Safety Summit (AI Seoul Summit) and for progress toward the responsible use of AI in the military in the REAIM 2024 summit.

https://unesdoc.unesco.org/ark:/48223/pf0000387369

³²⁴⁹ UNESCO, The Eastern Africa Sub-Regional Forum on Artificial Intelligence (2024), https://www.unesco.org/en/earfai

³²⁵⁰ UNESCO, Implementation of the Recommendation on the Ethics of Artificial Intelligence, General Conference, 42nd session (Nov. 2, 2023),

³²⁵¹ UNESCO Global AI Ethics and Governance Observatory, Readiness Assessment Methodology (2025), https://www.unesco.org/ethics-ai/en/ram

³²⁵² UNESCO Global AI Ethics and Governance Observatory, Country Profiles: Kenya (2025), https://www.unesco.org/ethics-ai/en/kenya

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National AI Strategy

The Republic of Korea, known commonly as South Korea, announced the National Strategy for Artificial Intelligence³²⁵³ in December 2019. While the focus is on building a world-class AI technical capacity through ambitious targets such as "achieving a world top 3 digital competitiveness by 2030," the Strategy also aims to address AI ethics and algorithmic transparency-related issues under the pillar of realizing people-centered AI.

The National Strategy materializes the Presidential Initiative for AI that former President Moon Jae-in announced on October 28, 2019. "AI is moving beyond scientific and technological advancements and is approaching us as a new civilization [...] AI will not only affect industrial sectors but also solve many issues facing our society: public health in an aging society, welfare for senior citizens living alone, the safety of women living by themselves, and the prevention of crimes that are becoming more sophisticated," stated former President Moon Jae-in.

Korea's National Strategy identifies nine major axes and 100 major tasks in three major areas. The major areas are (1) fostering a global-leading AI ecosystem, (2) becoming a country unrivaled for its use of AI, and (3) realizing people-centered AI. The Strategy is the result of a cooperation of the entire Korean ministries and offices including the Ministry of Science and ICT, the Ministry of the Interior and Safety, the Ministry of Education, and the Presidential Committee on the Fourth Industrial Revolution (PCFIR).³²⁵⁴

The Presidential Committee on the Fourth Industrial Revolution (PCFIR) formally ended in September 2022³²⁵⁵ and the Presidential Committee on Digital Platform Government was launched in September 2023.³²⁵⁶ The new Committee will be responsible for evaluating policies and projects related to AI, infrastructures, and services for creating a Digital Platform for Government according to a human-centered vision.³²⁵⁷

President Yoon Suk-yeol visited the University of Toronto for an AI roundtable in September 2022, where they discussed AI and collaboration between

https://stip.oecd.org/stip/interactive-dashboards/policy-

initiatives/2021%2Fdata%2FpolicyInitiatives%2F16688

https://news.mt.co.kr/mtview.php?no=2022071517260121218

³²⁵³ The Government of the Republic of Korea, *National Strategy for Artificial Intelligence* (Dec. 17, 2019),

 $[\]frac{\text{https://www.msit.go.kr/bbs/view.do?sCode=eng\&nttSeqNo=9\&bbsSeqNo=46\&mId=10\&mPid=9}{2}$

³²⁵⁴ Presidential Committee on the Fourth Industrial Revolution, About PCFIR (2020),

³²⁵⁵ Disengagement of PCFIR (Jul. 16, 2022),

Presidential Committee on Digital Platform Government, https://dpg.go.kr/

³²⁵⁷ Yonhap News Agency, *Yoon calls for improving public services through 'digital platform government'* (Sept. 2, 2022), https://en.yna.co.kr/view/AEN20220902004700315

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University of Toronto and South Korean partners.³²⁵⁸ As an extension of the roundtable, the Ministry of Science and ICT announced the Digital Strategy of Korea in line with President Yoon's vision. The purpose is for Korea "to become a best practice country in digital innovation and take a leap forward as a leading country in the digital era, rather than staying stagnant as a fast-follower."³²⁵⁹

In addition, MSIT announced the Plan for Mainstreaming Artificial Intelligence and Industrial Advancement in January 2023 as a follow-up plan for the Korean Digital Strategy. The plan will promote the advancement of AI industry and technology while sharing benefits with the public by investing in 10 core AI projects.³²⁶⁰

The Korean government updated the National Strategy in September 2024 with a set of new commitments intended to serve as a blueprint for Korea's goal to become one of the top three global AI powerhouses.³²⁶¹ These commitments are part of the Policy Directions for National AI Strategies presented at the first National AI Committee chaired by President Yoon Suk Yeol. MSIT described this development as a "shift in policy paradigm," as the government aims to "move beyond merely expanding the initial AI infrastructure" to establishing AI as part of the national infrastructure, "fostering transformation across all sectors."³²⁶²

The Policy Directions for National AI Strategies reasserts the goal set out in the National AI Strategy of establishing Korea as a Global AI Hub through the Leap to AI G3. This plan rests on four AI flagship projects:

- 1. Expand advanced GPU capacity by 15 times and support the commercialization of domestic AI semiconductors, including the establishment of the National AI Computing Center
- 2. Stimulate private investment of KRW 65 trillion in the AI sector over four years (2024–2027)
- 3. Drive the AI adoption rate of 70% in industries and 95% in the public sector by 2030

³²⁵⁸ Rahul Kalvapalle, *South Korean President Yoon Suk-Yeol Visits U of T for AI Roundtable* (Sept. 26, 2022), https://www.utoronto.ca/news/south-korean-president-yoon-suk-yeol-visits-u-t-ai-roundtable

³²⁵⁹ Ministry of Science and ICT, Korea to Come up with the Roadmap of Digital ROK, Realizing the New York Initiative,

 $[\]underline{\text{https://www.msit.go.kr/bbs/view.do?sCode=eng\&mId=4\&mPid=2\&bbsSeqNo=42\&nttSeqNo=7}}42$

³²⁶⁰ Digital Times, *The government will invest 712.9 billion won this year to normalize AI and upgrade industries* (Jan. 26, 2023),

http://www.dt.co.kr/contents.html?article_no=2023012602109931081010&ref=naver
³²⁶¹ Ministry of Science and ICT, *Blueprint for Korea's Leap to Become One of the Top Three Global AI Powerhouse (AI G3)* (Sept. 26, 2024),

 $[\]underline{\text{https://www.msit.go.kr/eng/bbs/view.do?sCode=eng\&mPid=2\&mId=4\&bbsSeqNo=42\&nttSeqNo=1037}$

³²⁶² Ibid

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4. Establish robust AI safety and security capabilities early on to take the lead in global AI governance.³²⁶³

The Korean government also unveiled an updated enforcement framework consisting of the newly established National AI Committee that will "be responsible for establishing and implementing the National AI Strategy by translating the policy directions into concrete and actionable tasks."³²⁶⁴

Al Ethics

Korea's National Strategy for Artificial Intelligence includes "preventing AI dysfunction and establishing AI ethics" as one of nine major actions and aims to set up AI Ethics Principles through public consultation.³²⁶⁵

As a follow-up action to establish the comprehensive AI ethical standards that all members of society—developers, providers, and users—can refer to from development to use of AI, the Korean government has formed an AI ethics research team and analyzed the commonalities and differences in OECD AI Principles and 25 global major AI ethical principles. As a result, in December 2020, the Korean Ministry of Science and ICT announced the Korean AI Ethical Standards³²⁶⁶ at the plenary session of the Presidential Committee on Fourth Industrial Revolution. The Standards include 3 basic principles to ultimately materialize 'Humanity' in the development and utilization of AI, as well as 10 key requirements to back up these principles. The 3 basic principles are Human dignity, Public interests, and Technological teleology. The 10 key requirements are Human rights advocacy, Privacy protection, Respect for Diversity, Injunction infringement, Public interests, Solidarity, Data management. Accountability, Safety, and Transparency.

In May 2021, the Ministry of Science and ICT announced the national strategy to build social trust in the era of AI. The strategy explicitly put an emphasis on the development of relevant technologies to pursue three ethical values: Explainability, Fairness, and Robustness.³²⁶⁷

3264 Ibid

³²⁶³ Ibid

³²⁶⁵ Government of the Republic of Korea, *National Strategy for Artificial Intelligence*, p. 49, OECD (Dec. 2019),

https://wp.oecd.ai/app/uploads/2021/12/Korea National Strategy for Artificial Intelligence 20 19.pdf

³²⁶⁶ Ministry of Science and ICT, Press Release: Ministry of Science and ICT to Establish "Artificial Intelligence (AI) Ethics Standards" (2020),

https://www.msit.go.kr/bbs/view.do?sCode=user&mPid=112&mId=113&bbsSeqNo=94&nttSeq No=3179742; OECD AI Policy Observatory, *Human-Centered National Guidelines for AI Ethics* [사람이 중심이 되는 인공지능 윤리기준] (Sept. 9, 2022),

https://oecd.ai/en/dashboards/countries/SouthKorea

³²⁶⁷ Korea, Artificial Intelligence-Based Policy Division, *Announcing Trustworthy AI Implementation Strategies* (May 13, 2021),

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Improvement of Policies and Laws for the Era of Al

Korea's legislature approved the Framework Act on the Development of Artificial Intelligence and Foundation of a Trust in December 2024 and enacted in early January 2025.3268 The Act establishes human-centered AI development and use as a basic principle such that "Artificial intelligence technology and the artificial intelligence industry should be developed in a way that enhances safety and reliability and improves the quality of life of the people."3269 The Act charges state and local governments to "devise policies to respond to changes in all areas, including society, economy, culture, and people's daily lives" because of AI systems and to "enable all citizens to adapt stably."

In keeping with the National Strategy's focus on making the Republic of Korea a global leader in AI, the act includes systems for developing trustworthy AI and charges the government to "respect the creative spirit of AI business operators."3270 The legislation will be enforced beginning in January 2026, with the Ministry of Science and ICT charged as the authority in charge of implementation and investigation.

In May 2020, the Korean government amended the Framework Act on National Informatization,³²⁷¹ now the Framework Act on Intelligence Informatization. "The purpose of this Act is to contribute to realizing an intelligent information society, securing the national competitiveness, and improving the quality of life for citizens, by prescribing matters necessary to establish and promote policies related to intelligent informatization."3272 The Act provides a definition for intelligence information technology and the basis for all regulations

https://www.msit.go.kr/bbs/view.do?sCode=user&mId=113&mPid=112&pageIndex=&bbsSeqN o=94&nttSeqNo=3180239&searchOpt=ALL&searchTxt=

³²⁶⁸ Kyoungjun Choi, Analyzing South Korea's Framework Act on the Development of AI, IAPP (Jan. 23, 2025), https://iapp.org/news/a/analyzing-south-korea-s-framework-act-on-thedevelopment-of-ai

³²⁶⁹ National Law Information Center, Law No. 20676, Basic Act on the Development of Artificial Intelligence and Creation of a Trust Base, etc.[인공지능 발전과 신뢰 기반 조성 등에 관한 기본법] (Jan. 21, 2025),

https://www.law.go.kr/%EB%B2%95%EB%A0%B9/%EC%9D%B8%EA%B3%B5%EC%A7% 80%EB%8A%A5%20%EB%B0%9C%EC%A0%84%EA%B3%BC%20%EC%8B%A0%EB% A2%B0%20%EA%B8%B0%EB%B0%98%20%EC%A1%B0%EC%84%B1%20%EB%93%B1 %EC%97%90%20%EA%B4%80%ED%95%9C%20%EA%B8%B0%EB%B3%B8%EB%B2% 95/(20676,20250121)

³²⁷⁰ Ibid

³²⁷¹ National Law Information Center, Framework Act on National Informatization (Dec. 23,

http://www.law.go.kr/lsInfoP.do?lsiSeq=172205&lsId=000028&chrClsCd=010202&urlMode=e ngLsInfoR&viewCls=engLsInfoR#0000

³²⁷² Article 1 of the Framework Act on Intelligent Informatization, https://elaw.klri.re.kr/eng_mobile/viewer.do?hseq=54720&type=sogan&key=54

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that address the development and use of AI, such as the basic principles of the intelligence information society, technical requirements, standardization, and personal data protection. This Framework operationalizes in part the National AI Strategy and its idea of a "future-oriented legal system"³²⁷³ based on the review and revision of relevant laws and regulations to address the issues pertaining to the use of AI in (1) data, (2) intellectual property, (3) accountability, (4) regulation of algorithms and trade secret, (5) finance, (6) platform, (7) labor, (8) healthcare, and (9) welfare.

Public Participation

The Korea Information Society Development Institute (KISDI) and the Ministry of Science and ICT (MSIT) jointly held an open seminar³²⁷⁴ to receive a wide range of public comments from the public and private sectors, academia, and civil society. The conference was implemented with the mission of changing the direction of AI's implication on Korean society in more benevolent ways, by checking the goodness, fairness, and validity of "The RoK's AI Utilization Guidelines" and its enforcement as of 2022. Before convening the event, the KISDI actively accepted and reflected a large number of opinions related to Korea's three major AI policy implementation measures: 1) The Self-checklist for practicing AI Ethics Standards,³²⁷⁵ 2) The Instructions to develop AI Accountability, and 3. AI Ethics Education.³²⁷⁶

South Korea conducted public consultations on AI legislation and welcomed independent expert participation in newly established AI bodies in 2024. Specifically, from June to July 2024, the Ministry of Science and ICT (MSIT) solicited public feedback on the opportunities and threats of AI technology, regulatory strategies for ensuring safe and reliable AI, and the government's AI policy priorities through an enhanced digital public forum (beingdigital.kr), following the Plan for Establishing a New Digital Order announced in May. This input will be used to guide the development of global AI norms in the future. The follow-up on the consultation also announced a policy

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³²⁷³ Government of the Republic of Korea, *National Strategy for Artificial Intelligence* (Dec. 17, 2019),

https://www.msit.go.kr/bbs/view.do?sCode=eng&nttSeqNo=9&bbsSeqNo=46&mId=10&mPid=9

³²⁷⁴ Open Policy Seminar for AI Reliability Enhancement (Nov. 24, 2021), https://www.kisdi.re.kr/bbs/view.do?bbsSn=113588&key=m2101113055944

³²⁷⁵ A Draft of Self-checklist for practicing AI Ethics Standards was uncovered by the MSIT as follow-up for the conference, https://www.aitimes.com/news/articleView.html?idxno=141704
³²⁷⁶ Korean Information Society Development Institute, KISDI Releases 'Artificial Intelligence Ethics Education Textbook' that Can Be used in Elementary, Middle, and High Schools (Feb. 9, 2023),

 $[\]underline{https://www.kisdi.re.kr/bbs/view.do?bbsSn=113985\&key=m2101113056011\&pageIndex=1\&sc=\underline{\&sw=}$

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idea contest open for anyone to propose new policies on issues such as closing the gap in access to AI, ensuring ethical awareness among AI developers, and preventing AI from violating individual rights.3277

Also, in April and July 2024, South Korea established two specialized bodies to enhance AI governance, both including independent experts. The Ministry of Science and ICT launched the AI Strategy High-Level Council to guide AI integration across various sectors.3278 Additionally, the State Council inaugurated the National Artificial Intelligence Committee to coordinate comprehensive national AI policies, focusing on regulatory improvements and infrastructure expansion.3279

Data Protection

In February 2020, Korea amended the three major data privacy laws to protect personal information and improve the personal data protection and privacy governance system in the era of the 4th industrial revolution. 3280 The three laws are the Personal Information Protection Act (PIPA), the Act on the Promotion of the Use of the Information Network and Information Projection (the Network Act), and the Credit Information Use and Protection Act (the Credit Information Act). These amendments reflect the outcome of "Hackathon agreements" held in February and April 2018. In May 2018, relevant ministries, civil society organizations and professionals from the industry, including legal circles, participated in the Presidential Committee on the Fourth Industrial Revolution. The Committee discussed the introduction of the use of fictitious names to foster the use of data, reviewing the existing legislation for increased coherence, and strengthening users' responsibility.

As a result of the amendments to the three major data privacy laws, the mandate of the Personal Information Protection Commission (PIPC) was upgraded in August 2020. The PIPC is now a ministerial-level central administrative agency that formulates data privacy policies and supervises the enforcement of data

https://www.msit.go.kr/bbs/view.do?sCode=user&mId=113&mPid=238&pageIndex=&bbsSeqN o=94&nttSeqNo=3184589&searchOpt=ALL&searchTxt=

https://www.msit.go.kr/bbs/view.do?sCode=user&mId=113&mPid=238&pageIndex=&bbsSeqN o=94&nttSeqNo=3184786&searchOpt=ALL&searchTxt=

³²⁷⁷ Ministry of Science and ICT, We Hear from the Public about Safe and Trustworthy Artificial Intelligence!, Press Release (Jul. 2024),

³²⁷⁸ Ministry of Science and ICT, Press release "Regulations on the Establishment and Operation of the National Artificial Intelligence Commission" Passed by the State Council [Korean only] (Jul. 2024),

³²⁷⁹ Ibid

³²⁸⁰ Ministry of Culture, Sports and Tourism, *Data 3 Laws* (Nov. 16, 2021), https://www.korea.kr/special/policyCurationView.do?newsId=148867915

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protection laws as an independent authority.³²⁸¹ Initially created in 2011 under the office of the President, the PIPC now operates independently. The PIPC centralizes various personal information protection functions previously scattered across ministries.

The PIPC published an AI Personal Information Protection Self-checklist to provide guidelines for the protection of personal information gathered and used by artificial intelligence in 2021. The checklist presents 16 specific items to check and 54 items to verify the safe handling of personal information during the AI life cycle: design, development, and operation. The PIPC penalized the indiscriminate use of personal information by a company using AI technology for the first time in 2021 as well. The AI startup was fined following a massive personal data breach. The PIPC signed self-regulation agreements with ten online shopping platforms for the safe use of personal information in 2022. 3283

The PIPC adopted a guide clarifying the rights of data subjects regarding automated decision-making by institutions using AI³²⁸⁴ and published standards for processing public data used in artificial intelligence (AI) development and services in 2024.³²⁸⁵

The PIPC and the European Commission announced the successful conclusion of their negotiations and the adoption of the European Commission's adequacy decision for the transfer of personal data from the European Union to the Republic of Korea under the General Data Protection Regulation in December 2021. The adequacy decision confirms the shared commitment of the Republic of Korea and the EU to a high level of data protection.³²⁸⁶ Korea reconfirmed this

https://www.pipc.go.kr/eng/user/itc/itc/greetings.do

³²⁸¹ Personal Information Protection Commission, About PIPC,

³²⁸² YonhapNews Agency, *Developer of AI chatbot service fined for massive personal data breach* (Apr. 28, 2021), https://en.yna.co.kr/view/AEN20210428009500315

³²⁸³ DataGuidance, South Korea: PIPC issues press release on online shopping platforms signing self-regulatory agreements for safe use of personal information (Jul. 14, 2022),

https://www.dataguidance.com/news/south-korea-pipc-issues-press-release-online-shopping ³²⁸⁴ Personal Information Protection Commission, *Personal Information Protection Commission publishes case-based "Guide to Data Subjects' Rights Regarding Automated Decisions*," Press Release (Sept. 26, 2024),

 $[\]frac{https://www.pipc.go.kr/np/cop/bbs/selectBoardArticle.do?bbsId=BS074\&mCode=C020010000\&nttId=10611\#LINK}{}$

³²⁸⁵ Personal Information Protection Commission, *Presentation of Standards for Processing* "public data" Used in Artificial Intelligence (AI) Development and Services (Jul. 17, 2024), https://www.pipc.go.kr/np/cop/bbs/selectBoardArticle.do?bbsId=BS074&mCode=C020010000&ntId=10362#LINK

³²⁸⁶ European Commission, Joint Press Statement by Didier Reynders, Commissioner for Justice of the European Commission, and Yoon Jong In, Chairperson of the Personal Information Protection Commission of the Republic of Korea (Dec. 17, 2021), https://ec.europa.eu/commission/presscorner/detail/en/statement 21 6915

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collaboration and partnership with the EU in a 2023 joint press statement³²⁸⁷ and ongoing discussions in high-level meetings with international data protection officials in 2024.³²⁸⁸

The PIPC is a member of the Global Privacy Assembly (GPA) since 2012. The Korea Internet & Security Agency (2004) and the Korea Communications Commission (2018) are also GPA members. The PIPC has taken an active role within the GPA in recent years. The PIPC co-sponsored the 2022 GPA Resolution on Facial Recognition Technology³²⁸⁹ and the 2023 GPA Resolution on Generative AI.³²⁹⁰ However, the PIPC did not endorse the 2018 Declaration on Ethics and Data Protection in AI³²⁹¹ or the 2020 Resolution on Accountability in the Development and Use of Artificial Intelligence.³²⁹² The PIPC serves as a member of the GPA's Policy Strategy Working Group 1: Global Frameworks and Standards³²⁹³ and Digital Education Working Group,³²⁹⁴ whose common purpose is to enhance data protection and AI accountability.

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³²⁸⁷ European Commission, *Joint Press Statement by Didier Reynders, European Commissioner for Justice, and Ko Haksoo, Chair of the Republic of Korea's Personal Information Protection Commission*, Press Release (Apr. 11, 2023), https://commission.europa.eu/news/joint-press-statement-didier-reynders-european-commissioner-justice-and-ko-haksoo-chair-republic-2023-04-11 en

³²⁸⁸ European Commission, Adequacy Decisions (Mar. 4, 2024),

https://commission.europa.eu/law/law-topic/data-protection/international-dimension-data-protection/adequacy-decisions_en; EDPB, EDPB Meets with Adequate Countries (Oct. 15, 2024), https://www.edpb.europa.eu/news/news/2024/edpb-meets-adequate-countries_en 3289 Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

³²⁹⁰ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

³²⁹¹ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

³²⁹² Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN.pdf

³²⁹³ Global Privacy Assembly, *Policy Strategy Working Group 1: Global Frameworks and Standards* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/Day-1-12a-Day-3-3-2b-v1_0-Policy-Strategy-Working-Group-WS1-Global-frameworks-and-standards-Report-Final.pdf

³²⁹⁴ Global Privacy Assembly, *Digital Education Working Group* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/DEWG-2019-2020-Annual-Report-GPA-20200921-finalannexes Oct-2020 final-en-211020-1.pdf

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The PIPC announced its plans to shape global privacy norms, especially in the context of emerging AI technologies in 2024. Chairperson Haksoo Ko will participate in high-level discussions on establishing safe frameworks for crossborder data transfers and privacy governance for AI applications, collaborating closely with EU data protection authorities and others from the UK, France, and Singapore to strengthen international cooperation. The PIPC will also host the GPA in Seoul in 2025 and promote global solidarity on data protection standards and AI governance, aiming to establish a unified approach to privacy in the digital age.3295

Regarding AI oversight, the PIPC is not the only competent independent agency. The National Human Rights Commission of Korea³²⁹⁶ advocates for the non-discriminatory use of AI and warns against the risk of bias and deep fake technology.³²⁹⁷ In a decision of April 11, 2022, the National Human Rights Commission adopted Human Rights Guidelines on the Development and Use of AI.³²⁹⁸ The Commission took a step toward implementing the Guidelines by developing a Human Rights Impact Assessment Tool for AI in 2024.3299 The Commission advocated to the Minister of Science and ICT that the Tool be "utilized during the establishment and implementation of AI-related policies and project plans to prevent human rights violations and discrimination arising from the development and use of AI."

³²⁹⁵ Ministry of Science and ICT, Press release, PIPC to Take Lead in Global Norm-Setting and Privacy Discussions at the 46th Global Privacy Assembly in the Era of AI (Oct. 30, 2024), https://www.pipc.go.kr/eng/user/ltn/new/noticeDetail.do

³²⁹⁶ National Human Rights Commission of Korea, *Purpose*,

https://www.humanrights.go.kr/eng/contents/view?contentsNo=124&menuLevel=3&menuNo=1

³²⁹⁷ Kim Min-sub, *Does AI Discriminate?* (Jul. 2020),

http://humanrights.go.kr/site/program/webzine/subview?menuid=003001&boardtypeid=1016&b oardid=7605775&searchissue=7605780;Park Cheol-eung, Human Rights Commission: Human Rights Should Be Included in AI Bill "Severe Threats such as 'Deep Fake Porn," Asia Economy (Jun. 1, 2020), https://view.asiae.co.kr/article/2020060110251892308

³²⁹⁸ Yulchon, Artificial Intelligence in South Korea, AsiaLaw (Nov. 22, 2024),

https://www.asialaw.com/NewsAndAnalysis/artificial-intelligence-in-south-korea/Index/2202 ³²⁹⁹ National Human Rights Commission of Korea, NHRCK Emphasizes the Importance of Implementing the Human Rights Impact Assessment to Protect Human Rights on the Development and Use of Artificial Intelligence, Press Release (Jul. 9, 2024), https://www.humanrights.go.kr/eng/board/read?boardManagementNo=7003&boardNo=7610408

[&]amp;page=1&searchCategory=&searchType=&searchWord=&menuLevel=2&menuNo=114

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Algorithmic Transparency

The Korean legislature passed amendments to the PIPA in 2023.³³⁰⁰ As of March 2024, South Korea's revised Personal Information Protection Act (PIPA) regulates automated decisions, defined as decisions made solely through automated processes, including AI systems. Under this amendment, individuals can request an explanation for automated decisions affecting them and may challenge such decisions if they impact their rights or responsibilities.³³⁰¹

Changes to the Public Official Election Act (POEA), effective January 2024, aim to prevent misuses of deepfakes during elections. The law mandates that AI-generated content, including synthetic images, voices, or videos that closely resemble authentic content, must clearly disclose the use of AI. This amendment seeks to protect electoral integrity by ensuring transparency of AI usage. The national strategy to build social trust in the era of AI explicitly refers to "Explainability" as a main ethical value. The National Human Rights Commission's Human Rights Guidelines on the Development and Use of AI also provides for algorithmic transparency. The Human Rights Impact Assessment Tool developed from these Guidelines in 2024 guides developers or deployers to protect algorithmic transparency through measures for Personal Information Protection, Data Management, Algorithm Performance and Reliability, Non-Discrimination, Explainability and Transparency, and Degree of Human Intervention. The stransparency of the stransparency of

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³³⁰⁰ South Korea Passes Sweeping Amendments to Data Privacy Law (Mar. 3, 2023), https://www.dailysecu.com/form/html/pascon/image/2021/pascon_2021_01.pdf; Legal Business Information, Partial amendment to the Personal Information Protection Act (draft), https://www.moleg.go.kr/lawinfo/makingInfo.mo?lawSeq=62160&lawCd=0&&lawType=TYPE 5&mid=a10104010000

³³⁰¹ Hwan Kyoung Ko et al., *Artificial Intelligence 2024: South Korea*, *Trends and Developments* (May 28, 2024), https://practiceguides.chambers.com/practice-guides/artificial-intelligence-2024/south-korea/trends-and-developments

³³⁰² Ibid

³³⁰³ Ministry of Science and ICT, MSIT Announced Strategy to Realize Trustworthy Artificial Intelligence (May 13, 2021),

 $[\]frac{https://www.msit.go.kr/eng/bbs/view.do?sCode=eng\&mId=4\&mPid=2\&pageIndex=\&bbsSeqNo=22\&nttSeqNo=509\&searchOpt=ALL\&searchTxt}{}$

³³⁰⁴ National Human Rights Commission of Korea, *NHRCK Emphasizes the Importance of Implementing the Human Rights Impact Assessment to Protect Human Rights in the Development and Use of Artificial Intelligence*, Press Release (Jul. 9, 2024),

 $[\]frac{\text{https://www.humanrights.go.kr/eng/board/read?boardManagementNo=7003\&boardNo=7610408}}{\text{\&searchCategory=\&page=1\&searchType=total\&searchWord=Artificial}\%20Intellige\&menuLeve} \\ \frac{1=2\&\text{menuNo=114}}{2}$

³³⁰⁵ Ibid, Human Rights Impact Assessment Tool for AI, pp. 16–21 (Jul. 9, 2024), https://www.humanrights.go.kr/eng/board/read?boardManagementNo=7003&boardNo=7610408 &searchCategory=&page=1&searchType=total&searchWord=Artificial%20Intellige&menuLeve 1=2&menuNo=114

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The Framework Act on Intelligence Informatization provides a framework to secure accountability, interoperability, and safety of intelligence information technology. 306 The Korean government enacted the details and level of technical standards that are legally required to be open to the public in May 2022. The technologies subjected to these criteria are, first and foremost, developed, managed, and utilized for military purposes; second, directly utilized for medical purposes and therefore have a tremendous influence on people's lives; and third, likely to cause significant damage to people in case of malfunction. 308

Korea amended sectoral legislation to reflect new demands for algorithmic transparency. The Credit Information Use and Protection Act introduced the right to challenge decisions based on automated processing in 2021. The Credit Information Act recognizes the data subject's right to challenge an automated credit assessment. It defines "automated credit assessment" as a "credit information company's or other act of evaluating credit information and other data using an information processing device (such as a computer) without the intervention of a human in the evaluation." The Credit Information Act was the first law that empowers individual users toward AI transparency.

The Korea Fair Trade Commission indicated in September 2024 that it intends to focus on amendments to Korea's competition law, the Monopoly Regulation and Fair Trade Act (MRFTA),³³¹⁰ for regulating AI companies, abandoning initial plans to adopt a Korean version of the EU's Digital Markets Act.³³¹¹

³³⁰⁶ National Law Information Center, *Framework Act on Intelligence Informatization* (Jun. 9, 2020),

https://www.law.go.kr/lsSc.do?section=&menuId=1&subMenuId=15&tabMenuId=81&eventGubun=060101&query=%EC%A7%80%EB%8A%A5%EC%A0%95%EB%B3%B4#undefined

3307 Korean Law Information Center, https://www.law.go.kr/LSW/eng/engMain.do

³³⁰⁸ See Article 16 and 21 of the Technical Standards, https://www.law.go.kr/법령/지능정보화기본법/(18298,20210720)

³³⁰⁹ Korea Law Translation Center, *Credit Information Use and Protection Act*, Art. 36–2 (Feb. 4, 2020), https://elaw.klri.re.kr/eng mobile/viewer.do?hseq=63719&type=part&key=23

³³¹⁰ Korean Legislature, *Monopoly Regulation and Fair Trade Act* [Korean] (Sept. 25, 2024), https://www.law.go.kr/%EB%B2%95%EB%A0%B9/%EB%8F%85%EC%A0%90%EA%B7%9C%EC%A0%9C%EB%B0%8F%EA%B3%B5%EC%A0%95%EA%B1%B0%EB%9E%98%EC%97%90%EA%B4%80%ED%95%9C%EB%B2%95%EB%A5%A0

³³¹¹ Lee Sangyun, *Lessons from Korea's Roller-Coaster Ride Toward Platform (Non)Regulation*, Truth on the Market (Sept. 25, 2024) https://truthonthemarket.com/2024/09/25/lessons-from-koreas-roller-coaster-ride-toward-platform-nonregulation/

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EdTech and Children Tracking

In their report investigating use of EdTech tools endorsed by governments for online learning during the pandemic, 3312 Human Rights Watch noted that Korea Educational Broadcasting System (EBS), the website of Korea's national educational public broadcaster, with over 2.1 million daily users during the COVID-19 school closure, tracked "a child's every movement and interaction within the virtual classroom" and sent children's data to 15 AdTech companies. Nonetheless, the EBS "does not disclose the use of ad trackers on the site." 3313 "Nor are the AdTech companies detected by Human Rights Watch to receive children's data disclosed in the list of third parties officially recognized as processors of EBS users' personal data." 3314

Without following up on efforts to address these issues, the Korean government announced plans to invest \$69.3 million by 2026 to develop digital classroom infrastructure and additional educational services. The EdTech Korea Fair 2024 organized in September 2024 highlighted various AI-driven learning platforms and digital services to personalize student learning, enhance digital literacy, and provide tools for teachers to monitor students' progress in real-time. The International Trade Administration estimates that "the focus is primarily on adopting AI technologies such as Intelligent Tutoring Systems, Extended Virtual Worlds (Metaverse), Extended Reality (XR), Conversational AI, and Speech Recognition into existing textbooks." 3315

Environmental Impact of AI

South Korea took a role in promoting environmentally responsible AI through commitments made at the Seoul AI Safety Summit in 2024. The Seoul Declaration and Ministerial Statement, adopted by various international leaders and experts, emphasized the need for AI that is safe, inclusive, and sustainable. Recognizing AI's potential impact on the environment, the declaration calls for policy frameworks that support the development of AI systems designed with sustainability in mind, ensuring they contribute positively to global climate goals.³³¹⁶ Later, at the United Nations Summit of the Future in September, South

3314 Ibid

³³¹² Human Rights Watch, "How Dare They Peep into My Private Life?" Children's Rights Violations by Governments That Endorsed Online Learning During the COVID-19 Pandemic (May 25, 2022), https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rights-violations-governments

³³¹³ Ibid

³³¹⁵ International Trade Administration, *South Korea Artificial Intelligence in Public Schools* (Sept. 23, 2024), https://www.trade.gov/market-intelligence/south-korea-artificial-intelligence-public-schools

³³¹⁶ Ministry of Science and ICT, Ministry of Foreign Affairs, *AI Seoul Summit, Seoul Declaration for Safe, Innovative, and Inclusive AI by Participants Attending the Leaders' Session*

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Korea endorsed the Global Digital Compact, committing to responsible AI use that minimizes environmental harm and accelerates climate action.³³¹⁷

Lethal Autonomous Weapons

The Korean government takes a stance against developing lethal autonomous weapons and rather focuses on AI supporting non-weapon systems such as effective management of military supplies or human decision-making processes. 3318

In October 2022, the Republic of Korea was one of 70 states that endorsed a joint statement on autonomous weapons systems at the United Nations General Assembly. The statement called for the recognition of the dangers of autonomous weapons systems, acknowledged the need for human oversight and accountability, and emphasized the importance of an international framework of rules and constraints.³³¹⁹ In this joint statement, States declared that they "are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law ("IHL"), including through maintaining human responsibility and accountability in the use of force."³³²⁰ Korea voted in favor of the UN General Assembly resolution on lethal autonomous weapons systems in December 2023.³³²¹

Korea participated in the REAIM 2023 international summit on the responsible application of artificial intelligence in the military domain. Hosted by the Netherlands, the participants worked to define an agenda for developing international agreements on AI applications in the military.³³²² At the end of the

of the Seoul Summit (May 21–22, 2024)

https://aiseoulsummit.kr/press/?uid=41&mod=document&pageid=1

https://documents.un.org/doc/undoc/ltd/n24/252/89/pdf/n2425289.pdf

³³¹⁷ United Nations General Assembly, *The Pact for the Future* (Sept. 20, 2024),

³³¹⁸ ZDNet, *University boycott ends after 'KAIST' confirms no 'killer robot' development* (Apr. 10, 2018), https://www.zdnet.com/article/university-boycott-ends-after-kaist-confirms-no-killer-robot-development

³³¹⁹ Stop Killer Robots, 70 states deliver joint statement on autonomous weapons systems at UN General Assembly (2022), https://www.stopkillerrobots.org/news/70-states-deliver-joint-statement-on-autonomous-weapons-systems-at-un-general-assembly/

³³²⁰ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm_en.pdf

³³²¹ UN General Assembly, *Item 99 - A/78/409 as a Whole Lethal autonomous Weapons Systems* (Dec. 22, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/votes/L56-GA.pdf

³³²² World Forum The Hague, *REAIM Summit 2023 Will Take Place at World Forum The Hague* (2022), https://www.worldforum.nl/en/nieuws/the-hague-to-host-international-summit-on-artificial-intelligence

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Summit in February 2023, Korea and other participant countries agreed on a joint call for action³³²³ where they "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability."³³²⁴ Korea also endorsed the Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023.³³²⁵

South Korea organized the second the Responsible AI in the Military Domain Summit in Seoul (REAIM2024), attended by representatives of 90 countries in September 2024. The summit highlighted South Korea's commitment to shaping global standards and frameworks for AI in military applications, underscoring its position as a mediator in the international arena. During the summit, 61 participants endorsed the Blueprint for Action, which "suggests principles and framework for the future governance, emphasizing that being responsible entails complying with international law, holding humans responsible and accountable, ensuring reliability and trustworthy of AI, maintaining an appropriate human involvement and improving AI explainability." 3326

Weeks after the Summit, the Ministry of Science and ICT demonstrated how Korea's leadership in efforts to regulate LAWS integrated into the national AI strategy with the launch of the National AI Strategy Policy Directions. Under the vision of "Emerging as one of the top three AI powerhouse to become a Global Pivotal State," the Policy Directions document outlines plans to promote AI in national defense through the "development of AI military security policies and the expansion of defense AI infrastructure" as part of efforts to achieve a 95% AI adoption rate in the public sector. South Korea also commits to promoting the values of the Seoul Declaration globally and "expand international cooperation for the responsible use of AI in military and security sectors" under the plan to lead global AI governance.

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³³²³ Government of Netherlands, *Call to action on responsible use of AI in the military domain* (Feb. 16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action (State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Nov. 27, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

³³²⁶ Ministry of Foreign Affairs of South Korea, *Outcome of Responsible AI in Military Domain (REAIM) Summit 2024* (Sept. 12, 2024),

https://tls.mofa.go.kr/eng/brd/m 5674/view.do?seq=321057

³³²⁷ Ministry of Science and ICT, *National AI Strategy Policy Directions* (Oct. 30, 2024), <a href="https://www.msit.go.kr/eng/bbs/view.do?sCode=eng&mId=4&mPid=2&pageIndex=&bbsSeqNo=42&nttSeqNo=1040&searchOpt=ALL&searchTxt="https://www.msit.go.kr/eng/bbs/view.do?sCode=eng&mId=4&mPid=2&pageIndex=&bbsSeqNo=42&nttSeqNo=1040&searchOpt=ALL&searchTxt="https://www.msit.go.kr/eng/bbs/view.do?sCode=eng&mId=4&mPid=2&pageIndex=&bbsSeqNo=42&nttSeqNo=1040&searchOpt=ALL&searchTxt="https://www.msit.go.kr/eng/bbs/view.do?sCode=eng&mId=4&mPid=2&pageIndex=&bbsSeqNo=42&nttSeqNo=1040&searchOpt=ALL&searchTxt="https://www.msit.go.kr/eng/bbs/view.do?sCode=eng&mId=4&mPid=2&pageIndex=&bbsSeqNo=42&nttSeqNo=1040&searchOpt=ALL&searchTxt="https://www.msit.go.kr/eng/bbs/view.do?sCode=eng&mId=4&mPid=2&pageIndex=&bbsSeqNo=42&nttSeqNo=1040&searchOpt=ALL&searchTxt="https://www.msit.go.kr/eng/bbs/view.do?sCode=eng&mId=4&mPid=2&pageIndex=&bbsSeqNo=42&nttSeqNo=1040&searchOpt=ALL&searchTxt="https://www.msit.go.kr/eng/bbs/view.do?sCode=eng&mId=4&mPid=2&pageIndex=&bbsSeqNo=1040&searchOpt=ALL&searchTxt="https://www.msit.go.kr/eng/bbs/view.do?sCode=eng&mId=4&mPid=2&pageIndex=&bbsSeqNo=1040&searchOpt=ALL&searchTxt="https://www.msit.go.kr/eng/bbs/view.do.kr/eng/bbs/view.

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Human Rights

Korea was rated "Free" with a score of 83/100 in the Freedom in the World 2024 report. 328 According to the report, "South Koreans benefit from regular rotations of power and robust political pluralism. Civil liberties are generally respected, though the country struggles with minority rights and social integration."3329

The Korean government established the National Human Rights Commission of Korea (NHRCK) in 2001 as a national advocacy institution for human rights protection.³³³⁰ During his congratulatory remarks on Human Rights Day in December 2018, former President Moon Jae-in stated "when human rights are realized in everyday lives, their value is demonstrable [...]Human rights are guaranteed through peace, and peace is secured through human rights." He also extended his gratitude to NHRCK for "fully demonstrating the history and significance of the Universal Declaration of Human Rights."³³³¹

In addition, the Korean government has been an active member in the seven core international human rights instruments, including the International Covenant on Civil and Political Rights and International Covenant on Economic, Social, and Cultural Rights. Especially since its entry into the United Nations (UN) in 1991 and the Commission of Human Rights (CHR) in 1993, Korea has been engaged in various international cooperation activities for the improvement of human rights, especially the rights of the vulnerable and of North Koreans.³³³²

Al Safety Summit

In November 2023, the Republic of Korea participated in the first AI Safety Summit and endorsed the Bletchley Declaration.³³³³ Korea thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI

https://freedomhouse.org/country/south-korea/freedom-world/2024

1014

https://www.humanrights.go.kr/site/homepage/menu/viewMenu?menuid=002001001001

³³²⁸ Freedom House, Freedom in the World 2024: South Korea (2024),

³³²⁹ Ibid

³³³⁰ National Human Rights Commission of Korea, *Purpose* (2001),

³³³¹ Cheong Wa Dae, Congratulatory Remarks by President Moon Jae-in on 2018 Human Rights Day (Dec. 10, 2018),

http://webarchives.pa.go.kr/19th/english.president.go.kr/BriefingSpeeches/Speeches/101

³³³² Ministry of Foreign Affairs, Human Rights Diplomacy,

https://www.mofa.go.kr/eng/wpge/m 5648/contents.do

³³³³ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, *Prime Minister's Office, The Bletchley Declaration by Countries Attending the AI Safety Summit* (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration/the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

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systems to fully realise their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible."

Building on this, South Korea co-hosted the Seoul Summit with the United Kingdom in Seoul on May 21-22, 2024. This resulted in the conclusion of several agreements, including the Seoul Statement of Intent toward International Cooperation on AI Safety Science and the Seoul Declaration for Safe, Innovative, and Inclusive AI.³³³⁴ France hosted the third AI Safety Summit, rebranded as the AI Action Summit in February 2025."³³³⁵

OECD / G20 AI Principles

The Korean government has been actively participating in international cooperation in the AI sector to promote responsible development and the use of AI. Korea endorsed the OECD AI Principles in 2019 and recommitted to the updated OECD AI Principles in 2024.³³³⁶ The Korean government is also one of the founding members of the Global Partnership on AI (GPAI), the world's first international AI initiative.³³³⁷

At the Ministerial Council Meeting of October 2021, the Korean Ministry of Science and ICT presented the "Progress over the past two years in implementing the OECD AI Principles and Future Direction."³³³⁸ A general director of the AI policy bureau at the Ministry of Science and ICT, Ms. Kyunhee Song, presented Korea's progress in accordance with the OECD AI Principles. As part of the effort to implement the OECD AI Principles, the Korean government also established the 'National Strategy of Artificial Intelligence (2019)' and the 'Digital New Deal Strategy (2020) (Data Dam Projects).

To further its commitment, Korea has joined the Steering Group for OECD's Working Party on Artificial Intelligence Governance.

South Korea ranked first in the OECD 2023 Digital Government Index, reflecting its alignment with OECD AI principles, particularly in digital government transparency and effectiveness.³³³⁹

https://www.elysee.fr/emmanuel-macron/sommet-pour-laction-sur-lintelligence-artificielle

³³³⁴ AI Seoul Summit, *Building in the AI Safety Summit: Towards an Innovative and Inclusive Future* (May 21-22, 2024), https://aiseoulsummit.kr/overview/

³³³⁵ Élysée, Artificial Intelligence Action Summit (Feb. 10–11, 2025),

³³³⁶ OECD AI Policy Observatory, *OECD AI Principles Overview, Countries Adhering to the AI Principles* (2025), https://oecd.ai/en/ai-principles

³³³⁷ GPAI, Community (2024), https://gpai.ai/community/

³³³⁸ OECD, *Putting the OECD AI Principles into practice: progress and future perspectives* (Oct. 4, 2021), https://oecd.ai/en/mcm

³³³⁹ Ministry of the Interior and Safety, *Press Release: S. Korea Tops OECD Global Digital Government Index for 2nd Consecutive Time* (Jan. 31, 2024), https://innovation.go.kr/en/bbs/newsNotice/newsDetail.do?bbsId=B0000063&nttId=15893

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Council of Europe Al Treaty

South Korea has not signed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law.³³⁴⁰

UNESCO Recommendation on AI Ethics

Korea has been playing an active role from the drafting to the implementation of the UNESCO Recommendation on the Ethics of AI.

Korea co-organized a Virtual Regional Consultation for Asia and the Pacific Region in July 2020, to work on the first draft. The conference responded to UNESCO's request for feedback reflecting different cultural values while addressing various regional concerns to achieve a document that "takes into account the wide-ranging impacts of AI, including on the environment on the needs of the global south."³³⁴¹

The Korean government presented the results of ongoing projects supported by various public donors and identified new opportunities for cooperation with UNESCO in 2021.3342 The Ministry of Science and ICT informed UNESCO of the Korean government's support for the drafting of the UNESCO Recommendation on the Ethics of AI. The Ministry of Science and ICT and the Korean Information Science Development Institute (KISDI) participated in two Intergovernmental Intersessional Meetings and Consultations for intergovernmental negotiations for the Recommendation. The Ministry of Science and ICT provided in-depth comments on the draft to make the Recommendation actionable for future AI policy. In that process, the Korean government consented to the purpose and values of the Recommendation.

Together with the Korean National Commission for UNESCO, Korea Legislation Research Institute (KLRI) hosted a forum themed UNESCO's Recommendations on AI Ethics and Legal Challenges in April 2021, which discussed the status of UNESCO's Recommendation and significant legal issues with the advent of AI technologies, urging for collaboration between the two organizations to address ethical and legal challenges posed by AI.³³⁴³

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³³⁴⁰ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Feb. 24, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

³³⁴¹ UNESCO Press Release, *UNESCO Launches Worldwide Online Public Consultation on the Ethics of Artificial Intelligence* (Jul. 15, 2020), https://www.unesco.org/en/articles/unesco-launches-worldwide-online-public-consultation-ethics-artificial-intelligence

³³⁴² UNESCO, *The Republic of Korea and UNESCO Hold Strategic Dialogue on Shared Priorities* (Mar. 26, 2021), https://www.unesco.org/en/articles/republic-korea-and-unesco-hold-strategic-dialogue-shared-priorities

³³⁴³ Korea Legislation Research Institute, *Korea Legislation Research Institute and Korean National Commission for UNESCO co-hosted a Forum and Completed a MOU* (Apr. 16, 2021), https://www.klri.re.kr/eng/news/E/1092/view.do

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In December 2022, the Ministry of Science and ICT of Korea attended the first UNESCO Global Forum on Artificial Intelligence Ethics online hosted by the Czech Republic in Prague, ³³⁴⁴ recalling the significance of the Recommendation and discussing its implementation. ³³⁴⁵

South Korea has not begun the process of implementing the UNESCO Readiness Assessment Methodology (RAM).³³⁴⁶

Evaluation

Korea is one of the leading countries in the field of AI policy, a status confirmed by the enactment of the Basic Act on AI Development. Korea has adopted a comprehensive National Strategy for AI, developed a strong ethical framework, and launched the AI Strategy High-Level Council and National AI Committee to guide AI policy integration across all sectors. Korea has endorsed the OECD/G20 AI principles and played an active role in the drafting and implementation of the UNESCO Recommendation on the Ethics of AI. Korea has updated national privacy laws, established a Personal Information Protection Commission, and maintained a leading role in the defense of human rights. Although Korea's Personal Information Commission endorsed the 2022 GPA Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology, the absence of regulation on the use of facial recognition at the national level still needs to be addressed.

Kuwait

In 2024, Kuwait introduced a draft National AI Strategy 2025–2028 and updated the Data Privacy Protection Regulation.

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³³⁴⁴ UNESCO, First Global Forum on Ethics of AI held in Prague, one year after the adoption of UNESCO's Recommendation (Dec. 14, 2022), https://www.unesco.org/en/articles/first-global-forum-ethics-ai-held-prague-one-year-after-adoption-unescos-recommendation

³³⁴⁵ Jinyong Lee, *The Ministry of Science and ICT participates in the first UNESCO AI Ethics Forum* (Dec. 15, 2022), https://www.smarttimes.co.kr/news/articleView.html?idxno=3890
³³⁴⁶ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

³³⁴⁷ Ministry of Science and ICT, Korea Establishes the High-Level Consultative Council on Artificial Intelligence Strategy as the top-level governance structure for AI (Apr. 4, 2024), https://www.msit.go.kr/eng/bbs/view.do?sCode=eng&mId=4&mPid=2&bbsSeqNo=42&nttSeqNo=994#; Ministry of Science and ICT, Government and Private Sector Unite to Elevate Nation to AI G3 Status (Jul. 30, 2024),

 $[\]frac{https://www.msit.go.kr/eng/bbs/view.do?sCode=eng\&mId=4\&mPid=2\&bbsSeqNo=42\&nttSeqNo=1025}{o=1025}$

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National AI Strategy

Kuwait's focus on the diversification of its oil-based economy is the basis of the Kuwait Vision 2035 "New Kuwait," the country's National Development Plan requiring investment in R&D propelled by industry, government, and academia. Kuwait released the draft National AI Strategy 2025—2028 in 2024 in line with the Vision 2035.

The National AI Strategy 2025–2028 document outlines strategic objectives for the Government to advance toward the AI goals defined under the Vision 2023. The Strategy conflates the pillars of the vision with a roadmap for AI, envisioning Kuwait's global positioning, Sustainable living, Effective public administration, Creative human capital, Developed infrastructure, Sustainable diversified economy, and High-quality healthcare as keys to harnessing Ai "for the benefit of its citizens and the nation as a whole."3349 The National AI Strategy stresses the importance of "transparency, accessibility and user-friendliness" to the objective of transforming public services. 3350 The Strategy defines "Advancing Responsible AI" as the first step in the roadmap, building the development of AI on "Ensuring AI is developed and deployed responsibly within Kuwait is a critical piece of the AI puzzle." The Government notes policy and regulatory tools to ensure responsible AI governance. 3351

Launched in 2017, the New Kuwait Development Plan aims to transform the country into a financial and commercial hub for the region. The plan is aligned with the SDG 2030 and more particularly the objective of "consolidating the values of society, preserving its identity, as well as achieving justice, political participation and freedoms."³³⁵² The seven pillars of the Kuwait Vision 2035 are:³³⁵³ (1) public administration (2) economy (3) infrastructure (4) living environment, (5) healthcare, (6) human capital, and (7) global position. The public administration pillar has the objective of "reform[ing] administrative and bureaucratic practices to reinforce transparency, accountability and efficiency in the government."

The Kuwaiti government issued the first National Cyber Security Strategy (2017–2020) in 2017. Notable in the strategy is the declaration of the State of

https://www.mofa.gov.kw/en/pages/kuwait-vision-2035

b68e2bd260ca/kuwait national strategy.pdf

http://www.newkuwait.gov.kw/image/NewKuwait_CampaignLaunchEvent.pdf

³³⁴⁸ Ministry of Foreign Affairs, Kuwait Vision 2035 "New Kuwait" (2025),

³³⁴⁹ Central Agency for Information Technology (CAIT), *National AI Strategy 2025–2028*, p. 6 (2024), https://cait.gov.kw/media/filer-public/3f/b4/3fb49a45-4a78-4489-8898-

³³⁵⁰ Ibid, p. 10

³³⁵¹ Ibid, p. 22

³³⁵² Ministry of Foreign Affairs, Kuwait Vision 2035 "New Kuwait" (2025),

https://www.mofa.gov.kw/en/pages/kuwait-vision-2035

³³⁵³ New Kuwait, New Kuwait Campaign Launch Event (Jan. 30, 2017),

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Kuwait to ensure that the strategy "preserves the fundamental rights, freedom and privacy of individuals and institutions." The strategy defines three objectives for the creation of a cybersecurity environment that is safe and secure, through the development of legislation that keeps pace with technology and aligns with international standards. 3355

Kuwait's Communications and Information Technology Regulatory Authority (CITRA) declared the importance of adopting artificial intelligence³³⁵⁶ and cloud computing techniques to achieve the New Kuwait 2035 objectives. Another government entity, the Central Agency for Information Technology (CAIT) has a key role in implementing a roadmap for government in digital transformation and announced the launch of the Massar strategy during the Smart Government Summit in May 2022.³³⁵⁷

Government entities such as CAIT are making concerted efforts to advance the digital transformation roadmap in Kuwait. In November 2022, CAIT hosted the Digital Transformation Kuwait Conference, to discuss digitization in government services and the pathway to the digital economy. The Deputy Director General of CAIT expressed the need for "cooperation between government and private sector to build, and advanced digital economy coupled with a flexible legislative system that dedicates uniformity to the sector's cybersecurity policies, guidelines and strategies."³³⁵⁸

As a member State of the Digital Cooperation Organization (DCO), Kuwait endorsed the Riyadh AI Call for Action (RAICA) Declaration "aimed at advancing the DCO's commitment to identifying and addressing present, emerging and future humanitarian issues in the field of AI."³³⁵⁹ RAICA was

 $\underline{\underline{https://citra.gov.kw/sites/en/LegalReferences/English\%20Cyber\%20Security\%20Strategy.pdf}$

3355 Council of Europe, Kuwait: Cybercrime Policies/Strategies (2020),

https://www.coe.int/en/web/octopus/country-wiki-ap/-

/asset_publisher/CmDb7M4RGb4Z/content/kuwait/pop_up#

https://citra.gov.kw/sites/en/Pages/NewsDetails.aspx?NewsID=55

³³⁵⁴ CITRA, Cyber Security Strategy 2017–2020, First Edition (2017),

³³⁵⁶ CITRA, Kuwait Confirms the Importance of Artificial Intelligence Techniques in Achieving the Objectives of Vision (New Kuwait 2035) (Dec. 19, 2018),

³³⁵⁷ The Times, *Kuwait's CIAT: Speeding Efforts for Smart Gov't, Digital Transformation* "*Important*" (May 31, 2022), https://timeskuwait.com/news/speeding-efforts-for-smart-govt-digital-transformation/

³³⁵⁸ Digital Transformation Kuwait, *Kuwait Digital Transformation Conference Opens Today to Achieve Kuwait 2035 Vision to Transform into a Digital Society and Economy* (Nov. 2, 2022), https://www.zawya.com/en/press-release/events-and-conferences/kuwait-digital-transformation-conference-opens-today-to-achieve-kuwait-2035-vision-to-transform-into-a-digital-society-and-economy-vi56h38s

³³⁵⁹ Digital Cooperation Organization, *Riyadh AI Call for Action (RAICA) Declaration* (Sept. 22, 2022), https://dco.org/wp-content/uploads/2024/06/Riyadh-AI-Call-for-Action-RAICA-Declaration.pdf

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launched during the Global AI Summit of 2022³³⁶⁰ and established a commitment to developing AI technology that benefits people, communities, and nations.

Public Participation

The Kuwait Government's online platform is the channel of communication of the government with the society, providing information about laws and regulations and increasing awareness of information technology. ³³⁶¹ The platform includes a list of government entities using e-services with channels for consultation. Kuwait is yet to have a mechanism to engage civil society in AI policymaking and the formulation of an AI strategy.

The Kuwait Vision Engagement Program 2035 (برنامج المشاركة لرؤية الكويت) included a mechanism providing an opportunity for the society to provide input in the formulation of the New Kuwait document. Individuals, government organizations, private companies, NGOs, or volunteers were able to submit their interest in various roles, such as ambassadors, pledgers, enablers, innovators, spreaders, and entrepreneurs.

The Kuwaiti Government produced the Country Engagement Framework (CEF) as part of the Third Kuwait National Development Plan (KNDP-3) within the New Kuwait 2035 Vision. This policy framework, produced in consultation with stakeholders and with the support of the World Bank,³³⁶³ reflected the analysis of issues and challenges regarding the seven pillars of Vision 2035.

On the civil society front, the Kuwait Transparency Society, a non-profit organization in Kuwait, participated in drafting the executive regulations of the "Right of Access to Information Law" passed in November 2021.³³⁶⁴ The focus group included a team of governmental experts to improve the final format of the regulations in line with international experiences.³³⁶⁵ The Society monitors the regulations implementation and trains government agencies in implementing the law in line with transparency and anti-corruption standards.

3360 WIRED, The Key Wins of Saudi Arabia's Global AI Summit (Sept. 27, 2021),

https://wired.me/technology/saudi-arabia-global-ai-summit/

https://e.gov.kw/sites/kgoenglish/Pages/OtherTopics/KGD.aspx

https://www.mofa.gov.kw/en/pages/kuwait-vision-2035

0280012021/original/KuwaitCEF-2021-2025-Final-English.pdf

Government Sectors Performed Distinctively Well during Pandemic (Feb 6, 2022), http://transaprency.org.kw

³³⁶¹ Kuwait Government Online, Kuwait Government Directory (2025),

³³⁶² Ministry of Foreign Affairs, Kuwait Vision 2035 "New Kuwait" (2025),

State of Kuwait, *World Bank Country Engagement Framework 2021–2025* (Jan. 2021), https://thedocs.worldbank.org/en/doc/06a7eba0bc51a01f8b1e4ba80be0bcdf-

³³⁶⁴ Kuwait Transparency Society, Kuwait Lags behind Most GCC States in Gender Equality: KTS

³³⁶⁵ UNCAC Coalition, *Kuwait Transparency Society* (2025), https://uncaccoalition.org/kuwait-transparency-society/

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Kuwait has embraced e-government plans, to enhance transparency and decentralization of public services, to minimize the control of government officials on operations. This is still work in progress, as reported by the Bertelsmann Foundation country report, which by 2022 ranked Kuwait #68 out of 137 countries, substantially lower than in previous years, with low scores in "Rule of Law" and "political participation."

Data Protection

Kuwait's Constitution protects the right to privacy. Article 39 reads: "Freedom of postal, telegraphic, and telephone correspondence is maintained, and secrecy is ensured." Messages may not be monitored unless required by law and only in compliance with established processes. 3368

Kuwait lacks a dedicated personal data protection legislation and a data protection supervisory entity. 3369 Two government entities: CITRA and CAIT, are responsible for the regulation and governance respectively, of information technology services in the country. CITRA 3370 is the Communication & Information Regulatory Authority, responsible for regulating, supervising, and monitoring the telecommunication sector of Kuwait and protecting the interest of users. 3371 CAIT is the Central Agency for Information Technology, responsible for IT governance. 3372

CITRA has made efforts to provide governance and regulation to the technology sector, through Decision No. 42 of 2021 on Data Privacy Protection Regulation (DPPR)³³⁷³ and the Cybersecurity strategy.³³⁷⁴ The DPPR describes data protection obligations on Telecommunication Services Providers and

https://www.constituteproject.org/constitution/Kuwait 1992.pdf?lang=en

https://www.dlapiperdataprotection.com/index.html?t=law&c=KW

https://www.citra.gov.kw/sites/en/Pages/regulations.aspx

https://www.e.gov.kw/sites/kgoenglish/Pages/InfoPages/FAOs.aspx

³³⁶⁶ Naser Almutairi, Ahmad AL-Hussaini and Shebiab Fahad Thuwaini, *The Impact of Adopting E-Government on Reduce Administrative Corruption: Empirical Evidence from Kuwait's Public Sector, Public Authority of Applied Education and Training Collage of Business* (2013), https://api.semanticscholar.org/CorpusID:14973254

³³⁶⁷ BertelsmannStiftung Foundation, *BTI Transformation Index. Kuwait Country Report 2024, https://bti-project.org/en/reports/country-report/KWT*

³³⁶⁸ Kuwait, Constitution. Art. 39,

³³⁶⁹ DLA Piper, Data Protection Laws of the World, Kuwait (Feb. 4, 2025),

³³⁷⁰ CITRA, Law of CITRA Communication & Info. Technology Regulatory Authority, https://www.citra.gov.kw/sites/en/Pages/LawofCITRA.aspx

³³⁷¹ CITRA, Regulations and Decisions,

³³⁷² CAIT, Kuwait Government Online (e.gov.kw),

³³⁷³ CITRA, Data Privacy Protection Regulation, V1.8,

https://www.citra.gov.kw/sites/en/LegalReferences/Data Privacy Protection Regulation.pdf 3374 CITRA, National Cyber Security Strategy for the state of Kuwait, 2017-2020, (2017), https://citra.gov.kw/sites/en/LegalReferences/English%20Cyber%20Security%20Strategy.pdf

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associated industrial sectors in terms of data collection, storage, processing, and transfer.³³⁷⁵ Human-centered values and fairness may be inferred from the DPPR mandate to "respect the rights and freedoms of natural and legal persons," ³³⁷⁶ setting provisions against the harmful use of personal data by third parties. Penalties are also established in case of violations of these rights. Kuwait updated the Data Privacy Protection Regulation in 2024 to establish a more robust data privacy framework aligned to the Kuwait Vision 2035.³³⁷⁷ CITRA also canceled the Data Classification Policy.³³⁷⁸

The DPPR governs the collection and processing of personal data via Service Providers of Communication and Information Technology Services (CIT Service) in the public and private sectors. CIT Services include public telecommunications networks, the operation of a website, smart application, or cloud computing services, by any natural or legal person.

The DPPR requires the determination of mechanisms and standards for encryption in line with the Data Classification policy of CITRA. Service Providers must comply with certain conditions for data processing, such as a) providing users with clear, easy access to their data practices and policies, b) maintaining a clear purpose for data collection (purpose limitation) and c) maintaining appropriate technical and organizational measures to ensure that personal data is protected against unauthorized or illegal processing, accidental loss, destruction or damage, among other conditions. Exempted from the DPPR are natural persons collecting and processing personal or family data, and security agencies processing personal data to prevent, investigate, or detect crimes, or to prosecute criminals, enforce, or prevent threats against public security.

The 2014 Law on Electronic Transactions includes privacy safeguards for privacy and data protection of civil, commercial, and administrative transactions, controlling electronic records, signatures, transactions, messages, and documents relating to these activities, but no specific mention to safeguards on interactions with AI-powered systems. 3379

https://www.dlapiperdataprotection.com/index.html?t=law&c=KW

https://www.citra.gov.kw/sites/en/LegalReferences/Data Privacy Protection Regulation.pdf 3377 CITRA, Regulations and Systems, Data Privacy Protection Regulation, Resolution 2024/26 [Arabic only],

https://citra.gov.kw/sites/ar/Lists/CITRALaws/Attachments/18/الني 20% كنحة 20% كنحة 20% كنحة 20% كنحة 20% كنحة 20% كنحة 20% كنات 20% كنحة

³³⁷⁵ DLA Piper, Data Protection Laws of the World, Kuwait (Feb. 4, 2025),

³³⁷⁶ CITRA, Data Privacy Protection Regulation, V1.8

³³⁷⁸ CITRA, *Regulatory Decisions, Cancel Classification Policy, Resolution 2024/34* (Feb. 18, 2024), https://citra.gov.kw/sites/ar/Pages/DecisionsDetails.aspx?id=2

³³⁷⁹ Kuwait, *Law No. 20 of 2014 Concerning Electronic Transactions* https://www.e.gov.kw/sites/kgoArabic/Forms/MagazineA.pdf

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The Law No. 63 of 2015 related to Combating Information Technology Crimes (Cyber Crime Law) regulates acts performed using an "information network" or "information technology."³³⁸⁰ Punishable under this law are hacking computer systems, accessing personal data without authorization, fraud, posting pornography, and engaging in human trafficking over the Internet. Articles 6 and 7 extend bans on print publications to online sharing of information, including online journalism and private use of social media and blogs.³³⁸¹

The Cyber Crime Law, enforced since 2016, faced criticism for permitting restrictions on Internet-based speech. Nothing in the Cybercrime law precludes police from utilizing these criteria to monitor private communications on Twitter, Facebook, and other social media platforms and mobile phone apps. An analysis by the Council of Europe (CoE) of the Cybercrime Law No 63 and Law No 20 of 2014 on Electronic Transactions found several areas of misalignment with the Budapest Convention. His development contrasts with the original objectives of the National Cybersecurity Strategy of 2017-2020 that made "fundamental rights, freedom and privacy of individuals and institutions" a priority. Strategy of 2017-2020 that made "fundamental rights, freedom and privacy of individuals and institutions" a priority.

In January 2022, the Kuwaiti government announced a Cyber Security Bill to amend Law No. 63 of 2015 and established the National Center of Cybersecurity. In a statement to the United Nations General Assembly in October 2022, the Kuwaiti Diplomatic attaché stressed the importance of the Cybersecurity Strategy 2017-2020 to "protect vital national and informational infrastructure and assets." 3387

³³⁸⁰ Ministry of Interior, *Cybercrime Law*, https://www.moi.gov.kw/main/sections/cybercrime?culture=en

³³⁸¹ Human Rights Watch, *Kuwait: Cybercrime Law a Blow to Free Speech* (Jul. 22, 2015), https://www.hrw.org/news/2015/07/22/kuwait-cybercrime-law-blow-free-speech

³³⁸² Ibid

³³⁸³ Ibid

³³⁸⁴ Council of Europe, Status regarding Budapest Convention (2020),

https://rm.coe.int/octocom-legal-profile-kuwait/16809e5372

³³⁸⁵ CITRA, Cyber Security Strategy 2017–2020 (2017),

https://citra.gov.kw/sites/en/LegalReferences/English%20Cyber%20Security%20Strategy.pdf ³³⁸⁶ Zawya, *Kuwait Approves Cyber Security Bill* (Jan. 19, 2022),

https://www.zawya.com/en/legal/kuwait-approves-cyber-security-bill-c9dw5oy0

3387 Times Kuwait, *Kuwait to United Nations: Cybersecurity is essential defense against cybercrime* (Oct. 26, 2022), https://timeskuwait.com/news/kuwait-to-united-nations-cybersecurity-is-essential-defense-against-cybercrime/

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Algorithmic Transparency

Kuwait has not enacted algorithmic transparency in law but the DPPR³³⁸⁸ requires providers to ensure transparency throughout collection and data processing. Yet, the DPPR does not include articles addressing automated decision-making, explainability, or AI-related transparency.

Biometric Identification

Kuwait efforts in digital government started in the early 2000s, following the GCC's decision to create electronic ID schemes for residents across the region. Kuwait launched the ID card program and eGovernment services in 2009. By 2012, Kuwait Ministry of Interior set up a biometric system in all land, sea, and airports, to track wanted individuals attempting to enter illegally to the country, and in 2016, launched a new e-passport system to combat forgery in immigration ports. ³³⁸⁹

The Kuwaiti government launched the new Digital ID card in April 2020, entrusting the project's management to the Public Authority for Civil Information (PACI).³³⁹⁰ The new Civil ID card would become the primary way of verifying the digital identity of all Kuwaiti citizens and residents and replace the physical card. The Civil ID was a crucial component in streamlining administrative operations to support Kuwait's comprehensive digital government project, aimed to change the way citizens and residents receive government services.

The new Civil ID card has a microprocessor that can store massive information, including digital certificates in a secure environment, allowing the use of electronic authentication and digital signatures.³³⁹¹ ID verification takes place through mobile and QR codes, with the aid of a bot. A feature of the 'credential wallet' hosts driver's licenses, birth certificates, and other documentation. During COVID-19 the Civil ID app was also used for registration of the status and doses of vaccination.³³⁹²

The Ministry of Education (MoE) announced the approval by the Audit Bureau in January 2023 of the implementation of a fingerprint system to track the

³³⁸⁸ CITRA, Data Privacy Protection Regulation,

https://www.citra.gov.kw/sites/en/LegalReferences/Data Privacy Protection Regulation.pdf

3389 Stephen Mayhew, *Kuwait launching new e-passport system by September* (May 12, 2016),

https://www.biometricupdate.com/201605/kuwait-launching-new-e-passport-system-by-september

³³⁹⁰ Thales, Civil ID card in Kuwait: The key to digital government,

 $[\]frac{https://www.thalesgroup.com/en/markets/digital-identity-and-security/government/customer-cases/kuwait}{}$

³³⁹¹ Ibid

³³⁹² Paci, Civil ID, (2023), https://hawyti.paci.gov.kw/English/Home.aspx

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attendance of teachers and school workers in government schools.³³⁹³ Earlier, in 2019, the MoE had plans for implementing a fingerprint system for attendance in 900 public schools, to include students and teachers, "without any gender discrimination" to strengthen safety measures.³³⁹⁴ The compulsory biometric attendance is set to start in the academic year 2023–2024, and is considered by MoE as a necessary action to "end the case of neglect by some teachers and school administration and preventing tampering with records."³³⁹⁵ The government has already selected the contractor for the 2,770 fingerprint devices worth US\$1.1M to be installed in schools across the country.³³⁹⁶

Facial Recognition

Facial recognition mechanisms were in the plans of Kuwait Civil Aviation in 2019, ³³⁹⁷ but were placed "under revision" by Yousef Al-Fouzan, Director General at Kuwait's Directorate-General for Civil Aviation (DGCA). The system was designed to locate passengers' whereabouts "at all times" to offer "better airport services."

The Ministry of Interior of Kuwait rejected categorically allegations of mass surveillance practices to monitor citizens' accounts on social media in 2020. The Minister set up an investigation committee to pursue fake accounts that published leaked recordings of Kuwait's State Security. 3398

A study by Amnesty International 11 countries using data tracing apps for COVID-19, including Kuwait, found that the "Shlonik" app was among "the most alarming tools [...] carrying out live or near-live tracking of users' locations by frequently uploading GPS coordinates to a central server [...] far beyond what is

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³³⁹³ Ayang Macdonald, *Kuwait picks contractor for biometric attendance system in public schools*, (Jan. 24, 2023), https://www.biometricupdate.com/202301/kuwait-picks-contractor-for-biometric-attendance-system-in-public-schools

Harish, *Kuwait makes biometric attendance mandatory in schools, English Archives*, (Apr. 17, 2019), https://englisharchives.mathrubhumi.com/news/nri/kuwait-makes-biometric-attendance-mandatory-in-schools-1.3733255

³³⁹⁵ Arab Times, *Govt Schools set to implement 'Fingerprint system' from Sept* (Jan. 22, 2023), https://www.arabtimesonline.com/news/govt-schools-set-to-implement-fingerprint-system-from-sept/#google vignette

Ayang Macdonald, *Kuwait picks contractor for biometric attendance system in public schools* (Jan. 24, 2023), https://www.biometricupdate.com/202301/kuwait-picks-contractor-for-biometric-attendance-system-in-public-schools

³³⁹⁷ Mark Bowen, *Kuwait International Airport to revise plans for facial recognition technology*, Intelligent CIO (Jul. 4, 2019), https://www.intelligentcio.com/me/2019/07/04/kuwait-international-airport-to-revise-plans-for-facial-recognition-technology/

³³⁹⁸ Samir Salama, *Kuwait has no mass surveillance: Interior Ministry* (Aug. 25, 2020), https://gulfnews.com/world/gulf/kuwait/kuwait-has-no-mass-surveillance-interior-ministry-1.73398576

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justified in efforts to tackle COVID-19."³³⁹⁹ Conversely, a report by Privacy International in 2022, did not find Kuwait to use practices of surveillance in public spaces and use of facial recognition.³⁴⁰⁰

Smart Cities

The government of Kuwait has announced plans for Smart sustainable cities, in line with the New Kuwait 2035 Vision and the efforts towards the UN SDGs, to make "urban operations and services more efficient [...] improve traffic flow and safety [...] and much more."³⁴⁰¹ Kuwait's General Secretariat for the Supreme Council for Planning and Development (GSSCPD) and UNDP organized workshops in February 2020 to obtain input from public and private entities and civil society about good practices regarding the creation of eco-cities.³⁴⁰²

Environmental Impact of AI

Kuwait's National AI Strategy envisions AI development in line with sustainable development goals. The Strategy identifies Energy as one sector where AI can drive advancements to "drive efficiency, foster innovation, and unlock new opportunities" in line with Kuwait's Vision 2035. The Strategy identifies projects in energy to ensure adequate supply while promoting decarbonization. However, the strategy does not address the energy or water demands of AI systems.

 $\underline{\text{https://privacyinternational.org/report/5003/under-surveillance-misuse-technologies-emergency-responses-global-lessons-covid-19}$

³³⁹⁹ Amnesty International, *Bahrain Kuwait and Norway contact tracing apps among most dangerous for privacy* (Jun. 16, 2020), https://www.amnesty.org/en/latest/news/2020/06/bahrain-kuwait-norway-contact-tracing-apps-danger-for-privacy/

³⁴⁰⁰ Privacy International (PI), Under Surveillance: (Mis)use of Technologies in Emergency Reponses. Global lessons from the COVID-19 pandemic (Dec. 2022),

³⁴⁰¹ Times Kuwait, *Korean Ambassador highlights Kuwait 2035 Vision at Smart Cities Forum* (Nov. 6, 2022), https://www.securitymiddleeastmag.com/kuwait-installs-smart-traffic-cameras/ (JNDP, *Eco-cities towards the Achievement of Kuwait National Development Plan (KNDP)* (Jan. 3, 2022), https://www.undp.org/kuwait/news/eco-cities-towards-achievement-kuwait-national-development-plan-kndp

³⁴⁰³ Central Agency for Information Technology (CAIT), *National AI Strategy 2025–2028*, p. 11 (2024), https://cait.gov.kw/media/filer_public/3f/b4/3fb49a45-4a78-4489-8898-

b68e2bd260ca/kuwait_national_strategy.pdf

³⁴⁰⁴ Ibid, p. 16

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Lethal Autonomous Weapons

Kuwait has been an active participant of the CCW GGE Group of Governmental Experts on Lethal Autonomous Weapons, yet the country has not banned their use. 3405

Kuwait is one of 126 High-Contracting Parties in the Convention of Certain Conventional Weapons (CCW) and endorsed Protocol I (on Certain Conventional Weapons), Amendment II, Protocol III, IV, and V.³⁴⁰⁶

Kuwait, as part of the Non-Aligned Movement (NAM), expressed its position against lethal autonomous weapons systems during the UN General Assembly of 2015, due to the "moral, humanitarian, and legal challenges for the international community." The statement, presented during the Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems Meeting in Geneva in 2022, calls for the negotiation of a "legally binding international instrument stipulating prohibitions and regulations on lethal autonomous weapons systems." 3408

Kuwait participated in an international summit on the responsible application of artificial intelligence in the military domain hosted by the Netherlands in February 2023. At the end of the Summit, Kuwait, together with other countries, agreed on a joint call for action on the responsible development, deployment and use of artificial intelligence in the military domain. ³⁴⁰⁹ In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." States also "stress the importance of a holistic, inclusive and comprehensive approach in addressing the possible impacts, opportunities and challenges of the use of AI in the military domain and the need for all stakeholders,

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³⁴⁰⁵ Human Rights Watch, Stopping Killer Robots. (Aug. 10, 2020),

 $[\]frac{https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and}{}$

³⁴⁰⁶ United Nations, *High Contracting Signatories, Convention on Certain Conventional Weapons*, https://www.un.org/disarmament/the-convention-on-certain-conventional-weapons/high-contracting-parties-and-signatories-ccw/

³⁴⁰⁷ Non-Aligned Movement, Convention on Prohibitions or Restrictions on the use of Certain Conventional Weapons which may be deemed to be excessively injurious or to have indiscriminate effects (CCW), (Jul. 2022), https://documents.unoda.org/wp-content/uploads/2022/08/WP-NAM.pdf

³⁴⁰⁸ Automated Decision Research, State Positions, Kuwait,

https://automatedresearch.org/news/state_position/kuwait%ef%bf%bc/

³⁴⁰⁹ Government of Netherlands, *Call to action on responsible use of AI in the military domain*, Press Release (Feb. 16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action

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including states, private sector, civil society and academia, to collaborate and exchange information on responsible AI in the military domain."³⁴¹⁰

Human Rights

Kuwait is a signatory of the Universal Declaration of Human Rights.³⁴¹¹ Kuwait has not ratified the International Covenant on Civil and Political Rights (ICCPR) or the International Covenant on Economic Social and Cultural Rights (ICESCR).³⁴¹² When the ICCPR was first issued, Kuwait expressed reservations and observations³⁴¹³ because ICCPR's Articles 6, 7, and 13 combined form an effective barrier to critical political discourse on the Internet, in contrast to the crucial safeguards provided by article 19 of the ICCPR.

The Freedom House rated Kuwait as a "Partially Free" country with a score of 38/100 in 2024; with a score of 14/40 in political rights and 24/60 in civil liberties. Amnesty International reported that Kuwait has areas to improve in relation to protecting the rights of certain groups of non-citizens. Human Rights Watch in 2022 reported that Kuwaiti authorities limit free speech and punish dissidents using sections in the penal code, national security, and cybercrime legislation, notably for remarks published on social media. 3416

Kuwait's Diplomatic Attache Jana Al-Dhafiri's speech at the 23rd regular session of the Independent Permanent Human Rights Commission (IPHRC) of the Organization of Islamic Cooperation (OIC) stressed Kuwait's commitment to human rights in AI. Al-Dhafiri called for "extraordinary measures to bridge digital gaps and foster innovation, including creating a comprehensive global regulatory framework [...] to advance a free, open, and secure digital future centered on human rights."³⁴¹⁷

Transparency International's 2022 Corruption Perception Index ranks Kuwait in 77th place out of 180 countries with a score of 42/100, signifying some

³⁴¹¹ OHCHR, Human Rights by Country: Kuwait,

 $\underline{https://www.ohchr.org/en/countries/menaregion/pages/kwindex.aspx}$

3412 Ibid

https://www.hrw.org/reports/2000/kuwait/kuwait-03.htm

³⁴¹⁶ Human Rights Watch, *Country Chapter Kuwait*, https://www.hrw.org/world-report/2022/country-chapters/kuwait

³⁴¹⁰ Responsible AI in the Military domain Summit, *REAIM Call to Action* (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action

³⁴¹³ Human Rights Watch, Kuwait's Reservations to the ICCPR,

³⁴¹⁴ Freedom House, *Freedom in the World 2024: Kuwait* (2024), https://freedomhouse.org/country/kuwait/freedom-world/2024

³⁴¹⁵ Amnesty International, Systematic Human Rights Violations in the State of Kuwait, https://www.amnesty.org/en/location/middle-east-and-north-africa/kuwait/report-kuwait/

³⁴¹⁷ Kuna (Kuwait News Agency), *Kuwait Asserts Commitment to Human Rights Principles in AI* (Jun. 30, 2024), https://www.kuna.net.kw/ArticleDetails.aspx?id=3163433&language=en

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level of corruption.³⁴¹⁸ Kuwait has taken considerable steps in the past five years to fight corruption and establish key foundational policy instruments to improve the government's role in fighting corruption. Accordingly, the Kuwait Anti-Corruption Authority (NAZAHA) was set up as an independent public authority to combat corruption under Law No. 2 of 2016, including the development of the NAZAHA governance framework.

The Government of Kuwait supports and promotes the right of peoples to self-determination (Guideline # 2), as well as international and regional resolutions that uphold this right, on the understanding that it is a "fundamental right that cannot be suppressed by any means or under any circumstances."³⁴¹⁹ Kuwait's Public Authority for Anti-Corruption (Nazaha) formulated the Kuwait Integrity and Anti-Corruption strategy (KIACS) 2024,³⁴²⁰ a comprehensive document that aligns with the new Kuwait Vision 2035. The KIACS has a focus on Sustainable Development Agenda (SDGs) 2030 and The United Nations Convention against Corruption, to promote the rule of law and accountability (#5 Assessment and Accountability Obligation).

OECD / G20 AI Principles

Kuwait is not a member of the OECD and did not endorse the OECD AI Principles of 2019³⁴²¹ or the updated principles in 2024.³⁴²² Kuwait has not submitted reports to the OECD AI Policy Observatory in relation to ongoing policies, strategies, or activities associated with AI.³⁴²³

Kuwait is a member of the MENA-OECD Initiative on Governance and Competitiveness created in 2021 to implement reforms to [...] improve [...] governance structures and cooperation.³⁴²⁴ The MENA-OECD Initiative has a focus on welfare, stability, and socio-economic security for all citizens, gender equality, and transparency, but does not address AI specifically.

https://www.transparencv.org/en/cpi/2022/index/kwt

https://www.un.org/unispal/document/auto-insert-

178762/#:~:text=The%20Government%20of%20Kuwait%20supports,means%20or%20under%20any%20circumstances%E2%80%9D

³⁴¹⁸ Transparency International, Corruption Perceptions Index (2022),

³⁴¹⁹ UN, Right of peoples to self-determination: Sec-Gen Report,

³⁴²⁰ Nazaha, Public Authority of Anti-corruption, *Kuwait Strategy for Integrity and Anti-corruption* (2019), https://andp.unescwa.org/sites/default/files/2021-07/Kuwait%20Integrity%20and%20Anti-Corruption%20Strategy.pdf

³⁴²¹ OECD, *Recommendation of the Council on Artificial Intelligence*, OECD/LEGAL/0449 (May 3, 2024), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449

³⁴²² OECD AI Policy Observatory, *OED AI Principles Overview, Countries Adhering to the AI Principles* (2025), https://oecd.ai/en/ai-principles

 ³⁴²³ OECD AI Policy Observatory, *Country Dashboards and Data* (2023), https://oecd.ai/en/
 ³⁴²⁴ OECD, *MENA-OECD Initiative. Governance & Competitiveness Development*, 2021
 Ministerial Conference, https://www.oecd.org/fr/sites/mena/Ministerial-Declaration-2021.pdf

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As review of Innovation policies in Kuwait by OECD³⁴²⁵ found that policies to promote science, technology, and innovation were either partially implemented or not implemented at all.

Council of Europe Al Treaty

Kuwait has not signed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law.³⁴²⁶

UNESCO Recommendation on AI Ethics

Kuwait is a UNESCO member since 1960³⁴²⁷ and is one of the 193 member states endorsing the Recommendations on the Ethics of AI.³⁴²⁸ Kuwait had a leading position in this process, chairing the UNESCO Intergovernmental committee that approved the AI code of ethics in 2021.³⁴²⁹ The committee included 300 experts, 102 countries, and 49 observers. Ambassador Adam AI Mulla, Permanent Representative of Kuwait to UNESCO highlighted the importance of the UNESCO Recommendation as a negotiated effort to reach a framework of international and national policies "to ensure that Artificial Intelligence benefits society as a whole."

UNESCO launched the Guidance for Policy Makers in the Gulf States with a forum to discuss AI policy with representatives from Kuwait and other five Arab states in 2021.³⁴³⁰ The UNESCO event was a key engagement in the region that aimed to "initiate the conversation on the possibility of developing national policies in AI." Following this effort, in a 2022 statement, Kuwait University called all university units to activate the UNESCO recommendation in their current and future applications.³⁴³¹

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³⁴²⁵ OECD, *Reviews of Innovation Policy: Kuwait 2021. Section 3.5.1 the Implementation of Kuwait's national development plans*, <a href="https://www.oecd-ilibrary.org/sites/49ed2679-en/1/3/3/index.html?itemId=/content/publication/49ed2679-en/1/3/index.html?itemId=/content/publication/49ed2679-en/1/3/index.html?itemId=/content/publication/49ed2679-en/1/3/index.html?itemId=/content/publication/49ed2679-en/1/3/index.html?itemId=/content/publication/49ed2679-en/1/3/index.html?itemId=/content/publication/49ed2679-en/1/3/index.html?itemId=/content/publication/49ed2679-en/1/3/index.html?itemId=/content/publication/49ed2679-en/1/3/index.html?itemId=/content/publication/49ed2679-en/1/3/index.html?itemId=/content/publication/49ed2679-en/1/3/index.html?itemId=/content/publication/49ed2679-en/1/3/index.html?itemId=/content/publication/49ed2679-en

en& csp =541f929e70ac0c521b6d3dae9c4894f4&itemIGO=oecd&itemContentType=book#sect ion-d1e8574

³⁴²⁶ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 2, 2025), https://www.coe.int/en/web/Conventions/full-list/?module=signatures-by-treaty&treatynum=225

³⁴²⁷ UNESCO, Kuwait, https://en.unesco.org/countries/kuwait

³⁴²⁸ UNESCO, *UNESCO Member States Adopt the First Ever Global Agreement On the Ethics Of Artificial Intelligence* (Nov. 25, 2021), https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence

³⁴²⁹ KUNA, *Kuwait-Chaired UNESCO Committee Approves AI Code of Ethics* (Jun. 25, 2021), https://www.kuna.net.kw/ArticleDetails.aspx?id=2985239&Language=en

³⁴³⁰ UNESCO, *AI and Education: Guidance for Policy-Makers, Regional Launch for Gulf States* (2021), https://unesdoc.unesco.org/ark:/48223/pf0000376709.locale=en

Times Kuwait, *KU calls on all sectors to activate ethics of artificial intelligence* (May 11, 2022), https://timeskuwait.com/news/ku-calls-on-all-sectors-to-activate-ethics-of-artificial-intelligence/

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Kuwait is an example in the Arab region of engagement in the promotion of the UNESCO Recommendations. Kuwait Ambassador Mr. Al Adam Al Mulla was elected Chair of the Group of Friends of the Implementation of the Recommendation on the Ethics of Artificial Intelligence in September 2022. 3432 The Group of Friends of the Implementation of the Recommendation on the Ethics of AI seeks to set a program that includes: (1) Elaboration of capacity-building tools and methodologies aligned to Policy action 1 for the Ethical Impact Assessment, Monitoring and Evaluation. (2) Global Forum on Ethics of Artificial Intelligence, (3) Establishment of the Global Observatory of AI Ethics, (4) Assisting Member States in building strong national institutions for promoting AI ethics, (5) Establishment, facilitation, and management of expert networks, such as the AI Ethics Experts without Borders (AIEB), Global Network of Knowledge Centers on Ethics of AI, Women on Ethical AI Network (W4ethicalAI). 3433

Kuwait has not taken targeted action to implement the UNESCO Recommendation such as initiating the Readiness Assessment Methodology (RAM).³⁴³⁴

Evaluation

Kuwait's formulation of the New Kuwait Vision 2035 harnesses the efforts to lead in digital transformation. The country is in the early stages of policy formulation that supports the adoption of responsible AI, though the draft AI Strategy in 2024 signaled progress. The fairly high position of Kuwait in AI readiness in the region indicates the potential impact that governance of AI could have to propel the country's responsible innovation. Kuwait's active leadership of the UNESCO Group of Friends and the former Chairmanship of the committee that drafted the Recommendations for AI are positive steps that need to be translated at the national level by the formulation of a national AI strategy. Kuwait has a formalized system for public information and consultation, and this could be leveraged to promote participation in trustworthy AI policy formulation. Governance and oversight are areas of opportunity for growth for Kuwait as documented by multiple international governance ranking systems. The modernization of Kuwait's data protection legal regime would also allow to ease concerns over surveillance practices happening in a legal vacuum.

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³⁴³² Twitter Post by Ambassador Adam Al Mulla (Sept. 22, 2022), https://twitter.com/KuwaitUNESCO/status/1573016924031782912

³⁴³³ UNESCO, *Implementation of the Recommendation on the Ethics of Artificial Intelligence* (2022), https://unesdoc.unesco.org/ark:/48223/pf0000382931

³⁴³⁴ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

Lithuania

In 2024, Lithuania identified the competent and market authorities to fulfill the country's enforcement obligations related to the EU AI Act, which entered into force in August. The country's legislative body adopted a Resolution on the use of AI technologies in the public sector built on eleven principles. Lithuania also hosted the convening to open the Council of Europe AI treaty for signatures and became party to the Convention.

National AI Strategy

The Ministry of Economy and Innovation released Lithuania's national AI strategy in 2019. The Lithuanian Artificial Intelligence Strategy: A Vision of the Future summarizes the key points from a Landscape Report on the status of AI in the country before defining six sections that align with the purpose "to modernize and expand the current AI ecosystem in Lithuania and ensure that the nation is ready for a future with AI."3435 The sections correspond to key actions divided into policy recommendations defined by principles and mechanisms. The six sections are:

- 1. Ethical and legal core principles for the development and use of AI
- 2. Lithuania's position in the AI ecosystem
- 3. Integration of AI systems across all economic sectors
- 4. Development of skills and competencies
- 5. Growth of AI Research and Development
- 6. Approaching data responsibly and efficiently.

The ethical and legal core principles section identifies two components for Trustworthy AI: "1) Ethical purpose—it should respect fundamental rights, applicable regulation and principles and values and 2) it should be technically robust and reliable" to protection against unintentional harm.3436 Policy recommendations to realize Trustworthy AI center on four principles implemented through a series of mechanisms. The four policy recommendations center on:

- 1. Developing mechanisms for public feedback to advise the public sector on ethical regulation and implementation, including establishing an AI ethics committee and recognizing AI literacy as a "new civic skill."3437
- 2. Creating and establishing trust in the rules, laws, and norms that govern AI, in part through regional and international cooperation.
- 3. Encouraging transparency and fairness in AI applications through support for research on minimizing bias, incentives for companies to uphold ethical standards, creation for an interdisciplinary AI center to promote discussions

³⁴³⁵ Ministry of The Economy and Innovation, Lithuanian Artificial Intelligence Strategy: A Vision for the Future, p. 4 (Apr. 2019),

https://eimin.lrv.lt/uploads/eimin/documents/files/DI strategija ENG(1).pdf

³⁴³⁶ Ibid, p. 8

³⁴³⁷ Ibid, pp. 8–9

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around ethics, and establishment of a "safeguarding mechanism that researchers would develop systems that are transparent and intrinsically capable of explaining the reasons for their results to users."3438

4. Encouraging ethics by design by creating a research and educational culture centered on this principle, in part by encouraging discussions on the ethical implications of technology from high school and beyond and developing "mediation capabilities to support vulnerable populations." 3439

Lithuania's AI development activity plan 2023–2026³⁴⁴⁰ issued in 2022 sets three main objectives: improve the conditions for the development of the AI ecosystem, increase the use of AI across both public and private sectors and create the necessary conditions for AI innovation.

As part of efforts implementing the national strategy, in 2024 the Ombudsman for Academic Ethics and Procedures of the Republic of Lithuania approved the Guidelines for the Ethical Use of Artificial Intelligence in Education and Research.³⁴⁴¹ The Guidelines focus on how to ensure the ethical use of AI technologies in education and research, addressing general principles and relations with open science, publication ethics, protection of intellectual property rights and consumers. "The guidelines provide information on [...] the integration of aspects of the ethical use of artificial intelligence into other relevant institutional policies governing studies and science" while allowing institutions to define their systems and processing for evaluating and validating AI tools.

The AI strategy aligns with the National Digital Decade Strategic Roadmap approved in March 2024. The Roadmap summarizes the country's progress in the context of the Digital Decade for Europe and sets out the actions and measures that will contribute to achieving the general objectives and digital targets. 3443 Lithuania plans to make significant investments in various digitalization-related activities by 2030. The Roadmap for Lithuania consists of 4 chapters: Digital skills and ICT

³⁴³⁸ Ibid, pp. 9–10

³⁴³⁹ Ibid, p. 10

³⁴⁴⁰ Renata Liubinavičė, and Gabija Žemaitytė, Lithuanian Action Plan for the Development of Artificial Intelligence Technologies [Lietuvos dirbtinio intelekto technologijų plėtros veiksmų planas 2023-2026/ [Lithuanian only] (Aug. 2022), http://kurklt.lt/wpcontent/uploads/2022/09/DI-pletros-veiksmu-planas.pdf

³⁴⁴¹ Office of the Ombudsperson for Academic Ethics and Procedures, Order On The Approval Of Guidelines On The Ethical Use Of Artificial Intelligence In Education And Research (Apr. 29, 2024), https://etikostarnyba.lt/wp-content/uploads/2024/08/Guidelines-on-the-ethical-use-ofartificial-intelligence-in-education-and-research.pdf

³⁴⁴² Office of the Ombudsperson for Academic Ethics and Procedures, *Guidelines on the Ethical Use of Artificial Intelligence in Education and Research Are Adopted* (May 20, 2024), https://etikostarnyba.lt/en/guidelines-on-the-ethical-use-of-artificial-intelligence-in-educationand-research-are-adopted/

³⁴⁴³ Ministry of Economy and Innovation, National Digital Decade Roadmap of the Republic of Lithuania (Mar. 2024), https://eimin.lrv.lt/media/viesa/saugykla/2024/5/wzspkh-PiZI.pdf

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professionals; Secure, resilient, performant, and sustainable digital infrastructure; Digital transformation of businesses; and Digitalization of public services. Among the country's priorities, Lithuania is paying particular attention to the education system, with a major overhaul of primary and secondary school curricula to strengthen digital competences.³⁴⁴⁴

EU Digital Services Act

As an EU member state, Lithuania shall apply the EU Digital Services Act (DSA).³⁴⁴⁵ The DSA regulates online intermediaries and platforms. Its main objective is to prevent illegal and harmful activities online and the spread of disinformation.

EU AI Act

As an EU member State, Lithuania is bound by the EU AI Act.³⁴⁴⁶ The EU AI Act is a risk-based market regulation which supports the objective of promoting a human-centric approach to AI and making the EU a global leader in the development of secure, trustworthy and ethical AI.

The EU Act took effect on August 1, 2024³⁴⁴⁷ and will be fully applicable in August 2026, with some exceptions: prohibitions took effect in February 2025. The governance rules and obligations for GPAI models will become applicable around mid-2025, while the rules for AI systems embedded in regulated products will apply after 36 months, in 2027.

The Ministry of Economy and Innovation submitted a series of amendments to the Lithuanian legislature in 2024 to speed up the development of AI in the country and fulfill the country's obligations under the EU AI Act.³⁴⁴⁸ The amendments

³⁴⁴⁴ EU Digital Skills and Jobs Platform, *Lithuania—National Digital Decade Strategic Roadmap* (Jul. 27, 2024), https://digital-skills-jobs.europa.eu/en/actions/national-initiatives/national-strategies/lithuania-national-digital-decade-strategie

³⁴⁴⁵ EUR-Lex, Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act) (Oct. 21, 2022), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022R2065

³⁴⁴⁶ European Parliament, Artificial Intelligence Act, European Parliament legislative resolution of 13 March 2024 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts (COM(2021)0206 – C9-0146/2021 – 2021/0106(COD)), P9 TA(2024)0138,

https://www.europarl.europa.eu/RegData/seance_pleniere/textes_adoptes/definitif/2024/03-13/0138/P9 TA(2024)0138 EN.pdf

³⁴⁴⁷ European Commission Directorate-General for Communication, *AI Act Enters into Force* (Aug. 1, 2024), https://commission.europa.eu/news/ai-act-enters-force-2024-08-01_enmmission (Aug. 1, 2024), https://einters.communication.europa.eu/news/ai-act-enters-force-2024-08-01_enmmission (Aug. 2024), https://einters.communication.europa.eu/news/ai-act-enters-force-2024-08-01_enmmission (Aug. 2024), <a href="https://einters.communication.europa.eu/news/ai-act-enters-force-2024-08-01_enmmission.europa.eu/news/ai-act-enters-force-2024-08-01_enmmission (Aug. 2024), <a href="https://einters.communication.europa.eu/news/ai-act-enters-force-2024-08-01_enmmission.europa.eu/news/ai-act-enters-force-2024-08-01_enmmission (Aug. 2024), <a href="https://einters.communication.europa.eu/news/ai-act-enters-force-2024-08-01_enmmission.europa.eu/news/ai-act-enters-force-2024-08-01_enmmission (Aug. 2024), <a href="https://einters.communication.europa.eu/news/ai-act-enters-force-2024-08-01_enmmission.europa.eu/news/ai-act-enters-force-2024-08-01_enmmission.europa.europa.europa.europa.europa.europa.europa.europa.europa.europa.europa.e

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designate the Innovation Agency as the notifying authority under the Act, charging it to assess the compliance of private entities and research institutions seeking designation as Notified Bodies under the AI Act. The bodies are required to conduct conformity assessments and certifications for high-risk AI systems, ensuring the safety and reliability of AI technologies and products.³⁴⁴⁹

The amendments designate the Communications Regulatory Authority as the market surveillance authority and single point of contact. ³⁴⁵⁰ The authority will oversee the safety and reliability of AI products and systems placed on the market.

The Ministry also launched a pilot artificial intelligence (AI) environment, known as an "AI sandbox" in 2024. The space will allow Lithuanian technology companies to safely design, test and develop IoT solutions before bringing them to market.³⁴⁵¹ The Innovation Agency's launched the GovTech sandbox within the GovTech Lab Lithuania project is a pilot project to scale up safe technology and develop new concepts and strategies within the public sector. Projects have included ITocracy, Constant Reshuffling, Digital protest, Encapsulated, Anti Ping pong, Health focus.³⁴⁵²

Public Participation

The national strategy was elaborated by the Ministry of Economy in consultation with an advisory group of "expert representatives from the private sector and academia."³⁴⁵³ The national AI strategy highlighted public participation as one of the the principles shaping the Lithuanian AI ethical AI regulation and implementation with a view to promote the transparent and fair use of AI. However, the platform for consultations, e-Citizen (*e-pilietis*) shows no AI-related consultations.³⁴⁵⁴ The platform collects archives of past consultations that include consultation information, a summary of results, and where applicable, a summary of how the results will be used. Such archives exist for the cycle on the regulation

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https://eimin.lrv.lt/en/structure-and-contacts/news-1/lithuania-accelerates-development-of-artificial-intelligence-by-creating-a-sandbox-to-test-the-technology/

 $\underline{https://epilietis.lrv.lt/lt/viesosios-konsultacijos-sarasas/archyvas/?page=1}$

³⁴⁴⁹ Ministry of Economy and Innovation, *Lithuania Aims to Become the Most Favourable Country for the Development of Artificial Intelligence Technologies* (Jul. 29, 2024), https://eimin.lrv.lt/en/structure-and-contacts/news-1/lithuania-aims-to-become-the-most-favourable-country-for-the-development-of-artificial-intelligence-technologies

³⁴⁵⁰ Ministry of the Economy and Innovation, *EIMIN Initiative Accelerates Development of Artificial Intelligence in Lithuania* (New 25, 2024), https://eimin.lrv.lt/en/structure.ord

³⁴⁵⁰ Ministry of the Economy and Innovation, EIMIN Initiative Accelerates Development of Artificial Intelligence in Lithuania (Nov. 25, 2024), https://eimin.lrv.lt/en/structure-and-contacts/news-1/eimin-initiative-accelerates-development-of-artificial-intelligence-in-lithuania/3451 Ministry of Economy and Innovation, Lithuania Accelerates Development of Artificial Intelligence by Creating a "Sandbox" to Test the Technology (Oct. 16, 2024),

³⁴⁵² The Innovation Agency, *GovTech Sandbox* (2024), https://govtechlab.lt/govtech-sandbox/

³⁴⁵³ Ministry of the Economy and Innovation, *Lithuania Artificial Intelligence Strategy* (Apr. 2019), https://eimin.lrv.lt/uploads/eimin/documents/files/DI strategija ENG(1).pdf

³⁴⁵⁴ E-Citizen, Public Consultations, Archives [Viešosios konsultacijos],

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of personal data protection in 2018^{3455} and the role of the digital transformation manager in $2023.^{3456}$

The AI development activity plan 2023–2026³⁴⁵⁷ provides for an action item dedicated to "activities for setting dialogue with the society on questions of ethical AI and the social implications of the use of AI systems" (action item 1.5.3.). Yet, the action committee in charge of the implementation of the AI development plan is to consult involved parties and NGOs, with the omission of the public at large (action item 1.5.1).

Data Protection

Since Lithuania is an EU Member State, the General Data Protection Regulation (GDPR)³⁴⁵⁸ is directly applicable in Lithuania and to Lithuanians. The aim of the GDPR is to "strengthen individuals' fundamental rights in the digital age and facilitate business by clarifying rules for companies and public bodies in the digital single market. A single law will also do away with the current fragmentation in different national systems and unnecessary administrative burdens."³⁴⁵⁹ The GDPR entered into force on May 24, 2016 and applies since May 2018. Lithuania's Law on Legal Protection of Personal Data was amended in July 2018 to adapt to the requirements of the GDPR.³⁴⁶⁰

³⁴⁵⁵ E-Citizen, Consultation Cycle on Legal Regulation of Personal Data Protection [Konsultacijų ciklas dėl asmens duomenų apsaugos teisinio reguliavimo], https://epilietis.lrv.lt/lt/viesosios-konsultacijos-sarasas/konsultaciju-ciklas-del-asmens-duomenu-apsaugos-teisinio-reguliavimo/.

³⁴⁵⁶ E-Citizen, Regarding the Role of the Digital Transformation Manager Responsible for Shaping the Institution's Internal Digital Agenda Strategy [Dél už institucijos vidinės skaitmeninės darbotvarkės strategijos formavimą atsakingo skaitmeninės transformacijos vadovo vaidmens], https://epilietis.lrv.lt/lt/viesosios-konsultacijos-sarasas/del-uz-institucijos-vidines-skaitmenines-darbotvarkes-strategijos-formavima-atsakingo-skaitmenines-transformacijos-vadovo-vaidmens/">https://epilietis.lrv.lt/lt/viesosios-konsultacijos-sarasas/del-uz-institucijos-vidines-skaitmenines-darbotvarkes-strategijos-formavima-atsakingo-skaitmenines-transformacijos-vadovo-vaidmens/">https://epilietis.lrv.lt/lt/viesosios-konsultacijos-sarasas/del-uz-institucijos-vidines-skaitmenines-darbotvarkes-strategijos-formavima-atsakingo-skaitmenines-transformacijos-vadovo-vaidmens/.

³⁴⁵⁷ Renata Liubinavičė, and Gabija Žemaitytė, *Lithuanian Action Plan for the Development of Artificial Intelligence Technologies [Lietuvos dirbtinio intelekto technologijų plėtros veiksmų planas 2023–2026]* [Lithuanian only] (Aug. 2022), http://kurklt.lt/wp-content/uploads/2022/09/DI-pletros-veiksmu-planas.pdf

³⁴⁵⁸ EUR-Lex, Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, https://eur-lex.europa.eu/EN/legal-content/summary/general-data-protection-regulation-gdpr.html

³⁴⁵⁹ European Commission, *Legal Framework of EU Data Protection*, https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection en

³⁴⁶⁰ State Data Protection Inspectorate, *Law of the Republic of Lithuania on Legal Protection of Personal Data* (Dec. 1, 2021), https://vdai.lrv.lt/en/legislation; Non-Official Translation, https://vdai.lrv.lt/uploads/vdai/documents/files/Republic%20of%20Lithuania%20Law%20on%20legal%20protection%20of%20personal%20data%202018%20Non-Official%20Translation%2001_12_2021.pdf

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Regarding the activities of law enforcement authorities, the Law on Legal Protection of Personal Data, Processed for the Purposes of Prevention, Investigation, Detection or Prosecution of Criminal Offences, or the Execution of Criminal Penalties, or National Security, or Defence³⁴⁶¹ transposed the EU Data Protection Law Enforcement Directive (LED). The LED protects data rights when personal data is used for law enforcement purposes, whether that data belongs to victims, witnesses, or suspects. The LED also prohibits of any decision based solely on automated processing, unless it is provided by law, and of profiling that results in discrimination.³⁴⁶²

The EU Charter of Fundamental Rights more generally provides that EU citizens have the right to protection of their personal data. Article 8 of the Charter states that: "Everyone has the right to the protection of personal data concerning him or her. Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law."

Lithuania is also a member of the Council of Europe and ratified the Council of Europe's Convention 108+ for the protection of individuals with regard to the processing of personal data.³⁴⁶³

The State Data Protection Inspectorate³⁴⁶⁴ (Inspectorate) is the main national supervisory authority in Lithuania. When data processing relates to journalistic, academic, artistic or literary expression, the Inspector of Journalist Ethics (Inspector)³⁴⁶⁵ has a similar mission to that of the Inspectorate. The Inspector while on duty cooperates with the Inspectorate to ensure compliance with the GDPR.

Amendments to the Law on Legal Protection of Personal Data, effective July 1, 2024, allow employers to process employees' and job applicants' criminal

³⁴⁶² EUR-Lex, *Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA*, Article 11 (1) and (2) (Apr. 27, 2026), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504
³⁴⁶³ Council of Europe, *Modernised Convention for the Protection of Individuals with Regard to the Processing of Personal Data* (May 18, 2018), https://www.coe.int/en/web/data-protection/convention108-and-protocol

³⁴⁶¹ Law of the Republic of Lithuania on Legal Protection of Personal Data, Processed for the Purposes of Prevention, Investigation, Detection or Prosecution of Criminal Offences, or the Execution of Criminal Penalties, or National Security, or Defence (Jul. 7, 2018), https://vdai.lrv.lt/en/legislation

³⁴⁶⁴ State Data Protection Directorate, *State Data Protection Directorate* (2023), https://vdai.lrv.lt/en/

³⁴⁶⁵ Office of the Inspector of Journalistic Ethics, *The Office of the Inspector of Journalistic Ethics* (2023), https://zeit.lt/en

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records under specific conditions, even if not previously provided for in the law.³⁴⁶⁶ Employers must evaluate their legitimate interest and publish a list of positions requiring a clean criminal record, alongside safeguards to protect data subject rights. The State Data Protection Inspectorate issued guidelines to help employers comply, and the European Data Protection Board issued Guidelines on Legitimate Interest in October 2024.³⁴⁶⁷ Additionally, the amendments impose stricter requirements for data subjects lodging complaints related to video surveillance, necessitating initial contact with the responsible entity before approaching the State Data Protection Inspectorate. Complaints to the Inspectorate must include proof of this initial contact. Other changes include extending the right to file complaints to non-profit organizations and enabling more efficient complaint handling, such as merging similar cases and extending the limitation period for administrative fines to three years."

Despite being a member of the Global Privacy Assembly (GPA) since 2002, the State Data Inspectorate has not endorsed the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence;³⁴⁶⁸ the 2020 GPA Resolution on AI Accountability;³⁴⁶⁹ the 2022 GPA Resolution on Facial Recognition Technology³⁴⁷⁰ or the 2023 GPA Resolution on Generative AI.³⁴⁷¹

Algorithmic Transparency

Lithuania is subject to the GDPR and Convention 108+. Lithuanians have a general right to obtain access to information about automated decision-making

Protection of Personal Data of the Republic of Lithuania, Rödl & Parner (Jul. 2024), https://www.roedl.lt/en/media-events/legal-changes-law-legal-protection-personal-data-lithuania https://www.roedl.lt/en/media-events/legal-changes-law-legal-protection-personal-data-lithuania https://www.roedl.lt/en/media-events/legal-changes-law-legal-protection-personal-data-lithuania https://www.roedl.lt/en/media-events/legal-changes-law-legal-protection-personal-data-lithuania https://www.edpl.europe.gu/legal-protection on Processes, Guidelines on Legitimate Interest, Statement on Draft Regulation for GDPR Enforcement, and Work Programme 2024–2025 (Oct. 9, 2024), https://www.edpb.europa.eu/news/news/2024/edpb-adopts-opinion-processors-guidelines-legitimate-interest-statement-draft_en https://global Privacy Assembly, Declaration on Ethics and Data Protection in Artificial Intelligence (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

³⁴⁷⁰ Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

³⁴⁷¹ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

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and to the factors and logic of an algorithm.³⁴⁷² They also have the right to contest a decision and seek rectification.

The 2020 Recommendation of the Council of Europe Committee of Ministers on human rights impacts of algorithm systems³⁴⁷³ specifically emphasizes requirements on transparency, accountability and effective remedies.

COVID-19 Tracking App

In spring 2020, the State Data Inspectorate started monitoring activities in response to information in the media about the possible improper processing of personal data by application Karantinas. After an assessment of the initial information, the Inspectorate decided to open an investigation and suspend the processing of personal data by the application. The study revealed that data from 677 individuals had been collected since April 2020 when the application became operational. The App concerned processed personal data using new technology as well as a systematic monitoring of data subjects in self-isolation. The App also aimed to process large datasets (data subjects throughout Lithuania and abroad). The processing was intended to be continuous and vulnerable data subjects were concerned.

The Inspectorate imposed a EUR 12,000 fine in 2021 on the National Public Health Centre (NPHC) and the developer of the application UAB *IT sprendimai sėkmei* for infringements of the GDPR. "When deciding on the imposition of the administrative fine and its amount, the DPA took into account the fact that the NHPC and the Company processed personal data intentionally, to a large extent, illegally, systematically, without providing technical and organizational means to demonstrate compliance with the requirements of the GDPR while processing personal data, and also processed special category personal data. In addition, the Company did not comply with the DPA instructions to stop the processing of personal data collected with the help of the app and deleted part of the personal data." 3474

The NPHC contested the decision in the court and claimed that the IT service provider should be considered the sole controller of the app and not them. The Court of Justice of the European Union, at the request of Lithuanian national

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³⁴⁷² See Recital 63 and Article 22 of the GDPR. Article 9 c) of the Convention 108+ as well as Recital 77, *Explanatory Report, Convention 108*+, p. 24, https://rm.coe.int/convention-108-convention-for-the-protection-of-individuals-with-regar/16808b36f1

³⁴⁷³ Recommendation CM/Rec(2020)1 of the Committee of Ministers to Member States on the Human Rights Impacts of Algorithmic Systems (Apr. 8, 2020), https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

³⁴⁷⁴ European Data Protection Board, *Lithuanian DPA Issues EUR 12,000 Fine for Infringements of the General Data Protection Regulation in Application "Karantinas" (Quarantine)* (Mar. 29, 2021), https://www.edpb.europa.eu/news/national-news/2021/lithuanian-dpa-issues-eur-12000-fine-infringements-general-data-protection en

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courts clarified in a December 2023 decision that "joint controllers do not require that there be an arrangement between those entities regarding the determination of the purposes and means of the processing of personal data in question" and they can be held liable for GDPR breaches committed by their representatives, without needing to pinpoint a specific individual responsible."³⁴⁷⁵

Lethal Autonomous Weapons

Lithuania was one of the 70 countries that endorsed a joint statement on autonomous weapons systems at the 2022 United Nations General Assembly. The joint statement urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law, including through maintaining human responsibility and accountability in the use of force." 3476

Lithuania voted in favor³⁴⁷⁷ of resolution L.56³⁴⁷⁸ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems.

Lithuania participated in the meeting of the Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons System in Geneva in 2024.³⁴⁷⁹ After the meeting, Lithuania joined with Australia, Canada, Estonia, Japan, Latvia, Poland, the Republic of Korea, the United Kingdom, and the United States to submit a working paper suggesting draft

 $\frac{https://curia.europa.eu/juris/document/document.jsf?text=\&docid=280324\&pageIndex=0\&doclang=EN\&mode=req\&dir=\&occ=first\&part=1\&cid=4572339$

 $\underline{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm\ en.pdf}$

³⁴⁷⁵ Court of Justice of the European Union, *Case C-683/21* (Dec. 5, 2023),

³⁴⁷⁶ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

³⁴⁷⁷ Isabelle Jones, *164 States Vote against the Machine at the UN General Assembly*, Stop Killer Robots (Nov. 1, 2023), https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

³⁴⁷⁸ UN General Assembly, *Resolution L56 Lethal Autonomous Weapons* (Oct.12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-

fora/1com/1com23/resolutions/L56.pdf

3479 United Nations Office for Disarman

³⁴⁷⁹ United Nations Office for Disarmament Affairs, *Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons* (Mar. 2024), https://meetings.unoda.org/meeting/71623

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articles aimed at regulating the development and use of Lethal Autonomous Weapon Systems in compliance with International Humanitarian Law principles.³⁴⁸⁰

Lithuania participated in the REAIM international summit on the responsible application of artificial intelligence in the military domain hosted by the Netherlands in February 2023. At the end of the Summit, Lithuania endorsed a joint call for action on the responsible development, deployment and use of artificial intelligence in the military domain.³⁴⁸¹ In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability."³⁴⁸² Lithuania also endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023.³⁴⁸³

Lithuania also participated in the REAIM 2024 Summit in South Korea and endorsed the outcome document, Blueprint for Action.³⁴⁸⁴ The Blueprint for Action lays out action steps for implementing the principles defined in the REAIM 2023 joint call around responsible AI in the military domain and governance of AI in the military domain.

Lithuania's Ministry of National Defense and Artificial Intelligence (AI) Working Group of the Future Committee of the Seimas hosted a conference on the Use of Artificial Intelligence (AI) Solutions Now and in the Future of Defense in September 2024.³⁴⁸⁵ Rasa Petrauskienė, chairperson of the Working Group of the Seimas Future Committee described the significance of the conference: "Our country

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³⁴⁸⁰ GGE on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems, Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects (Aug. 26, 2024), https://docs-library.unoda.org/Convention on Certain Conventional Weapons - Group of Governmental Experts on Lethal Autonomous Weapons Systems (2024)/CCW-GGE.1-2024-WP.10.pdf">GGE.1-2024-WP.10.pdf

³⁴⁸¹ Government of Netherlands, *Call to Action on Responsible Use of AI in the Military Domain* (Feb. 16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action
³⁴⁸² Responsible AI in the Military Domain Summit, *REAIM Call to Action* (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action
³⁴⁸³ US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Nov. 27, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/
³⁴⁸⁴ REAIM 2024, https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

 $[\]frac{https://www.reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163\&shareBbsMngNo=10264\&shareMenuId=11613\&shareTabMenuId=11613$

³⁴⁸⁵ Infobalt Lietuva, *Using Artificial Intelligence (AI) Solutions in Current and Future Defense Conference [Konferencija Dirbtinio intelekto (DI) sprendimų naudojimas dabar ir ateities gynyboje]* (Sept. 18, 2024), https://infobalt.lt/2024/09/13/konferencija-dirbtinio-intelekto-disprendimu-naudojimas-dabar-ir-ateities-gynyboje/

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is standing at a historical turning point. This conference provides a unique opportunity for Lithuania to become a leading country in the formation of global AI policy in the defense sector. We have a chance not only to follow global trends but also to create them." Minister of National Defense Laurynas Kasčiūnas elaborated on the necessity to consider the implications of AI in defense proactively: "Every day we fight with the aggressor both in the physical and technological fields. AI has huge potential to transform the battlefield, or even decide the winner. Therefore, it is our responsibility, firstly, to understand how these technologies can help us stay one step ahead, and secondly, to ensure that they are used responsibly. This requires cooperation between technology developers, public and private sectors, the military, and public representatives. Only in this way will we be able to create innovative solutions and ensure a safer future for everyone."

Human Rights

Lithuania adopted the United Nations Declaration on Human Rights in 1998. As a member of the European Union and of the Council of Europe, Lithuania is committed to upholding the EU Charter of Fundamental Rights and the European Convention on Human Rights. According to the Freedom House 2024 Freedom in the World report, Lithuania is a free and democratic country, where "political rights and civil liberties are generally respected."³⁴⁸⁶

A 2020 Recommendation from the Council of Europe Committee of Ministers to Member States reaffirmed that member States "must ensure that any design, development and ongoing deployment of algorithmic systems occur in compliance with human rights and fundamental freedoms, which are universal, indivisible, inter-dependent and interrelated, with a view to amplifying positive effects and preventing or minimising possible adverse effects."³⁴⁸⁷

Nordic-Baltic Cooperation on AI

As for the international landscape, the Lithuanian minister responsible for digital development signed the 2018 declaration on "AI in the Nordic-Baltic region" establishing a collaborative framework on "developing ethical and transparent guidelines, standards, principles and values to guide when and how AI applications should be used" and "on the objective that infrastructure, hardware, software and data, all of which are central to the use of AI, are based on standards,

³⁴⁸⁶ Freedom House, *Freedom in the World 2024: Lithuania* (2024), https://freedomhouse.org/country/lithuania/freedom-world/2024

³⁴⁸⁷ Council of Europe, Recommendation CM/Rec(2020)1 of the Committee of Ministers to Member States on the Human Rights Impacts of Algorithmic Systems (Apr. 8, 2020), https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

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enabling interoperability, privacy, security, trust, good usability, and portability." 3488

The ministerial declaration Digital North 2.0³⁴⁸⁹ builds on the common priorities of the Nordic-Baltic countries, and follows the previous ministerial declaration, Digital North 2017–2020. A council of ministers for digitalization (MR-DIGITAL) was established in 2017 with to promote regional development by: (1) Building a common area for cross-border digital services to increase mobility and integration, (2) Establishing a fair data economy for efficient sharing and re-use of data to drive innovation that promotes green economic growth and development, and (3) Promoting "Nordic-Baltic leadership in the EU/EEA and globally in a sustainable and inclusive digital transformation of our societies."³⁴⁹⁰

The ministers for digitalization released another joint statement announcing a focus on digital inclusion, striving to implement measures to make digital services more accessible to all Lithuanian inhabitants and ensuring that those who do not possess the necessary level of skills get the opportunity to acquire them in November 2021. 3491

A common statement by the Nordic and Baltic ministers for digitalization in September 2022 reiterated their commitment to "ensuring that our region maintains its position as a leader in digitalisation, and that everyone in the region benefit from digitalisation regardless of age, wealth, education or level of digital skills" following the COVID-19 pandemic and the war in Ukraine. To maintain the trust citizens put in digital services from the public sector, the ministers noted "we need to continue our efforts to make our digital public services human centric and accessible. [...] Robust and secure digital services, safeguarding users' privacy and ensuring that personal data are stored and processed in a trustworthy way, are crucial to the citizens' sustained trust in digital services."³⁴⁹²

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³⁴⁸⁸ Nordic and Baltic Ministers of Digitalization, *AI in the Nordic-Baltic region* (May 14, 2018), https://www.norden.org/en/declaration/ai-nordic-baltic-region

³⁴⁸⁹ Nordic and Baltic Ministers of Digitalization, *Ministerial Declaration Digital North 2.0* (Sept. 29, 2020), https://www.norden.org/en/declaration/ministerial-declaration-digital-north-20 (Sept. 29, 2020), https://www.norden.org/en/declaration/ministerial-declaration-digital-north-20 (Sept. 29, 2020), https://www.norden.org/en/declaration/ministerial-declaration-digital-north-20 (Sept. 29, 2020), https://www.norden.org/en/declaration/ministerial-declaration-digital-north-20 (Sept. 29, 2020), https://www.norden.org/en/declaration/ministerial-declaration-digital-north-20 (Sept. 2000), https://www.norden.org/en/declaration/ministerial-declaration-digital-north-20 (Sept. 2000), https://www.norden.org/en/declaration/ministerial-declaration-digital-north-20 (Sept. 2000), https://www.norden.org/en/declaration-decla

https://www.norden.org/en/information/nordic-baltic-co-operation-digitalisation

³⁴⁹¹ Nordic and Baltic Ministers of Digitalization, *Common statement on the importance of promoting digital inclusion as a central part of the digital transformation in the Nordic-Baltic region* (Nov. 26, 2021), https://www.norden.org/en/declaration/common-statement-importance-promoting-digital-inclusion-central-part-digital

³⁴⁹² Nordic and Baltic Ministers of Digitalization, *Common statement on the importance of cooperation on digital security in the Nordic-Baltic region* (Sept. 6, 2022), https://www.norden.org/en/declaration/common-statement-importance-cooperation-digital-security-nordic-baltic-region

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OECD / G20 AI Principles

Lithuania is a member of the OECD and endorsed the OECD AI Principles in May 2019³⁴⁹³ and the updated principles in 2024. The main principles of the Lithuanian AI strategy overlap with OECD AI principles. Some public sector initiatives and academic sector initiatives can be seen on the OECD AI monitoring platform. The Seimas of the Republic of Lithuania adopted a Resolution on the Use of Artificial Intelligence Technologies in the Public Sector. The resolution emphasizes the necessity of establishing unified legal guidelines to ensure that AI integration enhances efficiency, transparency, and accountability within public institutions. It also highlights the importance of mitigating risks associated with unregulated AI usage, such as data breaches and inaccuracies. The resolution calls upon the government to implement eleven specific principles governing AI application in public sector operations. These guidelines and the initiative to align with the OECD Principles promoting responsible AI use and seizing the potential benefits of AI systems to promote sustainable, inclusive growth.

Council of Europe AI Treaty

Lithuania contributed as a Council of Europe and EU Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of Law.³⁴⁹⁷ The Committee on AI approved the Draft Framework Convention during its 10th Plenary session in March 2024³⁴⁹⁸ and opened the Convention for signature and ratification by any country in the world at a meeting in Vilnius, Lithuania in September 2024.

https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449

https://oecd.ai/en/dashboards/countries/Lithuania

https://search.coe.int/cm/pages/result_details.aspx?objectid=0900001680aee411

³⁴⁹³ OECD, OECD Legal Instruments (May 2019),

³⁴⁹⁴ OECD AI Policy Observatory, *OECD AI Principles, Countries Adhering to the AI Principles* (2025), https://oecd.ai/en/ai-principles.

³⁴⁹⁵ OECD AI Policy Observatory, AI in Lithuania (2023),

³⁴⁹⁶ Lietuvos Respublikos Seismas, *In Its Resolution, the Seimas Has Formulated the Principles of Use of Artificial Intelligence Technologies in the Public Sector*, Press Release (May 9, 2024), https://www.lrs.lt/sip/portal.show?p_r=35403&p_k=2&p_t=288543&p_a=1648&p_kade_id=9 (2025), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

³⁴⁹⁸ Council of Europe, *Draft Framework Convention on AI, Human Rights, Democracy and the Rule of Law* (Mar. 19, 2024),

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Lithuania is party to the convention as a member of the European Union, which signed on September 5, 2024,³⁴⁹⁹ but has not signed or ratified the treaty as an independent nation.³⁵⁰⁰

UNESCO Recommendation on AI Ethics

Lithuania was among the 193 countries that actively supported UNESCO's efforts in drafting and adopting its Recommendations on AI Ethics. According to the Ministry of Foreign Affairs of the Republic of Lithuania, Lithuania has been committed to supporting and implementing the UNESCO Recommendation. In addition, the advancement and implementation of ethical principles for AI were among the priorities that Lithuania presented to UNESCO for its candidacy to the Executive Board 2021–2025. School 2021–2025.

Lithuania has not initiated the Readiness Assessment Methodology (RAM),³⁵⁰³ a tool designed to enable countries to identify and overcome challenges to addressing the development and governance of AI systems in accordance with the UNESCO Recommendation.³⁵⁰⁴

Evaluation

Lithuania has endorsed the OECD AI principles and the UNESCO Recommendation on the Ethics of AI, set a national AI strategy in 2019, and launched an AI Development Action Plan in August 2022. Lithuania has taken the initial steps to implementing the EU AI Act by identifying authorities for AI oversight. The country will need to develop additional measures to supplement the EU AI Act with a national governance framework. The E-Citizen platform offers a great opportunity to acknowledge, facilitate, and expand public participation in the development of a legal framework.

³⁴⁹⁹ Center for AI and Digital Policy, *Council of Europe AI Treaty, 39 Signatories* (Feb. 12, 2025), https://www.caidp.org/resources/coe-ai-treaty/.

³⁵⁰⁰ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 3, 2025), https://www.coe.int/en/web/Conventions/full-list/?module=signatures-by-

treaty&treatynum=225.

³⁵⁰¹ UNESCO Lietuvos nacionalinė komisija, *Ethics and Philosophy* (2013), https://unesco.lt/science/ethics-and-philosophy

³⁵⁰² UNESCO, *National Statement of Lithuania*, 41st Session of the General Conference (Nov. 10, 2021),

https://www.unesco.org/sites/default/files/medias/fichiers/2021/11/10112021 am lithuania eng 41 v0.pdf

³⁵⁰³ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

³⁵⁰⁴ UNESCO Global AI Ethics and Governance Observatory, *Readiness Assessment Methodology* (2023), https://www.unesco.org/ethics-ai/en/ram

Luxembourg

In 2024, Luxembourg initiated a series of legislative amendments and innovations to ensure alignment with the EU AI Act. A bill before the Chamber of Deputies would designate the AI oversight authorities. The National Data Protection Commission also launched a regulatory sandbox for AI. Luxembourg became party to the Council of Europe AI Treaty through the EU signature, though the country did not sign independently.

National AI Strategy

The Luxembourg Strategic Vision for Artificial Intelligence (2019) was presented in 2019 by the Prime Minister, who was also Minister for Digitalisation, together with the Minister of Economy. The strategy has 3 objectives for Luxembourg to: (1) be among the most advanced digital societies in the world, especially in the EU; (2) become a data-driven and sustainable economy; and (3) support human-centric AI development.³⁵⁰⁵

The Strategic Vision is based on a human-centered approach to AI whereby human intelligence should be "in charge" of AI and individuals should be at the center of all services based on AI. Luxembourg commits to the respect of the 2019 Ethics Guidelines for Trustworthy AI formulated by the EU High-Level Expert Group on Artificial Intelligence. The Luxembourgian government commits to adopt policies to tackle the difficulties that could be caused by the mainstreaming of AI technologies and underlines that this mainstreaming should be aimed to the improvement of the citizens' daily lives, keeping in mind that AI was not just created by humans, but for humans as well. For this reason, Luxembourg commits to transparent, understandable and trustworthy AI for all the people who live, invest and work in Luxembourg. 3507

The Strategy also underlines the need for a regulation of the use and management of data respectful of fundamental ethical principles and confidentiality and which allows for reaching the full potential of the use of data in the economic and social domains.³⁵⁰⁸ The Strategy includes key actions to ensure the protection of fundamental rights:

- collaborating with the data protection authority and leveraging its expertise in order to address AI-related questions
- creating a consultative committee specialized in technology and ethics to debate the ethical consequences of technologies and advise the government on

luxembourg.public.lu/sites/default/files/2020-09/AI EN 0.pdf

³⁵⁰⁷ Ibid, p. 9

³⁵⁰⁵ The Government of Luxembourg, Digital Luxembourg, *Artificial Intelligence: A Strategic Vision for Luxembourg*, p. 5 (May 2019), <a href="https://digital-purple.com/https://dig

³⁵⁰⁶ Ibid, p.7

³⁵⁰⁸ Ibid, p. 6

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potential risks and societal impacts. The Committee was effectively created in 2020.

- collaborating with the private sector to develop a proper corporate governance regarding AI,
- working with the Institute of Standardization, Accreditation, Safety and Quality of Products and Services (ILNAS) to actively follow the regulatory processes of products and services in the framework of the ISO system.
- putting in place innovative technologies to reinforce data protection in view of machine learning.³⁵⁰⁹

The Strategy considers how AI can foster investments and strategic partnerships, the efficiency of public services, the need to integrate AI in the context of life-long learning, attraction of talents, education, planning, and how to integrate the efforts of Luxembourg in the context of European integration.

The Strategy foresees 3 main domains of application for AI in Luxembourg:

- The private sphere: daily activities, routine activities to gain time, receive high quality assistance, and ensure data protection.
- The professional sphere: participation to the diversified economy of Luxembourg to increase job opportunities, new revenue streams, and skills training.
- The public sphere: access to governmental services and relations with the administration (e-health, education, finance).³⁵¹⁰

Luxembourg's Strategic Vision for AI has led to the creation of an AI4Gov inter-ministerial committee, whose members represent the Ministry for Digitalisation, the Communications and Media Service (SMC), and the Information and Press Service (SIP). The inter-ministerial coordination group, under the leadership of the Prime Minister, set up a governance mechanism to continuously follow up on strategic initiatives that support Luxembourg's AI development. It is tasked with regularly assessing the strategic vision and setting up a framework for future actions.³⁵¹¹

The aim of the AI4Gov Committee is also to encourage ministries and administrations to make use of AI and data science to transform their actions and tasks.³⁵¹² The open data pledge of the national strategy was implemented in

³⁵¹⁰ Ibid, p.10

³⁵⁰⁹ Ibid, pp. 14-15

³⁵¹¹ European Commission, https://ai-watch.ec.europa.eu/countries/luxembourg/luxembourg-aistrategy-report en

³⁵¹² Luxembourg Government,

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2016³⁵¹³ and has been expanded since. The Open Data Platform enables accessible sourcing of public-sector data, open to public and private producers and reusers of data.

The strategic vision for Luxembourg endorses the Ethics Guidelines for Trustworthy AI of the High-Level Expert Group on AI of the European Commission, as well as the Coordinated Plan on Artificial Intelligence by the European Commission. Further endorsements concerning the risks of AI to Fundamental Human Rights are not addressed in the Strategy.

The Strategic Vision is part of Digital Luxembourg, a broader policy strategy that aims to coordinate and strengthen Luxembourg's transformation into a solid digital society.³⁵¹⁴

In 2019, the Ministry of Economy adopted the report Data-Driven Innovation Strategy for the Development of a Trusted and Sustainable Economy in Luxembourg, which is interconnected with the National AI Strategy's provisions.³⁵¹⁵ The Innovation Strategy is based on a vision of a Luxembourg data-driven economy, where AI systems, combined with Internet of Things components, systems, and networks, HPC, and Big Data analytics are used "to drive future growth." The Strategy includes:

- Boosting and assuring digital infrastructure capacity
- Experimenting, innovating, and up-take of new advanced digital technologies into industry
- Ensure a strong regulatory, intellectual property, investment and financing environment.

The priority sectors for such data driven-innovation were defined in the 2018 Luxembourg coalition agreement and include, among others, logistics, financial services, health- and eco-tech.³⁵¹⁶

The government of Luxembourg, along with thirteen other EU Member States, published a position paper on innovative and trustworthy AI in October 2020. The paper set out two visions for the EU's development of AI: (1) promoting innovation, while managing risks through a clear framework and (2) establishing trustworthy AI as a competitive advantage. The countries call for a borderless single market for AI in the EU. They state that "The main aim must be to create a

³⁵¹⁴ European Commission AI Watch, *Luxembourg AI Strategy Report* (Sept. 1, 2021), https://aiwatch.ec.europa.eu/countries/luxembourg/luxembourg-ai-strategy-report_en

 $\underline{https://gouvernement.lu/en/publications/rapport-etude-analyse/minist-economie/intelligence-artificielle/data-driven-innovation.html}$

³⁵¹³ Luxembourg Government, *The Luxembourgish Open Data Platform* (2025), https://data.public.lu/en/

³⁵¹⁵ Luxembourg Government, *The Data-Driven Innovation Strategy for the Development of a Trusted and Sustainable Economy in Luxembourg* (2019),

³⁵¹⁶ Coalition Parties DP, LSAP et déi gréng, *Accord de coalition 2018–2023* (2018), https://gouvernement.lu/fr/publications/accord-coalition/2018-2023.html

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common framework where trustworthy and human-centric AI goes hand in hand with innovation, economic growth, and competitiveness to protect our society, maintain our high-quality public service, and benefit our citizens and businesses. This can help the EU to protect and empower its citizens, stimulate innovation and progress in society, and ensure its values are protected."³⁵¹⁷

Public Participation

The National AI Strategy evolved from a project initiated by the Government of the Grand Duchy of Luxembourg and a public consultation on AI policy in 2020. The public consultation was answered by 20,000 randomly selected participants. Top consultation results include:³⁵¹⁸

- Over 80% of the public thinks that the state needs a data ethics committee
- When asked which sector they trusted most with data and AI, the public sector won with 77% of respondents voicing a high or very high level of trust
- 70% of respondents believe that AI can help them with tasks in their daily lives
- 73% of people use digital tools for public sector tasks (online payments, MyGuichet.lu, etc.). Coming in second was mobility (Google Maps, Waze, etc.)
- More than 70% of respondents are in favor of full-scale, AI-based trials, such as Luxembourg's digital twin project.³⁵¹⁹

Currently no related public consultations are open for submissions. However, Digital Luxembourg, now known as Innovative Initiatives, supports and powers several initiatives that are open to public participation.³⁵²⁰

EU Digital Services Act

As an EU member state, Luxembourg shall apply the EU Digital Services Act (DSA).³⁵²¹ The DSA regulates online intermediaries and platforms. Its main

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³⁵¹⁷ Netherlands and PR EU, Brussels, *Non-paper, Innovative and Trustworthy AI: Two Sides of the Same Coin*, Our Ideas, Digital Policy (Oct. 8. 2020),

https://www.netherlandsandyou.nl/web/pr-eu-brussels/about-us/our-ideas-for-europe/digital-policy

³⁵¹⁸ Innovative Initiatives Digital Luxembourg, Results Are In: Here's What the Public Thinks about AI (2021), https://innovative-initiatives.public.lu/stories/results-are-heres-what-public-thinks-about-ai; Nicolas Poussing, Luxembourg Institute of Socio-Economic Research, Résultats de la consultation publique relative aux opportunités et aux défis de l'Intelligence Artificielle (Apr. 2021), https://smc.gouvernement.lu/dam-assets/Rapport-IA6-final.pdf

Research Luxembourg, *Meet Luxembourg Digital Twin* (Jul. 22, 2021), https://www.researchluxembourg.org/en/meet-luxembourg-digital-twin/

³⁵²⁰ Innovative Initiatives, *One Platform, Countless Innovative Initiatives*, https://innovative-initiatives.public.lu/join-us

³⁵²¹ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital

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objective is to prevent illegal and harmful activities online and the spread of disinformation.

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As an EU member State, Luxembourg is bound by the EU AI Act. 3522 The EU AI Act is a risk-based market regulation which supports the objective of promoting a human-centric approach to AI and making the EU a global leader in the development of secure, trustworthy and ethical AI.

The EU AI Act entered into force on August 1, 2024, and the provisions will be fully applicable by August 2, 2026.³⁵²³.

Luxembourg began revisiting the national AI strategy in June 2024 to ensure that AI technologies developed in the country are compatible with GDPR and the EU AI Act.³⁵²⁴

Chamber of Deputies speaker Elizabeth Margue submitted a bill to implement the EU AI Act and designate the supervisory and competent authorities to Parliament in December 2024. Sept. As of February 2025, the bill is still in committee. The bill proposes the Luxembourg Office of Accreditation and Surveillance (OLAS) as the notifying authority overseeing conformity assessment bodies evaluating general purpose AI systems, the Luxembourg Agency for Medicines and Health Products (ALMPS) to supervise bodies specific to system in healthcare and medical device sectors, and the Luxembourg State Data Protection Commissioner's Office (CGP).

The National Commissioner for Data Protection (CNPD) will serve as the Notified Body charged with performing third-party conformity assessment activities for high-risk systems for law enforcement, immigration, or asylum. The

Services Act), (Oct. 21, 2022), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022R2065

³⁵²² European Parliament, Artificial Intelligence Act, European Parliament legislative resolution of 13 March 2024 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts (COM(2021)0206 – C9-0146/2021 – 2021/0106(COD)), P9_TA(2024)0138,

 $\frac{https://www.europarl.europa.eu/RegData/seance_pleniere/textes_adoptes/definitif/2024/03-13/0138/P9_TA(2024)0138_EN.pdf$

3523 EUR-LEX, Regulation 2024/1689 [...] Laying Down Harmonized Rules on Artificial Intelligence (Jun. 13, 2024), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L 202401689

³⁵²⁴ Luxembourg Institute of Science and Technology (LIST), *What Luxembourg intends to do about AI* (Sept. 5, 2024), https://www.list.lu/en/media/press/what-luxembourg-intends-to-do-about-ai/

³⁵²⁵ Chamber of Deputies, *Bill 8476 [Projet de Loi]*[French Only] (Dec. 23, 2024), https://wdocs-pub.chd.lu/docs/exped/0151/094/302942.pdf

³⁵²⁶ Chamber of Deputies, *Bill 8476, Draft Law Implementing Certain Provisions of Regulation* (EU) 2024/1689 (Feb. 20, 2025), https://www.chd.lu/fr/dossier/8476

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CNDP will also be the default market surveillance authority and primary point of contact, charged with coordinating activities across the sector-specific market surveillance authorities. The bill also designates supervisory authorities for judiciary and prosecution services, the financial sector, insurance sector, medicine and health, and audiovisual.³⁵²⁷

Data Protection

Since Luxembourg is an EU Member State, the General Data Protection Regulation (GDPR)³⁵²⁸ is directly applicable in Luxembourg and to Luxembourgers.³⁵²⁹ The GDPR entered into force on 24 May 2016 and applies since 25 May 2018. The Act of August 1, 2018, on the organization of the National Data Protection Commission and the general data protection framework supplements the GDPR.

Regarding the activities of law enforcement authorities, Luxembourg transposed the EU Data Protection Law Enforcement Directive (LED)³⁵³⁰ with the Act of August 1, 2018, on the protection of individuals with regard to the processing of personal data in criminal and national security matters. The LED protects citizens' right to data protection whenever personal data is used by criminal law enforcement authorities for law enforcement purposes.³⁵³¹

The National Data Protection Commission (CNPD) enforces rights related to both the GDPR and the LED. To ensure better compliance with GDPR, in May 2022, the CNPD adopted the GDPR-CARPA certification mechanism for

³⁵²⁷ Arendt, New Luxembourg Bill Designates National Authorities under the AI Act: The CNPD Takes Centre Stage (Jan. 9, 2025), https://www.arendt.com/news-insights/news/news-luxembourg-bill-designates-national-authorities-under-the-ai-act-the-cnpd-takes-centre-stage/

³⁵²⁸ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, https://eur-lex.europa.eu/EN/legal-content/summary/general-data-protection-regulation-gdpr.html

³⁵²⁹ European Commission, *Legal Framework of EU Data Protection*, https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection_en

³⁵³⁰ Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

³⁵³¹ European Commission, *Legal Framework of EU Data Protection*, https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection en

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companies, public entities, and other organizations established in Luxembourg.³⁵³² The CNPD accredited a first entity, EY PFS Solutions, in the framework of GDPR-CARPA, in June 2022, giving it the right to issue GDPR certifications.³⁵³³

The CNPD launched a regulatory sandbox for AI in May 2024 to serves as a platform for collaboration between government bodies and industry stakeholders. The sandbox encourages the development of responsible AI solutions while safeguarding ethical standards and ensuring compliance with the EU's AI regulations, including data privacy.³⁵³⁴

The EU Charter of Fundamental Rights more generally provides that EU citizens have the right to protection of their personal data. Article 8 of the Charter states that: "Everyone has the right to the protection of personal data concerning him or her. Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law."

Luxembourg is also a member of the Council of Europe. The country signed but has not yet ratified³⁵³⁵ the Council of Europe's modernized version of Convention 108 for the protection of individuals with regard to the processing of personal data (Convention 108+).³⁵³⁶

Algorithmic Transparency

Although it has not yet ratified Convention 108+, which provides for algorithmic transparency, Luxembourg is subject to the GDPR and the EU AI Act. Luxembourgers have a general right to obtain access to information about automated decision-making, to the factors and logic of an algorithm, and access to a process for contestation.³⁵³⁷

³⁵³² European Data Protection Board, *The CNPD Adopts the Certification Mechanism GDPR-CARPA* (Jun. 27, 2022), https://edpb.europa.eu/news/national-news/2022/cnpd-adopts-certification-mechanism-gdpr-carpa en

³⁵³³ Luxembourg's National Data Protection Authority website, *The CNPD is the First Data Protection Authority in Europe to Deliver an Accreditation to a GDPR Certification Body* (Oct. 17, 2022), https://cnpd.public.lu/en/actualites/national/2022/10/premier-agrement-certification.html

³⁵³⁴ National Commission for Data Protection, *CNPD Launches AI Sandbox* (Sept. 5 2024), https://cnpd.public.lu/en/actualites/national/2024/05/lancement-sandkescht.html

³⁵³⁵ Council of Europe, Chart of Signatures and Ratifications of Treaty 223 (Mar. 3, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=223
3536 Council of Europe, Modernised Convention for the Protection of Individuals with Regard to the Processing of Parsonal Data (May 18, 2018) https://www.coe.int/en/web/data-

the Processing of Personal Data (May 18, 2018) https://www.coe.int/en/web/data-protection/convention108-and-protocol

³⁵³⁷ See Recital 63 and Article 22 of the GDPR.

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The 2020 Recommendation of the Council of Europe Committee of Ministers on human rights impacts of algorithm systems³⁵³⁸ specifically emphasizes requirements on transparency, accountability, and effective remedies.³⁵³⁹

The Luxembourg Institute of Science and Technology (LIST) Ethical Bias Leaderboard launched in March 2024 evaluates the performance of AI models across seven biases: Ageism, LGBTIQ+phobia, Political bias, Racism, Religious bias, Sexism, and Xenophobia posed by AI models. The Leaderboard provides transparency to users, facilitates their ability to choose LLMs that exhibit lower biases, and increases awareness about the "inherent limitations of AI." Evaluators emphasized the need for explainability to foster trust and to improve reliability.

Ban on Facial Recognition

Luxembourg is highly regarded as one of the few (European) countries to ban facial recognition. While this ban has never been transformed into a policy, Luxembourg Minister of Defense François Bausch pledged in October 2019 that no facial recognition systems were implemented during his term in the Defense Department.³⁵⁴¹

The European Data Protection Board (EDPB) issued guidelines on the use of facial recognition technologies in the area of law enforcement in May 2022. The EDPB Chair said: "Facial recognition technology is intrinsically linked to processing personal data, including biometric data, and poses serious risks to individual rights and freedoms." The EDPB stresses that facial recognition tools should be used only in strict compliance with the Law Enforcement Directive

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

 $\underline{leaderboard/?no_cache=1\&cHash=baa5c859e1dbacdc920162608e9cbe8c}$

05/edpb guidelines 202304 frtlawenforcement v2 en.pdf

³⁵³⁸ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020),

³⁵³⁹ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020),

³⁵⁴⁰ Luxembourg Institute of Science and Technology, *LIST Pioneers AI Regulatory Sandboxes and Launches Ethical Bias Leaderboard* (Sept. 5, 2024), <a href="https://www.list.lu/en/news/list-pioneers-ai-regulatory-sandboxes-and-launches-ethical-bias-pioneers-ai-regulatory-sandboxes-ai-regulat

³⁵⁴¹ Jess Bauldry, *Lux Police Not Using Facial Recognition* (Aug. 22, 2019), https://delano.lu/article/delano_lux-police-not-using-facial-recognition

³⁵⁴² European Data Protection Board, *Guidelines 05/2022 on the use of facial recognition technology in the area of law enforcement Version 2.0* (Apr. 26, 2023), https://www.edpb.europa.eu/system/files/2023-

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(LED). Moreover, such tools should be used only if necessary and proportionate, as laid down in the Charter of Fundamental Rights.³⁵⁴³

Environmental Impact of AI

AI technologies in Luxembourg are beginning to have a notable impact on the environment, with the country leveraging AI for both environmental protection and sustainability efforts. As AI adoption increases, it is important to address the environmental impact of the technology itself, particularly its energy consumption and carbon footprint. Francesco Ferrero, head of the Human Centered AI, Data, and Software (HANDS) unit at the Luxembourg Institute of Science and Technology promoted his vision of "frugal AI" that "embraces smaller, more efficient models and aligns with the 'less is more' philosophy." Luxembourg's AI strategy and regulatory frameworks aim to balance the benefits of AI with sustainable development goals, ensuring that AI-driven environmental initiatives align with global efforts to mitigate climate change.

Lethal Autonomous Weapons

Luxembourg has regularly voiced its position on Letham autonomous weapon systems (LAWS), in particular, via the meetings on autonomous weapons systems of the Convention on Certain Conventional Weapons (CCW). For example, in 2019, Luxembourg mentioned that international norms on LAWS could be strengthened, and spoke in favor of keeping "human control" over the use of force. In September 2021, Luxembourg submitted a joint submission to the Chair of the Group of Governmental Experts (GGE) on LAWS, indicating that "the ceding of human control, agency, responsibility and intent in decisions on the application of force to algorithms and computer-controlled processes poses fundamental ethical concerns." In 2022, Luxembourg

fora/ccw/2021/gge/documents/Austria-et-al sept.pdf

³⁵⁴³ European Data Protection Board, *EDPB Adopts Guidelines on Calculation of Fines & Guidelines on the Use of Facial Recognition Technology in the Area of Law Enforcement*, Press release (May 16, 2022), https://edpb.europa.eu/news/news/2022/edpb-adopts-guidelines-calculation-fines-guidelines-use-facial-recognition_en

³⁵⁴⁴ RTL Today, *AI Is "Accelerating the Climate Crisis," Expert Warns* (Sept. 18, 2024), https://today.rtl.lu/news/business-and-tech/a/2231633.html

³⁵⁴⁵ Louis Juste, *Less Is More: Towards Frugal, Ethical AI*, Silicon Luxembourg (Dec. 6, 2024), https://www.siliconluxembourg.lu/less-is-more-towards-frugal-ethical-ai/

of Government of Luxembourg, Statement to the Convention on Conventional Weapons Group of Governmental Experts on Lethal Autonomous Weapons Systems (Aug. 20, 2019), https://conf.unog.ch/digitalrecordings/index.html?guid=public/61.0500/D438BEC1-48F6-4116-BEE5-1A44BE7EBC19 10h09&position=8786

³⁵⁴⁷ Austria, Brazil, Chile, Ireland, Luxembourg, Mexico and New Zealand, *Submission to the Chair of the CCW GGE on LAWS* (Sept. 2021),

https://reachingcriticalwill.org/images/documents/Disarmament-

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together with other delegations submitted a working paper on emerging technologies in the area of LAWS to the Chair of the GGE, acknowledging the responsibility of the GGE to "recognize the urgent need for adequate rules and limits on the development, deployment, and use of autonomous weapon systems to ensure sufficient human involvement and oversight."³⁵⁴⁸

Luxembourg was one of 70 states that endorsed a joint statement on autonomous weapons systems at the United Nations General Assembly in October 2022. The statement called for the recognition of the dangers of autonomous weapons systems, acknowledged the need for human oversight and accountability, and emphasized the importance of an international framework of rules and constraints.³⁵⁴⁹ In this joint statement, States declared that they "are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law ("IHL"), including through maintaining human responsibility and accountability in the use of force."³⁵⁵⁰

At the 78th UN General Assembly First Committee in 2023, Luxembourg voted in favor³⁵⁵¹ of resolution L.56³⁵⁵² on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. The report should analyze ways to address the challenges and concerns autonomous weapon systems raise from

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³⁵⁴⁸ Argentina, Austria, Belgium, Chile, Costa Rica, Ecuador, Guatemala, Ireland, Kazakhstan, Liechtenstein, Luxembourg, Malta, Mexico, New Zealand, Nigeria, Panama, Peru, the Philippines, Sierra Leone, Sri Lanka, State of Palestine, Switzerland, and Uruguay, *Working Paper Submitted to the 2022 Chair of the Group of Governmental Experts (GGE) on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems (LAWS)* (May 2022), https://documents.unoda.org/wp-content/uploads/2022/05/2022-GGE-LAWS-joint-submission-working-paper-G-23.pdf

³⁵⁴⁹ Ousman Noor, 70 States Deliver Joint Statement on Autonomous Weapons Systems at UN General Assembly, Stop Killer Robots (Oct. 21, 2022),

 $[\]frac{https://www.stopkillerrobots.org/news/70\text{-}states\text{-}deliver\text{-}joint\text{-}statement\text{-}on\text{-}autonomous-}{weapons\text{-}systems\text{-}at\text{-}un\text{-}general\text{-}assembly/}}$

³⁵⁵⁰ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

 $[\]frac{\text{https://estatements.unmeetings.org/estatements/}11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcS}{nnAm\ en.pdf}$

³⁵⁵¹ Isabelle Jones, *164 States Vote against the Machine at the UN General Assembly*, Stop Killer Robots (Nov. 1, 2023), https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

³⁵⁵² General Assembly, *Lethal Autonomous Weapons*, Resolution L56 (Oct.12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

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humanitarian, legal, security, technological and ethical perspectives and reflect on the role of humans in the use of force.

In February 2023, Luxembourg participated in an international summit on the responsible application of artificial intelligence in the military domain hosted by the Netherlands. At the end of the Summit, Luxembourg, together with other countries, agreed on a joint call for action on the responsible development, deployment and use of artificial intelligence in the military domain. This joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." The state of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability.

Luxembourg also endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023. 3555

Human Rights

Luxembourg is a signatory to many international human rights treaties and conventions. In 2024, Luxembourg received a rating of "Free" and score of 97/100 in the Freedom House Freedom in the World report. Freedom House reported that "Luxembourg is a constitutional monarchy with a democratically elected government. Political rights and civil liberties are generally respected."³⁵⁵⁶

A 2020 Recommendation to member States on the human rights impacts of algorithmic systems, the Council of Europe Committee of Ministers affirmed that States' commitment to the Convention for the Protection of Human Rights and Fundamental Freedoms requires them to "ensure that any design, development and ongoing deployment of algorithmic systems occur in compliance with human rights and fundamental freedoms, which are universal, indivisible, inter-dependent and interrelated, with a view to amplifying positive effects and preventing or minimising possible adverse effects."3557

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³⁵⁵³ Government of Netherlands, *Call to Action on Responsible Use of AI in the Military Domain*, Press Release (Feb.16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action

Responsible AI in the Military Domain Summit, *REAIM Call to Action* (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action

³⁵⁵⁵ US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Nov. 27, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

³⁵⁵⁶ Freedom House, *Freedom in the World 2024: Luxembourg* (2024), https://freedomhouse.org/country/luxembourg/freedom-world/2024

³⁵⁵⁷ Council of Europe, Recommendation CM/Rec(2020)1 of the Committee of Ministers to Member States on the Human Rights Impacts of Algorithmic Systems (Apr. 8, 2020), https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

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Council of Europe AI Treaty

Luxembourg contributed as a Council of Europe and EU Member State in the negotiations of the Council of Europe Framework Convention on AI and Human Rights, Democracy, and the Rule of Law. The Committee on AI approved the Draft Framework Convention during its 10th Plenary session in March 2024.³⁵⁵⁸ The European Union of which Luxembourg is part signed this first legally binding international treaty on AI when it opened for signature on September 5, 2024. While Luxembourg is a member of the EU and the Council of Europe, the country has not independently signed the treaty.³⁵⁵⁹

OECD / G20 AI Principles

Luxembourg is a member of the OECD and endorsed the OECD AI Principles. In its national AI strategy, Luxembourg does not directly refer to the OECD AI principles. However, the strategy supports the key principles and suggestions such as human-centered AI, transparency of AI systems, exploring links between ethics and AI, and establishing private and public partnerships. OECD has also noted several examples of implementation of the AI Principles by Luxembourg. 3560

UNESCO Recommendation on AI Ethics

Luxembourg endorsed the UNESCO Recommendation on the Ethics of AI in November 2021.³⁵⁶¹ The country has not yet initiated the UNESCO Readiness Assessment Methodology (RAM), a tool to facilitate the UNESCO Recommendation. ³⁵⁶²

Evaluation

Host to some of the biggest multinational technology companies, Luxembourg is one of the first countries to have developed a policy in the field of

³⁵⁵⁸ Council of Europe, *Draft Framework Convention on AI, Human Rights, Democracy and the Rule of Law* (Mar. 20, 2024),

https://search.coe.int/cm/pages/result_details.aspx?objectid=0900001680aee411

https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449

³⁵⁵⁹ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Sept. 5, 2024), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

³⁵⁶⁰ OECD, Digital Government Review of Luxembourg: Towards More Digital, Innovative and Inclusive Public Services (Sept. 28, 2022), https://www.oecd.org/en/publications/digital-government-review-of-luxembourg b623803d-en.html; OECD AI Policy Observatory, AI in Luxembourg, https://oecd.ai/en/dashboards/countries/Luxembourg; Recommendation of the Council on Artificial Intelligence, OECD/LEGAL/0449 (2019),

³⁵⁶¹ UNESCO Digital Library, *Recommendation on the Ethics of Artificial Intelligence* (2021), https://unesdoc.unesco.org/ark:/48223/pf0000381137

³⁵⁶² UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

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AI that addresses issues of certification and standardization. Luxembourg benefits from a comprehensive data protection legal regime with an independent data protection commission. To be true to its commitment to a human-centered approach to AI and in line with its endorsement of the UNESCO Recommendation on the Ethics of AI, it would be worth for Luxembourg to finally ratify the modernized version of Council of Europe Convention 108. Luxembourg is one of the very few countries to have officially committed for law enforcement authorities not to use facial recognition. With the adoption of the EU AI Act, Luxembourg shall designate a national supervisory mechanism which, it is to be hoped, will be an independent one and will take the protection of human rights seriously.

Malaysia

In 2024, Malaysia introduced the National Guidelines on AI Governance & Ethics and progressed on the UNESCO Readiness Assessment Methodology (RAM).

National AI Strategy

The Government of Malaysia does not have a National AI Strategy. Instead, AI-related policies under the umbrella of the National AI Roadmap (AI-Rmap), are addressed as part of the Malaysian whole-of-government strategy, known as the Twelfth Malaysia Plan, 2021–2025 (12 Plan). The 12 Plan was introduced in September 2021 with the aim of "a prosperous, inclusive and sustainable Malaysia."³⁵⁶³

According to the 12 Plan, "national strategies on artificial intelligence (AI) and blockchain will be developed to guide the growth of every sector in the economy." The 12 Plan mentions that measures will be implemented to strengthen guidelines and regulations on personal data protection and data sharing with the aim of "ensuring data safeguards against cyber-attacks and unethical uses." According to the Plan, "an ethical framework and standards on technology development, deployment, and utilisation will also be introduced to ensure responsible use of technology."

Digitalization and AI objectives are covered under the Malaysian Digital Economy Blueprint (MyDIGITAL), which operates in coordination with the Economic Planning Unit (EPU). MyDIGITAL is a comprehensive 104-page document that lays the road map to achieve the country's grand vision to become a regional leader in the digital economy and attain inclusive, responsible, and sustainable socio-economic development nationally. 3564 Other initiatives include:

³⁵⁶³ Government of Malaysia, *Twelfth Malaysia Plan* (2021), https://rmke12.epu.gov.my/bm
³⁵⁶⁴ Government of Malaysia, *Malaysia Digital Blueprint Economy* (Feb. 2021), https://ekonomi.gov.my/sites/default/files/2021-02/malaysia-digital-economy-blueprint.pdf

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- National Fourth Industrial Revolution (2021): The Malaysian government, via its Economic Planning Unit (EPU), also introduced its National 4IR Policy, designed to "steer strategic socio-economic transformation through the ethical use of 4IR policies." Using a whole-of-nation approach, the plan intends to support balanced, responsible, and sustainable growth for business; provide socio-environmental well-being for all; and create a fit-for-future government. Notably, the Policy draws on references from the World Economic Forum (WEF), OECD, UN, and the World Bank.³⁵⁶⁵
- National Big Data Analytics (BDA) Framework (2016): Introduced by the Malaysia Digital Economy Corporation (MDEC), the BDA has four focus areas: architecting a data-driven culture; identifying roles for a data-driven organization; turning information into action; accessing tools and partners. 3566
- In 2021, the Ministry of Science, Technology, and Innovation (MOSTI) awarded selected researchers grants to formulate a National Artificial Intelligence (AI) Roadmap for Malaysia.³⁵⁶⁷

The AI-Rmap, which replaced earlier plans to develop a national AI framework to complement Malaysia's BDA, 3568 has six overall strategies to execute: establishing AI governance, advancing AI R&D, escalating a digital infrastructure to enable AI, fostering AI talents, acculturating AI, and kick-starting a national AI innovation ecosystem. 3569 While the roadmap does not explicitly address human rights, it does include "Pursuit of Human Benefits and Happiness" under its list of Principles of Responsible AI. 3570

The AI-Rmap has a distinct action plan through 2025, with benchmarks set for horizon 1 (2021–2022), horizon 2 (2023–2024), and horizon 3 (2050 onwards). Within those benchmarks, four strategic initiatives are delineated. For instance, strategic initiative 1.1 "Establishing an AI Coordination and Implementation Unit

https://www.epu.gov.my/sites/default/files/2021-07/4IR_Presentation.pdf

³⁵⁶⁵ Government of Malaysia, National 4IR Policy (Jul. 1, 2021),

³⁵⁶⁶ Malaysia Digital Economy Corporation, *Malaysia's National Big Data Analytics Initiative* (Oct. 2016), https://calabarzon.neda.gov.ph/wp-content/uploads/2016/10/02-Big-Data-Analytics-MDEC.pdf

³⁵⁶⁷ University of Technology, Malaysia, *UTM Experts Entrusted by MOSTI to Develop the National Artificial Intelligence (AI) Roadmap for Malaysia* (Dec. 1, 2020),

 $[\]underline{https://news.utm.my/2020/12/utm-experts-entrusted-by-mosti-to-develop-the-national-artificial-intelligence-ai-roadmap-for-malaysia/}$

³⁵⁶⁸ OpenGOVAsia.com, *Plans for Cloud-First Strategy and National AI Framework Revealed at 29th MSC Malaysia Implementation Council Meeting* (Oct. 28, 2017),

 $[\]frac{https://opengovasia.com/plans-for-cloud-first-strategy-and-national-ai-framework-revealed-at-29th-msc-malaysia-implementation-council-meeting/$

³⁵⁶⁹ Ministry of Science, Technology and Innovation, *Malaysia National Artificial Intelligence Roadmap 2021 2025 (AI-Rmap)* (Aug. 2022), https://airmap.my/wp-content/uploads/2022/08/AIR-Map-Playbook-final-s.pdf

³⁵⁷⁰ Ibid, p. 30

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(AI-CIU) responsible for successful implementation of the AI Roadmap" outlined the appointment of a committee by horizon 1 (2021–2022) to oversee the execution of the AI-Rmap. The AI-CIU was also tasked with implementing an AI code of ethics as part of strategic initiative 1.4: institutionalizing AI principles for AI implementation. However, despite these benchmarks, no documentation has been found indicating any progress since the AI-Rmap publication in 2022.³⁵⁷¹

Nevertheless, in August 2022, the Malaysian Ministry of Science, Technology, and Innovation (MOSTI) launched five complementary technology roadmaps: the Electricity and Electronics Roadmap: Artificial Intelligence Roadmap 2021–2025, the Technology Development 2021–2030, the National Blockchain Technology Roadmap 2021–2025, the National Advanced Materials Roadmap 2021–2030, and the National Robotics Roadmap 2021–2030. 3572

Malaysia furthered its AI-related policies in 2024. The Malaysia Science and Technology Information Center launched the National Guidelines on AI Governance and Ethics to enhance the development and deployment of AI technology.³⁵⁷³ The Guidelines cited alignment with OECD, UNESCO, and European Commission AI principles in proposing seven principles "to guide the development of Trusted and Responsible AI":

- Fairness
- Reliability, Safety, and Control
- Privacy and Security
- Inclusiveness
- Transparency
- Accountability
- Pursuit of Human Benefit and Happiness

The Malaysia Cabinet also approved the establishment of the National Artificial Intelligence Office (NAIO), which will be overseen by the MyDIGITAL Corporation, a government agency tasked with overseeing Malaysia's digital transformation efforts. 3574

³⁵⁷¹ Ibid

³⁵⁷² Rex Tan, Mosti Launches Five Technology Roadmaps to Develop Malaysia's Robotics, Advanced Materials, and AI Industries, Malay Mail (Aug. 9, 2022),

https://www.malaymail.com/news/money/2022/08/09/mosti-launches-five-technologyroadmaps-to-develop-malaysias-robotics-advanced-materials-and-ai-industries/21970; see also the AR R-map, https://airmap.my/wp-content/uploads/2022/08/AIR-Map-Playbook-final-s.pdf

³⁵⁷³ Malaysia Science and Technology Information Centre, The National Guidelines on AI Governance & Ethics (Sept. 2024), https://mastic.mosti.gov.my/publication/the-nationalguidelines-on-ai-governance-ethics/

³⁵⁷⁴ MyDIGITAL Corporation, The National AI Office (NAIO) (2024), https://www.mvdigital.gov.mv/initiatives/the-national-ai-office-naio/

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Public Participation

Information on public consultations in Malaysia are difficult to find. However, the Personal Data Protection Commissioner of the Ministry of Communications and Multimedia Malaysia issued a public consultation paper as part of a review of the Personal Data Protect Act.³⁵⁷⁵ The consultation paper is available on the Personal Data Protection Commissioner Office website, along with a 2024 amendment to the act.³⁵⁷⁶

Data Protection

Data protection in Malaysia stems from the Personal Data Protection Act of 2010 (PDPA),³⁵⁷⁷ which came into force in 2013. The PDPA seeks to safeguard personal data and confer certain rights to users regarding personal data. Five pieces of subsidiary legislation were also enforced on November 15, 2013.

Additional legislation passed to date include the Personal Data Protection Regulations 2013 ("the 2013 Regulations"); the Personal Data Protection (Class of Data Users) Order 2013 ("the Order"); the Personal Data Protection (Registration of Data User) Regulations 2013 ("Registration Regulation"); the Personal Data Protection (Fees) Regulations 2013; the Personal Data Protection Regulations 2016 ("Compounding of Offences Regulations"); the Personal Data Protection (Class of Data Users) (Amendment) Order 2016 ("the Order Amendment"); and the Personal Data Protection (Appeal Tribunal) Regulations 2021.³⁵⁷⁸

The PDPA imposes strict requirements on any person who collects or processes personal data (data users) and grants individual rights to data subjects. The PDPA is enforced by the Commissioner of the Department of Personal Data Protection (the Commissioner). The PDPA is based on widely accepted personal data protection principles, including informed consent, notice, purpose limitation, security, storage limit, data integrity, access, and correction.³⁵⁷⁹

 $\frac{https://www.pdp.gov.my/ppdpv1/wp-content/uploads/2024/12/Public-Consultation-Paper-on-Review-of-Act-709\ V4.pdf}{}$

https://www.kkmm.gov.my/pdf/Personal%20Data%20Protection%20Act%202010.pdf

 $\underline{https://www.dataguidance.com/notes/malaysia-data-protection-overview}$

³⁵⁷⁵ Personal Data Protection Department, *Public Consultation Paper No. 01/2020: Review of Personal Data Protection Act 2010 (Act 709)* (Feb. 14, 2020),

³⁵⁷⁶ Personal Data Commissioner, *PDP Act 2010*, https://www.pdp.gov.my/ppdpv1/en/akta/pdp-act-2010/

³⁵⁷⁷ Malaysia Ministry of Communications and Multimedia, *Personal Data Protection Act 2010* (Jun. 2010),

³⁵⁷⁸ DataGuidance.com, Personal Data Protection Act 2010 (Jun. 2021),

³⁵⁷⁹ Personal Data Commissioner, *Principles of Personal Data Protection* (2024), https://www.pdp.gov.my/ppdpv1/en/principles-of-personal-data-protection/

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The PDPA does not apply to federal and state governments. It also exempts the processing of information by a credit reporting agency, and it does not constrain government access to data.

The converging opinion among stakeholders is that although Malaysia is a regional frontrunner in its data protection regime, the country's laws and regulations need to evolve to reflect a more complex digital landscape. The gap between Malaysia's governance capacity and the country's aspirations could stymie its ambitions for a complete digital transformation by undermining trust in both the online and offline spaces. This risk is underscored by several realities: significant data breaches without commensurate penalty or recourse, existing gaps in the PDPA, as well as the inclusion or exclusion of vulnerable communities in Malaysia's data-driven and digitalization agenda.³⁵⁸⁰

The 2024 amendments to the PDPA may address some of these concerns with updated definitions and harsher sanctions for noncompliance.³⁵⁸¹

Malaysia's data protection agency, the Personal Data Protection Commissioner, is not a member of Global Privacy Assembly and has not endorsed the relevant resolutions.³⁵⁸²

AI in Healthcare

In 2017, the Ministry of Health launched the Malaysian Health Data Warehouse (MyHDW) as part of a national healthcare information-gathering system. The system is designed to share a patient's healthcare records among all public health institutions, ensuring any doctor had full access to medical records. The Malaysian government also initiated several public-private collaborations, including the signing of a Memorandum of Understanding (MoU) between Microsoft Malaysia and CREST (Collaborative Research in Engineering, Science & Technology) to create a first-of-its-kind digital health hub, and the creation of Malaysia's largest digital health platform, DoctorOnCall, which connects patients with an extensive network of over 1,500 Specialists in private hospitals and more than 100 GP doctors throughout the country.³⁵⁸³

To combat the spread of COVID-19, the Malaysian government led a multi-agency effort to create the MySejahtera app, which was linked to the MyTrace app (developed by the Malaysian Ministry of Science, Technology, and

files/ASPI RaisingStandards report fin web 0.pdf

https://globalprivacyassembly.org/participation-in-the-assembly/list-of-accredited-members/
³⁵⁸³ HealthcareITnews.com, *An Overview of Malaysia's Digital Health Landscape* (Jul. 1, 2020), https://www.healthcareitnews.com/news/asia/overview-malaysia-s-digital-health-landscape

³⁵⁸⁰ Asia Society Policy Institute, *Raising Standards: Data and AI in Southeast Asia* (Jul. 2022), https://asiasociety.org/sites/default/files/inline-

³⁵⁸¹ Laws of Malaysia, *Act A1727: Personal Data Protection (Amendment) Act 2024* (Oct. 9, 2024), https://www.pdp.gov.my/ppdpv1/akta/pdp-amendmentact-2024/

³⁵⁸² Global Privacy Assembly, List of Accredited Members (2025),

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Innovation (MOSTI)) which "enables the identification of those who have been in close proximity to an infected person using Bluetooth technology."³⁵⁸⁴ In December 2020, the Malaysian government mentioned that there were 24.5 million users of Mysejahtera, with a strong push by the government for increased usage.³⁵⁸⁵

MOSTI also endorsed the use of AI-enabled apps to detect those who may have been in close contact with a COVID-19 patient, and a geofencing app to enforce and monitor quarantines." In May 2021, the Malaysian government launched the Hotspot Identification for Dynamic Engagement (HIDE) system, as an early warning system to preemptively identify COVID-19 hotspots using predictive technology, big data analytics, and AI. MOSTI is also planning to add "artificial intelligence and big data analytics into the HIDE system to produce more accurate predictions of coronavirus hotspots based on Bluetooth contact tracing. HIDE currently uses MySejahtera check-in data. MSST

Finally, in August 2021, the Malaysian government introduced a new mobile app, the Vaccine Certificate Verifier app, to combat a rise in the production and selling of fake certificates in the country.³⁵⁸⁸ While the government rolled out the use of AI-enabled technology to assist the healthcare industry and COVID-19 response, there has been little communication from the government about human rights, data privacy, and algorithmic transparency.

Facial Recognition

Since launching the Safe City Initiatives in 2004, cities across Malaysia have been installing CCTVs in public areas to monitor crime, traffic surveillance, and flooding.³⁵⁸⁹ As part of the initiative, the Minister of Federal Territories announced in 2020 their intention to increase up to 5000 cameras in the capital

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https://www.mondaq.com/government-measures/1071572/covid-19-nowhere-to-hide

³⁵⁸⁴ HealthcareITnews.com, *COVID-19: Malaysia's Pandemic Approaches and Its Impact on Telehealth* (Jun. 8, 2020), https://www.healthcareitnews.com/news/asia/covid-19-malaysia-s-pandemic-approaches-and-its-impact-telehealth

³⁵⁸⁵ Yahoo News, *Health Ministry Source: MySejahtera Covers 24.5 Million Users with Up to 30,000 Daily Downloads Despite Misconceptions* (Dec. 3, 2020),

https://malaysia.news.yahoo.com/health-ministry-source-mysejahtera-covers-020809774.html 3586 Mondaq.com, *Malaysia: COVID-19: Nowhere to HIDE?* (May 24, 2021),

³⁵⁸⁷Code Blue, *Government Plans Bluetooth COVID-19 Contact Tracing, Geofencing Self-Quarantine App* (Nov. 2, 2021), https://codeblue.galencentre.org/2021/11/02/government-plans-bluetooth-covid-19-contact-tracing-geofencing-self-quarantine-app/

³⁵⁸⁸ HealthcarelTnews.com, *Malaysia Launches Vaccine Certificate Verification App* (Aug. 24, 2021), https://www.healthcareitnews.com/news/asia/malaysia-launches-vaccine-certificate-verification-app

³⁵⁸⁹ Jabatan Pengangkutan Bandar DBKL, Inisiatif Bandar Selamat, *MyGovernment*, (Aug. 20, 2020), https://www.malaysia.gov.my/portal/content/31144

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city of Kuala Lumpur and upgrade existing cameras with AI capabilities, facial recognition, and other functions.³⁵⁹⁰

In 2018, Auxiliary Force Sdn Bhd (AFSB), a member of Royal Malaysia Police Cooperative Bhd., became the first Malaysian security force in the country to integrate body-worn cameras with facial recognition technology.³⁵⁹¹ In 2019, the state of Penang launched the first public facial recognition to help police combat crime. The system uses AI to identify faces captured by the CCTV network operated by Penang Island City Council (MBPP), with a plan to have hundreds of new cameras installed at major roads, intersections, and hotspots for criminal activity.³⁵⁹²

The Malaysian business sector has also integrated the use of facial recognition across the nation, including facial recognition "check-ins" at events. The Malaysian Ministry of Transport introduced a public-private facial recognition program in 2019, allowing users to take selfies of themselves for recognition. While there is an increase in facial recognition technology in Malaysia, there is no overarching AI policy focused on human rights and democratic values governing the use of this technology.

In 2021, the Malaysian government began planning the introduction of the Digital Identity (Digital ID) initiative. The initiative is expected to be fully implemented in 2024. The Digital ID will be a form of digital identification and authentication for individuals conducting matters using the latest biometric technology such as fingerprints and facial and iris recognition. The Home Ministry and National Registration Department (NRD) have been entrusted to lead the implementation of this initiative as the population data, information, and records are under the custody and jurisdiction of the NRD. The National Digital ID (ID)

³⁵⁹⁰ Metro News, *UN Safe City Concept Implemented in Malaysia since 2004*, The Star (Jul. 7, 2022), https://www.thestar.com.my/metro-news/2022/07/07/un-safe-city-concept-implemented-in-malaysia-since-2004

OpenGOVAsia.com, Auxiliary Force of Malaysian Police Integrates Facial Recognition Technology with Body-Worn Cameras (Apr. 16, 2018), https://opengovasia.com/auxiliary-force-of-malaysian-police-integrates-facial-recognition-technology-with-body-worn-cameras/

³⁵⁹² Biometricupdate.com, *Malaysian State Launches Facial Recognition to CCTV Network* (Jan 3, 2019), https://www.biometricupdate.com/201901/malaysian-state-launches-facial-recognition-to-cctv-network

³⁵⁹³ The Malaysian Reserve, Facial Recognition Tech Grows amid Concerns (Dec. 5, 2019), https://themalaysianreserve.com/2019/12/05/facial-recognition-tech-grows-amid-concerns/? cf chl jschl tk =DAhg QRUGomGzvz0vzL53vheCQUq1lvw25Aloim.rTw-1636370158-0-gaNycGzNClE

³⁵⁹⁴ Grab.com, *Grab Partners with Ministry of Transport to Implement Facial Recognition Technology in Malaysia* (Apr. 11, 2019), https://www.grab.com/my/press/social-impact-safety/grab-mot-facial-recognition-technology/

³⁵⁹⁵ Liew Jia Xian, Govt to Introduce Digital ID System that Strengthens MyKad Security, Says Home Ministry, The Star (Oct. 20, 2021),

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Digital Nasional, IDN) aims to create a Verifiable Platform of Trust that will be utilized by the public and private sectors to verify the identity of their respective users when conducting digital transactions. The IDN is targeted at every Malaysian citizen and permanent resident aged 5 years and above. There has been criticism on the security and privacy of personal data. Details concerning the digital ID system project are contained in the Twelfth Malaysian Plan, Eurasia Review states, adding that the database will contain citizens' information such as their full names and aliases as well as face and fingerprint biometrics. The state of the security of their respective users when conducting digital transactions. The IDN is targeted at every Malaysian citizen and above. There has been criticism on the security and privacy of personal data. Details concerning the digital ID system project are contained in the Twelfth Malaysian Plan, Eurasia Review states, adding that the database will contain citizens' information such as their full names and aliases as well as face and fingerprint biometrics.

In 2021, AirAsia introduced its revamped FACES, a facial recognition technology that allows passengers to replace their traditional boarding pass with their face, allowing for a seamless and contactless experience throughout several airport touchpoints as passengers do not need to carry around their passports and boarding passes. In 2022, AirAsia announced that it would integrate the facial recognition experience with Malaysia Airports' EZPaz technology at Kuala Lumpur International Airport (KLIA2). The enhanced FACES feature is only available on select domestic travel in the initial phase. To use FACES, passengers must enroll in AirAsia FACES via their mobile app, take a selfie video, and scan their travel documents, such as their IC or passport. Before using FACES, passengers must also perform a one-time document verification check at the dedicated FACES counters in the airport. According to AirAsia, the facial recognition feature helps reduce queuing time and increases operational efficiencies, safety, and security for the airline. The security of the airline.

AI in Court

Malaysia announced in 2010 its plan to establish an e-judiciary system against the backdrop of a broader initiative to digitalize its government and public services. ³⁶⁰⁰ By 2017, the national judiciary system had been fully digitized and was integrated with other government agencies, including COPS (Royal Malaysia

https://www.thestar.com.my/news/nation/2021/10/20/government-to-introduce-digital-id-system-which-strengthens-mykad-security-says-home-ministry

https://www.malaysia.gov.my/portal/content/31124

³⁵⁹⁶ Malaysia Government Portal, *National Digital ID* (Jan. 24, 2025),

Avang MacDonald, *Malaysia's Biometric Registry Project Faces Sharp Criticism*, Biometric Update (Oct. 5, 2021), https://www.biometricupdate.com/202110/malaysias-biometric-registry-project-faces-sharp-criticism

³⁵⁹⁸ Staff, Asian Aviation, *AirAsia Expands Facial Recognition at KL* (Oct. 5, 2022), https://asianaviation.com/airasia-expands-facial-recognition-at-kl/

³⁵⁹⁹ Alexander Wong, *AirAsia FACES Now Integrated with Malaysia Airports' EZPaz Facial Recognition System*, SoyaCincau (Nov. 6, 2022), https://soyacincau.com/2022/10/06/airasia-faces-now-integrated-with-malaysia-airports-ezpaz-facial-recognition-system/

³⁶⁰⁰ Office of the Chief Registrar Federal Court of Malaysia, *Sistem E-Kehakiman Bagi Mahkamah Di Seluruh Negara*, MyGovernment (Jan. 13, 2025), https://www.malaysia.gov.my/portal/content/31135

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Police), MySikap (Road Transport Department), INSIST (Malaysian Department of Insolvency), MyIdentity (National Registration Department), SMPP (Malaysian Prison Department), iAGC (Attorney General's Chambers of Malaysia), and MyeTaPP (Department of Lands and Mines).

A court in Sabah, Malaysia used AI to help mete out a court sentence as part of a nationwide pilot program aimed at determining the efficiency of AI in sentencing recommendations. This was followed by the release of an official guidance for using AI in judiciary sentencing on the peninsula in 2021, which described a three-phase strategy to expand the use of AI sentencing programs across the entire nation.³⁶⁰¹ According to Malaysian authorities, using AI in Malaysia's courts will help make sentencing more consistent and improve the quality of judgment while clearing backlogs more quickly and cost-efficiently. However, lawyers and various stakeholder groups have criticized this AI use on the grounds that the system was used before judges, lawyers, and the public can fully understand the way it works. The use of AI in the courts has also been criticized as unconstitutional and not envisaged under the country's Criminal Procedure Code. Other critics of the AI-sentencing pilot say AI systems risk worsening the bias against minorities and marginalized groups by not giving them a fair trial.³⁶⁰²

Autonomous Vehicles

The Government of Malaysia has declared on its official website that AI will be a key technology in developing autonomous or self-driving vehicles. The government of Malaysia mentions that "not only is AI capable of collecting and analysing data through sensors and cameras but it is also capable of adapting to situations and learning through machine learning."³⁶⁰³

In February 2022, the Ministry of Transport in Malaysia updated the Guidelines for Public Road Trials of Autonomous Vehicles. The Guidelines are intended to provide guidance to organizations planning to conduct trials of automated vehicles on designated public roads. Data and information collected from the AV trial may be used in the future by relevant authorities to develop a national policy and regulatory framework for AV adoption and application in Malaysia. The Guidelines provide for safety trial measures for organizations

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³⁶⁰¹ V. Anbalagan, *Malaysian Bar Troubled over Judges Using AI for Sentencing*, Free Malaysia Today (Jul. 24, 2021),

https://www.freemalaysiatoday.com/category/nation/2021/07/24/malaysian-bar-troubled-over-judges-using-ai-for-sentencing/

³⁶⁰² Danial Martinus, *Malaysia Tests AI Court Sentencing despite Ethical Concerns Raised by Lawyers*, via Mashable SEA (Apr. 13, 2022), https://sea.mashable.com/tech/20026/malaysia-tests-ai-court-sentencing-despite-ethical-concerns-raised-by-lawyers

³⁶⁰³ Government of Malaysia, *Capacities for Digital Transformation, Autonomous Car* (Jan. 13, 2025), https://www.malaysia.gov.my/portal/content/30713

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approved to conduct AV trials such as ensuring that the AV's software, components, equipment, and instruments are safe and operational as intended. Also, a trialing organization must be aware of abnormal traffic and weather conditions that may cause the AV system to fail.³⁶⁰⁴

According to the Malaysian Investment Development Authority ("MIDA"), Malaysia supports efforts to become a regional leader in manufacturing, engineering, and technological innovation. To this end, the National Automotive Policy 2020 (NAP 2020) aims to develop the Malaysian auto industry "through research and development of new technologies, especially in the areas of Next-Generation Vehicles (NxGV), Industrial Revolution 4.0 (IR 4.0), and mobility as a service (MaaS)." According to the MIDA, the first autonomous vehicle (AV) testing route of Malaysia, which will allow tech companies to test the capabilities of their vehicles, has been approved by the Ministry of Transport of Malaysia and the Sepang Municipal Council. 3606

Environmental Impact of AI

In one of its technology roadmaps, "National Advanced Materials Roadmap 2021-2030," the Malaysian Ministry of Science, Technology, and Innovation (MOSTI) launched the 10–10 Malaysian Science, Technology, Innovation and Economy (MySTIE) framework. The framework contained several scientific, technological, and socio-economic drivers, mainly focusing on national priority areas, emerging technologies, industry analysis, and global trends. The tenth metric focused on "Environment and Biodiversity," wherein the increasing application of emerging technologies, including AI, address climate change issues such as global warming, air pollution, and biodiversity loss.

The Industrial Revolution 4.0 Policy document from 2021 recognized the wide-ranging applications of AI and included a mission to preserve ecological security and harness technology in such a manner as to "enable sustainable consumption and production, and to solve environmental issues."³⁶⁰⁸

³⁶⁰⁵ Malaysia Industrial Development Authority (MIDA), *Malaysia Steering towards Autonomous Vehicle Technology*, MIDA e-Newsletter (Mar. 2021), https://www.mida.gov.my/malaysia-steering-towards-autonomous-vehicle-technology/

3606 Ibid

Ministry of Transport Malaysia, *Guideline for Public Road Trials of Autonomous Vehicles, Version 5* (May 8, 2023), https://www.futurise.com.my/wp-content/uploads/2024/01/Version-5.0-Section-AB-Autonomous-Vehicles-Guideline.pdf

³⁶⁰⁷ Ministry of Science, Technology & Innovation (MOSTI), *National Advanced Materials Technology Roadmap 2021–2030* (Dec. 2020), https://www.mosti.gov.my/wp-content/uploads/2022/08/Pelan-Hala-Tuju-Teknologi-Bahan-Termaju-Negara-2021-2030-versi-BI.pdf

The Economic Planning Unit, Prime Minister's Department, *The National 4IR Policy* (Jul. 2021), https://ekonomi.gov.my/sites/default/files/2021-07/National-4IR-Policy.pdf

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Taking a significant stride to check the environmental impact of AI, the National Guidelines on AI Governance and Ethics released in September 2024 aligns the government's initiative with responsible AI and ESG & SDG principles. Recognizing "Sustainability" as a critical element in AI policymaking, the guidelines focus on the environmental impact of AI technologies by assessing the "energy consumption and carbon footprint associated with AI hardware infrastructure, data centers, and computing resources." 3609

Lethal Autonomous Weapons

In February 2023, Malaysia participated in an international summit on the Responsible Artificial Intelligence in the Military Domain (REAIM) hosted by the Netherlands. At the end of the Summit, Malaysia, together with other countries, agreed on a joint call for action on the responsible development, deployment, and use of artificial intelligence in the military domain. In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability."

They also "affirm that data for AI systems should be collected, used, shared, archived and deleted, as applicable, in ways that are consistent with international law, as well as relevant national, regional and international legal frameworks and data standards. Adequate data protection and data quality governance mechanisms should be established and ensured from the early design phase onwards, including in obtaining and using AI training data."

States also "stress the importance of a holistic, inclusive and comprehensive approach in addressing the possible impacts, opportunities and challenges of the use of AI in the military domain and the need for all stakeholders, including states, private sector, civil society and academia, to collaborate and exchange information on responsible AI in the military domain."³⁶¹¹

Human Rights

Malaysia is a member of the United Nations and has endorsed the Universal Declaration of Human Rights. According to Freedom House, Malaysia

³⁶⁰⁹ Malaysian Science, Technology Information Centre (MASTIC), *The National Guidelines on AI Governance & Ethics* (Sept. 2024), https://mastic.mosti.gov.my/publication/the-national-guidelines-on-ai-governance-ethics/

³⁶¹⁰ Government of Netherlands, *Call to Action on Responsible Use of AI in the Military Domain* (Feb.16, 2023), Press Release, https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action

³⁶¹¹ Responsible AI in the Military Domain Summit, *REAIM Call to Action* (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action

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is "partly free" with a score of 53/100.³⁶¹² Freedom House notes, "The Barisan Nasional (BN) political coalition ruled Malaysia from independence in 1957 until 2018, maintaining power by manipulating electoral districts, appealing to ethnic nationalism, and suppressing criticism through restrictive speech laws and politicized prosecutions of opposition leaders." Since the BN lost to an opposition alliance in 2018, political affairs have been characterized by a "more complex pattern of competition and cooperation among multiple coalitions, creating opportunities for reform and modest improvements to civil liberties."

On transparency, Freedom House noted that "efforts towards enacting a freedom of information act and other reforms stalled after the PN [Perikatan Nasional] took power."³⁶¹³ Government operations were also not transparently carried out while Parliament was suspended for part of 2021.

OECD / G20 AI Principles

Malaysia has not endorsed OECD AI Principles and G20 AI Guidelines. The OECD AI Policy Observatory does not list AI initiatives from Malaysia.

Council of Europe AI Treaty

Malaysia has not endorsed the Council of Europe AI Treaty. 3614

UNESCO Recommendation on AI Ethics

As a member of UNESCO, Malaysia adopted the Recommendation on the Ethics of Artificial Intelligence, the first global standard on the ethics of artificial intelligence in November 2021.³⁶¹⁵

As of 2024, Malaysia has been underway in completing the UNESCO Readiness Assessment Methodology (RAM), a key tool to support Member States in their implementation of the UNESCO Recommendation on the Ethics of AI.³⁶¹⁶

Additionally, Malaysia has made efforts to align with UNESCO's Recommendation Policy Area 8: Education and Research. Malaysia has worked on implementing an inclusive digital literacy policy. In early 2024, the country launched "AI untuk Rakyat," a national program led by the MyDIGITAL Corporation and Intel Corporation that offers online courses to citizens. The goal of this collaboration is to "create a comprehensive and accessible learning

³⁶¹⁴ Council of Europe, *Chart of Signatures and Ratifications of Treaty 225* (Jan. 19, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225
³⁶¹⁵ UNESCO, *UNESCO Adopts First Global Standard on the Ethics of Artificial Intelligence* (Nov. 6, 2022), https://www.unesco.org/en/articles/unesco-adopts-first-global-standard-ethics-artificial-intelligence

³⁶¹² Freedom House, *Freedom in the World 2024: Malaysia* (2024), https://freedomhouse.org/country/malaysia/freedom-world/2024 https://freedomhouse.org/country/malaysia/freedom-world/2024 https://freedomhouse.org/country/malaysia/freedom-world/2024 https://freedomhouse.org/country/malaysia/freedom-world/2024 https://freedomhouse.org/country/malaysia/freedom-world/2024 https://freedomhouse.org/country/malaysia/freedom-world/2024 https://freedom-world/2024 https://freedom-world/2024 https://freedomhouse.org/country/malaysia/freedom-world/2024 <a hre

³⁶¹⁶ UNESCO, *Global AI Ethics and Governance Observatory: Country Profiles* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

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experience for Malaysians of diverse age groups, backgrounds, and geographical locations."³⁶¹⁷

Fvaluation

Malaysia has rapidly introduced technology into its public and private sectors and has constructed numerous digital policies and has taken action to map out and support its digital economy and support business growth. While there is currently no comprehensive national AI framework currently, the AI-Rmap is ongoing and part of the overall 12 Plan.

Along with Malaysia's endorsement and beginning implementation of the UNESCO Recommendations on the Ethics of AI, the government has made strides with implementation of the AI Roadmap and the development of the National Guidelines on AI Governance and Ethics. However, the lack of restrictions on government or public use of data in the data protection legal regime is a cause for concern in view of Malaysia's deployment of AI for surveillance purposes.

It remains to be seen whether the new Prime Minister, Anwar Ibrahim, will uphold his "promise of political and social reforms" and give to Malaysia's AI and data protection laws and policies a strong human-centered focus.³⁶¹⁸

Malta

In 2024, Malta modified the charge for the Malta Digital Innovation Authority (MDIA) to clarify the institution's status as an authority for market surveillance and compliance reporting under the EU AI Act.

National AI Strategy

The Parliamentary Secretary for Financial Services, Digital Economy and Innovation (PSFS) of Malta released a National AI Strategy³⁶¹⁹ and a National AI Ethics Framework in 2019. ³⁶²⁰ The strategy aims to make Malta the "Ultimate AI

³⁶¹⁷ MyDIGITAL Corporation, *One Million Malaysians Successfully Complete "AI Untuk Rakyat" Self-learning Online Programme in Record Time* (Jun. 5, 2024), https://www.mydigital.gov.my/one-million-malaysians-successfully-complete-ai-untuk-rakyat-self-learning-online-programme-in-record-time/

³⁶¹⁸ Freedom House, F*reedom in the World 2023: Malaysia*, p. 26 (Mar. 2023), https://freedomhouse.org/sites/default/files/2023-03/FIW World 2023 DigtalPDF.pdf

³⁶¹⁹ Parliamentary Secretariat for Financial Services, Digital Economy and Innovation, Office of the Prime Minister, *Malta: The Ultimate AI Launchpad: A Strategy and Vision for Artificial Intelligence in Malta 2030* (Oct. 2019), https://malta.ai/wp-

content/uploads/2019/11/Malta The Ultimate AI Launchpad vFinal.pdf

³⁶²⁰ Parliamentary Secretariat for Financial Services, Digital Economy and Innovation, Office of the Prime Minister, *Malta: Towards Trustworthy AI: Malta's Ethical AI Framework* (Oct. 2019), https://www.mdia.gov.mt/wp-

content/uploads/2023/04/Malta Towards Ethical and Trustworthy AI.pdf

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Launchpad" by creating a venue where "local and foreign companies and entrepreneurs can develop, prototype, test and scale AI, and ultimately showcase the value of their innovations across an entire nation primed for adoption."³⁶²¹ The National AI Strategy was drafted on the basis of report delivered by the Malta AI Taskforce, ³⁶²² a group of experts entrusted to advise the government on AI matters, and public consultation.

The National AI Strategy includes more than 70 actions that are set to be implemented by the end of 2022, together with actions to support a longer-term vision of where the country would like to be in 2030. The Strategy includes three strategic pillars with a focus on boosting investment, start-ups, and innovation and adoption across the public and private sectors. Moreover, each pillar draws on three strategic "enablers": 1) Education and workforce; 2) Ethical and legal, and 3) Ecosystem and infrastructure.³⁶²³ The ethical and legal enabler aims to establish the first national AI certification program for those wishing to create "ethically aligned, transparent and socially responsible AI solutions."

The Strategy, however, does not disclose financial provisions or estimations for its overall implementation.

The goals to be achieved in between 2019 and 2022 were to:

- Raise Maltese citizen's awareness on what AI is and how it can be used to benefit society
- Generate investment with AI-related activities and stimulate research and development (R&D) across various Maltese sectors
- Support a strong culture of collaboration locally and internationally to pilot and scale AI solutions
- Launch and implement pilot projects that showcase the benefits that AI can deliver and to build an AI-powered government
- Prepare the workforce for work in an AI-driven world
- Update and align Maltese national law in accordance with changes that may be required to keep pace with disruptive technologies

The Strategy further assumes that the Maltese business community will have "developed foundational knowledge of how AI solutions can be applied in

³⁶²² Malta Digital Innovation Authority, *Artificial Intelligence: Strategy and Vision for AI in Malta 2030, Malta: Towards an AI Strategy* (Mar. 2019), https://www.mdia.gov.mt/malta-ai-strategy/

³⁶²¹ Parliamentary Secretariat for Financial Services, Digital Economy and Innovation, Office of the Prime Minister, *Malta: The Ultimate AI Launchpad: A Strategy and Vision for Artificial Intelligence in Malta 2030* (Oct. 2019), https://malta.ai/wp-content/uploads/2019/11/Malta The Ultimate AI Launchpad vFinal.pdf

³⁶²³ Parliamentary Secretariat for Financial Services, Digital Economy and Innovation – Office of the Prime Minister, *Malta: The Ultimate AI Launchpad: A Strategy and Vision for Artificial Intelligence in Malta 2030*, p. 19 (Oct. 2019), https://malta.ai/wp-content/uploads/2019/11/Malta The Ultimate AI Launchpad vFinal.pdf

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their areas of business and what the benefits of doing so are," Malta will "be a model nation that others look to when developing policy on ethical and trustworthy AI" through its national AI certification, and "[c]omputers will be able to process, understand, and generate Maltese text and speech, and AI solutions which are accessible in both of Malta's national languages will be part of every-day life." 3624

The Strategy envisions additional goals to be achieved by 2030, including:

- To have AI solutions be a highly valued and trusted part of everyday life and used by Maltese citizens of all generations to enhance the way they live, work, and play
- For AI to be a key driver that propels R&D activities, investments, and growth across the Maltese economy
- For Malta to be recognized as the "Ultimate AI Launchpad" and be amongst the top 10 nations with the highest-impact national AI program, for the nation to be a global hub for AI application and niche R&D with a vibrant start-up community anchored by global AI tech companies, and for AI solutions piloted in Malta to have achieved mass global adoption
- To have AI solutions help augment most public services for the benefit of Maltese citizens, including being a central component in the toolbox of educators and doctors, alleviating congestion through intelligent nationwide traffic management, optimizing power and water usage, and fueling the personalization of citizen and tourist services
- For companies of all sizes and sectors to deploy AI solutions to improve productivity and business performance, including plugging resource gaps, providing 24/7 customer service, and redefining business models or delivering better offerings to customers
- For Maltese workers to have the skillsets needed to thrive in the new era of work
- For robust legal, governance, and social protection mechanisms to be in place to ensure AI systems are safe, ethical, trusted, socially responsible, and human-centric
- That, following Malta's lead, most countries will require AI systems to comply with international regulations and standards on AI systems that Malta has helped to shape and develop
- For individuals to have much better ownership and control of their personal data and be able to commoditize it for their own benefit as AI, 5G, and the Internet of Things converge and revolutionize how data is used

Beyond assuming that workers will have "the skill sets needed to thrive in the new era of work," the Strategy envisions that employment levels will remain high, worker productivity and job satisfaction will improve with the use of AI

³⁶²⁴ Ibid, pp. 16–17

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tools, new types of jobs will exist, displaced workers will receive aid to transition into new roles, AI will be embedded horizontally across all aspects of the educational curricula, and that AI tools will be widely used by educators and schools to the benefit of their students.³⁶²⁵

Malta Digital Innovation Authority (MDIA) established in 2018³⁶²⁶ is an independent authority with the mission to "direct and facilitate the secure and optimal uptake of digital innovation." Supervising the execution of Malta's National Artificial Intelligence Strategy is part of this mission.

Ethical AI Framework and Principles

The National AI Strategy identified four key actions towards trustworthy AI:

- Establish an Ethical AI Framework Towards Trustworthy AI
- Launch the world's first national AI certification framework
- Appoint a Technology Regulation Advisory Committee to advise on legal matters
- Set up a Regulatory Sandbox for AI and a Data Sandbox for AI

The National AI Strategy foresees a strong ethical AI framework as a supplement to the national legal and regulatory system to ensure that AI development is ethically aligned, transparent, and socially responsible.³⁶²⁸

The Ethical AI Framework that followed the strategy defines four objectives: (1) Build on human-centric approach; (2) Respect for all applicable laws and regulations, human rights and democratic values; (3) Maximize the benefits of AI systems while preventing and minimizing their risks; (4) Align with emerging international standards and norms around AI ethics³⁶²⁹. The framework sets out four ethical AI principles to achieve Malta's vision for ethical and trustworthy AI: human autonomy; prevent harm; fairness; and explainability.

The framework also recommends the establishment of a National Technology Ethics Committee (NTEC) under the auspices of the MDIA to ensure its monitoring and implementation.³⁶³⁰ However, to date, there is no evidence that the committee has in fact been created.

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³⁶²⁵ Ibid

³⁶²⁶ Malta Government Gazette, *Malta Digital Innovation Authority Act, Cap. 591*, Gazette no. 20,028 – 20.07.2018 (Jul. 15, 2018), https://legislation.mt/eli/act/2018/31

³⁶²⁷ MDIA, What We Do, https://www.mdia.gov.mt/what-we-do/

³⁶²⁸ Keith Schembri Orland, The Independent, *Government Launches National Artificial Intelligence Strategy* (Oct. 3, 2019), https://www.independent.com.mt/articles/2019-10-03/local-news/Government-launches-National-Artificial-Intelligence-Strategy-6736214287

³⁶²⁹ MDIA, *Malta Towards Trustworthy AI: Malta's Ethical AI Framework* (Oct. 2019), https://www.mdia.gov.mt/wp-

content/uploads/2023/04/Malta_Towards_Ethical_and_Trustworthy_AI.pdf ³⁶³⁰ Ibid.

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Malta also developed a national AI certification framework, issued by the MDIA. The certification offers valuable recognition in the marketplace that the AI systems of successful applicants have been developed in an ethical, transparent, and socially responsible manner.

As for the AI regulatory sandbox, during the past years, the MDIA opened a number of competitive calls that resulted in state-of-the-art research and innovative projects. The MDIA Technology Assurance Sandbox has been revamped and in March 2023 another project on conversational AI was onboarded.³⁶³¹

Public Participation

The Parliamentary Secretary for Financial Services, Digital Economy and Innovation within the Office of the Prime Minister oversaw public consultations on the initial National AI Strategy document "Malta Towards an AI Strategy: High-Level Document for Public Consultation" in 2019. The AI Taskforce also ran an in-person public consultation workshop to help guide citizens.³⁶³²

Subsequently, the Malta AI Task Force and Parliamentary Secretary for Financial Services, Digital Economy, and Innovation released the Malta Ethical AI Framework for Public Consultation. 3633.

The revision of the Strategy and Vision for AI in Malta 2030 followed a pre-consultation meeting that engaged key stakeholders including startups, public sector, private sector, education, and non-governmental organizations. A call for public participation was opened in November 2023,³⁶³⁴ but no further direction has been posted since the pre-consultation meeting in December 2023.³⁶³⁵

Locating public consultation opportunities among the various government websites is not user friendly. In its annual report however, the MDIA discusses its expanding role with regard to AI.³⁶³⁶

³⁶³² Malta AI, *Events: Public Consultation Workshop* (Mar. 21, 2019), https://malta.ai/malta-ai-public-consultation-workshop/

³⁶³¹ Gavril Flores and Annalise Seguna, *Unleashing the Power of AI: Crafting a Roadmap to Harness Its Benefits* (Mar. 28, 2023), https://timesofmalta.com/articles/view/unleashing-power-ai-crafting-roadmap-harness-benefits-a2.1022026

³⁶³³ Malta AI, *Malta Ethical AI Framework for Public Consultation* (Aug. 2019), https://malta.ai/wp-content/uploads/2019/08/Malta_Towards_Ethical_and_Trustworthy_AI.pdf
³⁶³⁴ Malta Digital Innovation Authority, *National AI Strategy and Vision Realignment*, (Dec. 2023), https://www.mdia.gov.mt/malta-ai-strategy/national-ai-strategy-realignment-2024/
³⁶³⁵ Ibid

 $^{^{3636}}$ MDIA, $Annual\ Report\ 2020$ (Ja. 18, 2021), https://www.mdia.gov.mt/news-events/mdia-annual-report-2020/

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Digital Services Act

As an EU member state, Malta shall apply the EU Digital Services Act (DSA).³⁶³⁷ The DSA regulates online intermediaries and platforms. Its main objective is to prevent illegal and harmful activities online and the spread of disinformation by requiring online platforms and intermediaries to prevent or remove posts containing illegal goods, services, or content. The DSA also bans targeted advertising based on protected categories and to minors based on profiling.

Malta is also party to the European Commission Guidelines under the DSA for the mitigation of systemic risks online for elections.³⁶³⁸

EU AI Act

As an EU member State, Malta is bound by the EU AI Act. 3639 The EU AI Act is a risk-based market regulation that supports the objective of promoting a human-centric approach to AI and making the EU a global leader in the development of secure, trustworthy, and ethical AI. The EU AI Act entered into force in August 2024. The EU AI Act establishes four levels of risk classification for AI systems and an exhaustive and nuanced list of prohibited AI uses. Still, Malta's national market surveillance authority will be charged with enforcing the rules regarding high-risk systems, investigating complaints, and imposing sanctions for non-compliance.

The EU AI Act grants these local authorities the power to request and access documentation created or maintained under the EU AI Act when necessary for fulfilling this mandate. While the European Commission has primary competence in the oversight on General Purpose AI Models, Malta's national market authority will provide oversight on high-risk systems.

https://ec.europa.eu/commission/presscorner/detail/en/IP_24_1707

³⁶³⁷ European Union, EUR-Lex, *Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and Amending Directive 2000/31/EC (Digital Services Act)* (Oct. 21, 2022), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022R2065

³⁶³⁸ European Commission, Guidelines under the DSA for the Mitigation of Systemic Risks Online for Elections (Mar. 2024),

³⁶³⁹ European Parliament, Artificial Intelligence Act, European Parliament Legislative Resolution of 13 March 2024 on the Proposal for a Regulation of the European Parliament and of the Council on Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts (COM(2021)0206 – C9-0146/2021 – 2021/0106(COD)), P9 TA(2024)0138 (Mar. 13, 2024),

https://www.europarl.europa.eu/RegData/seance_pleniere/textes_adoptes/definitif/2024/03-13/0138/P9_TA(2024)0138_EN.pdf

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Malta has three national authorities with AI oversight and reporting duties: the Malta Digital Innovation Authority (MDIA)3640, the Office of the Information and Data Protection Commissioner (IDPC),3641 and the National Accreditation Board. ³⁶⁴² The MDIA is the leading market surveillance authority and notifying authority on innovation technologies including AI. The IDPC enforces the GDPR and the national Data Protection Act and serves as the other market surveillance authority. The National Accreditation Board is the other notifying authority. The MDIA is required to assist the IDPC in "safeguarding the data protection rights of data subjects."

More specifically, the MDIA Act establishes the MDIA as the competent authority to, inter alia:

- exercise regulatory functions regarding Innovative Technology Arrangements and related services:
- support the development and implementation of the guiding principles described in the MDIA Act; and
- establish minimum quality, compliance and security standards for any Innovative Technology Arrangements and related services.³⁶⁴³

With the enactment of the MDIA Act, Malta's purpose is to establish a "national technology assurance framework." Although the MDIA's initial focus was on distributed ledger technology to regulate and promote blockchain and cryptocurrency technology, in 2020/2021 its mandate broadened to include AI technology.3645

The IDPC's objectives are to increase public trust and confidence in the use of personal data, ensure consistent application of the GDPR, enforce data protection rules, increase awareness, and ensure transparency and good governance, among others.³⁶⁴⁶ It also has the authority to impose administrative fines and lists data protection decisions on the website.³⁶⁴⁷. In one high-profile case,

3645 Ibid

³⁶⁴⁰ Malta Legislation, Act No. XIX of 2024: Malta Digital Innovation Authority Act (MDIA Act) (Jun. 14, 2024), https://legislation.mt/eli/cap/591/20240614/eng

³⁶⁴¹ Office of the Information and Data Protection Commissioner, *The IDPC's Objectives*, https://idpc.org.mt/our-office/

³⁶⁴² NAB-Malta, *The Accreditation Board*, https://nabmalta.org.mt/accreditation-board-malta/ ³⁶⁴³ MDIA, Frequently Asked Questions, What Is the Purpose of the MDIA and What Functions Will It Have? https://mdia.gov.mt/faq/#1576660516492-13a4f293-c7c6

MDIA, Annual Report 2020 (Jan. 18, 2021), https://www.mdia.gov.mt/news-events/mdiaannual-report-2020/

³⁶⁴⁶ Information and Data Protection Commissioner, Our Office, The IDPC's Objectives, https://idpc.org.mt/our-office/

³⁶⁴⁷ IDPC, Data Protection Decisions (Jan. 19, 2025), https://idpc.org.mt/decisions/

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the IDPC levied a 65,000 Euro fine against C-Planet (IT Solutions) Ltd, which was held responsible for a personal data breach of over 337,000 Maltese voters.³⁶⁴⁸

Malta has also several independent oversight bodies for human rights, namely: the National Commission for the Promotion of Equality, the Commission for the Rights of Persons with Disabilities and the Parliamentary Ombudsman. They are competent to oversee the impact of AI policies within their field of competences.

Data Protection

Since Malta is an EU Member State, the General Data Protection Regulation (GDPR)³⁶⁴⁹ is directly applicable in Malta and to Maltese citizens. The aim of the GDPR is to "strengthen individuals' fundamental rights in the digital age and facilitate business by clarifying rules for companies and public bodies in the digital single market. A single law will also do away with the current fragmentation in different national systems and unnecessary administrative burdens."³⁶⁵⁰

The Maltese Data Protection Act 2018 (Chapter 586 of the Laws of Malta) (DPA) supplements the GDPR and took effect on May 28, 2018.³⁶⁵¹

Regarding the activities of law enforcement authorities, Malta transposed the EU Data Protection Law Enforcement Directive (LED)³⁶⁵² with Subsidiary Legislation.³⁶⁵³ "The directive protects citizens' fundamental right to data

³⁶⁴⁸ IDPC, *The Commissioner Issues the Decision on the Personal Data Breach Suffered by C-Planet (IT Solutions) Ltd*, Press Release (Jan. 17, 2022), https://idpc.org.mt/idpc-publications/idpc-issues-decision-on-cplanet-data-breach

³⁶⁴⁹ European Parliament and the Council, *Regulation (EU) 2016/679 on the Protection of Natural Persons with Regard to the Processing of Personal Data and on the Free Movement of Such Data* (Apr. 27, 2016), https://eur-lex.europa.eu/EN/legal-content/summary/general-data-protection-regulation-gdpr.html

³⁶⁵⁰ European Commission, *Data Protection in the EU*, https://commission.europa.eu/law/law-topic/data-protection/data-protection-eu en

³⁶⁵¹ Malta Legislation, *Data Protection Act*, chapter 586 (May 28, 2018), https://legislation.mt/eli/cap/586/eng/pdf

³⁶⁵² European Union, EUR-Lex, Directive (EU) 2016/680 on the Protection of Natural Persons with Regard to the Processing of Personal Data by Competent Authorities for the Purposes of the Prevention, Investigation, Detection or Prosecution of Criminal Offences or the Execution of Criminal Penalties, and on the Free Movement of Such Data, and Repealing Council Framework Decision 2008/977/JHA (LED) (May 4, 2016), https://eur-lex.europa.eu/eli/dir/2016/680/2016-05-04

³⁶⁵³ Malta Legislation, Subsidiary Legislation 586.08, Data Protection (Processing of Personal Data by Competent Authorities for the Purposes of the Prevention, Investigation, Detection or Prosecution of Criminal Offences or the Execution of Criminal Penalties) Regulation (May 28, 2018),

https://legislation.mt/eli/sl/586.8/eng#:~:text=PROCESSING%20OF%20PERSONAL%20DAT A%20BY,AUTHORITIES%20FOR%20THE%20PURPOSES%20OF

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protection whenever personal data is used by criminal law enforcement authorities for law enforcement purposes. It will in particular ensure that the personal data of victims, witnesses, and suspects of crime are duly protected and will facilitate cross-border cooperation in the fight against crime and terrorism."3654 The LED provides for the prohibition of any decision based solely on automated processing, unless it is provided by law, and of profiling that results in discrimination.³⁶⁵⁵ The LED also requires for Member States, including Malta, to enable data subjects to exercise their rights via national data protection authorities. 3656

The EU Charter of Fundamental Rights more generally provides that EU citizens have the right to protection of their personal data. Article 8 of the Charter states that: "Everyone has the right to the protection of personal data concerning him or her. Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law."

Malta is also a member of the Council of Europe and ratified the Council of Europe's Convention 108+ for the protection of individuals with regard to the processing of personal data.³⁶⁵⁷

Although the IDPC is an accredited member of the Global Privacy Assembly since 2003, 3658 it did not endorse the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence, 3659 the 2020 GPA Resolution on AI Accountability, 3660 or the 2022 GPA Resolution on Facial Recognition

³⁶⁵⁵ European Parliament, EUR-Lex, LED Article 11 (1) and (2) (May 4, 2016), https://eurlex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

3656 Ibid, Article 17

³⁶⁵⁴ European Commission, Data Protection in the EU, https://commission.europa.eu/law/lawtopic/data-protection/data-protection-eu en

³⁶⁵⁷ Council of Europe, Modernised Convention for the Protection of Individuals with Regard to the Processing of Personal Data (May 18, 2018), https://www.coe.int/en/web/dataprotection/convention108-and-protocol

³⁶⁵⁸ Global Privacy Assemble, List of Accredited Members (2025),

https://globalprivacyassembly.org/participation-in-the-assembly/list-of-accredited-members/ ³⁶⁵⁹ Global Privacy Assembly, Declaration on Ethics and Data Protection in Artificial

Intelligence (Oct. 23, 2018), https://globalprivacyassembly.org/wp-

content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf ³⁶⁶⁰ Global Privacy Assembly, Resolution on Accountability in the Development and Use of

Artificial Intelligence (Oct. 2020), https://globalprivacyassembly.org/wpcontent/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

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Technology.³⁶⁶¹ However, the IDPC co-sponsored the 2023 GPA Resolution on Generative AI.³⁶⁶²

Algorithmic Transparency

Malta is subject to the GDPR and Convention 108+. Maltese citizens have a general right to obtain access to information about automated decision-making and to the factors and logic of an algorithm.³⁶⁶³

Malta's Ethical AI Framework also covers criteria for guaranteeing algorithmic transparency such as the necessity to establish measures to ensure the traceability of outcomes for decisions made based on the use of an algorithm. Users are also to be made aware in clear and easily understandable language that relevant decisions, content, advice, or outcomes are the result of an algorithmic decision.

The 2020 Recommendation of the Council of Europe Committee of Ministers on human rights impacts of algorithm systems³⁶⁶⁴ specifically emphasizes requirements on transparency, accountability and effective remedies. The Recommendation provides that "Transparency levels should be as high as possible and proportionate to the severity of adverse human rights impacts, including ethics labels or seals for algorithmic systems to enable users to navigate between systems."³⁶⁶⁵ The Recommendation also clarifies that "Contestation should include an opportunity to be heard, a thorough review of the decision and the possibility to obtain a non-automated decision. This right may not be waived, and should be affordable and easily enforceable before, during and after deployment, including through the provision of easily accessible contact points and hotlines."³⁶⁶⁶

³⁶⁶¹ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

³⁶⁶² Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

³⁶⁶³ Council of Europe, *Convention 108*+, p. 23 (Jun. 2018), https://rm.coe.int/convention-108-convention-for-the-protection-of-individuals-with-regar/16808b36f1

³⁶⁶⁴ Council of Europe, Recommendation CM/Rec(2020)1 of the Committee of Ministers to Member States on the Human Rights Impacts of Algorithmic Systems (Apr. 8, 2020), https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

³⁶⁶⁵ Ibid

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Smart Surveillance

Malta's Safe City pilot project in Paceville and then Marsa created using technology developed by Chinese tech giant Huawei, was considered as an example of mass surveillance technology. Former Prime Minister Joseph Muscat even referred to the potential network as "eyes in the sky." The project also attracted criticisms from UN Data Protection Rapporteur Joseph Cannataci, who doubted the legal basis on which the project was developed, and EU Commissioner for Justice Vera Jourova. "Concerns about how the data collected by Huawei would be used also contributed to widespread negative responses to the project."

The project was discontinued in January 2023 after the contract expired and the state-owned company tasked with implementing the system was dissolved.³⁶⁶⁸

Environmental Impact of AI

Malta has not published specific policies or guidelines related to the environmental impact of AI systems or technology.

Lethal Autonomous Weapons

The Maltese government supports a legally binding instrument on lethal autonomous weapons. Malta has participated in some Convention on Certain Conventional Weapons (CCW) meetings on autonomous weapons. Malta spoke for the first time at the 2021 CCW Group of Governmental Experts on Lethal Autonomous Weapon Systems (GGE on LAWS) meeting, stating that it "remains concerned with the rapid technological advancement especially in AI, where as a result, lethal autonomous weapons systems are today capable of functioning with a lesser degree of human control or none."³⁶⁶⁹

In October 2022, Malta was one of 70 states that endorsed a joint statement on autonomous weapons systems at the United Nations General Assembly. The statement called for the recognition of the dangers of autonomous weapons systems, acknowledged the need for human oversight and accountability, and emphasized the importance of an international framework of rules and

Times of Malta, *Facial Recognition CCTV in Paceville... and then Marsa* (Oct. 22, 2018), https://timesofmalta.com/articles/view/20181022/local/budget-facial-recognition-cctv-in-paceville-and-then-marsa.692306

³⁶⁶⁸ Karl Azzopardi, MaltaToday, Maltese Government Ditches Controversial Huawei "Safe City" CCTV Company (Jan. 9, 2023),

https://www.maltatoday.com.mt/news/national/120627/state_ditches_controversial_huawei_cctv_3669 Automated Decision Research, *Malta*,

https://automatedresearch.org/news/state_position/malta

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constraints.³⁶⁷⁰ In this joint statement, States declared that they "are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law ("IHL"), including through maintaining human responsibility and accountability in the use of force."³⁶⁷¹

Malta participated in the first REAIM international summit on the responsible application of artificial intelligence in the military domain hosted by the Netherlands. At the end of the Summit, Malta, together with other countries, agreed on a joint call for action on the responsible development, deployment, and use of artificial intelligence in the military domain. This joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." Malta also endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023. 3674

At the 78th UN General Assembly First Committee in 2023, Malta cosponsored and voted in favor of resolution L.56³⁶⁷⁵ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. The report should analyze ways to address the challenges and concerns autonomous weapon systems raise from humanitarian, legal, security, technological and ethical perspectives and reflect on the role of humans in the use of force.

³⁶⁷⁰ Stop Killer Robots, 70 States Deliver Joint Statement on Autonomous Weapons Systems at UN General Assembly (2022), https://www.stopkillerrobots.org/news/70-states-deliver-joint-statement-on-autonomous-weapons-systems-at-un-general-assembly/

³⁶⁷¹ United Nations (UN) General Assembly, *Joint Statement on Lethal Autonomous Weapons Systems, First Committee, 77th United Nations General Assembly Thematic Debate:* Conventional Weapons (Oct. 21, 2022),

 $[\]underline{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcS\underline{nnAm_en.pdf}$

³⁶⁷² Government of Netherlands, *Call to Action on Responsible Use of AI in the Military Domain*, Press Release (Feb. 16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action

³⁶⁷³ Responsible AI in the Military Domain Summit, *REAIM Call to Action* (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action
³⁶⁷⁴ US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Feb. 12, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

³⁶⁷⁵ General Assembly, *Lethal Autonomous Weapons*, *Resolution L56* (Oct. 12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

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At the 79th UN General Assembly First Committee in October 2024, Malta co-sponsored and voted in favor of resolution L.77³⁶⁷⁶ with 160 other countries in favor to 3 against, with 13 abstentions.³⁶⁷⁷ The Resolution highlighted "the importance of addressing the challenges and concerns (about the possible negative consequences and impacts) posed by autonomous weapons systems" from humanitarian, legal, security, technological, and ethical perspectives and mandated the UN Secretary-General to convene open informal consultations in 2025 open to the full participation of all Member States.

Human Rights

According to the Freedom House, Malta is a "free" country with a score of 87. "Malta is a parliamentary democracy with regular, competitive elections and periodic rotations of power. New and smaller political parties encounter difficulties in challenging the dominance of the two main parties, and official corruption is a serious problem. While civil liberties are generally respected, mistreatment of migrant workers and asylum seekers remains a concern." ³⁶⁷⁸

Malta is a Member State of the Council of Europe (CoE) and of the United Nations and thus has human rights obligations at the regional and universal levels.

As a Member of the CoE, Malta must abide by the European Convention on Human Rights and is subject to the jurisdiction of the European Court of Human Rights and the monitoring of the CoE treaty bodies. Its human rights policies and practices are also monitored by the CoE Commissioner for Human Rights.

In a 2020 Recommendation to member States on the human rights impacts of algorithmic systems, the Council of Europe Committee of Ministers affirmed that "member States must ensure that any design, development and ongoing deployment of algorithmic systems occur in compliance with human rights and fundamental freedoms, which are universal, indivisible, inter-dependent and interrelated, with a view to amplifying positive effects and preventing or [minimizing] possible adverse effects." ³⁶⁷⁹

³⁶⁷⁶ UN General Assembly, *Lethal Autonomous Weapons*, *Resolution A/C.1/79/L.77* (Oct. 18, 2024), https://documents.un.org/doc/undoc/ltd/n24/305/45/pdf/n2430545.pdf

³⁶⁷⁷ United Nations, In Nearly 50 Separate Recorded Votes, First Committee Approves 15 Drafts on Conventional Weapons, Divergent Approaches to Outer Space Security (Nov. 5, 2024), https://press.un.org/en/2024/gadis3756.doc.htm

³⁶⁷⁸ Freedom House, *Freedom in the World Report 2024: Malta* (2024), https://freedomhouse.org/country/malta/freedom-world/2024

³⁶⁷⁹ Council of Europe Committee of Ministers, *Recommendation CM/Rec(2020)1 of the Committee of Ministers to Member States on the Human Rights Impacts of Algorithmic Systems* (Apr. 8, 2020), https://search.coe.int/cm?i=09000016809e1154

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As a UN Member State, Malta is subject to the oversight of various UN human rights bodies, including the Human Rights Council and its Universal Periodic Review and thematic special procedures.

OECD / G20 AI Principles

Malta is not a member of the OECD³⁶⁸⁰ but is recognized by the OECD as adhering to the AI Principles.³⁶⁸¹ The Maltese National AI Strategy emphasizes that Malta's Ethical AI Framework builds on the OECD AI Principles. The Framework explicitly states that particular attention was given to ensuring alignment with OECD AI Principles.³⁶⁸²

Council of Europe Al Treaty

Malta contributed as a Council of Europe and EU Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of law. Malta is party to the treaty as part of the European Union³⁶⁸³ but has not signed the treaty independently.³⁶⁸⁴

UNESCO Recommendation on AI Ethics

Malta has been a UNESCO member state since 1965 and is among the 193 Member States that adopted the UNESCO Recommendation on the Ethics of Artificial Intelligence. Malta has not initiated the UNESCO Readiness Assessment Methodology (RAM)³⁶⁸⁵ or explicitly addressed implementation of the UNESCO AI Recommendation.

Evaluation

Malta's goal is to become the "ultimate AI launchpad." Malta has developed a national AI strategy with strong pillars for trustworthy AI and benefits from a comprehensive European and national data protection legal regime. In response to the adoption of the EU AI Act, the Maltese government amended the Malta Digital Innovation Agency Act to enhance its independence and power over

https://www.caidp.org/resources/coe-ai-treaty/

³⁶⁸⁰ OECD, Members and Partners (2024), https://www.oecd.org/about/members-and-partners/

³⁶⁸¹ OECD, OECD AI Principles Overview, Countries Adhering to the AI Principles (2025), https://oecd.ai/en/ai-principles

MDIA, *Malta Towards Trustworthy AI: Malta's Ethical AI Framework*, p. 10 (Oct. 2019), https://www.mdia.gov.mt/wp-

content/uploads/2023/04/Malta Towards Ethical and Trustworthy AI.pdf

³⁶⁸³ CAIDP, Council of Europe AI Treaty, 37 Signatories (Nov. 10, 2024),

³⁶⁸⁴ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Jan. 19, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

³⁶⁸⁵ UNESCO Global AI Ethics and Governance Observatory, *Global Hub: Country Profiles* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

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innovative technology policies. The MDIA now has power to conduct market surveillance and compliance of products through investigation and enforcement, secure budget for its implementation, and issue and implement programs and schemes such as providing a certificate or mark of assurance or approval to innovative technology. In addition, Malta co-sponsored the GPA Resolution related to AI for the first time. Overall, the development of AI-related policies and the governance structure in Malta show improvement.

Mauritius

In 2024, Mauritius worked on the UNESCO Readiness Assessment Methodology (RAM) and hosted a UNESCO-sponsored AI Summit spotlighting Ethical AI.

National AI Strategy

Mauritius became one of the first African countries to publish a national AI strategy in 2018.³⁶⁸⁶ The strategy reflects the country's aim to promote and utilize AI in improving growth, productivity, and quality of life, with recommendations for the achievement of these goals. The strategy provides a roadmap for the development of AI in the country with a focus on key areas through the identification of sectors and national projects that can leverage AI, capacity-building and skill development, AI ethics, partnerships for emerging technologies, awareness campaigns, and adoption of AI in public services. The Economic Development Board and the Ministry of Finance and Economic Development³⁶⁸⁷ are responsible for piloting the strategy.

The AI projects identified for implementation fall in the manufacturing, health, agriculture, and FinTech sectors. As recommended by the Strategy, Mauritius established an AI Council composed of experts whose primary role is to advise the Government on ways to support the country's AI ecosystem. The Strategy also urges the government to create a regulatory environment for AI, consisting of a framework on ethics and data protection, and the provision of grants and tax credits to encourage investment in AI.

According to the Africa Policy Institute (Afripoli), Mauritius' digital strategy focuses on five waves, one of which is the review of the existing legal frameworks to support AI and robotics developments.³⁶⁸⁸ The UN e-government

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³⁶⁸⁶ Government of Mauritius, *Mauritius Artificial Intelligence Strategy* (Nov. 2018), https://ncb.govmu.org/ncb/strategicplans/MauritiusAIStrategy2018.pdf

³⁶⁸⁷ OECD, *AI Policies in Mauritius* (2023), https://oecd.ai/en/dashboards/countries/Mauritius
³⁶⁸⁸ Africa Policy Institute (AfriPoli), *AI in Africa: Key Concerns and Policy Considerations for the Future of the Continent* (May 30, 2022), https://afripoli.org/ai-in-africa-key-concerns-and-policy-considerations-for-the-future-of-the-continent

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survey report highlights the efforts of Mauritius to align the Digital Government Transformation Strategy with the Public Sector Business Transformation Strategy, and the appointment of a High-Level Digital Government Task Force for oversight and reporting.³⁶⁸⁹ Mauritius' policy efforts align with the commitments it took as a member of the African Union, notably the AU digital transformation strategy³⁶⁹⁰ and the Continental Data Policy Framework. 3691

Moreover, the government of Mauritius collaborates with the national AI industry, showing support for their initiatives. In particular, the Mauritius Ministry of Information Technology, Communication and Innovation promoted the Artificial Intelligence (AI) Summit, an initiative of the Mauritius Emerging Technologies Council (METC).3692

Public Participation

Mauritius includes a framework for public participation in its laws. The country's Constitution makes it mandatory for the legislature to create avenues for public participation in the law-making process. Accordingly, it provides citizens with the right to participation, freedom of association, and expression. ³⁶⁹³

The Digital Government Survey of 2018 reported a significant lack of involvement of citizens in national issues and policy discussions.³⁶⁹⁴ Recommendations in the Digital Government Transformation Strategy included the "provision of digital platforms for integrating citizens and other stakeholder views in government decision-making processes, "3695 engagement by Ministries / Government departments with the public, and dissemination of information to inform decision-making, as well as the release of Open Data "as a means to

https://desapublications.un.org/sites/default/files/publications/2022-09/Web%20version%20E-Government%202022.pdf

Mauritius-spotlighted-as-premier-destination-for-technological-development-during-AI-Summit.aspx

³⁶⁸⁹ United Nations, e-Government Survey 2022 (2022),

³⁶⁹⁰ African Union, The Digital Transformation Strategy for Africa (2020–2030) (May 18, 2020), https://au.int/en/documents/20200518/digital-transformation-strategy-africa-2020-2030 ³⁶⁹¹ African Union, 40th Ordinary Session of the Executive Council (Feb. 2–3, 2022), https://au.int/sites/default/files/decisions/41584-EX CL Dec 1143-1167 XL E.pdf 3692 Mauritius Ministry of Information Technology, Communication and Innovation, METX 2024: Mauritius Spotlighted as Premier Destination for Technological Development During AI Summit (May 8, 2024), https://www.govmu.org/EN/newsgov/SitePages/METX-2024-

³⁶⁹³ Mauritius National Assembly, Constitution of the Republic of Mauritius (May 2018), https://mauritiusassembly.govmu.org/mauritiusassembly/index.php/the-constitution/

³⁶⁹⁴ Republic of Mauritius, *Digital Government Transformation Strategy 2018–2022* (2018), https://cib.govmu.org/Documents/Reports/Digital%20Government%20Strategy%202018-2022.pdf

³⁶⁹⁵ Ibid

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achieve transparency in public sector operations."³⁶⁹⁶ Accordingly, the government established the Citizen Support Portal.³⁶⁹⁷ The Portal is an e-participation and e-decision-making platform meant to enable government to engage with citizens. The platform is intended to "handle citizen complaints, monitor complaints, and inform citizens on Government policies."³⁶⁹⁸ The platform is supported by 35 Citizen Advice Bureaus placed across the country, to facilitate access to computers or the Internet to citizens who do not have these means.³⁶⁹⁹ The government of Mauritius has on occasion proactively consulted with relevant stakeholders in developing its national digital policy. While preparing strategic plan Digital Mauritius 2030, the government has been consulting stakeholders from the public and the private sectors.³⁷⁰⁰

In the UN e-Government survey 2020, Mauritius had moved to first place in Africa, 63rd in the world, and 45th globally in the open data index, and was recognized as a model digital government.³⁷⁰¹ The most recent e-Government Survey of 2022, ranked Mauritius as the 2nd top nation in Africa and 75th out of 193 countries in the world, in terms of the e-Government development index (EGDI).³⁷⁰²

In January 2023, the Data Protection Office organized a conference "Protecting Personal Data across All Economic Sectors" on Data Protection Day³⁷⁰³. Privacy rights, accountability, and protection against government surveillance were part of the agenda.

³⁶⁹⁶ Ibid

¹⁰¹⁰

³⁶⁹⁷ Republic of Mauritius, Citizen Support (2022), https://www.csu.mu/index.php

Republic of Mauritius, *Digital Government Transformation Strategy 2018–2022* (2018), https://cib.govmu.org/Documents/Reports/Digital%20Government%20Strategy%202018-2022.pdf

Republic of Mauritius, *List of Citizens Advice Bureaus* (2023), https://www.csu.mu/map-of-cab-offices-offering-cep-services

³⁷⁰⁰ Government of Mauritius, *Digital Mauritius 2030*, p. 4 (Dec. 17, 2018), https://ncb.govmu.org/ncb/strategicplans/DigitalMauritius2030.pdf

³⁷⁰¹ Central Informatics Bureau, *UN e-Government Survey 2020: Mauritian Perspective* (Jun. 21, 2020), https://cib.govmu.org/Documents/Reports/Mauritius%20Perspective-%20UN%20e-Gov%202020.pdf

³⁷⁰² United Nations, UN E-Government Knowledgebase-Mauritius (2023),

https://publicadministration.un.org/egovkb/en-us/Data/Country-Information/id/109-Mauritius 3703 Data Protection Office, Conference on Protecting Personal Data across All Economic Sectors (Jan. 30, 2023),

https://dataprotection.govmu.org/SitePages/SliderReadMore.aspx?IDS=54

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Data Protection

Mauritius is among the first African countries that enacted a new law, the Data Protection Act 2017 (DPA),³⁷⁰⁴ in line with the European General Data Protection Regulation (GDPR)³⁷⁰⁵ and repealing the previous Data Protection Act.³⁷⁰⁶

The DPA aims to enhance data subjects' control over their personal data and individual autonomy.³⁷⁰⁷ Unlike the GDPR, the DPA does not have any extraterritorial effect. The DPA covers "the processing of personal data, wholly or partly by automated means." ³⁷⁰⁸ Section 21 of the DPA³⁷⁰⁹ enshrines provisions regarding the lawful, fair, and transparent processing of data, the right to erasure and rectification, and the observance of the rights of data subjects. Section 34 provides for the right to privacy within the "principles of lawfulness, necessity, and proportionality in a democratic society." The DPA requires a Data Protection Impact Assessment ex-ante to assess if the processing has the potential to result in "high risk to the rights and freedoms of data subjects by virtue of their nature, scope, context, and purpose." The Assessment shall include:

- 1. Purposes and the legitimate interest of the processing
- 2. Necessity and proportionality
- 3. Risks to the rights and freedoms of data subjects
- 4. Measures to address risks; safeguards

³⁷⁰⁵ Office of the United Nations High Commissioner for Human Rights, *Mauritius Right to Privacy in the Digital Age CFI-RTP*, p. 2 (Sept. 6, 2022),

 $\underline{https://www.ohchr.org/sites/default/files/documents/issues/digitalage/reportprivindigage 2022/submissions/2022-09-06/CFI-RTP-Mauritius.docx$

https://dataprotection.govmu.org/Pages/The%20Law/Data-Protection-Act-2017.aspx

³⁷⁰⁷ Office of the United Nations High Commissioner for Human Rights, *Mauritius Right to Privacy in the Digital Age CFI-RTP* (Sept. 6, 2022),

 $\underline{\text{https://www.ohchr.org/sites/default/files/documents/issues/digitalage/reportprivindigage2022/sub} \\ \underline{\text{missions/2022-09-06/CFI-RTP-Mauritius.docx}}$

 $\underline{https://dataprotection.govmu.org/Documents/DPA_2017_updated.pdf?csf=1\&e=0rlrff$

³⁷⁰⁹ Office of the United Nations High Commissioner for Human Rights, *Mauritius Right to Privacy in the Digital Age CFI-RTP*, question 4 (Sept. 6, 2022),

 $\frac{https://www.ohchr.org/sites/default/files/documents/issues/digitalage/reportprivindigage 2022/sub_missions/2022-09-06/CFI-RTP-Mauritius.docx_missions/$

³⁷⁰⁴ Parliament of Mauritius, *The Data Protection Act 2017* (Dec. 22, 2017), https://rm.coe.int/dpa-2017-maurice/168077c5b8

³⁷⁰⁶ Data Protection Office, *Data Protection Act* 2017 (Dec. 22, 2017),

³⁷⁰⁸ Data Protection Office, *Data Protection Act 2017*, p. 9 (Dec. 22, 2017),

³⁷¹⁰ Ibid, p. 4.

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The DPA has been criticized for providing no limitations regarding the use of new technologies, including AI,³⁷¹¹ thus raising privacy and ethical concerns if no impact assessment is conducted.³⁷¹²

The Data Protection Office (DPO)³⁷¹³ is the supervisory authority responsible for protecting the privacy rights of individuals since 2009. The DPO offers e-services ranging from Data Protection Impact Assessments, compliance audits, certifications, transfer of personal data abroad, and notifications of a personal data breach. One of the functions of the Data Protection Commissioner, as per Article 5 of the DPA, is to examine any proposal for automated decisionmaking that may result in adverse effects on the privacy of individuals.³⁷¹⁴

Mauritius' Data Protection Commissioner since 2007 is Ms. Drudeisha Madhub. Ms. Madhub contributed to the reform of Mauritius's data protection legislation and in the Southern Mediterranean region, including with regard to the negotiations with the EU to achieve adequacy. 3715 Despite the DPO's action at national and international level, the DPO has not endorsed the Global Privacy Assembly's 2018 Declaration on Ethics and Data Protection in Artificial Intelligence, ³⁷¹⁶ 2020 Resolution on Accountability in the Development and Use of Artificial Intelligence,³⁷¹⁷ and 2022 Declaration on Facial Recognition Technology.³⁷¹⁸

https://dataprotection.govmu.org/Pages/About%20Us/About-the-Office.aspx

https://dataprotection.govmu.org/Documents/DPA 2017 updated.pdf?csf=1&e=0rlrff

³⁷¹¹ The Office of the High Commissioner for Human Right, *States, Mauritius* (2023), https://www.ohchr.org/Documents/Issues/DigitalAge/Submissions/States/Mauritius-1.docx ³⁷¹² Mauritius Institute of Directors, *Position Paper 8, Guidelines for the Audit Committee on* Data Protection (2020), https://assets.kpmg/content/dam/kpmg/mu/pdf/2020/mu-ACF-Position-Paper-8.pdf

³⁷¹³ Data Protection Office, About the Office,

³⁷¹⁴ Data Protection Office, *Data Protection Act* 2017 (Dec. 22, 2017),

³⁷¹⁵ Data Protection Office, Data Protection Commissioner,

https://dataprotection.govmu.org/Pages/Home%20-%20Pages/Upcoming%20Events/The-Data-Protection-Commissioner.aspx

³⁷¹⁶ International Conference of Data Protection & Privacy Commissioners, *Declaration on* Ethics and Data Protection in Artificial Intelligence (Oct. 23, 2018),

https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

³⁷¹⁷ Global Privacy Assembly (GPA), Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence (Oct. 2020), https://globalprivacyassembly.org/wpcontent/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN.pdf

³⁷¹⁸ Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate *Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principlesand-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

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The DPO has issued several Guidelines regarding the DPA,³⁷¹⁹ including AI solutions in the context of the COVID-19 pandemic³⁷²⁰ and a Code of Practice³⁷²¹ to ensure that the Mauritius Police Force complies with the DPA when it operates the Safe City surveillance systems. In a report by the UN Rights Committee of 2021, Mauritius was found in violation of citizens' privacy rights due to the lack of assurance of protection of the biometric data stored in the National Identity Card.³⁷²²

In 2018, Mauritius ratified³⁷²³ the African Union Convention on Cyber Security and Personal Data Protection (Malabo Convention).³⁷²⁴ The collaboration with European Union led the Ministry of Information Technology, Communication, and Innovation (MITCI) to initiate the Cyber Resilience for Development Project (Cyber4D) project in 2018.³⁷²⁵ In April of that year, the country signed the Commonwealth Cyber Declaration on the occasion of the Commonwealth Heads of Government Meeting (CHOGM).³⁷²⁶ The parties to the Declaration acknowledged the importance of agreeing on common standards, strengthening data protection and security, and affirmed that "the same rights that citizens have offline must be also protected online."

 $\underline{\text{https://dataprotection.govmu.org/Pages/Downloads/Guidelines-Data-Protection-Act-2017.aspx}_{3720} \ Ibid$

 $\frac{https://dataprotection.govmu.org/Documents/Code\%20of\%20Practice\%20for\%20the\%20operation\%20of\%20the\%20Safe\%20City\%20System\%28s\%29\%20by\%20MPF.PDF$

releases/2021/07/mauritius-storing-biometric-data-identity-cards-violates-privacy-un-human?LangID=E&NewsID=27329

<u>AFRICAN UNION CONVENTION ON CYBER SECURITY AND PERSONAL DATA P</u> ROTECTION.pdf

³⁷²⁴ African Union, *African Union Convention on Cybersecurity (Malabo Convention)* (Jun. 27, 2014), https://au.int/en/treaties/african-union-convention-cyber-security-and-personal-data-protection

 $\frac{https://mitci.govmu.org/Documents/Speeches/2022/Hon.\%20D\%20Balgobin's\%20Speech\%20-\%20African\%20Cyber\%20Resilience\%20Conference\%20-\%2025.04.22.pdf}$

³⁷¹⁹ Data Protection Office, Guidelines Protection Act 2017,

³⁷²¹ Government Portal of Mauritius, *Code of Practice for the Operations of Safe City Systems by MPF* (2020).

³⁷²² UN Human Rights, Office of the High Commissioner *Mauritius: Storing Biometric Data on Identity Cards Violates Privacy* (2021), https://www.ohchr.org/en/press-

African Union, List of Countries which Have Signed, Ratified/Acceded to the African Union Convention on Cyber Security and Personal Data Protection (Mar. 25, 2022), https://au.int/sites/default/files/treaties/29560-sl-

³⁷²⁵ Ministry of Information Technology, Communication and Innovation (MITCI), *Speech of Hon. Deepak Balgobin*, African Cyber Resilience Conference by the Cyber Resilience for Development Project (EU) (Apr. 25, 2022),

The Commonwealth, *Commonwealth Cyber Declaration 2018* (2018), https://thecommonwealth.org/commonwealth-cyber-declaration-2018

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In 2021, the MITCI submitted to Parliament and achieved the enactment of the new Cybersecurity and Cybercrime legislation,³⁷²⁷ in alignment with the Council of Europe tenets and other international conventions. Mauritius is a *priority country* in the Council of Europe Global Action on Cybercrime Extended Project (GLACY+), which seeks to strengthen States' capabilities in the formulation of cybercrime legislation.³⁷²⁸ However, the cybercrime legislation does not specifically address personal data protection or algorithm transparency as fundamental rights.

In 2021, the Government proposed to amend the Information and Communication Technologies (ICT) Act seeking to regulate the misuse and abuse of social media. The Information and Communication Technologies Authority launched a public consultation,³⁷²⁹ which generated concerns among free expression advocates locally and internationally.³⁷³⁰ While the proposed amendment largely targeted communications that are protected under Article 12 of Mauritius's Constitution, such an amendment would have allowed the government to set proxy servers with the capability to decrypt social media posts. Such a capability would interfere with the provisions of the DPA that afford data privacy and protection. Ultimately, the government retracted the proposed amendment.

Mauritius signed a Joint Declaration³⁷³¹ on privacy and the protection of personal data with the European Union, Australia, Comoros, India, Japan, New Zealand, Singapore, South Korea, and Sri Lanka, with the aim to promote core safeguards relating to automated decision-making such as transparency and the possibility to challenge the outcome of an automated decision.

After an eight-day visit to the country in December 2023, the UN Special Rapporteur on the right to privacy stated, "Overall, privacy is taken seriously in Mauritius and the Government has prioritized developing a comprehensive legal

 $\frac{https://ncb.govmu.org/ncb/legislations/THE\%20CYBERSECURITY\%20AND\%20CYBERCRI}{ME\%20ACT\%202021.pdf}$

³⁷²⁷ Government Gazette of Mauritius, *No. 173: The Cybersecurity and Cybercrime Act 2021* (Nov. 24, 2021),

³⁷²⁸ Council of Europe, *Global Action on Cybercrime Extended (GLACY+)* (2023), https://www.coe.int/en/web/cybercrime/glacyplus

³⁷²⁹ Information and Communication Technologies Authority, *Social Media Consultation* (2021), https://www.icta.mu/comm-social-media-consult/

³⁷³⁰ Electronic Frontier Foundation, *Proposed New Internet Law in Mauritius Raises Serious Human Rights Concerns* (Apr. 2021), https://www.eff.org/deeplinks/2021/04/proposed-new-internet-law-mauritius-raises-serious-human-rights-concerns

³⁷³¹ European Union, *Joint Declaration on Privacy and Protection of Personal Data* (Feb. 23, 2022), https://www.eeas.europa.eu/eeas/joint-declaration-privacy-and-protection-personal-data_en#:~:text=*This%20Joint%20Declaration%20was%20issued,by%20the%20Philippines%2C%20Thailand%20and

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framework. However, the challenge, as is the case for all States, is to ensure the implementation of the laws."3732

Algorithmic Transparency

On September 4, 2020, Mauritius became the first African country to ratify the Convention 108+, which sets a right to algorithmic transparency.³⁷³³ Section 38 of the DPA addresses the rights of an individual not to be subject to automated decision making, including profiling, that results in legal effects for the subject. This section establishes that automated processing for evaluation "shall not be based on special categories of personal data" and must include safeguards for the "rights, freedoms, and legitimate interests" of the subject.³⁷³⁴

Facial Recognition and Smart Cities

Mauritius' National AI Strategy states that AI is essential to help improve public safety, which is also echoed in Mauritius' Vision Strategic Plan 2030³⁷³⁵ and the Digital Government Transformation Strategy.³⁷³⁶ Already underway, the Safe City Project is set to include the installation of a Safe City infrastructure comprised of a total of 4000 surveillance cameras (Intelligent Video Surveillance –IVS) with built-in facial recognition capabilities once it is completed.³⁷³⁷ Huawei Technologies Co, Ltd, the Chinese Information Communication Technology giant with an almost two-decades-old presence in Mauritius in partnership with Mauritius Telecom, provided the AI-powered technology,³⁷³⁸ which has the capability of generating alarms when it detects suspicious personnel.³⁷³⁹ The Carnegie Endowment for Peace study on AI surveillance reported this exclusive

 $\underline{\text{https://www.ohchr.org/en/press-releases/2023/12/un-expert-says-mauritius-leads-privacy-region-challenges-remain}$

https://dataprotection.govmu.org/Documents/DPA_2017_updated.pdf?csf=1&e=0rlrff

https://govmu.org/EN/communique/Pages/Vision-2030.aspx

³⁷³⁷ L.E. Pep, Safe City Project: Apprehensions Persist!, Mauritius Times (Aug. 26, 2019),

https://www.mauritiustimes.com/mt/safe-city-project-apprehensions-persist/3738 Huawei, Safe Mauritius, *The Inspiration for Heaven* (Oct. 2018),

 $\underline{\text{https://www.huawei.com/uk/corporate-information/talk-about-ict/stories/safe-mauritius-the-inspiration-for-}$

heaven#:~:text=Huawei%20and%20its%20partners%20believe,safety%2C%20and%20maintain %20social%20stability

³⁷³² United Nations Human Rights Office of the High Commissioner, *UN Expert Says Mauritius Leads on Privacy in the Region, but Challenges Remain* (Dec. 2023),

³⁷³³ Council of Europe, *Convention 108+: Signature and Ratification by Mauritius* (Sept. 20, 2020), https://www.coe.int/en/web/data-protection/-/convention-108-signature-and-ratification-by-mauritius

³⁷³⁴ Data Protection Office, *Data Protection Act 2017* (Dec. 22, 2017),

³⁷³⁵ Republic of Mauritius, *The Digital Government 2030* (Dec. 17, 2018),

³⁷³⁶ Ibid

³⁷³⁹ Ibid

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surveillance contract for smart policing with Huawei to be the result of a commitment of Mauritius to access long-term financing from China. ³⁷⁴⁰

In 2020, members of the Parliament raised concerns about the effectiveness of data protection safeguards because the Prime Minister exempted the Safe City Project from the DPA, under Section 44 of the DPA, evoking national security grounds. As a result, the Government released a Code of Practice³⁷⁴¹ for the operation of the Safe City Systems by the Mauritius Police Forces in accordance with the provisions of the DPA 2017. Mauritius' Prime Minister stated that no biometric data has been collected because the AI technology is not yet operational and reiterated that the Safe City project is aligned with Section 44 of the DPA 2017.³⁷⁴²

The Safe City pilot falls under the jurisdiction of the Mauritius Police Force, under the Prime Minister's Office, but the responsibilities for the data of this project were opaque from the onset.³⁷⁴³ The Hoover Institution warned about the risks for "political control, manipulation, and oppression" resulting from surveillance projects, and calls for checks and balances by the Mauritian Parliament, National Audit Office, and media to ensure that the public interest in projects of this magnitude is a priority.

In May 2023, the German Council on Foreign Relations published a study demonstrating that these concerns still exist in Mauritius, as part of Chinese-planned coastal smart cities, located close to submarine cable landing stations and vital naval channels.³⁷⁴⁴

Biometrics

Upon reaching the age of 18, all Mauritius citizens must apply for an identity card which they must carry on them.³⁷⁴⁵ Mauritius launched its first

³⁷⁴⁴ Valentin Weber, *China's Smart Cities and the Future of Geopolitics*, German Council on Foreign Relations (May 2023), https://dgap.org/en/research/publications/chinas-smart-cities-and-future-geopolitics

³⁷⁴⁰ Carnegie Endowment for International Peace, *The Global Expansion of AI Surveillance* (Sept. 2019), https://carnegieendowment.org/files/WP-Feldstein-AISurveillance_final1.pdf
³⁷⁴¹ Government Portal of Mauritius, *Code of Practice of Safe City Systems by the MPF* (2020), https://dataprotection.govmu.org/Documents/Code%20of%20Practice%20for%20the%20operation%20of%20the%20Safe%20City%20System%28s%29%20by%20MPF.PDF

³⁷⁴² Mauritius News, *Surveillance Cameras: Facial Recognition Not Yet Operational* (Dec. 2021), https://mauritiushindinews.com/ion-news/surveillance-cameras-facial-recognition-not-yet-operational/

³⁷⁴³ Hoover Institution, *The Trappings of the Mauritius Safe City Project* (2022), https://www.hoover.org/sites/default/files/research/docs/kasenally_webreadypdf-compressed.pdf

³⁷⁴⁵ Government Portal of Mauritius, *Mauritius National ID Card* (2019), https://mnis.govmu.org/Pages/Index.aspx#:~:text=The%20Mauritius%20National%20ID%20Card/1985%20National%20Identity%20card%20Actd

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identity card scheme under the National Identity Card Act of 1985.³⁷⁴⁶ A new smart biometric ID card scheme, which mandates the Government to store data including fingerprints and calls for stiffer penalties against identity fraud³⁷⁴⁷ to deter multiple ID card applications using fake information, initiated under the Mauritius National Identity Card Unit in 2019.

The new 2013 National Identity Card scheme led to a constitutional challenge, *Madhewoo v The State of Mauritius, and another*,³⁷⁴⁸ which reached the Supreme Court of Mauritius as citizens of Mauritius feared misuse of their personal data for Government mass surveillance. The Supreme Court held that although the smart ID card scheme interfered with the plaintiff's right to privacy under Section 9(1) of the Constitution, the application of the 2013 Act was permissible under Section 9(2) because the right to privacy is not absolute and interference with that right is permissible in the interest of public order. However, the Court held that the storage of the data was not adequately secured because of the lack of safeguards as provided under the DPA. In response, the Mauritius Government issued the National Identity Card (Amendment, Civil Identity Register) Regulations 2015,³⁷⁴⁹ which erases the biometric data once the ID card has been issued.

In 2016, the Judicial Committee of the Privy Council confirmed the 2015 judgment of the Supreme Court of Mauritius.³⁷⁵⁰ Subsequently, the plaintiff filed a UN human rights complaint. On July 21, 2021, the UN Human Rights Committee shared the views of the Committee according to which the mandatory storing of biometric data interfered with the plaintiff's right to privacy since it relates to data storage and retention contrary to Article 17 of the International Covenant on Civil and Political Rights³⁷⁵¹ to which Mauritius is a party. The Committee found that the Government failed to set appropriate measures to protect the stored data against the risk of arbitrariness and abuse and must take steps to

https://mauritiuslii.org/akn/mu/act/1985/60/eng@2017-06-30

https://www.jcpc.uk/cases/jcpc-2016-0006

https://govmu.org/EN/communique/Pages/default.aspx

³⁷⁴⁶ Mauritius LII, National Identity Card Act, Act 60 of 1985 (Apr. 11, 1986),

³⁷⁴⁷ Government Portal of Mauritius, *Mauritius National Identity Card Unit* (2019), https://mnis.govmu.org/Pages/Index.aspx

³⁷⁴⁸ Judicial Committee of the Privy Council Decisions, *JCPC/2016/0006*, *Constitutions: Madhewoo (Appellant) v The State of Mauritius and another* (Oct. 31, 2016),

³⁷⁴⁹ Government Portal of Mauritius, *Communiques* (2020),

Judicial Committee of the Privy Council Decisions, *JCPC/2016/0006*, *Constitutions: Madhewoo v The State of Mauritius and another* (Oct. 31, 2016), https://www.jcpc.uk/cases/jcpc-2016-0006

³⁷⁵¹ UN Human Rights, Office of the High Commissioner *Mauritius: Storing Biometric Data on Identity Cards Violates Privacy* (Jul. 22, 2021), https://www.ohchr.org/en/press-releases/2021/07/mauritius-storing-biometric-data-identity-cards-violates-privacy-un-human?LangID=E&NewsID=27329

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avoid similar violations. Mauritius was given 180 days to report back to the Committee with the actions taken to give effect to the Committee's views and to publish them broadly in the official language of Mauritius. To date, there are no official reports about any action planned by Mauritius to address the UN report.

A 2021 OHCHR report also pointed to the use of AI for profiling and automated decision-making by Intelligent agencies in Mauritius despite the regulations of Section 9 of the Constitution. The report noted deployment of AI across four areas: (1) public safety video and image analysis, including the use of CCTVE audio recording; (2) DNA Analysis powered by AI; (3) Forensic application of Facial Identification Techniques (FITS) and (4) Crime forecasting through the Intelligent Video Surveillance (IVS).³⁷⁵²

Environmental Impact of AI

No available documents from Mauritius indicated a position or policies on the environmental impact of AI systems.

Lethal Autonomous Weapons

Mauritius ratified the Convention on Certain Conventional Weapons (CCW) in 1993 and has participated in some CCW meetings on autonomous weapons systems. As a member of the Non-Aligned (NAM) and the African Union, Mauritius supports the negotiation of a legally binding instrument on autonomous weapons systems to ensure that the weapons respect human rights and remain accountable.³⁷⁵³ The African Group in 2021 stressed the "ethical, legal, moral, and technical questions" raised by the use of autonomous weapons systems and urged for concrete policy recommendations to be adopted including prohibitions and regulations.³⁷⁵⁴

Human Rights

The Freedom House 2024 *Freedom in the World* report ranks Mauritius as a 'free' country in terms of protection of human rights, with a score of 85/100.³⁷⁵⁵ The country has a strong ranking for the protection of political rights and civil liberties. However, International IDEA's latest Global State of Democracy 2023

https://www.ohchr.org/Documents/Issues/DigitalAge/Submissions/States/Mauritius-1.docx

https://freedomhouse.org/country/mauritius/freedom-world/2024

³⁷⁵² OHCHR, Digital Age Submissions: Mauritius 1 (2021),

³⁷⁵³ United Nations, Office of Disarmament Affairs, Convention on Prohibition or Restriction on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects (2021), https://documents.unoda.org/wp-content/uploads/2020/07/CCW GGE1 2020 WP 7-ADVANCE.pdf.

³⁷⁵⁴ CCW Group of Governmental Experts meeting on LAWS, *Statement by the African Group* (Dec 3, 2021), http://149.202.215.129:8080/s2t/UNOG/LAWS3-03-12-2021-AMmp3 en.html ³⁷⁵⁵ Freedom House, *Freedom in the World 2024: Mauritius* (2024),

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report indicates that Mauritius is part of the countries in Africa that have experienced the greatest democratic recession over the last five years.³⁷⁵⁶

Mauritius has a comprehensive framework on human rights, as a member of the United Nations and a signatory of the Universal Declaration of Human Rights. Mauritius has also ratified the International Covenant on Civil and Political Rights (ICCPR), the International Covenant on Economic and Social Cultural Rights (ICESR), and the Convention on Cybercrime (Budapest Convention). Mauritius enacted the Protection of Human Rights Act 1998 that creates a national framework for the protection of human rights. The Act establishes the National Human Rights Commission whose mandate is to protect human rights and investigate complaints regarding human rights violations.

In 2018, the UN Human Rights Council, Universal Periodic Review of Mauritius, highlighted the country's efforts to develop human rights indicators, which were integrated systematically into national implementation and monitoring plans.³⁷⁵⁹ Mauritius issues periodic reports on the implementation of the African Charter on Human and People's Rights, the latest in March 2016 for the period 2009–2015.³⁷⁶⁰

OECD / G20 AI Principles

Mauritius is not a member of the OECD or the G20 and has not endorsed the OECD AI Principles³⁷⁶¹ or the G20 AI Guidelines.³⁷⁶² The OECD AI Observatory reports the strides of the government of Mauritius in the field of AI policy³⁷⁶³ with the release of the AI Strategy and the establishment of an AI Council. The Mauritius AI strategy addresses six OECD AI principles: (1)

 $\underline{https://www.idea.int/sites/default/files/2024-02/the-global-state-of-democracy-2023-the-new-\underline{checks-and-balances.pdf}}$

 $\frac{https://www.ohchr.org/sites/default/files/documents/issues/digitalage/reportprivindigage 2022/sub_missions/2022-09-06/CFI-RTP-Mauritius.docx_missions/$

https://www.ohchr.org/en/countries-and-territories/africa-region/un-human-rights-southern-africa 3760 Republic of Mauritius- Prime Minister's Office, Sixth to Eighth Combined Periodic Report of the Republic of Mauritius on the Implementation of the African Charter on Human and Peoples' Rights, May 2009–Dec 2015 (Mar. 2016),

https://www.achpr.org/public/Document/file/English/staterep6 mauritius 2009 2015 eng.pdf ³⁷⁶¹ OECD, *Recommendations of the Council on Artificial Intelligence* (Jun. 2019), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449

³⁷⁶² OECD, *G20 AI Principles* (Jun. 2021), https://wp.oecd.ai/app/uploads/2021/06/G20-AI-Principles.pdf

³⁷⁵⁶ International IDEA, Global State of Democracy 2023, p. 19 (2023),

³⁷⁵⁷ OHCHR Office of the High Commissioner for Human Rights, *Mauritius, CFI-RTP* (Sept. 2022),

³⁷⁵⁸ International Labour Organization, *The Protection of Human Rights Act 1998* (1998), https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/69100/67757/F21666391/MUS69100.pdf 3759 United Nations, *UN Human Rights in Southern Africa* (2019),

³⁷⁶³ OECD, AI Policies in Mauritius (2023), https://oecd.ai/en/dashboards/countries/Mauritius

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inclusive growth, sustainable development, and well-being; (2) Human-centered values and fairness, (3) Robustness, security, and safety, (4) Fostering a digital ecosystem for AI, (5) Providing an enabling policy environment for AI, and (6) Building human capacity and preparing for labor market transitions.³⁷⁶⁴ However, fairness is only glancingly mentioned in the national AI strategy without a clear indication of how the government of Mauritius defines and intends to promote fairness in relation to AI development and deployment.³⁷⁶⁵

At the International Conference on Digital Economy & Digital Banking held in Mauritius in October 2022, Mauritius' Prime Minister, Pravind Kumar Jugnauth, reiterated the government's engagement to continue to foster collaboration with international institutions, especially with the OECD, with the aim to promote Mauritius as a Development Model in Africa. The Prime Minister shared Mauritius's determination to become a member of the OECD. Mauritius was one of the guest countries invited to attend the G20 summit in Delhi, India, in September 2023. 3767

Council of Europe Al Treaty

Mauritius has not endorsed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law, the first international treaty on AI and human rights.³⁷⁶⁸

UNESCO Recommendation on AI Ethics

Mauritius is a member state of UNESCO since 1968³⁷⁶⁹ and one of the 193 countries which endorsed the UNESCO Recommendation on the Ethics of AI (UNESCO Recommendations) on November 21, 2021.³⁷⁷⁰

³⁷⁶⁵ Government of Mauritius, *Mauritius Artificial Intelligence Strategy*, p. 17 (Nov. 2018), https://ncb.govmu.org/ncb/strategicplans/MauritiusAIStrategy2018.pdf

<u>development#:~:text=The%20two%2Dday%20conference%20themed,Le%20Meridien%2C%20</u> Pointe%20aux%20Piments

³⁷⁶⁴ OECD, *Mauritius AI Strategy* (2018), https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faipo.oecd.org%2F2021-data-policyInitiatives-27393

³⁷⁶⁶ Economic Development Board, *Mauritius – OECD: Unleashing New Pathways for Development* (2022), https://www.edbmauritius.org/newsroom/mauritius-oecd-unleashing-new-pathways-

³⁷⁶⁷ Policy Circle, *G20 Presidency: India Must Focus on Climate Action, Malnutrition* (2022), https://www.policycircle.org/diplomacy/g20-india-climate-change/

³⁷⁶⁸ Council of Europe, *Framework Convention on Artificial Intelligence, Signatories* (Jan. 16, 2025), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

³⁷⁶⁹ UNESCO, *Countries: Mauritius* (2025), https://en.unesco.org/countries/mauritius (Nov. 2021), https://unesdoc.unesco.org/ark:/48223/pf0000380455

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In 2022, Mauritius attended the UNESCO-Southern Africa Sub-Regional Forum on AI (SARFAI 2022) held in Windhoek, Namibia in September 2022. Discussions concerned the Ethical Impact Assessment and Readiness Assessment Methodologies in the framework of the implementation of the UNESCO Recommendation. Mauritius was not a participant in the session. The co-hosts of SARFAI 2022 (Botswana, Malawi, Mozambique, Namibia, South Africa, Zambia and Zimbabwe) approved the Windhoek Statement on Artificial Intelligence in Southern Africa, 3771 which calls for the establishment of a Southern African coordination mechanism for the implementation of the UNESCO Recommendation on the Ethics of AI.

Member states of the South African Development Community (SADC), including Mauritius, are set to submit the Declaration to the 2023 Joint Meeting of SADC Ministers responsible for Education and Training and Science, Technology, and Innovation, for discussion and adoption. The most recent UNESCO AI Needs Assessment Survey did not include any report or statistic about Mauritius.³⁷⁷²

Mauritius is currently completing the UNESCO Readiness Assessment Methodology (RAM), a tool to support the effective implementation of the Recommendation.³⁷⁷³ The RAM helps countries and UNESCO identify and address any institutional and regulatory gaps.³⁷⁷⁴

With patronage from UNESCO, Mauritius hosted its inaugural AI Summit in 2024, focused on "ethical AI driving socio-economic progress, global collaboration, and innovation." Organized by the Ministry of Information Technology, Communication, and Innovation and the Mauritius Emerging Technology Council (METC), the event marks a preliminary step towards implementing the UNESCO Recommendation on Ethics in Artificial Intelligence, particularly principles 9 (Awareness and Literacy) and, given the international spotlight, 4 (Multi-stakeholder and Adaptive Governance & Collaboration). The Summit brought together stakeholders from across Africa and around the world and provided a spotlight for the UNESCO Recommendation on the Ethics of Artificial Intelligence, presented by Prof. Emma Ruttkamp-Bloem of the

³⁷⁷² UNESCO, *Artificial intelligence Needs Assessment Survey in Africa* (2021), https://unesdoc.unesco.org/ark:/48223/pf0000375322

³⁷⁷¹ UNESCO, *Windhoek Statement on Artificial Intelligence in Africa* (Sept. 2022), https://unesdoc.unesco.org/ark:/48223/pf0000383197/PDF/383197eng.pdf.multi

³⁷⁷³ UNESCO Global AI Ethics and Governance Observatory, *Global Hub, Country Profiles* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

³⁷⁷⁴ UNESCO Global AI Ethics and Governance Observatory, *Readiness Assessment Methodology* (2023), https://www.unesco.org/ethics-ai/en/ram

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UNESCO World Commission on the Ethics of Scientific Knowledge and Technology.³⁷⁷⁵

Fvaluation

Undoubtedly, Mauritius is one of the few African countries making significant strides toward the Fourth Industrial Revolution. Mauritius has endorsed the UNESCO Recommendation on the Ethics of AI, developed a national AI strategy, upgraded its data protection legal regime, and ratified the Council of Europe's Convention 108+. Yet, concerns remain regarding widespread AI-powered surveillance practice.

Mexico

In 2024, Mexico continued participation in the UNESCO-affiliated regional summit on ethical AI and joined the Montevideo Declaration. The country also completed the UNESCO RAM with a report presented to the Senate. Domestically, Mexico lacks a formal AI strategy. However, the multi-stakeholder group National AI Alliance introduced a framework for AI regulation and development, which signals a step toward a comprehensive AI strategy under the government elected in late 2024.

National AI Strategy

In 2018, Mexico became the first Latin American country to announce a national AI strategy. The Office of the Mexican President under the Peña Nieto administration together with the United Kingdom's Embassy in Mexico City commissioned a readiness assessment and policy report.³⁷⁷⁶

The report provides a preliminary outline of how Mexico should become a leader in AI. Mexico's manufacturing-centric economy, the report argues, faces grave risks amid growing automation and should take a clear, strategic position in developing AI. The report set out five thematic areas: governance, government, and public services; research and development; capacity, skills, and education; data infrastructure; and ethics and regulation.

Within the category of ethics and regulation, the report recommends that the Mexican government bring data assets inside the scope of Mexican competition law (COFECE) in recognition of the fact that data is a competitive

³⁷⁷⁵ UNESCO, *Mauritius Hosts Inaugural AI Summit* (May 13, 2024), https://www.unesco.org/en/articles/mauritius-hosts-inaugural-ai-summit

³⁷⁷⁶ British Embassy of Mexico City, Oxford Insights, C Minds, *Hacia una Estrategia de IA en México: Aprovechando la Revolución de la IA* (Jun. 2018), https://7da2ca8d-b80d-4593-a0ab-5272e2b9c6c5.filesusr.com/ugd/7be025 ba24a518a53a4275af4d7ff63b4cf594.pdf; Oxford Insights, *Towards an AI Strategy in Mexico: Harnessing the AI Revolution* (Jun. 2018), https://go.wizeline.com/rs/571-SRN-279/images/Towards-an-AI-strategy-in-Mexico.pdf

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asset. The report also calls for the creation of an AI Ethics Council which would "set guidelines and limits which reflect Mexican Values" and "award a quality mark for AI companies who abide by the standards." ³⁷⁷⁷

On this basis, in March 2018, the Office of the President under the former Peña Nieto administration launched Mexico's AI Strategy 2018. The Strategy sets out five key actions for the Mexican government: develop an inclusive governance framework; identify the needs of AI in industry; open the recommendations of the readiness assessment and policy report for public consultation; support Mexico's AI leadership in international forums; and promote continuity through changing administrations, by working with all interested stakeholders towards an official AI National Policy.³⁷⁷⁸

However, a 2022 report conducted by the OECD in collaboration with the Development Bank of Latin America reported: "Mexico's 2018 strategy, which was put into effect under a previous administration, is no longer publicized on official government websites. It is unclear whether the current administration considers the strategy to be still in effect."3779

During the López Obrador administration but following a recommendation of the 2018 AI readiness and policy report, a multi-stakeholder national coalition, IA2030.Mx, ³⁷⁸⁰ comprising institutions from the government, industry, civil society and academy, and coordinated by C Minds, issued the Mexican National AI Agenda (2018–2030).³⁷⁸¹ The "objective is to coordinate efforts, build a single voice around AI and promote continued action and support for the topic."³⁷⁸² The Agenda revolves around six thematic axes: 1. Data, Digital Infrastructure and Cybersecurity; 2. Ethics; 3. Research and Development; 4. Governance, Government and Public Services; 5. Skills, Capacities and Education; and 6. Mexicans Abroad.

Under the first axis and with regard to privacy, the Agenda identifies as a key issue: "A constant tension exists between privacy and access to data necessary

3777 Ibid

³⁷⁷⁸ CAF-Development Bank of Latin America, Mexico: The Story and Lessons behind Latin America's First AI Strategy, p. 5 (Jun. 2020),

https://scioteca.caf.com/bitstream/handle/123456789/1587/Mexico the story and lessons behin d Latin America's first AI strategy.pdf?sequence=1&isAllowed=y

³⁷⁷⁹ OECD/CAF, The Strategic and Responsible Use of Artificial Intelligence in the Public Sector of Latin America and the Caribbean, OECD Public Governance Reviews, p. 101 (Mar. 22, 2022), https://doi.org/10.1787/1f334543-en

³⁷⁸⁰ IA2030Mx, About Us (Acerca) (Accesssed Jan. 9, 2024), https://www.ia2030.mx

³⁷⁸¹ IA2030Mx, Mexican AI National Agenda (2020), https://www.ia2030.mx/agenda2020

³⁷⁸² CAF-Development Bank of Latin America, Mexico: The Story and Lessons behind Latin America's First AI Strategy, p. 7 (Jun. 2020),

https://scioteca.caf.com/bitstream/handle/123456789/1587/Mexico the story and lessons behin d Latin America's first AI strategy.pdf?sequence=1&isAllowed=y

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for the development and improvement of AI systems. If data is the raw material, how to ensure appropriate access? A vision for data governance which allows access to data in a safe, ethical, lawful and privacy-friendly way, as it is currently defined or to be reconsidered in light of recent events such as the SARS 2 COVID-19 pandemic or possible terrorist attacks, is necessary."³⁷⁸³

Concerning ethics, the Agenda states that "it is of the utmost importance for the development and adoption of AI technology in our country to be based on the protection of, and respect for human rights."³⁷⁸⁴ The Agenda explains that "one of the main merits in using human rights as a pivotal element in the development of AI is that human rights clearly establish the responsibility of the government in protecting human rights and providing mechanisms for the prevention of, and remedy against possible violations."³⁷⁸⁵

The Agenda identifies three rights which may be particularly at risk: freedom of expression, equality and non-discrimination, and privacy.³⁷⁸⁶ These rights are part of the case law of the Inter-American Court for Human Rights and also addressed by the Inter-American Commission for Human Rights. These rights are also well defined in various conventions at international level.³⁷⁸⁷

The Centro LATAM Digital and Latin American Initiative for Open Data (Iniciativa Latinoamericana por los Datos Abiertos, ILDA), with the financial support of the International Development Research Centre (IDRC) and the Inter-American Development Bank (IADB), published a report on Mexico's public policy on AI. The purpose of this report was to identify the main challenges and obstacles for the design of public policies on AI that includes a human rights-based approach and that may serve to support and resume Mexico's national AI strategy by the current government.

Key recommendations are (i) to create a national strategy on AI that is multi-stakeholder and multi-disciplinary that could contribute to the development of public policies and mechanism for measurement and assessment; (ii) put a strong emphasis on the protection of personal data related with the development of AI technologies; (iii) implement the OECD principles on AI; (iv) include efficient government coordination mechanisms to implement a national plan on AI that could identify the main actors and stakeholders of different areas; and (v) to work closely with the different commissions and groups of National Congress

³⁷⁸³ IA2030Mx, Mexican AI National Agenda, p. 23 (2020), https://www.ia2030.mx/agenda2020

³⁷⁸⁴ Ibid, p. 47

³⁷⁸⁵ Ibid, p. 48

³⁷⁸⁶ Ibid

³⁷⁸⁷ Ibid, p. 49

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to make them aware of the benefits and risks of AI that may support the drafting of flexible regulations on AI.³⁷⁸⁸

The Mexican government also published the General Principles for the Development and Use of Systems based on AI in the Federal Public Administration.³⁷⁸⁹ The key principles are: Monitor and evaluate the impacts of AI systems in order to ensure that they achieve the expected results; Promote transparency, by explaining to the users that interact with AI systems the decision process taken by such systems, the expected benefits as well as the potential risks derived from using such systems; Protect privacy, by incorporating mechanisms of control and consent for the use of personal data during the design of AI systems; Foster equality, by reducing risks of discriminatory biases derived from the utilized data; Due process, by allowing individuals to dispute decisions made by AI systems.

The National Artificial Intelligence Alliance (ANIA) established a framework to integrate AI as a driver of social, economic, and educational development in Mexico, promoting inclusion, scientific research, innovation, and responsible entrepreneurship. This framework is designed to guide public policy, regulation, and governance to protect human and environmental rights by managing AI-associated risks and ensuring ethical and transparent AI deployment. The initiative included:

- Conducting diagnostics and formulating regulatory and policy recommendations through multi-sectoral workgroups covering public policy, education, labor, cybersecurity, gender inclusion, and innovation.
- Promoting AI awareness and training.
- Documenting AI use cases within Mexico.
- Fostering international collaboration.

ANIA, launched in the Senate, united stakeholders from technology, academia, civil society, and government, working together under an "AI Framework for the Common Good." This collaborative model, developed with UNESCO, aimed to advance an ethical AI ecosystem for the benefit of all Mexicans.³⁷⁹⁰

Mexican Senator Ricardo Monreal introduced the Federal Law Regulating Artificial Intelligence, a bill aimed at creating a legal framework for AI in Mexico,

³⁷⁸⁹ Digital Government and Emerging Technologies, *Principles for the Administration of Artificial Intelligence* (Nov. 2018),

 $\frac{https://www.gob.mx/cms/uploads/attachment/file/415644/Consolidado_Comentarios_Consulta_I_A_1_pdf$

³⁷⁸⁸ Empatia, *Report on Mexican Public Policy* (Dec. 2021), https://www.empatia.la/blogpost-ia-en-mexico/

³⁷⁹⁰ Alianza Nacional de Inteligencia Artificial (ANIA), *Proposal for a National Agenda for Artificial Intelligence for Mexico 2024–2030* (2024),

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in February 2024.³⁷⁹¹ However, the bill never passed. The Senate has since undertaken a series of conversations with academic and industry experts to gain insights into how to regulate AI. The senators, led by the Commission of Analysis, Tracking, and Evaluation about the Application and Development of Artificial Intelligence, expect to develop a bill and vote on it by the end of 2025.³⁷⁹²

Public Participation

The Mexican AI National Agenda is the product of broad public participation. The IA2030Mx coalition stated that "the members of this movement have been working since the beginning of 2018 under a philosophy of coresponsibility of government, academia, industry and civil society, seeking that Mexico does not lag behind in the 4th Industrial Revolution, strategically takes advantage of the benefits of AI and mitigates the possible ethical and social risks."³⁷⁹³ "What started as the collaboration of 10 institutions grew to the participation of more than 110 on a national scale. One of the first actions of the coalition was launching a national consultation on AI" in which 1588 people across the different Mexican states participated.³⁷⁹⁴

Data Protection

The right to data protection³⁷⁹⁵ is enshrined in Article 16 paragraph 2 of the Mexican Constitution. Mexico has also ratified the 1981 Council of Europe (Convention 108) for the protection of individuals with regard to the processing of personal data but not yet the 2018 Protocol modernizing the Convention.³⁷⁹⁶

For the private sector, the 2010 Federal Law for the Protection of Personal Data Held by Private Parties and its respective Regulations constitute the main legislative framework regarding data protection. The National Institute for Transparency, Access to Information and Personal Data Protection (INAI) is the authority responsible for enforcing the law for the private sector.

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³⁷⁹¹ VeerOne, Key Points of Mexico's Proposed Artificial Intelligence Regulation Bill: A Comparative Analysis with EU and Chile Models (Aug. 1, 2024),

https://veerone.com/searches/key-points-mexicos-proposed-artificial-intelligence-qiimZmW ³⁷⁹² Rafael Ramírez, El Sol de México, *Senate Analyzes How to Regulate Artificial Intelligence* (Jan. 12, 2025), https://oem.com.mx/elsoldemexico/mexico/senado-analiza-como-regular-la-inteligencia-artificial-21076484

³⁷⁹³ IA2030Mx, *Artificial Intelligence in Mexico: A National Agenda* (Nov. 2020), https://www.ia2030.mx/

³⁷⁹⁴ IA2030Mx, *National Survey of Artificial Intelligence* (2019), https://36dc704c-0d61-4da0-87fa-917581cbce16.filesusr.com/ugd/7be025_9e91bfffeea647a0a663630ea716aa8f.pdf

³⁷⁹⁵ National Institute for Transparency, Access to Information and Personal Data Protection, *The Right to Personal Data Protection in Mexico: Guide* (Dec. 2020), https://home.inai.org.mx/wp-content/documentos/GuiasTitulares/guiapdpextranjeros_ing.pdf

³⁷⁹⁶ Council of Europe, *Chart of Signatures and Ratifications of Treaty 223* (Jan. 13, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=223

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For the public sector, the 2017 General Law for the Protection of Personal Data in the Possession of Obligated Subjects as well as the General Guidelines for the Protection of Personal Data regulates the processing of personal information in the possession of any Federal, State, or local authority across Mexico. The INAI is responsible for applying these rules at the federal level. Each of the 32 Mexican States has its own legal framework that regulates the collection and processing of personal data by the public sector. A State-level data protection authority oversees compliance with the law.

As pointed by the INAI, "a common basis for the private and the public sector are the principles and duties regarding the protection of personal data that are found in the regulations that apply to them, which assure data subjects that the processing of their information is carried out properly." Whether the processing of personal data occurs in the private or the public sector, data subjects benefit from the "ARCO rights," which refer to the access, ratification, cancelation, and opposition rights of data subjects with respect to their personal data. Data subjects have the right to oppose the processing of their data at any time by any mechanism, including automated decision-making and profiling. In the public sector, data subjects are also granted the right to data portability.

In May 2022, the INAI issued recommendations for the processing of personal data deriving from the use of AI.³⁷⁹⁸ Referring to the OECD, the INAI mentions that "there exists at least five values or principles for responsible AI governance:

- 1. AI should benefit to people and the planet by fostering inclusive growth, sustainable development and well-being.
- 2. AI systems should be designed in compliance with the rule of law, human rights, democratic values and diversity, and they should include adequate mechanisms—such as, for example, allowing human intervention when it is necessary—to guarantee a just and equitable society.

808

³⁷⁹⁷ National Institute for Transparency, Access to Information and Personal Data Protection, Recommendations for the Treatment of Personal Data Derived from the Use of Artificial Intelligence (May 2022), https://home.inai.org.mx/wp-

content/documentos/DocumentosSectorPublico/RecomendacionesPDP-IA.pdf; Cristos Velasco and Maria Solange Maqueo, *Privacy and Data Protection Law in Mexico*, Wolters Kluwer Law & Business (Nov. 2022), https://law-store.wolterskluwer.com/s/product/privacy-and-data-protection-law-in-

 $[\]frac{mexico/01t4R00000OknfVQAR?srsltid=AfmBOooxbz8DFOwPvBKXXIxWYE6hOmJe7LAe-A7Z1vGK3WzLN~0VB-tP}{A7Z1vGK3WzLN~0VB-tP}$

³⁷⁹⁸ National Institute for Transparency, Access to Information and Personal Data Protection, Recommendations for the Treatment of Personal Data Derived from the Use of Artificial Intelligence (May 2022), https://home.inai.org.mx/wp-

<u>content/documentos/DocumentosSectorPublico/RecomendacionesPDP-IA.pdf</u>; Data Guidance, *Mexico: INAI Recommendations on AI* (Sept. 2022),

https://www.dataguidance.com/opinion/mexico-inai-recommendations-ai

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- 3. Transparency and responsible public disclosure regarding AI systems should exist in order to ensure that people understand its results and can be challenged.
- 4. AI systems should function in a safe and sound manner during its entire lifecycle and potential risks should be continuously assessed and managed.
- 5. Organizations and individuals who develop, deploy or operate AI systems should be responsible for its correct functioning, based on the principles described above."³⁷⁹⁹

The INAI then sets "five basic principles which should be respected during the development and implementation of any AI technology. These principles guarantee that technological development has a positive impact on people's life, especially people who use these technologies." These are: inclusive growth, sustainable development, and well-being; human-centered values and fairness; transparency and explainability; robustness, security, and safety; and accountability.

The INAI is part of the Ibero-American Data Protection Network (RIPD),³⁸⁰¹ a group of experts on data protection and access to information, comprising 34 entities, including 14 federal and state authorities from Latin America and the Caribbean. In 2019, the RIPD adopted the Specific Guidelines for Complying with the Principles and Rights Governing Personal Data Protection in Artificial Intelligence Projects,³⁸⁰² based on the Standards for Personal Data Protection for the Ibero-American States approved in 2017.³⁸⁰³ The INAI relied on the RIPD AI Guidelines to formulate its own recommendations on top of the OECD AI Principles.

The INAI is a member of the Global Privacy Assembly (GPA) since 2010. Data protection institutes for the Federal District (Mexico City) and for the states of Mexico, Michoacan, Nuevo León, Quintana Roo, and Tamaulipas are also accredited members.³⁸⁰⁴

3800 Ibid

³⁷⁹⁹ National Institute for Transparency, Access to Information and Personal Data Protection, Recommendations for the Treatment of Personal Data Derived from the Use of Artificial Intelligence, p. 16 (May 2022), https://home.inai.org.mx/wp-content/documentos/DocumentosSectorPublico/RecomendacionesPDP-IA.pdf

³⁸⁰¹ Ibero-American Data Protection Network, *The Network: United Mexican States*, https://www.redipd.org/la-red/integrantes/paises/estados-unidos-mexicanos

³⁸⁰² Red Iberoamericana de Protección de Datos (RIPD), *Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects* (Jun. 21, 2019), https://www.redipd.org/documentos/guia-orientaciones-especificas-proteccion-datos-ia

³⁸⁰³ Red Iberoamericana de Protección de Datos (RIPD), *Standards for Personal Data Protection for Ibero-American States* (Jun. 20, 2017), https://www.redipd.org/documentos/estandares-iberoamericanos-2017

³⁸⁰⁴ Global Privacy Assembly, *List of Accredited Members* (2023), https://globalprivacyassembly.org/participation-in-the-assembly/list-of-accredited-members/

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The INAI co-sponsored the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence, 3805 2020 GPA Resolution on AI Accountability, 3806 and 2023 GPA Resolution on Generative AI. 3807 However, it did not endorse the 2022 GPA Resolution on Facial Recognition Technology. 3808

Algorithmic Transparency

Although transparency and explainability are not expressly mentioned in the data protection laws of Mexico, the INAI's 2022 Recommendations for the processing of personal data deriving from the use of AI mention transparency and explainability as one of the five basic AI principles that should be respected during the development and implementation of AI systems. The INAI explains that: "whoever uses AI systems should be transparent regarding the use of such systems and provide significant information in order for people to be aware that they are interacting with AI systems; to know what part AI systems play in the results obtained; to be granted the opportunity to contest the outcome if they have been negatively impacted by the AI system." 3810

Data Scraping

The INAI and 16 of its international data protection and privacy counterparts released a follow-up joint statement laying out expectations for industry related to data scraping and privacy.³⁸¹¹ The initial statement in August

³⁸⁰⁶ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), <a href="https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-the-

<u>Use-of-AI-EN-1.pdf</u>

3807 Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-

Generative-AI-Systems-101023.pdf

3808 Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate
Use of Personal Information in Facial Recognition Technology (Oct. 2022),
https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-

Technolog.pdf

3809 National Institute for Transparency, Access to Information and Personal Data Protection
(INAI), Recommendations for the Treatment of Personal Data Derived from the Use of Artificial Intelligence, p. 17 (May 2022), https://home.inai.org.mx/wp-

content/documentos/DocumentosSectorPublico/RecomendacionesPDP-IA.pdf
3810 Ibid p. 17

³⁸¹⁰ Ibid, p. 17

³⁸¹¹ ICO, Global Privacy Authorities Issue Follow-Up Joint Statement on Data Scraping after Industry Engagement (Oct. 28, 2024), https://ico.org.uk/about-the-ico/media-centre/news-and-blogs/2024/10/global-privacy-authorities-issue-follow-up-joint-statement-on-data-scraping-after-industry-engagement/

³⁸⁰⁵ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922_ICDPPC-40th_AI-Declaration_ADOPTED.pdf

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2023 established that "[social media companies] and other websites are responsible for protecting personal information from unlawful scraping."3812 The follow-up, which incorporates feedback from engagement with companies such as Alphabet (YouTube), X Corp (formerly Twitter), and Meta Platforms (Facebook, Instagram, WhatsApp), adds that organizations must "comply with privacy and data protection laws when using personal information, including from their own platforms, to develop AI large language models"; must regularly review and update privacy protection measures to keep pace with technological advances; and ensure that permissible data scraping, such as that for research, "is done lawfully and following strict contractual terms."3813

Data scraping generally involves the automated extraction of data from the web. Data protection authorities are seeing increasing incidents involving data scraping, particularly from social media companies and the operators of other websites that host publicly accessible data. Scraped personal information can be exploited for targeted cyberattacks, identity fraud, monitoring, profiling and surveillance purposes, unauthorized political or intelligence gathering purposes, unwanted direct marketing or spam.

Use of AI in Public Administration

As a member of the Latin American Centre for Development Administration (CLAD), Mexico approved the Ibero American Charter on Artificial Intelligence in Civil Service in November 2023.3814 The Charter aims to provide a roadmap and common framework for CLAD member states to learn about the challenges and opportunities involved in the implementation of AI in public administration and adapt their AI policy strategies and laws accordingly.

The guiding principles in the Charter include human autonomy; transparency, traceability and explainability; accountability, liability and auditability; security and technical robustness; reliability, accuracy, and reproducibility; confidence, proportionality, and prevention of damage; privacy and protection of personal data; data quality and safety; fairness, inclusiveness,

³⁸¹² Regulatory Supervision Information Commissioner's Office of the United Kingdom, Joint Statement on Data Scraping and the Protection of Privacy (Aug. 24, 2023), https://ico.org.uk/media/about-the-ico/documents/4026232/joint-statement-data-scraping-202308.pdf

³⁸¹³ ICO, Global Privacy Authorities Issue Follow-Up Joint Statement on Data Scraping after Industry Engagement (Oct. 28, 2024), https://ico.org.uk/about-the-ico/media-centre/news-andblogs/2024/10/global-privacy-authorities-issue-follow-up-joint-statement-on-data-scraping-afterindustry-engagement/

³⁸¹⁴ Latin American Centre for Development Administration (CLAD), *Ibero American Charter* on Artificial Intelligence in Civil Service (Nov. 2023), https://clad.org/wpcontent/uploads/2024/03/CIIA-EN-03-2024.pdf

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and non-discrimination; human-centering, public value, and social responsibility; and sustainability and environmental protection.

The Charter calls on member states to create policies and laws to require the assessment of the impact of AI systems on human rights and freedoms and the registration of algorithms to "anticipate risks, prevent undesirable effects and ensure its proper implementation."³⁸¹⁵ The Charter also proposes a risk classification mechanism that would require guardrails for middle-risk uses and prohibitions against high-risk applications. Prohibited uses include facial recognition systems; systems aimed at behavior and cognitive manipulation of specific individuals or vulnerable groups (children or the elderly); and social ranking systems based on certain personality traits, individual behaviors, sociodemographic features or economic status.

EdTech and Children Tracking

In November 2020, the Council of Europe Consultative Committee of the Convention for the Protection of individuals with regard to automatic processing of personal data (Convention 108), to which Mexico is party, issued Guidelines on Children's Data Protection in an Education Setting, also applicable to remote e-learning solutions and services.³⁸¹⁶ The Committee recalls that "The UN Convention Committee on the Rights of the Child set out in 2001, that [...] Education must be provided in a way that respects the inherent dignity of the child and enables the child to express his or her views freely."³⁸¹⁷

The Committee highlighted the need for children to have agency over how their data re used and called for better education for them around their digital footprint. The Committee set standards to minimize data collection, especially in the use of EdTech "when consent cannot be freely given because the choice is to use a product and receive remote instruction or refuse and receive none." The Committee recommended "A precautionary approach and a strengthened protection towards sensitive, special categories of data, including genetic and biometric data, and ethnic origin, or relating to sexual orientation, or offences, recognising children's additional vulnerability." In addition, they noted that "Profiling of children should be prohibited by law. In exceptional circumstances, States may lift this restriction when it is in the best interests of the child or if there

³⁸¹⁵ Ibid, p. 10

³⁸¹⁶ Council of Europe Consultative Committee of the Convention for the Protection of Individuals with Regard to Automatic Processing of Personal Data (Convention 108), *Guidelines on Children's Data Protection in an Education Setting* (Apr. 2021), https://rm.coe.int/t-pd-2019-6bisrev5-eng-guidelines-education-setting-plenary-clean-2790/1680a07f2b

³⁸¹⁷ Ibid, p. 3

³⁸¹⁸ Ibid, p. 5

³⁸¹⁹ Ibid, p. 8

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is an overriding public interest, on the condition that appropriate safeguards are provided for by law"3820

In May 2022, Human Rights Watch published a global investigative report on the education technology (EdTech) endorsed by 49 governments, including Mexico, for children's education during the pandemic. Based on technical and policy analysis of 163 EdTech products, Human Rights Watch found that governments' endorsements of the majority of these online learning platforms put at risk or directly violated children's rights.

EdTech products used in Mexico sent children's data to AdTech companies that specialize in behavioral advertising or whose algorithms determine what children see online. According to Human Rights Watch, in line with child data protection principles as well as corporations' human rights responsibilities outlined in the United Nations Guiding Principles on Business and Human Rights, EdTech and AdTech companies should not collect and process children's data for advertising. The report noted steps companies should take to protect children's rights, including working with governments to define clear retention and deletion rules for children's data collected during the pandemic. Furthermore, governments should develop, refine, and enforce modern child data protection laws and standards, and ensure that children who want to learn are not compelled to give up their other rights to do so.³⁸²¹

Use of AI for Criminal Purposes

The use of AI and the use of deepfakes for criminal-related purposes is on the rise and Mexico has not been exempted. In December 2023, the financial services regulator, the National Commission for the Protection and Defense of Users of Financial Services gave a warning about a deepfake video being widespread mainly through social media purporting to be Mr. Carlos Slim (Mexico's wealthiest man). The video shows a manipulated image of Mr. Carlos Slim taken from an earlier event that his company and foundation Telmex promotes among interns.³⁸²² The deepfake video informs about a new application requesting citizens to redirect to a hyperlink, download, fill out, and send a form to earn an attractive sum of money per day. The video was a well-elaborated scam and there is evidence that many people in Mexico were affected by this fraud.

³⁸²⁰ Ibid, p. 19

³⁸²¹ Human Rights Watch, How Dare They Peep into My Private Life (May 25, 2022), https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rightsviolations-governments

³⁸²² El Financiero, Carlos Slim Is Not Looking for Partners: The Face and Voice of the Businessman Was Faked with AI to Cheat Investors (Dec. 8, 2023), https://www.elfinanciero.com.mx/nacional/2023/12/08/carlos-slim-no-busca-socios-suplantanrostro-y-voz-del-empresario-con-ia-para-estafar-a-inversores/

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Environmental Impact of AI

Mexico's participation in the Latin American and Caribbean Regional Council and other international organizations signals a commitment to sustainable development in the use of AI technologies. However, Mexico has not developed specific policies around the environmental impact of AI or other digital technologies.

Lethal Autonomous Weapons

In October 2022, Mexico endorsed, together with 69 other countries, a joint statement on autonomous weapons systems at the UN General Assembly meeting. In this joint statement, States urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law (IHL), including through maintaining human responsibility and accountability in the use of force." 3823

In February 2023, Mexico endorsed, along with more than 30 other Latin American and Caribbean states, the Belén Communiqué, 3824 which calls for "urgent negotiation" of a binding international treaty to regulate and prohibit the use of autonomous weapons to address the grave concerns raised by removing human control from the use of force.

At the 78th UN General Assembly First Committee in 2023, Mexico voted in favor³⁸²⁵ of resolution L.56³⁸²⁶ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems.

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https://www.rree.go.cr/files/includes/files.php?id=2261&tipo=documentos

fora/1com/1com23/resolutions/L56.pdf

³⁸²³ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee, 77th United Nations General Assembly Thematic Debate – Conventional Weapons* (Oct. 21, 2022),

³⁸²⁴ Latin American and the Caribbean Conference of Social and Humanitarian Impact of Autonomous Weapons, *Communiqué* (Feb. 24, 2023),

³⁸²⁵ Stop Killer Robots, 164 States Vote against the Machine at the UN General Assembly (Nov.

^{1, 2023), &}lt;a href="https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/">https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/ General Assembly, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/ General Assembly, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/ General Assembly, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/ General Assembly, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/ General Assembly, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/ General Assembly, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/ General Assembly, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/ General Assembly, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/ General Assembly, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/ General Assembly, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/ General Assembly, <a href="https://www.stopkillerrob

https://reachingcriticalwill.org/images/documents/Disarmament-

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Human Rights

Freedom House gives Mexico a "partly free" (60/100) rating for political rights and civil liberties. 3827 According to Freedom House, "Mexico has been an electoral democracy since 2000, and alternation in power between parties is routine at both the federal and state levels. However, the country suffers from severe rule of law deficits that limit full citizen enjoyment of political rights and civil liberties."3828

In December 2020, celebrating Human Rights Day, the National Institute for Public Health, mentioned that "Mexico signed the Universal Declaration of Human Rights in 1948, however it was not until 1992 that the protection and defense of human rights obtained constitutional ranking. [...] The COVID-19 crisis has been fueled by structural discrimination and racism. [...] In order to recover from the crisis, we have to tackle the pandemic of inequality. For this, it is necessary to promote and protect economic, social, and cultural rights."3829

OECD / G20 AI Principles

Mexico has taken an active role in pursuing international cooperation for the ethical development of AI. The Mexican government endorsed the OECD AI Principles in 2019 and the updated principles in 2024.3830 Mexico has also endorsed G20 AI Guideline and is one of the founding members of the Global Partnership on AI (GPAI), the world's first international AI initiative. 3831

Council of Europe AI Treaty

Mexico contributed as an Observer State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of Law. However, Mexico has not signed the treaty. 3832

3828 Ibid

³⁸²⁷ Freedom House, Freedom in the World 2024: Mexico (2024), https://freedomhouse.org/country/mexico/freedom-world/2024

³⁸²⁹ Instituto Nacional de Salud Publica, *Dia de los Derechos Humanos* (Dec. 9, 2020), https://www.insp.mx/avisos/dia-de-los-derechos-humanos

³⁸³⁰ OECD, OECD AI Principles Overview, Countries Adhering to the AI Principles (2025), https://oecd.ai/en/ai-principles

³⁸³¹ OECD, OECD to Host Secretariat of New Global Partnership on Artificial Intelligence (Jun. 15, 2020), https://www.oecd.org/going-digital/ai/oecd-to-host-secretariat-of-new-globalpartnership-on-artificial-intelligence.htm; Gobierno de México, Joint Statement by the Founding Members of the Global Alliance on Artificial Intelligence (Jun. 5, 2020), https://www.gob.mx/sre/prensa/declaracion-conjunta-de-los-miembros-fundadores-de-la-alianza-

global-sobre-la-inteligencia-artificial

³⁸³² Council of Europe, Framework Convention on Artificial Intelligence, Signatories (Jan. 13, 2025), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificialintelligence

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UNESCO Recommendation on AI Ethics

Mexico is represented in UNESCO's World Commission on the Ethics of Scientific Knowledge and Technology (COMEST). COMEST produced a preliminary study on the ethics of AI, which became the foundation of the UNESCO Recommendation on the Ethics of AI.³⁸³³ In November 2021, Mexico alongside 192 other states adopted the Recommendation on Ethics of AI.³⁸³⁴

Mexico is among the countries that "have initiated a process to establish institutional infrastructures, such as national steering committees on the ethics of AI, to oversee the piloting of the capacity-building tools under development."³⁸³⁵

CAF, the development bank of Latin America, and UNESCO signed a letter of intent to collaborate on the implementation of the UNESCO Recommendation in Latin America and the Caribbean. They pledged to create a Regional Council composed of national and local governments in the region which will support their implementation efforts. Mexico is a member of the Regional Council. 3836

Mexico signed the 2023 Santiago Declaration to Promote Ethical Artificial Intelligence as part of this movement.³⁸³⁷ The Santiago Declaration aligns with the UNESCO Recommendation and establishes fundamental principles that should guide public policy on AI. These include proportionality, security, fairness, non-discrimination, gender equality, accessibility, sustainability, privacy and data protection.³⁸³⁸ Mexico reinforced this commitment with its endorsement of the Montevideo Declaration following the Second Ministerial and High-Level Authorities Summit on the Ethics of Artificial Intelligence in Latin America and

https://somosiberoamerica.org/tribunas/inteligencia-artificial-etica-y-responsable-de-las-palabras-a-los-hechos-y-derechos/

³⁸³³ UNESCO, *Elaboration of a Recommendation on the Ethics of Artificial Intelligence* (2020), https://en.unesco.org/artificial-intelligence/ethics#recommendation; UNESCO, *World Commission on the Ethics of Scientific Knowledge and Technology (COMEST)* (Dec. 2, 2024), https://en.unesco.org/themes/ethics-science-and-technology/comest/members

³⁸³⁴ UNESCO, *Recommendation on the Ethics of Artificial Intelligence* (Nov. 23, 2021), https://unesdoc.unesco.org/ark:/48223/pf0000381137

³⁸³⁵ UNESCO, *Implementation of the Recommendation on Ethics of AI*, p. 3 (Oct. 7, 2022), https://unesdoc.unesco.org/ark:/48223/pf0000382931

³⁸³⁶ Gabriela Ramos and Ángel Melguizo, Ethical and Responsible Artificial Intelligence: From Words to Action and Rights, Somos Iberoamérica (Feb. 1, 2023),

³⁸³⁷ Summit of Ministerial and High Authorities of Latin America and the Caribbean, *Santiago Declaration "To Promote Ethical Artificial Intelligence in Latin America and the Caribbean"* (Oct. 2023), https://minciencia.gob.cl/uploads/filer_public/40/2a/402a35a0-1222-4dab-b090-5c81bbf34237/declaracion_de_santiago.pdf

³⁸³⁸ UNESCO, *UNESCO and Leading Ministry in Santiago de Chile Host Milestone Regional LAC Forum on Ethics of AI* (Dec. 5, 2023), https://www.unesco.org/en/articles/unesco-and-leading-ministry-santiago-de-chile-host-milestone-regional-lac-forum-ethics-ai?hub=387

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the Caribbean.³⁸³⁹ The declaration calls on governments and companies across the region to ensure AI advancements align with democratic values, prioritize human rights, and improve quality of life.

Mexico completed the UNESCO Readiness Assessment Methodology (RAM), a tool to support the effective implementation of the Recommendation.³⁸⁴⁰ The RAM helps countries and UNESCO identify and address any institutional and regulatory gaps.³⁸⁴¹

UNESCO developed the Artificial Intelligence Readiness Assessment of Mexico report following the RAM in partnership with the National Alliance for Artificial Intelligence (ANIA) and supported by Centro-i. The assessment involved over 250 participants from government, civil organizations, academia, and industry to evaluate Mexico's AI ecosystem and readiness for ethical governance.

The report, which was presented to the Mexican Senate, highlights AI's potential to boost global GDP by 1.5–2% within a decade and to transform up to 60% of jobs. The report also outlines Mexico's opportunity to become a regional leader through a national AI strategy integrated into its National Development Plan. Despite ranking third in Latin America in AI readiness and recording \$508 million in tech investments, Mexico faces challenges due to population dynamics and limited investment in AI (\$150 million in 2023).

Mexico has strengths in education, ranking high in technical training, AI research, and patents. However, the report advises bolstering inclusivity for underrepresented groups, including by supporting Indigenous languages, and integrating media literacy in education. Additional recommendations include a unified digital identity system, an expanded open data policy, and enhanced security for critical infrastructure.

Using UNESCO's Readiness Assessment Methodology (RAM), the report provides an ethical orientation for AI and aligns with the National AI Agenda Proposal developed by ANIA.

conocimiento/sites/agencia-gobierno-electronico-sociedad-informacion-

conocimiento/files/documentos/noticias/EN-

Proposal%20for%20Montevideo%20Declaration.pdf

³⁸⁴⁰ UNESCO Global AI Ethics and Governance Observatory, *Country Profiles: Mexico* (Oct. 24, 2024), https://www.unesco.org/ethics-ai/en/mexico

³⁸⁴¹ UNESCO Global AI Ethics and Governance Observatory, *Readiness Assessment Methodology* (2023), https://www.unesco.org/ethics-ai/en/ram

³⁸⁴² UNESCO, UNESCO Presents the Artificial Intelligence Readiness Assessment of Mexico (Jul. 3, 2024), https://www.unesco.org/en/articles/unesco-presents-artificial-intelligence-readiness-assessment-mexico

³⁸³⁹ Uruguay, Agency for Electronic Government (AGESIC), *Montevideo Declaration* (Oct. 4, 2024), <a href="https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-gopeimineto/gitts/agencia-gobierno-electronico-sociedad-informacion-gopeimineto/gitts/agencia-gobierno-electronico-sociedad-informacion-gopeimineto/gitts/agencia-gobierno-electronico-sociedad-informacion-gopeimineto/gitts/agencia-gobierno-electronico-sociedad-informacion-gopeimineto/gitts/agencia-gobierno-electronico-sociedad-informacion-gopeimineto/gitts/agencia-gobierno-electronico-sociedad-informacion-gopeimineto/gitts/agencia-gobierno-electronico-sociedad-informacion-gopeimineto/gitts/agencia-gobierno-electronico-sociedad-informacion-gopeimineto/gitts/agencia-gobierno-electronico-sociedad-informacion-gopeimineto/gitts/agencia-gobierno-electronico-sociedad-informacion-gopeimineto/gitts/agencia-gobierno-electronico-sociedad-informacion-gopeimineto/gitts/agencia-gobierno-electronico-sociedad-informacion-gopeimineto/gitts/agencia-gobierno-electronico-sociedad-informacion-gopeimineto/gitts/agencia-gopeimineto/gitts/agenci

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Evaluation

Mexico was the first Latin American country to initiate a national AI strategy in 2018. However, the change in administration at the end of 2018 put a break on previous AI policy initiatives. The 2022 Recommendations for the processing of personal data deriving from the use of AI issued by the national data protection authority and the steps taken to implement the UNESCO Recommendation on the Ethics of AI are positive signs although AI remains largely unregulated across the country. There are ever-growing concerns regarding the use of AI for mass surveillance of citizens and for malicious and criminal related purposes.

Morocco

In 2024, Morocco created parliamentary working group charged with assessing AI policy. Morocco also advanced international governance by completing the UNESCO Readiness Assessment Methodology (RAM) and introducing, with the United States, the first UN General Assembly resolution on artificial intelligence.

National AI Strategy

Morocco lacks a National AI Strategy. However, government and non-governmental organizations have worked to create pathways to such a strategy. For example, The Morocco AI conference organized by a non-governmental agency proposed a framework for a national strategy. The Digital Development Agency (ADD) intends to establish "an ecosystem dedicated to Artificial Intelligence," which is seen as the pathway for the development of the National AI Strategy. However, government and non-governmental agency proposed a framework for a national strategy. The Digital Development Agency (ADD) intends to establish "an ecosystem dedicated to Artificial Intelligence," which is seen as the pathway for the development of the National AI Strategy.

The Moroccan House of Representatives created a parliamentary working group, the Artificial Intelligence Thematic Group in September 2024. The group is to study the opportunities and impacts of AI systems, including an assessment of existing laws.³⁸⁴⁵

A parliamentary opposition group in the Moroccan House of Councilors (the General Union of Moroccan Workers' group) presented a bill to regulate the

³⁸⁴³ Morocco AI, *Recommendations towards a National AI Strategy for Morocco* (Oct. 2023), https://morocco.ai/

³⁸⁴⁴ Digital Development Agency, *Ecosystem Dedicated to Artificial Intelligence* (2021), https://www.add.gov.ma/ecosysteme-dedie-a-lintelligence-artificielle-prioritaire

³⁸⁴⁵ House of Representatives, *Internal Meeting of the Thematic Group on AI* (Sept. 4, 2024), https://www.chambredesrepresentants.ma/fr/agenda/reunion-interne-du-groupe-thematique-sur-lia-mercredi-4-septembre-2024

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use of artificial intelligence (AI) in the country in April 2024.³⁸⁴⁶ The bill is aimed at addressing the negative aspects and illegal uses of AI technology. It proposes the creation of a National Agency for Artificial Intelligence dedicated to AI governance. This agency would be responsible for implementing, monitoring, and updating a national AI strategy in line with global developments in the field.

In December 2018, the Mohamed VI Polytechnic University in Morocco hosted UNESCO's first Forum on AI in Africa.³⁸⁴⁷ This led to the creation of the Benguérir Declaration,³⁸⁴⁸ advocating for the advancement of an AI Strategy across the African continent.³⁸⁴⁹ The declaration emphasized "the importance of fostering AI in Africa as a catalyst for development, focusing on the human rights aspect and grounded in universal ethical principles."3850 Following the forum, Morocco allocated 50 million MAD to finance research projects in 11 specific areas related to AI.3851

Public Participation

Although specific public participation opportunities for the development of Morocco's AI Strategy were not identified, the formulation of The New Development Model for Morocco, which outlines the country's vision until 2035, 3852 employed a comprehensive consultative process and co-construction approach. Artificial intelligence is highlighted in the report as a disruptive force, emphasizing the necessity for adequate training in this field. However, it remains unclear whether a similar process will be adopted for the development of the National AI Strategy.

The Morocco AI Annual conference serves as another platform for businesses, government entities, and civil society to convene in Morocco.³⁸⁵³ The Recommendations Towards a National AI Strategy for Morocco Report is derived

³⁸⁵¹ UNESCO, Steering AI and Advanced ICTs for Knowledge Societies: A Rights, Openness, Access, and Multi-Stakeholder Perspective (2019), https://unesdoc.unesco.org/ark:/48223/pf0000372132

³⁸⁴⁶ Adil Faouzi, Morocco Proposes Establishment of National Agency for AI Governance (Apr. 25, 2024), https://www.moroccoworldnews.com/2024/04/362295/morocco-proposesestablishment-of-national-agency-for-ai-governance

³⁸⁴⁷ UNESCO, Artificial Intelligence Needs Assessment Survey in Africa (2021), https://unesdoc.unesco.org/ark:/48223/pf0000375322

³⁸⁴⁸ UNESCO, Outcome Statement of the Forum on Artificial Intelligence in Africa: Benguérir (Kingdom of Morocco) (Dec. 13, 2018), https://en.unesco.org/sites/default/files/ai outcomestatement africa-forum en.pdf

³⁸⁴⁹ UNESCO, Artificial Intelligence Needs Assessment Survey in Africa (2021), https://unesdoc.unesco.org/ark:/48223/pf0000375322

³⁸⁵² Special Commission for the Development Model, *The New Development Model: General* Report (Apr. 2021), https://www.csmd.ma/documents/CSMD Report EN.pdf

MoroccoAI Conferences and Workshops, MoroccoAI (2023), https://morocco.ai/conference/

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from an analysis of numerous National AI Strategies and the priorities delineated in Morocco's New Development Model (NDM). This report meticulously presents 44 recommendations tailored to the development of an AI strategy for Morocco, ³⁸⁵⁴ shedding light on critical areas where AI has the potential to significantly advance Morocco's developmental goals.

Data Protection

Morocco's Law on the Protection of Individuals with Regard to the Processing of Personal Data was passed in 2009.3855 This law establishes a framework for safeguarding personal data and the National Commission for the Protection of Personal Data (CNDP). The CNDP possesses the authority to issue guidance and enforce its provisions. Presently, the CNDP is engaged in the process of revising the law to ensure alignment with global standards and potentially seek EU adequacy status.3856

Since 2013, the processing of biometric data has been governed by the provisions outlined in CNDP Decision no. 478-2013, which delineates the necessary conditions for the utilization of biometric devices for access control. This decision establishes regulations for the handling of biometric data and mandates prior authorization from the CNDP for the installation of such devices. However, authorization for the use of biometric data in accessing "sensitive premises and facilities" is granted under specific conditions.

In September 2019, the CNDP imposed a moratorium on facial recognition³⁸⁵⁸ by both public and private organizations, extending it until the end of 2020³⁸⁵⁹ through Deliberation D-195-EUS/2020, which stipulates the

³⁸⁵⁴ MoroccoAI, *Recommendations towards a National AI Strategy for Morocco* (Oct. 2023), https://morocco.ai/

https://www.kas.de/documents/265308/22468903/230406_DataProtectionLawsNorthernAfrica_KAS_Web.pdf/

https://www.legal500.com/guides/chapter/morocco-data-protection-cybersecurity/

 $\frac{https://www.biometricupdate.com/202004/morocco-extends-facial-recognition-moratorium-to-year-end-proposes-biometric-authentication-service}{}$

³⁸⁵⁵ Kingdom of Morocco Administration of National Defense, General Directorate of Information Systems Security, *Law No. 09–08 on the Protection of Individuals with Regard to the Processing of Personal Data*, https://www.dgssi.gov.ma/en/loi-09-08-relative-la-protection-des-personnes-physiques-legard-du-traitement-des

³⁸⁵⁶ Konrad-Adenauer-Stiftung e. V. Rule of Law Programme MENA, *Data Protection Laws in Northern Africa* (Sept. 2022),

³⁸⁵⁷ Mehdi Kettani, Morocco: Data Protection & Cybersecurity (2023),

BiometricUpdate.com, *Morocco Places Moratorium on Facial Recognition, California Limits Police Use* (Sept. 12, 2019), https://www.biometricupdate.com/201909/morocco-places-moratorium-on-facial-recognition-california-limits-police-use

³⁸⁵⁹ Biometric Update.com, Morocco Extends Facial Recognition Moratorium to Year-End, Proposes Biometric Authentication Service (Apr. 9, 2020),

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requirement of CNDP authorization among other criteria. 3860 Notably, in 2020, biometric systems were sanctioned by the CNDP for utilization in "user authentication and proof of life for social welfare beneficiaries" by social security institutions.

In 2020, Morocco released two opinions regarding the utilization of facial recognition technologies. These publications underscored the country's meticulous approach in reconciling technological progress with the protection of data rights and ethical concerns. Additionally, Morocco collaborated with Burkina Faso in co-sponsoring AI-related resolutions at the Global Privacy Assembly. Furthermore, Morocco joined other data protection authorities in co-signing a letter addressing concerns related to data scraping. 3862

Furthermore, a consultation regarding genomic data was initiated in April 2022. Morocco is an active member of the Network of African Data Protection Authorities (NADPA). This network serves as a platform for facilitating exchanges and cooperation among its members, aiming to amplify Africa's voice in its engagements with partners worldwide. Morocco in the engagements with partners worldwide.

Its recent focus has been on "strengthening the network's international presence, promoting legislation on Data Protection across Africa, and fostering cooperation among members, including capacity building."³⁸⁶⁶ In 2022, the NADPA signed a Memorandum of Understanding with the Smart Africa Alliance to collaborate on various issues. These include supporting the enforcement of data protection regulations, advocating for the establishment of a harmonized framework for data protection policies and regulations across Africa, and assisting

https://www.legal500.com/guides/chapter/morocco-data-protection-cybersecurity/

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³⁸⁶⁰ Mehdi Kettani, Morocco: Data Protection & Cybersecurity (2023),

³⁸⁶¹ Tech Hive Advisory, Center for Law & Innovation, *State of AI Regulation in Africa: Trends and Developments Report* (Mar. 2024),

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³⁸⁶² **Thi**d

³⁸⁶³ CNDP, Protection of Genomic Data (Apr. 19, 2022),

https://www.cndp.ma/images/commpresse/CNDP-Consultations GENOME 20220419-EN.pdf 3864 DiploFoundation, Stronger Digital Voices from Africa: Building African Digital Foreign Policy and Diplomacy (Nov. 2022), https://www.diplomacy.edu/wp-content/uploads/2023/01/African-digital-foreign-policy En.pdf

³⁸⁶⁵ NADPA/RAPDP, *Who Are We?* (2023), https://www.nadpa-rapdp.org/en/qui-sommes-nous (3866 Global Privacy Assembly, *International Enforcement Cooperation Working Group, Privacy and DataProtection Networks*, *Snapshot* (May 13, 2021), https://globalprivacyassembly.org/wp-content/uploads/2021/09/20210513-DPA-networks-Landscape-Snapshot-Infographic-1.0.pdf

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countries in drafting or revising legislation and establishing Data Protection Authorities (DPAs). 3867

The CNDP has represented Morocco to the Global Privacy Assembly since 2011.3868 The CNDP co-sponsored the 2023 Resolution on Generative AI Systems.3869 However, the CNDP did not sponsor the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence,3870 2020 GPA Resolution on AI Accountability,3871 or 2022 GPA Resolution on Facial Recognition Technology.3872

Algorithmic Transparency

Article 11 of the data protection law prohibits decision-making based on the automated processing of personal data. In October 2018, the Council of Europe treaty, Convention 108, officially titled the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data, was signed by 20 states. Morocco, along with two other countries, was invited to accede to the treaty. Accession involves a formal evaluation to ensure that the relevant laws of the applicant country meet the requirements outlined in Convention 108. Sars

DiploFoundation, Stronger Digital Voices from Africa: Building African Digital Foreign Policy and Diplomacy (Nov. 2022), https://www.diplomacy.edu/wp-content/uploads/2023/01/African-digital-foreign-policy En.pdf

³⁸⁶⁸ Global Privacy Assembly, List of Accredited Members (Jan. 20, 2025),

https://globalprivacyassembly.org/participation-in-the-assembly/list-of-accredited-members/3869 Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

³⁸⁷⁰ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

³⁸⁷¹ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

³⁸⁷² Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

³⁸⁷³ National Commission for the Protection of Personal Data, *Law No. 09-08 on the Protection of Individuals with Regard to the Processing of Personal Data* (2009), https://www.cndp.ma/fr/cndp/publications.html

³⁸⁷⁴ IAPP, What Does the Newly Signed 'Convention 108+' Mean for UK Adequacy? (Oct. 30, 2018), https://iapp.org/news/a/what-does-the-newly-signed-convention-108-mean-for-u-k-adequacy/#

³⁸⁷⁵ Graham Greenleaf, *Data Protection Convention 108 Accession Eligibility: 80 Parties Now Possible* (Nov. 1, 2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3062415

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Morocco signed Convention 108³⁸⁷⁶ and its Protocol amending the convention in May 2019,³⁸⁷⁷ becoming the 55th State and the 6th country in the African region to do so.³⁸⁷⁸

The CNDP and Council of Europe announced a "Neighbourhood Partnership" in 2021 to promote the ratification of the Protocol modernizing Convention 108, as well as supporting the CNDP's efforts to enhance data protection in the Kingdom of Morocco.³⁸⁷⁹

Digital ID

Morocco established its national electronic identity system in 2008, 3880 introducing the CNIE (Carte Nationale d'Identité Electronique), a smart ID card equipped with cutting-edge security features. Enrollment procedures included biometric data capture to ensure the uniqueness of individuals, employing an Automatic Fingerprint Identification System (AFIS) for de-duplication.

In 2022, the Digital Development Agency (ADD) and the Directorate of National Security (DGSN) collaborated to launch an identification and authentication service for digital service users. This initiative enables individuals to verify their identities when accessing services from both public and private sectors.³⁸⁸¹ Holders of the National Electronic Identity card introduced in 2019 gained immediate access to the platform while holders of the old CNIE were also granted access.³⁸⁸²

In June 2023, a tripartite agreement was announced between the Ministries of Health and Social Protection, the National Security Directorate, and the National Commission for the Control of Personal Data Protection. This agreement aimed to utilize the national identity card to simplify and enhance access to health

³⁸⁷⁶ One Trust DataGuidance, *International: Morocco Signs Convention 108 and Amending Protocol* (May 29, 2019), https://www.dataguidance.com/news/international-morocco-signs-convention-108-and-amending

³⁸⁷⁷ Council of Europe, *Protocol Amending the Convention for the Protection of Individuals with Regard to Automatic Processing of Personal Data* (Oct. 2018), https://rm.coe.int/16808ac918 ³⁸⁷⁸ Council of Europe, *Welcome of Morocco*, *55th State Party to Convention 108* (May 28, 2019), https://www.coe.int/en/web/data-protection/-/welcome-to-morocco-55th-state-party-to-convention-108-

³⁸⁷⁹ Council of Europe, *Support to Data Protection in Morocco* (Mar. 11, 2021), https://www.coe.int/en/web/data-protection/support-to-data-protection-in-morocco
3880 World Bank Group, *ID4D Country Diagnostic: Morocco* (Jul. 2014),

https://id4d.worldbank.org/sites/id4d/files/2018-04/Morocco_ID4D_Diagnostic_Web404018.pdf ³⁸⁸¹ Idemia, *The Kingdom of Morocco Launches a National Digital ID Platform with IDEMIA* (May 19, 2022), https://www.idemia.com/news/kingdom-morocco-launches-national-digital-id-platform-idemia-2022-05-19

³⁸⁸² Sara Zouiten, *Digital ID: Moroccans to Access Multitude of Services Online* (Apr. 26, 2022), https://www.moroccoworldnews.com/2022/04/348615/digital-id-moroccans-to-access-multitude-of-services-online

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services.3883 Hospitals and other medical facilities would be empowered to verify patient identities, and citizens would have the option to include certain health data in the electronic chip embedded within the national identity card.³⁸⁸⁴

AI Development and Applications

Morocco has implemented AI systems in various sectors, including higher education, the judiciary, and healthcare.

The "AL KHAWARIZMI" program was launched in May 2019 through a partnership among the Digital Development Agency; National Center for Scientific and Technical Research; Ministry of Industry, Trade, and the Green and Digital Economy;, and Ministry of National Education, Vocational Training, Higher Education, and Scientific Research.3885 This initiative supports applied research projects in AI and Big Data. Its objective is to promote and incentivize applied scientific research within the digital development domain, aligning with the ADD's vision for advancing the AI ecosystem.

The Euromed University of Fez (UEMF) inaugurated the Euromed School of Digital Engineering and Artificial Intelligence (EIDIA), a specialized institution focusing on AI research, development, and education. 3886 It stands as the first Engineering School entirely dedicated to Digital Engineering and Artificial Intelligence (EIDIA) within the Euro-Mediterranean-African Space, marking a significant milestone in the region's academic landscape.³⁸⁸⁷

Morocco's Justice Committee purchased an AI program to "revolutionize the court system." Tools will initially be used to undertake tasks such as note taking and "transcribe judgments through AI-supported voice dictation" with further plans to facilitate processings."3888

In healthcare, Morocco has integrated AI tools as part of the efforts to expand access to healthcare through digitization and software. A representative from the Ministry of Health noted stressed that "Artificial Intelligence (AI) is a

https://www.add.gov.ma/programme-al-khawarizmi

³⁸⁸³ Middle East Online, National Card's Digital ID: A Convention for Health (Jun. 16, 2023), https://middle-east-online.com/en/national-card%E2%80%99s-digital-id-convention-health ³⁸⁸⁴ Biometricupdate.com, Morocco Will Introduce Digital IDs into Health Services (Jun. 22, 2023), https://www.biometricupdate.com/202306/morocco-will-introduce-digital-ids-into-health-

services 3885 Digital Development Agency, Al-Khawarizmi Program (2023),

³⁸⁸⁶ Morocco World News, Artificial Intelligence School to Open in Fez (Jul. 12, 2019), https://www.moroccoworldnews.com/2019/07/278026/artificial-intelligence-school-open-fe ³⁸⁸⁷ Smail Tigani, Digital Engineering and Artificial Intelligence Platform (2020), https://ueuromed.org/en/plateformes-technnologiques/digital-engineering-and-artificialintelligence-platform

³⁸⁸⁸ Adil Faouzi, Morocco's Justice Ministry to Integrate Artificial Intelligence in Court System (Jul. 15, 2024), https://www.moroccoworldnews.com/2024/07/363918/moroccos-justiceministry-to-integrate-artificial-intelligence-in-court-system

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tool intended to support our healthcare professionals, not replace them" and that "the final decision always remains under the responsibility of the healthcare professional." 3889

Lethal Autonomous Weapons

Morocco is a member of the Group of Government Experts on Lethal Autonomous Weapons Systems (GGE on Laws)³⁸⁹⁰ of the Convention on Certain Conventional Weapons (CCW) of the UN Office for Disarmament Affairs (UNODA) since 2014. Ethical concerns led the group to declare a pre-emptive ban on LAWS.³⁸⁹¹

Morocco endorsed the Political Declaration on the Responsible Military Use of Artificial Intelligence and Autonomy. To build international consensus around responsible behavior and guide states' development, deployment, and use of military AI, reads the declaration's stated goal.

Human Rights

Morocco ratified the Universal Declaration of Human Rights (UDHR). Morocco is a member of the Arab League but has not ratified the Arab Charter on Human Rights. Other UN human rights treaties that Morocco has ratified are: International Covenant on Civil and Political Rights (ICCPR); the International Covenant on Economic, Social and Cultural Rights (ICESCR); the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT); the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW); the Convention on the Rights of Persons with Disabilities (CRPD); the Convention on the Rights of the Child (CRC); the Convention for the Protection of all Persons from Enforced Disappearance (CED); the International Convention on the Elimination of All Forms of Racial Discrimination (CERD);

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https://automatedresearch.org/news/state_position/morocco/

³⁸⁸⁹ Asmae Daoudi, *Health Minister: Digitization and Innovation Are Crucial for Healthcare System Improvement* (May 30, 2024),

 $[\]frac{https://www.moroccoworldnews.com/2024/05/362968/health-minister-digitization-and-innovation-are-crucial-for-healthcare-system-improvement}{}$

³⁸⁹⁰ Automated Decision Research, Morocco (2023),

³⁸⁹¹ Congressional Research Service, *International Discussions Concerning Lethal Autonomous Weapons Systems* (Feb. 14, 2023), https://sgp.fas.org/crs/weapons/IF11294.pdf

³⁸⁹² US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy, Endorsing States* (Nov. 27, 2024), https://www.state.gov/bureau-of-artificial-intelligence-and-autonomy

³⁸⁹³ University of Minnesota, *Ratification of International Human Rights Treaties: Morocco* (2023), http://hrlibrary.umn.edu/research/ratification-morocco.html

³⁸⁹⁴ International Justice Resource Center, *Courts and Monitoring Bodies: Middle East and North Africa* (2023), https://ijrcenter.org/regional/middle-east-and-north-africa/

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and the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (CMW).³⁸⁹⁵

Freedom House scored Morocco as partly-free country (37/100) in 2024.3896 Freedom House reported, "Morocco holds regular multiparty elections for Parliament and local bodies. Reforms in 2011 shifted some authority over government from the monarchy to the national legislature. Nevertheless, King Mohammed VI and his palace maintain full dominance through a combination of substantial formal powers and informal lines of influence in state and society." Morocco scored 54/100 for net freedom. The Ibrahim Index of African Governance in 2023 scored Morocco at 62/100 for Overall Governance, and 48.5/100 in Participation, Rights & Inclusion, placing the country in position 8 out of 54 African countries, with an increasing trend since 2012. 3898

The Moroccan presidency of the Human Rights Council organized high-level discussions in Geneva to address artificial intelligence and its impact on human rights. Since prioritizing this issue in January 2024, Morocco has appointed co-facilitators who led extensive consultations resulting in a comprehensive report advocating for the integration of human rights principles in the development and evolution of AI tools. ³⁸⁹⁹

OECD / G20 AI Principles

While Morocco is not a member of the OECD and has not endorsed the OECD AI Principles,³⁹⁰⁰ the OECD does track Morocco on its Policy Observatory site.³⁹⁰¹ Under each principle, the site includes the previously mentioned "ecosystem dedicated to artificial intelligence"³⁹⁰² as encompassing the establishment of "a strategy and national roadmap for developing an AI

https://freedomhouse.org/country/morocco/freedom-world/2024

https://iiag.online/locations/ma.html

³⁸⁹⁵ International Justice Resource Center, *Country Factsheet Series: Morocco* (Sept. 15, 2017), https://ijrcenter.org/wp-content/uploads/2017/11/Morocco.pdf

³⁸⁹⁶ Freedom House, Freedom in the World 2024: Morocco (2024),

³⁸⁹⁷ Freedom House, Freedom on the Net 2024: Morocco (2024),

https://freedomhouse.org/country/morocco/freedom-net/2024

³⁸⁹⁸ Ibrahim Index of African Governance, Morocco 2023 (2024),

³⁸⁹⁹ Kingdom of Morocco, News, High-Level Discussions in Geneva on Artificial Intelligence and Human Rights, under the Presidency of Morocco (Sept. 4, 2024),

 $[\]underline{https://www.maroc.ma/fr/actualites/discussions-de-haut-niveau-geneve-sur-lintelligence-artificielle-et-les-droits-de-lhomme$

³⁹⁰⁰ OECD, OECD AI Principles: Overview, Countries Adhering to the AI Principles (2024), https://oecd.ai/en/ai-principles

³⁹⁰¹ OECD, AI in Morocco (2025), https://oecd.ai/en/dashboards/countries/Morocco

³⁹⁰² Digital Development Agency, *Ecosystem Dedicated to Artificial Intelligence* (2021), https://www.add.gov.ma/ecosysteme-dedie-a-lintelligence-artificielle-prioritaire

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Ecosystem."³⁹⁰³ A second initiative is contained under Principle 1.1 – Inclusive growth, sustainable development, and well-being.³⁹⁰⁴ This references the Artificial Intelligence research taking place at Hassan II University of Casablanca under the Al Khawarizmi 2020 program.³⁹⁰⁵

Council of Europe AI Treaty

Morocco has not signed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law. 3906

UNESCO Recommendations on AI Ethics

Morocco has been a member state of UNESCO since October 1975. 3907 It is one of the 193 countries that endorsed the UNESCO Recommendation on the Ethics of Artificial Intelligence in November 2021. 3908 Morocco participated on the 24-member expert group that prepared the text of the recommendation and was one of the 5 African countries that "contributed comments on the first draft of the recommendation." 3909

In 2021, in UNESCO's AI Needs Assessment Survey, 32 countries in Africa identified institutional capacity building for AI as a key priority. ³⁹¹⁰ At the UNESCO General Conference 2023, 194 countries decided to designate AI Movement in Morocco as the first UNESCO-affiliated Center in Africa. ³⁹¹¹ AI Movement will work on:

³⁹⁰³ OEC, *Morocco: Strategy for Developing an AI Ecosystem* (2021), https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faipo.oecd.org%2F2021-data-policyInitiatives-27136

³⁹⁰⁴ OECD, *Morocco: R&D Centre Specialised in ICT and Artificial Intelligence* (2022), https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faipo.oecd.org%2F2021-data-policyInitiatives-16699

³⁹⁰⁵ Hassan II University of Casablanca, *Al Khawarizmi 2020 (Artificial Intelligence)* (2023), https://www.univh2c.ma/projets-de-recherche/#10

³⁹⁰⁶ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Jan. 28, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

³⁹⁰⁷ UNESCO, *Morocco* (2023), https://whc.unesco.org/en/statesparties/ma

³⁹⁰⁸ UNESCO, *UNESCO Member States Adopt the First Ever Global Agreement on the Ethics of Artificial Intelligence* (Apr. 21, 2022), https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence

³⁹⁰⁹ DiploFoundation, Stronger Digital Voices from Africa: Building African Digital Foreign Policy and Diplomacy (Nov. 2022), https://www.diplomacy.edu/wp-content/uploads/2023/01/African-digital-foreign-policy En.pdfion

³⁹¹⁰ UNESCO, *Artificial Intelligence Needs Assessment Survey in Africa* (2021), https://unesdoc.unesco.org/ark:/48223/pf0000375322

³⁹¹¹ UNESCO, Category 2 Institutes and Centres, Proposals for Designation, Part II: Moroccan International Centre for Artificial Intelligence (AI Movement) (Sept. 2023), https://unesdoc.unesco.org/ark:/48223/pf0000386790 eng

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- 1. Capacity building for policymakers, public administrations
- 2. Innovation and entrepreneurship through its programs like African Women in Tech
- 3. Educational programs at Masters and Doctoral level, as well as programs for Executives to support African businesses.
- 4. Creating research cooperation within Africa and beyond

Morocco's Minister Delegate for Digital Transition and Administrative Reform pledge that a "commission will be set up to establish a road map to implement the provisions of the recommendation on the ethics of AI." ³⁹¹² Beginning in 2023, Morocco was selected as part of a pilot group of countries developing legislative, regulatory, and institutional changes to best align themselves with the UNESCO Recommendation on the Ethics of AI.³⁹¹³

At the beginning in 2023, Morocco was selected as part of a pilot group of countries developing legislative, regulatory, and institutional changes to best align themselves with the UNESCO Recommendation on the Ethics of AI." Morocco has since completed the UNESCO Readiness Assessment Methodology (RAM), a tool to help countries identify gaps and opportunities to implement AI systems ethically. The RAM report highlighted Morocco's "favorable ecosystem for the development of a holistic and responsible vision of AI" and progress on technical infrastructure. Along with gaps in technological infrastructure, the lack of a national AI strategy could increase the challenge of making necessary adjustments to legal frameworks, particularly in regulating personal data and cyberspace, to "address the challenges and opportunities of AI."

Morocco joined the United States in March 2024 to introduce the first-ever UN General Assembly resolution on the use of artificial intelligence.³⁹¹⁵

Evaluation

Morocco's AI trajectory points to a strategic shift in the direction of a National Strategy for Artificial Intelligence. With several efforts and approvals, Morocco has shown that it is a progressive country in recent years. Particularly, even in situations when the human rights environment is not ideal, the Data Protection National Commission's active oversight offers a layer of safety in areas

³⁹¹² Oumaima Latrech, *Morocco, UNESCO Pledge to Strengthen Artificial Intelligence Ethics* (Mar. 26, 2022), https://www.moroccoworldnews.com/2022/03/347908/morocco-unesco-pledge-to-strengthen-artificial- intelligence-ethics

³⁹¹³ UNESCO, *Implementation of the Recommendation on the Ethics of Artificial Intelligence* (AI) (2023), https://unesdoc.unesco.org/ark:/48223/pf0000387369

³⁹¹⁴ UNESCO Global AI Ethics and Governance Observatory, *Morocco* (2024), https://www.unesco.org/ethics-ai/en/morocco

³⁹¹⁵ Kingdom of Morocco, News, *UNGA: U.S and Moroccan Ambassadors Present First-Ever UN Resolution on Artificial Intelligence* (Mar. 15, 2024), https://www.maroc.ma/en/news/ungaus-and-moroccan-ambassadors-present-first-ever-un-resolution-artificial-intelligence

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of AI research. Morocco has demonstrated its commitment to ethical AI and data protection standards by endorsing the UNESCO Recommendation on the Ethics of AI and by signing Convention 108 and the Protocol. The nation's cosponsorship of Resolution 2023 on Generative Artificial Intelligence Systems at the World Privacy Assembly demonstrates its active involvement in forming global AI policy.

US cooperation with Morocco in the presentation of the first-ever UN General Assembly resolution on the use of artificial intelligence on March 15, 2024, further demonstrated the country's active involvement in forming the global governance of AI. This achievement highlights Morocco's dedication to global cooperation and its understanding of the significance of creating precise standards and rules for the ethical and responsible application of AI worldwide. Morocco's introduction of projects centered on AI in higher education is indicative of its progressive outlook and goal to leverage AI technologies. All these changes point to Morocco's awareness of the critical role AI will play in determining the course of the future and its deliberate attempts to establish itself as a player in the international AI arena.

Myanmar

In 2024, Myanmar included AI applications as part of the draft e-Governance Master Plan. Concerns over human rights remain.

National AI Strategy

The Government of Myanmar has not developed a national AI strategy. However, the Draft e-Governance Master Plan 2030 published in 2024 reveals intentions to use AI for public services, predictive analytics, and automation.³⁹¹⁶

Myanmar endorsed the UNESCO Recommendation on the Ethics of AI, which could provide a template for a human-centered national AI strategy, should Myanmar take step to implement it.

Public Participation

The Myanmar government does not appear to hold public participation in AI policymaking.

³⁹¹⁶ Ministry of Transport and Communication, *The Myanmar e-Governance Master Plan 2030* (Jul. 2024), https://myanmar.gov.mm/documents/20143/0/Myanmar+e-Governance+Master+Plan+2030+%28Draft%29 1.pdf

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Data Protection

Myanmar does not have a single principal data protection law and does not have a data protection agency. Three legal instruments refer to the concept of privacy or data protection:

- The Constitution of the Republic of the Union of Myanmar (2008)³⁹¹⁷
- The Law Protecting the Privacy and Security of Citizens (Union Parliament Law 5/2017) of March 8, 2017, as amended by Law 16/2020 of August 28, 2020, and by the State Administration Council Law 4/2021 of February 13, 2021 (Privacy Law)³⁹¹⁸
- The Electronic Transactions Law of April 30, 2004 (State Peace and Development Council Law No. 5/2004), as amended by the Law amending the Electronic Transactions Law (No. 6/2014) of February 25, 2014, and by the State Administration Council Law No. 7/2021 of February 15, 2021 (ETL)³⁹¹⁹

Section 357 of the Constitution states: "The Union shall protect the privacy and security of home, property, correspondence, and other communications of citizens under the law subject to the provisions of this Constitution." 3920

According to its Preamble, the Privacy Law was enacted to protect the privacy and security of citizens as stated in the Constitution. "Privacy" is defined as "the right to freedom of movement, freedom of residence, and freedom of speech of a citizen." Section 3 of the Privacy Law states that every citizen "has the right to enjoy the protection of his/her privacy and security in full, as set out in the Constitution." Section 4 requires the relevant Ministry and relevant government department, organization, or official (called Responsible Authorities in the Privacy Law) to ensure that the privacy and security of citizens are protected. Before the Privacy Law was amended by the State Administration Council Law 4/2021 of February 13, 2021 ("SACL 4/2021"), Section 8 of the Privacy Law protected citizens from unreasonable searches, seizures, and surveillance. The SACL 4/2021 suspended section 8 on February 13, 2021, thirteen days after Myanmar's military took power in a coup.

³⁹¹⁸ Myanmar Centre for Responsible Business, *Unofficial Translation Consolidating the Amendments in Law 4/2021: Law Protecting the Privacy and Security of Citizens* (Feb. 13, 2021), https://www.myanmar-responsiblebusiness.org/pdf/Law-Protecting-Privacy-and-Security-of-Citizens_en_unofficial.pdf

https://www.constituteproject.org/constitution/Myanmar 2015#s2673

³⁹¹⁷ Constitute Project, *Myanmar 2008*, unofficial translation (2015), https://www.constituteproject.org/constitution/Myanmar 2015

³⁹¹⁹ Myanmar Centre for Responsible Business, *Unofficial Translation: Electronic Transactions Law (consolidated version)* (Feb. 15, 2021), https://www.myanmar-

<u>responsiblebusiness.org/pdf/electronic-transactions-law_consolidated_2014-and-2021_en.pdf</u> ³⁹²⁰ Constitute Project, *Myanmar 2008*, unofficial translation, Chapter VIII: Citizen, Fundamental Rights and Duties of the Citizens (2015),

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Amendments to the ETL by the State Administration Council Law 7/2021 of February 15, 2021 2021 (SACL 7/2021) introduced the concept of personal data and personal data protection. "Personal Data" is defined as "information that identifies or is capable of identifying an individual." A new section 27-A was inserted into the ETL, among other things: (a) setting out the obligations of a Personal Data Management Officer; (b) requiring that an "investigation team" receiving personal data keep it confidential except disclosing it to permitted persons; and (c) excluding the application of the personal data protection obligations from certain scenarios, such as investigations by the government. The term Personal Data Management Officer covers persons authorized by the government and organizations who are responsible for collecting, retaining, and using personal data. An Officer's obligations include:

- storing, protecting, and processing personal data according to its type and level of security
- prohibiting the examination, disclosure, transmission, alteration, destruction, and copying of personal data without consent of the individual or as permitted by any law
- refraining from processing personal data in violation of the ETL
- destroying personal data after its retention period has expired

The 2022 Cyber Security Bill lays out a set of rules for the protection of personal information, which shows alignment with the General Data Protection Regulation. For example, Article 11 in Chapter 6 stipulates that "the person responsible for managing and keeping the personal information shall

- 1. systematically keep, protect and manage the personal information based on its types, security levels in accordance with the law
- 2. not allow, disclose, inform, distribute, dispatch, modify, destroy copy and submit as evidence of the personal information of an individual without the consent or the permission in the provision of an existing law to any individual or organization
- 3. not utilize personal information for managing issues that are not in compliance with the objectives
- 4. systematically destroy the personal information that is collected to be used for a period of time after a certain period"³⁹²¹

Meanwhile, the Cyber Security Bill establishes responsibilities and restrictions for Digital Platform Service Providers, which follows the global trend of holding Big Tech and platform companies accountable. The Bill not only clarifies the definition of a Digital Platform Service Provider but also requires all

³⁹²¹ The Republic of the Union of Myanmar, State Administration Council, *Cyber Security Law (DRAFT)* (Feb. 2022), https://www.hrw.org/sites/default/files/media_2022/02/220127%20Cyber-Security-Bill-EN.pdf

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digital platform service providers to obtain a license from the newly designated Cyber Security Steering Committee to operate in Myanmar.³⁹²²

In particular, Article 36 in Chapter 9 Providing Service designates obligations for "digital platform service provider with more than 100,000 users in Myanmar shall ensure the following:

- 1. Devices holding users' data must be stored in line with data classification rules.
- 2. Internet Service providers must be registered in accordance with Myanmar company law.
- 3. Taxes must be paid in accordance with the provisions set forth in relevant laws if is due to claim any tax relating to the business conducted through internet service or similar profitable business."

Moreover, the Bill provides that a digital platform service provider in Myanmar "shall retain the following information for up to three years from the first date of use of the service:

- 1. username, Internet Protocol (IP) address, telephone number, identification card number and address of the service users.
- 2. users record of the service user.
- 3. other information as directed by the Department."3923

Algorithmic Transparency

In Myanmar, algorithmic transparency is neither protected nor provided as a legal right. The report Human Rights Impact Assessments for AI: Learning from Facebook's Failure in Myanmar by the Carr Center for Human Rights Policy at Harvard Kennedy School investigates the identification of discrimination as an algorithmic harm and the assessment of algorithmic decision-making under the UN Guiding Principles through the case of Facebook. 3924

Facial Recognition

In December 2020, Myanmar authorities started using a system of 335 surveillance cameras in the capital, Napyidaw.³⁹²⁵ This was done as part of the government's "Safe City" project to curb crime. Made by the technology company

³⁹²² Win Shwe Yi Htun, *Cyber Security Bill (Myanmar)*, NO & T Asia Legal Review No.44 (Feb. 2022), https://www.noandt.com/en/publications/publication20220225-3/

³⁹²³ The Republic of the Union of Myanmar, State Administration Council, *Cyber Security Law* (*DRAFT*) (Feb. 2022), https://www.hrw.org/sites/default/files/media_2022/02/220127%20Cyber-Security-Bill-EN.pdf

³⁹²⁴ Mark Latonero and Aaina Agarwal, *Human Rights Impact Assessments for AI:* Learning from Facebook's Failure in Myanmar (Mar. 19, 2021),

https://carrcenter.hks.harvard.edu/files/cchr/files/210318-facebook-failure-in-myanmar.pdf
³⁹²⁵ MyanmarNow, *Hundreds of Huawei CCTV Cameras with Facial Recognition Go Live in Naypyitaw* (Dec. 19, 2020), https://www.myanmar-now.org/en/news/hundreds-of-huawei-cctv-cameras-with-facial-recognition-go-live-in-naypyitaw

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Huawei, the cameras were spread between eight townships and reportedly equipped with facial recognition as well as license plate recognition capabilities. An advisor for the Naypyitaw Safe City project, said that "anyone with a criminal history entering Naypyitaw will be recognized."3926

Similar systems have been installed in Mandalay and the commercial capital Yangon. 3927 Myanmar's regional minister for Electrical Power and Construction confirmed by way of comments to the media, that the system in Mandalay would use AI to detect any abnormal activity such as crime and accidents. Such activity would be recorded and followed by the cameras, which would send information to one another as well as to the police.

Human Rights Watch raised concerns that the use of this technology was approved without public consultation or transparency, making it unclear how the Myanmar authorities would mitigate any potential impact on human rights and the right to privacy.³⁹²⁸

Protesters protesting the ousting of Aung San Suu Kyi in a coup in 2021 have cited fears regarding the deployment and use of facial recognition technology by the military junta. 3929 In a few weeks after the coup, the military leadership successfully pushed for amendments³⁹³⁰ suspending Sections 5, 7, and 8 of the Law Protecting the Privacy and Security of Citizens. The ramifications of the suspension of these sections, particularly Section 8(b) of the Privacy Law which previously provided that the State "shall not surveil, spy upon, or investigate any citizen in a manner which could disturb their privacy and security or affect their dignity" when it comes to the potential of privacy breaching AI surveillance, is immense.

The deployment of facial recognition technology by the Tatmadaw against protesters has drawn concern from the international community including a call by the Indonesian President for a high-level ASEAN meeting in 2021. 3931

³⁹²⁷ Reuters, Fears of "Digital Dictatorship" as Myanmar Deploys AI (Mar. 19, 2021), https://www.reuters.com/world/china/fears-digital-dictatorship-myanmar-deploys-ai-2021-03-18/ ³⁹²⁸ Human Rights Watch, Myanmar: Facial Recognition System Threatens Rights (Mar. 12, 2021), https://www.hrw.org/news/2021/03/12/myanmar-facial-recognition-system-threatens-

³⁹²⁹ Rina Chandran, Fears of "Digital Dictatorship" as Myanmar Deploys AI (Mar. 18, 2021), https://www.reuters.com/world/china/fears-digital-dictatorship-myanmar-deploys-ai-2021-03-18/ ³⁹³⁰ Myanmar State Administration Council, Law Protecting the Privacy and Security of Citizens (unofficial translation) (Apr. 2021), https://www.myanmar-responsiblebusiness.org/pdf/Law-Protecting-Privacy-and-Security-of-Citizens en unofficial.pdf

³⁹³¹ WION, Myanmar Deploys AI: Indonesian President Calls for ASEAN Meeting on Coup Crisis (Mar. 19, 2021), https://www.wionews.com/south-asia/myanmar-deploys-ai-indonesianpresident-calls-for-asean-meeting-on-coup-crisis-371577

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A report by the Reuters news agency in July 2022 revealed that Myanmar's military government is now expanding camera surveillance systems for cities in all 14 states and divisions in the country.³⁹³²

Biometric Identification

In 2019, Myanmar's Ministry of Transport and Communications announced its intention to make biometric data collection mandatory when mobile phone services are purchased, this being part of a strategy to create a "national database to store and manage biometric mobile subscriber registration information from all mobile network operators in Myanmar."³⁹³³

Environmental Impact of AI

Myanmar has not published policies related to the environmental impact of AI in English.

Lethal Autonomous Weapons

At the United Nations General Assembly (UNGA) in October 2017, Myanmar said that lethal autonomous weapons systems were a security issue that warranted serious consideration.³⁹³⁴ At the 74th Session of the UNGA in October 2019, Myanmar's Ministry of Foreign Affairs noted that there were "growing concerns on new types of weapons such as lethal autonomous weapon systems and their destructive power" and there was a risk of a new arms race growing with worldwide military expenditures increasing at an "alarming level."³⁹³⁵

Reuters, *Myanmar's Junta Rolls Out Chinese Camera Surveillance Systems in More Cities* (Jul. 10, 2022), https://www.reuters.com/world/asia-pacific/exclusive-myanmars-junta-rolls-out-chinese-camera-surveillance-systems-more-2022-07-10/

³⁹³³ Biometrics Research Group, *Myanmar to Introduce Mandatory Biometric Data Collection for Massive National Database* (Dec. 6, 2019),

 $[\]frac{https://www.biometricupdate.com/201912/myanmar-to-introduce-mandatory-biometric-data-collection-for-massive-national-database}{\\$

³⁹³⁴ Campaign to Stop Killer Robots, *Report on Activities* — *Convention on Conventional Weapons Group of Governmental Experts Meeting on Lethal Autonomous Weapons Systems & Meeting of High Contracting Parties, United Nations Geneva*, p. 18 (Nov. 2017), https://www.stopkillerrobots.org/wp-

content/uploads/2018/02/CCW Report Nov2017 posted.pdf

³⁹³⁵ Myanmar, Statement by Mr. Ye Minn Thein, Director, International Organizations and Economic Department, Ministry of Foreign Affairs at the First Committee Thematic Discussion on "Conventional Weapons, 74th Session of the United Nations General Assembly, pp. 2–3 (Oct. 25, 2019), http://statements.unmeetings.org/media2/21999843/myanmar-statement-on-conventional-weapons-cluster-25-oct-.pdf

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Myanmar is not a state party to the Convention on Certain Conventional Weapons (CCW),³⁹³⁶ but according to Human Rights Watch, participated in CCW meetings on killer robots in 2017–2018.³⁹³⁷

Human Rights

Though the country is a signatory to the UN Declaration of Human Rights, according to Freedom House, Myanmar is "not free" with a score of 8 out of 100 in 2024,³⁹³⁸ down from its score of 9 out of 100 in 2023. Myanmar was last classified as "partly free" in 2020, when it received a score of 30 of 100.³⁹³⁹

Myanmar is ranked 166th out of 167 countries on the 2023 Democracy Index, with a score of 0.85 out of 10.3940 Under the Voice and Accountability Value, which measures perceptions of the extent to which a country's citizens are able to participate in selecting their government as well as freedom of expression, freedom of association, and a free media, Myanmar achieved a score of -0.94 in 2020, well below the world median of 0.3941 In the 2024 World Justice and Peace Index, Myanmar fell further to 138th of the 142 countries and jurisdictions ranked and scored 0.34 overall.3942

According to Freedom House, "Myanmar's already-stalled democratic transition was completely derailed in February 2021, when the military, known as the Tatmadaw, seized control of the government, arresting dozens of senior government officials and preventing the newly elected parliament from convening. The National League for Democracy (NLD), which won a sweeping victory in the November 2020 elections, led a broad-based opposition to the takeover, organizing a country-wide Civil Disobedience Movement (CDM) that continued throughout the year. Protesters were met with indiscriminate violence

 $\frac{https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and}{}$

 $\underline{https://freedomhouse.org/country/myanmar/freedom-world/2024}$

 $\frac{\text{https://govdata360.worldbank.org/indicators/h80016ecf?country=MMR\&indicator=382\&viz=lined}{e\ chart\&years=1996,2020}$

³⁹³⁶ United Nations, Office for Disarmament Affairs, *High Contracting Parties and CCW Signatories* (Jun. 25, 2024), https://www.un.org/disarmament/the-convention-on-certain-conventional-weapons/high-contracting-parties-and-signatories-ccw/

³⁹³⁷ Human Rights Watch, Stopping Killer Robots - Country Positions on Banning Fully Autonomous Weapons and Retaining Human Control (Aug. 10, 2020),

³⁹³⁸ Freedom House, Freedom in the World 2024: Myanmar (2024),

³⁹³⁹ Freedom House, Freedom in the World 2020: Myanmar (2020),

https://www.eiu.com/n/campaigns/democracy-index-2023/

³⁹⁴¹ World Bank, Voice and Accountability (2020),

³⁹⁴² World Justice Project, Rule of Law Index 2024, p. 948 (2024), https://worldiusticeproject.org/rule-of-law-index/country/2024/Myanmar

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from military forces, and journalists, activists, and ordinary people risked criminal charges and detention for voicing dissent. Armed conflict between the military and ethnic rebel groups continued, as did the forced displacement of hundreds of thousands of Rohingya, a mostly Muslim ethnic minority."

The use of AI has been implicated in what has been described as ethnic genocide and ethnic cleansing in Myanmar, in the wake of several reports regarding the complicity of Meta, formerly known as Facebook. The social media platform was reported as unable or unwilling to moderate hate speech calls for violence against Rohingya Muslims in Myanmar, and in some cases amplified them. Relying on a small Burmese-speaking team who were not based in Myanmar, the company depended heavily on Natural Language Processing systems which struggled to provide accurate translations of content in Burmese. In the aftermath of the crisis which has seen over 1 million Rohingya Muslims in refugee camps in Bangladesh, a class action has been launched against Meta seeking 150 billion pounds in compensation for the company's complicity in the genocide. 3944

The Law Amending the Electronic Transactions Law of 2004³⁹⁴⁵ has been enacted last February 2021. This permits government confiscation of personal data and the criminalization of content deemed to be untruthful or fake or created to incite public panic. The 2022 Cyber Security Bill³⁹⁴⁶ not only addresses the protection and governance of personal information, critical information infrastructure, and electronic communication but also establishes mechanisms and responsibilities to tackle risks, crimes, and attacks in the cyberspace³⁹⁴⁷. Meanwhile, the new Bill faces criticisms and calls for withdrawal³⁹⁴⁸ due to its potential impacts on fundamental rights. In particular, the Bill prohibits the use of virtual private networks (VPNs) without the Ministry's permission. Moreover, the

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³⁹⁴³ Mish Khan and Sam Taylor, *Facebook in Myanmar: A Human Problem that AI Can't Solve* (Nov. 6, 2018), https://teacircleoxford.com/essay/facebook-in-myanmar-a-human-problem-that-ai-cant-solve/

³⁹⁴⁴ Dan Milmo, *Rohingya Sue Facebook for £150bn over Myanmar Genocide*, The Guardian (Dec. 2016), https://www.theguardian.com/technology/2021/dec/06/rohingya-sue-facebook-myanmar-genocide-us-uk-legal-action-social-media-violence

³⁹⁴⁵ Free Expression Myanmar, *Legislation Amending the Electronic Transactions Law* (2021), https://freeexpressionmyanmar.org/wp-content/uploads/2021/02/Electronic-Transaction-Law-Amendment-2021-EN-MM.docx.pdf

³⁹⁴⁶ OneTrust DataGuidance, *Myanmar: State Administration Council Issues Cybersecurity Bill* (Feb. 1, 2022), https://www.dataguidance.com/news/myanmar-state-administration-council-issues

³⁹⁴⁷ The Republic of the Union of Myanmar, *State Administration Council, Cyber Security Law (DRAFT)* (Feb. 2022), https://www.hrw.org/sites/default/files/media_2022/02/220127%20Cyber-Security-Bill-EN.pdf

³⁹⁴⁸ Global Network Initiative, *GNI Calls for Withdrawal of Draft Cybersecurity Law in Myanmar* (2022), https://globalnetworkinitiative.org/cybersecurity-law-mm-2022/

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Bill grants authorities the power to order Digital Platform Service Providers to "block or remove content" when a "legitimate complaint" is made that the content "damages a person's social standing and livelihood." ³⁹⁴⁹

OECD / G20 AI Principles

Myanmar has endorsed neither the OECD AI Principles nor the G20 AI Guidelines.³⁹⁵⁰

Council of Europe AI Treaty

Myanmar has not signed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law.³⁹⁵¹

UNESCO Recommendation on AI Ethics

Myanmar adopted the UNESCO Recommendation on the Ethics of AI together with UNESCO Member States.³⁹⁵² It remains to be seen how Myanmar will implement the recommendations.

Evaluation

Myanmar does not have a national AI strategy and has not established a process for meaningful public participation to this end. Meanwhile, AI is being used for surveillance purposes in a country in which the unregulated use of new technologies has already had devastating consequences in the framework of the Rohingya genocide. Myanmar has yet to act on its endorsement of the UNESCO Recommendation on the Ethics of Artificial Intelligence.

Netherlands

In 2024, the Dutch Government released a vision on generative AI and continued discussions on how to implement the EU AI Act. The Dutch Data Protection Authority also fined Clearview AI more than €30 million for violating GDPR and prohibited the company's facial recognition services in the Netherlands.

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³⁹⁴⁹ Human Rights Watch, *Myanmar: Scrap Draconian Cybersecurity Bill* (Feb. 15, 2022), https://www.hrw.org/news/2022/02/15/myanmar-scrap-draconian-cybersecurity-bill

³⁹⁵⁰ OECD Legal Instruments, *Recommendation of the Council on Artificial Intelligence, Adherents* (May 3, 2024), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449#adherents

³⁹⁵¹ Council of Europe, *The Framework Convention on Artificial Intelligence* (2025), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

³⁹⁵² UNESCO, *UNESCO Adopts First Global Standard on the Ethics of Artificial Intelligence* (Apr. 2022), https://www.unesco.org/en/articles/unesco-adopts-first-global-standard-ethics-artificial-intelligence

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National AI Strategy

In January 2024, the Dutch government presented its "vision on generative AI," which highlighted the opportunities and challenges posed by generative AI, recognizing its potential to revolutionize sectors like labor, education, research, and government services. 3953 While embracing the technology's ability to enhance productivity and innovation, the vision is also focused on managing risks, market monopolies, and biases in AI models.

Key initiatives outlined in the vision include funding for AI research, public-private partnerships, and the creation of a national AI test facility. It emphasizes responsible AI development based on principles of safety, fairness, human wellbeing, and sustainability. To ensure the responsible integration of AI, it committed to pursuing a comprehensive action plan that includes stakeholder collaboration, legislative development, education, and strict oversight.³⁹⁵⁴

The Dutch government set out the Strategic Action Plan for Artificial Intelligence in September 2019.³⁹⁵⁵ The Plan sets out three broad themes: "Capitalising on societal and economic opportunities," "Creating the right conditions," and "Strengthening the Foundations." The key goals are publicprivate partnerships, international cooperation, an "inclusive approach that puts people first," and "a country that is at the forefront of AI applications which serve the interests of people and society." Under this plan, the Dutch government commits to protecting public values and human rights. The plan emphasizes prohibition of discrimination, protection of privacy, freedom of speech, human dignity and autonomy, as well as the right to a fair trial.

The Dutch AI strategy follows the 2018 Dutch Digitalization Strategy, the first Cabinet-wide effort to formulate key priorities for digitalization, data and AI. As part of the Digitalization Strategy, the government "supports and endorses the guidelines established in the EU's recent communication on the 'Ethics guidelines for trustworthy AI."3956 The government also commits to creating a "responsible innovation toolbox (including impact assessments, handbooks and guidelines)" and making knowledge available in the areas of transparency, explainability and accountability. Through the Transparency Lab initiative, the "government is

³⁹⁵³ Government of the Netherlands, Dutch government presents vision on generative AI (Jan. 18, 2024), https://www.government.nl/latest/news/2024/01/18/dutch-government-dutch-governmentpresents-vision-on-generative-ai

³⁹⁵⁴ Ibid

³⁹⁵⁵ Government of the Netherlands, The Strategic Action Plan for Artificial Intelligence (2019), https://oecd.ai/en/wonk/documents/netherlands-strategic-action-plan-for-ai-2019

³⁹⁵⁶ Nederland Digitaal, *Dutch Digitalization Strategy 2.0* (2018), https://www.nederlanddigitaal.nl/documenten/publicaties/2019/11/13/english-version-of-thedutch-digitalisation-strategy-2.0

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working with businesses and supervisory bodies to assess how algorithms and their practical applications can be made more transparent and verifiable."

In 2021, the government published an updated Dutch Digitalization Strategy. The ministries that coordinate the efforts are advised by the Digital Netherlands Council, which joins the deliberation process on digitalization policy and consists of domain experts. The Strategy commits the Netherlands to European and international cooperation within appropriate ethical and legal frameworks. The Strategy devotes particular attention to fairness (especially in relation to the GDPR), rule of law, accountability, transparency, and fundamental rights (with explicit reference to privacy, non-discrimination, and autonomy).

Despite the actions already taken by the Dutch government, some concerns have been raised as to how the government proceeds towards its policy objectives. The findings in the 2020 report of the Temporary Committee on the Digital Future (TCDT) of the Dutch House of Representatives concludes that the House of Representatives has only discussed digitization in a fragmented way; that not all of the risks, opportunities and public values have been addressed; and that many laws and rules in the field of digitization are determined in the European Union. The TCDT proposed to establish a standing committee for Digital Affairs in the House of Representatives, which was effectively formed in 2021 and addressed themes like digital fundamental rights, digital citizenship, and data ethics.

The Dutch Research Council (NWO) and the Ministry of Economic Affairs & Climate Policy jointly developed a public-private research program that funds research on explainable, socially aware and responsible AI. SPRONG—Responsible Applied AI. SPRONG aims to find ways to responsibly implement AI in practice, which resulted in several AI projects on sustainability and reducing socio-economic inequality. SPRONG In 2023, the NWO announced funding for the ten-year AI research program ROBUST, which in part focuses on "accuracy, reliability, repeatability, resilience and security" and taking "AI out of the black box." The Special

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³⁹⁵⁷ House of Representatives, The temporary committee on the Digital Future (TCDT), *Summary of the report Update required. Towards greater parliamentary control of digitisation*, https://www.houseofrepresentatives.nl/members-parliament/committees/temporary-committee-

digital-future/summary-report-update-required

³⁹⁵⁸ House of Representatives, *Digitale Zaken – Thema's* (Jun. 9, 2021), https://www.tweedekamer.nl/kamerleden-en-commissies/commissies/digitale-zaken/thema%E2%80%99s

³⁹⁵⁹ NWO, *First national research agenda for Artificial Intelligence* (Nov. 21, 2019), https://www.nwo.nl/en/news/first-national-research-agenda-artificial-intelligence

³⁹⁶⁰ Regieorgaan SIA, SPRONG-trajecten 2022 – 2030 (ronde 1) (2022), https://regieorgaan-sia.nl/praktijkgericht-onderzoek/programmas/sprong/sprong-trajecten-2022-2030-ronde-1/

NWO, NWO funds ten years of AI research with 25 million euros (Jan. 10, 2023), https://www.nwo.nl/en/news/nwo-funds-ten-years-ai-research-25-million-euros

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Interest Group of AI, SIGAI, representing all computing science academic institutes and researchers in the Netherlands that perform AI research also published Dutch Artificial Intelligence Manifesto highlighting the importance of socially aware, explainable and responsible AI.³⁹⁶²

The public administration within the Kingdom is layered and sometimes disconnected. However, the government organizations and the Association of the Netherlands Municipalities (VNG), the Ministry of the Interior and Kingdom Relations commit to focusing on "ethics in, by and for design and the transparency of algorithms when government experiments with AI for public tasks." A study commissioned by Ministry of Interior proposed AI guidelines that apply to the public and private sectors. The guideline, prepared by researcher at VUB, Tilburg University, Eindhoven University of Technology and the National Human Rights Institute of the Netherlands, is a result of Dutch parliament stating that "racism must be ended as soon as possible, not least by stopping the use of discriminatory algorithms."³⁹⁶³

In 2020, the Dutch Data Protection Authority (Dutch DPA) approved the first code of conduct in the Netherlands, the Data Pro Code³⁹⁶⁴ drafted by NL Digital, the Dutch industry association for organizations in the ICT sector. In 2021, researchers from VUB, Tilburg University, Eindhoven University of Technology, and the National Human Rights Institute of the Netherlands developed AI guidelines that apply to the public and private sectors. The Guideline is a result of Dutch parliament stating that "racism must be ended as soon as possible, not least by stopping the use of discriminatory algorithms" and was funded by the Ministry of the Interior.³⁹⁶⁵

Public Participation

With the implementation of the EU AI Act, the Dutch DCA, part of the AP, opened its first two calls for public input in the fall of 2024. The calls

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³⁹⁶² Dutch Artificial Intelligence Manifesto (2018), http://bnvki.org/wpcontent/uploads/2018/09/Dutch-AI-Manifesto.pdf; IPN SIG AI (2019), https://ii.tudelft.nl/bnvki/?page id=1247

³⁹⁶³ VUB Today, New guidelines aim to correct discriminatory algorithms: VUB researchers help to create AI rules for government organisations and companies (Jul. 15, 2021), https://today.vub.be/en/article/new-guidelines-aim-to-correct-discriminatory-algorithms
³⁹⁶⁴ Nederland ICT, Guildeins on Codes of Conduct and Monitoring Bodies under REgulatin 2016/679 (Aug. 20, 2020), <a href="https://www.edpb.europa.eu/our-work-tools/accountability-tools/register-code-of-conduct/2020/data-pro-code-of-en-decode-of-conduct/2020/data-pro-code-of-en-decode-of

³⁹⁶⁵ VUB Today, *New guidelines aim to correct discriminatory algorithms* (July 15, 2021), https://today.vub.be/en/article/new-guidelines-aim-to-correct-discriminatory-algorithms

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specifically referenced certain prohibitions outlined in the AI Act, "based upon [the AP's] role as coordinating supervisor of algorithms and AI."³⁹⁶⁶

In the calls, citizens, governments, businesses and other organizations were asked to submit responses to the first two prohibitions outlined in the Act, manipulative and deceptive AI systems (prohibition A) and exploitative AI systems (prohibition B), as well as the sixth prohibition, AI systems for emotion recognition in the areas of workplace and education institutions (prohibition F). 3967

Participation in the development of the Dutch Digitalization Plan and the Strategic Action Plan for Artificial Intelligence is geared more towards public agencies, private companies, universities and research institutes than the citizens directly. Taskforce AI, which created the initial AI report, is a public-private partnership, and its Dutch AI Coalition (NL AIC) is a cooperation between different research centers.³⁹⁶⁸ The national Innovation Centre for AI (ICAI) is also a national network between knowledge institutions, industry and government.³⁹⁶⁹

The Dutch AI Coalition (NL AIC), a public-private consortium, offers (paid or time-limited trial) membership for interested stakeholders in the field of AI, which would grant access to AI projects and working groups. The Human-Centric AI working group has developed two key projects. The Ethical, Legal and Societal Aspects (ELSA) Labs aims "to ensure that companies, governmental authorities, centres of expertise, civil society organisations and the general public develop responsible applications of AI jointly. This involves solutions for both social and business problems, focusing on honesty, fairness, security and (above all) trustworthiness. The approach addresses human values as well as public values."³⁹⁷¹

The NL AIC launched 'AI Parade,' an eighteen-month public engagement project on AI that kicked off in early 2022, focused in part on education and citizen participation.³⁹⁷² The Dutch Ministry of Foreign Affairs also set up the REAIM

³⁹⁶⁶ Autoriteit Persoonsgegevens, *Input on prohibited AI systems* (2024), https://www.autoriteitpersoonsgegevens.nl/en/themes/algorithms-ai/eu-ai-act/input-on-prohibited-ai-systems#first-call-manipulative-and-exploitative-ai-systems

³⁹⁶⁷ Ibid

³⁹⁶⁸ HSD Foundation, *New Dutch AI Coalition Demands National* Approach (Jul. 23, 2019), https://www.thehaguesecuritydelta.com/news/newsitem/1329-dutch-ai-coalition-demands-national-approach

³⁹⁶⁹ Innovation Center for Artificial Intelligence, https://icai.ai/

³⁹⁷⁰ NL AIC, *Deelname informatie* (2022), https://nlaic.com/deelname-informatie/

³⁹⁷¹ ELSA Labs, https://nlaic.com/en/building-blocks/human-centric-ai/elsa-concept/

³⁹⁷² NL AI Coalition, *AI Parade*, https://nlaic.com/en/building-blocks/human-centric-ai/social/ai-parade/

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conference in 2023, with the intent to "mobilise and activate a wide group of stakeholders" in the responsible military deployment of AI.³⁹⁷³

While not equivalent to public participation in AI policy as such, the Dutch government has made efforts towards document accessibility and knowledge-building, which are often the building blocks for adequate public participation in AI policies. The Electronic Announcement Act requires national governments to publish official publications on the internet rather than on paper. ³⁹⁷⁴ All AI policies are accessible by the public via the websites of the Dutch Parliament and the Digital Government. ³⁹⁷⁵

EU Digital Services Act

As an EU member state, the Netherlands shall apply the EU Digital Services Act (DSA).³⁹⁷⁶ The DSA regulates online intermediaries and platforms. Its main objective is to prevent illegal and harmful activities online and the spread of disinformation.

FU ALACT

As an EU member State, the Netherlands is bound by the EU AI Act.³⁹⁷⁷ The EU AI Act is a risk-based market regulation which supports the objective of promoting a human-centric approach to AI and making the EU a global leader in the development of secure, trustworthy and ethical AI.

As of November 2024, the Netherlands has not officially determined the division of supervisory duties under the EU AI Act, but the DPA and the Dutch Authority for Digital Infrastructure (RDI) "in collaboration with 20 other Dutch

https://www.government.nl/ministries/ministry-of-foreign-affairs/activiteiten/reaim

files/Digital Government Factsheets Netherlands 2019 0.pdf

https://www.nldigitalgovernment.nl/digital-government-agenda/

https://www.europarl.europa.eu/RegData/seance_pleniere/textes_adoptes/definitif/2024/03-13/0138/P9_TA(2024)0138_EN.pdf

³⁹⁷³ Ministry of Foreign Affairs, REAIM 2023, Events (2023),

³⁹⁷⁴ European Commission, *Digital Government Factsheet 2019 – Netherlands* (2019), https://joinup.ec.europa.eu/sites/default/files/inline-

³⁹⁷⁵ Dutch House of Representatives, https://www.houseofrepresentatives.nl; Government of the Netherlands, Digital Government Agenda. (Feb. 27, 2025),

³⁹⁷⁶ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act), (Oct. 21, 2022), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022R2065

³⁹⁷⁷ European Parliament, Artificial Intelligence Act, European Parliament legislative resolution of 13 March 2024 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts (COM(2021)0206 – C9-0146/2021 – 2021/0106(COD)), P9 TA(2024)0138,

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supervisory authorities that may play a role in AI-supervision,"³⁹⁷⁸ have submitted three rounds of advice on supervisory duties to the Dutch government. The third and final round of advice was submitted on November 7, 2024. ³⁹⁷⁹

The AI Act entered into force on August 1, 2024, and will be fully applicable in August 2026, with some exceptions.

Data Protection

Since the Netherlands are an EU Member State, the General Data Protection Regulation is directly applicable. In alignment with GDPR requirements, the Dutch Data Protection Authority (DPA) was established. It is an independent supervisory body in charge of promoting and enforcing personal data protection rights. It is tasked with the supervision of national and international businesses and organizations, the central government (including the police and the criminal justice authorities), as well as associations, schools, foundations and individual citizens.

The DPA is a member of the European Data Protection Body (EDPB), "an independent European body, which contributes to the consistent application of data protection rules throughout the European Union, and promotes cooperation between the EU's data protection authorities." 3980

The Dutch DPA is also a member of the Global Privacy Assembly (GPA) since 2002. The DPA did not endorse the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence,³⁹⁸¹ the 2020 GPA Resolution on AI Accountability³⁹⁸² or the 2023 GPA Resolution on Generative AI.³⁹⁸³ However, the

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³⁹⁷⁸ Autoriteit Persoonsgegevens, *Second (Interim) Advice on Supervisory Structure AI Act* (Jun. 12, 2024), https://autoriteitpersoonsgegevens.nl/en/documents/second-interim-advice-on-supervisory-structure-ai-act

³⁹⁷⁹ Autoriteit Persoonsgegevens, *Third Advice on the Supervisory Structure for the AI Act* (Nov. 7, 2024), https://www.autoriteitpersoonsgegevens.nl/en/documents/third-advice-on-the-supervisory-structure-for-the-ai-act

³⁹⁸⁰ European Data Protection Board, *Who We Are*, https://edpb.europa.eu/about-edpb/about-edpb/about-edpb/who-we-are en

³⁹⁸¹ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

³⁹⁸² Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

³⁹⁸³ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

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DPA did co-sponsor the 2022 GPA Resolution on Facial Recognition Technology.³⁹⁸⁴

In January 2023, the Dutch government launched a supervisory body for algorithms (the *algoritmetoezichthouder*, or algorithm watchdog).³⁹⁸⁵ A new dedicated unit, the Department for the Coordination of Algorithmic Oversight has been created within the DPA. The main mission of the algorithm supervisor is to coordinate all algorithm-related cooperation between Dutch regulators. Its focus will be mainly on monitoring the use of algorithms in the public sector. The objective is to better protect citizens' fundamental rights (such as privacy and non-discrimination) and reduce the risks of serious incidents. This development responds to a series of issues identified with the use of AI in the public sector and some initiatives of several Dutch regulators.

In January 2024, the Department released its second AI & Algorithmic Risks Report. In the Report, the DPA highlights the urgent need for better risk management and incident monitoring. The DPA also stresses that "the advance of generative AI puts additional pressure on the development of effective safeguards." The report recommends a comprehensive strategy that includes human control and oversight, secure applications and systems, and strict rules to ensure that organizations are in control.³⁹⁸⁶ This shows the Dutch DPA's commitment to apply data protection law as a way to fill some of the loopholes in the EU AI Act.

In September 2024, the DPA fined Clearview AI, an American facial recognition startup, €30.5 million for violating GDPR by building a database that included facial data from Dutch citizens. Dutch DPA chairman Aleid Wolfsen said they violated data privacy law "on several points: the company should never have built the database and is insufficiently transparent" and further warned that use of Clearview services is prohibited in the Netherlands. "Clearview breaks the law, and this makes using the services of Clearview illegal," Wolfsen said. "Dutch organisations that use Clearview may therefore expect hefty fines from the Dutch DPA."3987

Technolog.pdf

³⁹⁸⁴ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), <a href="https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-on-Principles-and-Expectation-on-Principles-and-Expec

³⁹⁸⁵ Digitaleoverheid.nl, *Algoritmetoezichthouder gelanceerd* (Jan. 17, 2023), https://www.digitaleoverheid.nl/nieuws/algoritmetoezichthouder-gelanceerd/

³⁹⁸⁶ Dutch Data Protection Authority, *AI & Algorithmic Risks Report Netherlands – Winter 2023-2024* (Dec. 18, 2023), https://www.autoriteitpersoonsgegevens.nl/en/documents/ai-algorithmic-risks-report-netherlands-winter-2023-2024-0

³⁹⁸⁷ Autoriteit Persoonsgegevens, *Dutch DPA imposes a fine on Clearview because of illegal data collection for facial recognition* (Sept. 3, 2024),

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In January 2021, the Dutch Court of Audit, following an investigation on the Dutch government's use of algorithms, concluded that "government interests are central to algorithms, not private citizens' interests; that the government recognizes the importance of privacy but takes little account of ethical aspects; and warns against the government's use of algorithms becoming dependent on external suppliers." In another report issued in 2022, the Dutch Court of Audit concluded that 6 out of 9 algorithms used by the Dutch government did not meet the basic requirements of Dutch law and exposed the government to various risks: from inadequate control over the algorithm's performance and impact to bias, data leaks and unauthorized access. 3989

In October 2021, several Dutch regulators (the Netherlands Authority for Consumers and Markets, the Dutch DPA, the Dutch Authority for the Financial Markets, and the Dutch Media Authority) intensified their cooperation via the Digital Regulation Cooperation Platform (DST) to better coordinate their oversight activities, not least oversight on the use of algorithms and AI.³⁹⁹⁰ They also pushed for more transparency in how the personal data of users is processed and used.³⁹⁹¹ This stronger coordination follows a 2021 audit of Google's teaching tools for schools³⁹⁹² which found the software's privacy protections to be lacking, as well as regulatory pushback against other Big Tech firms.³⁹⁹³

Algorithmic Transparency

In March 2024, "as the coordinating authority for the oversight of AI and algorithms," the AP and the DCA outlined its oversight work plan that focused on

https://www.autoriteitpersoonsgegevens.nl/en/current/dutch-dpa-imposes-a-fine-on-clearview-because-of-illegal-data-collection-for-facial-recognition

https://english.rekenkamer.nl/publications/reports/2021/01/26/understanding-algorithms

 $\underline{https://www.rekenkamer.nl/publicaties/rapporten/2022/05/18/algoritmes-getoetst}$

³⁹⁸⁸ The Netherlands Court of Audit, *Understanding algorithms* (Jan. 2021),

³⁹⁸⁹ The Netherlands Court of Audit, *Algoritmes getoetst* (May 2022),

³⁹⁹⁰ Authority for Consumers and Markets, *The Digital Regulation Cooperation Platform (SDT)* (Oct. 2021) https://www.acm.nl/en/about-acm/cooperation/national-cooperation/digital-regulation-cooperation-platform-sdt

³⁹⁹¹ Authority for Consumers and Markets, *Dutch regulators press for better information about online use of internet users' data* (Mar. 2022), https://www.acm.nl/en/publications/dutch-regulators-press-better-information-about-online-use-internet-users-data

³⁹⁹² Sjoera Nas and Floor Terra, *DPIA* on the use of Google G Suite (Enterprise) for Education (Mar. 12, 2021), https://www.surf.nl/files/2021-06/updated-g-suite-for-education-dpia-12-march-2021.pdf

³⁹⁹³ Natasha Singer, *How the Netherlands Is Taming Big Tech*, New York Times (Jan. 18, 2023), www.nytimes.com/2023/01/18/technology/dutch-school-privacy-google-microsoft-zoom.amp.html

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four main areas: "transparency, auditing, governance, and preventing discrimination in algorithmic processes". 3994

The Netherlands is subject to both the EU GDPR and Council of Europe Convention 108+. Algorithmic transparency is therefore a legal right. The DPA has expressed concerns about the lack of transparency and poor data security practices in the public sector, policing, criminal justice. It has also mentioned that digital government will be one of its three core focus areas for 2020–2023.³⁹⁹⁵

Algorithm Impact Assessment

Under the commission of the Dutch Ministry of the Interior, Utrecht University developed The Fundamental Rights and Algorithm Impact Assessment (FRAIA) in 2021. 3996 This innovative tool aims to proactively identify and address risks to fundamental rights associated with algorithm use. Between 2023 and 2024, FRAIA was successfully piloted with 15 algorithms across various government bodies, allowing for the collection of valuable insights and recommendations for future enhancements. 3997 While there was some initial skepticism, participants in these pilot programs expressed positive feedback and valued FRAIA's comprehensive approach, which integrates legal, ethical, and technical perspectives. As a result, FRAIA is gaining considerable political and international recognition.

The Dutch Digital Infrastructure Agency (RDI) partnered with UNESCO in October 2023 to enhance the supervisory capabilities of AI regulators across Europe. This collaboration supports the efforts of Dutch and European working groups focused on AI oversight. UNESCO aims to assist RDI and these groups in strengthening their oversight abilities in accordance with the AI Act and other relevant legislation. The collaboration has several specific objectives:

• Conducting a baseline assessment through a comprehensive report on current AI oversight practices in Europe and beyond.

https://www.unesco.org/en/artificial-intelligence/recommendation-ethics/supervising

³⁹⁹⁴ Autoriteit Persoonsgegevens, *Work Plan Oversight of AI and Algorithms 2024* (Mar. 22, 2024), https://www.autoriteitpersoonsgegevens.nl/en/documents/work-plan-oversight-of-ai-and-algorithms-2024

Dutch Data Protection Authority, Focus Dutch Data Protection Authority 2020–2023, https://autoriteitpersoonsgegevens.nl/sites/default/files/atoms/files/ap-dataprotectie in een digitale samenleving -gb wtk.pdf

³⁹⁹⁶ Government of the Netherlands, *Impact Assessment Fundamental Rights and Algorithms* (Mar. 31, 2022), https://www.government.nl/documents/reports/2022/03/31/impact-assessment-fundamental-rights-and-algorithms

³⁹⁹⁷ Government of the Netherlands, FRAIA in Action (Jun. 20, 2024),

https://www.government.nl/documents/reports/2024/06/20/fraia-in-action

³⁹⁹⁸ UNESCO, Supervising the Ethics of Artificial Intelligence (May 2024),

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- Developing and discussing AI oversight case studies with members of the working groups, led by RDI. Creating and sharing best practices to address specific AI oversight challenges.
- Exploring and presenting approaches and options to key stakeholders in AI oversight.
- Providing training for oversight leaders based on established best practices.
- The project is scheduled for completion by the end of 2025.³⁹⁹⁹

Fraud Detection Algorithm

In early 2020, a Dutch court ruled that the System Risk Indication algorithm (SyRI), used to combat fraud in government programs, violated Article 8 of the European Convention on Human Rights. 4000 In the landmark decision, the Court ruled that the principle of transparency was not observed, because there is no insight into the risk indicators and the operation of the risk model. The Court also warned that there is a risk of bias, in that inadvertent links could be established through SyRI on the basis of lower socio-economic status or an immigration background.

The UN Special Rapporteur on Extreme Poverty and Human Rights explained that the decision challenged the "systematic, legislatively sanctioned, used of digital technologies in welfare state on human rights ground."⁴⁰⁰¹ In a filing with the court, the Special Rapporteur voiced concern that "SyRI has consistently been rolled out in poorer and more vulnerable areas of municipalities", and that the Dutch government has denied access to information about the data and 'risk models' used in the algorithm." The Special Rapporteur called the decision, "a clear victory for all those who are justifiably concerned about the serious threats digital welfare systems pose for human rights."⁴⁰⁰²

The Data Processing by Partnerships Act was introduced by the government in April 2020. Where SyRI was related to public data sharing, this bill

Autoriteit Persoonsgegevens, *AI Risk Report Summer 2024: Turbulent Rise of AI Calls for Vigilance by Everyone* (Jul. 18, 2024), https://www.autoriteitpersoonsgegevens.nl/en/current/ai-risk-report-summer-2024-turbulent-rise-of-ai-calls-for-vigilance-by-everyone

⁴⁰⁰⁰ Wired.com, *Europe Limits Government by Algorithm. The US, Not So Much* (Feb. 7, 2020), https://www.wired.com/story/europe-limits-government-algorithm-us-not-much/

⁴⁰⁰¹ UN OHCHR, Brief by the UN Special Rapporteur on extreme poverty and human rights as Amicus Curiae in the case of NJCM c.s./De Staat der Nederlanden (SyRI) before the District Court of The Hague (2019),

https://www.ohchr.org/Documents/Issues/Poverty/Amicusfinalversionsigned.pdf

⁴⁰⁰² UN OHCHR, Landmark ruling by Dutch court stops government attempts to spy on the poor – UN expert (Feb. 5, 2020),

https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=25522&LangID=E

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expands the data surveillance and sharing to all data stored in public and private storage. 4003

In January 2021, the Dutch government resigned after it became clear that thousands of families, disproportionately of ethnic minority backgrounds, were wrongly accused of child welfare fraud by a discriminatory algorithm and ordered to pay money back, which drove many victims into deep poverty. 4004 This scandal would later lead to several policy shifts: a mandatory AI registry, a new algorithmic supervisory body, and mandatory human rights risk assessments for public sector AI systems. 4005 Alexandra van Huffelen, Minister of Digitalization at the time, later declared that high-risk AI systems should require certification before use, that "impact assessments should be meaningful and address fundamental rights in the complete AI lifecycle," that AI should respect and protect people and their rights, and human-centric AI requires more human oversight - especially when systems have a big influence on people." Van Huffelen also makes clear that the government's experiences with the fraud detection algorithm have urged the Netherlands not just to implement new algorithmic oversight policies, but also to proactively implement components of the EU AI Act, and sometimes even go beyond its requirements: she states that the high-risk impact assessment should be expanded to more cases via "a broader Impact Assessment tool on Human Rights and algorithms" and that Big Tech platform governance is inadequate, suggesting that stricter rules should include content labelling policies. 4007

In a similar scandal, journalists revealed that five Dutch municipalities (Nieuwegein, Houten, IJsselstein, Lopik and Veenendaal) used a discriminatory risk scoring system for fraud up to June 2022 – even after the SyRi scandal – and the Dutch labor union FNV filed a complaint with the Dutch DPA in January 2023.

 $\underline{https://automatingsociety.algorithmwatch.org/wp-content/uploads/2020/10/Automating-Society-Report-2020.pdf}$

⁴⁰⁰³ AlgorithmWatch, Automating Society Report 2020 (2020),

⁴⁰⁰⁴ Gabriel Geiger, *How a Discriminatory Algorithm Wrongly Accused Thousands of Families of Fraud*, Vice (Mar. 1, 2021) https://www.vice.com/en/article/jgq35d/how-a-discriminatory-algorithm-wrongly-accused-thousands-of-families-of-fraud

⁴⁰⁰⁵ Luca Bertuzzi, *Once bitten, Netherlands wants to move early on algorithm supervision* (Nov. 14, 2022), https://www.euractiv.com/section/digital/news/once-bitten-netherlands-wants-to-move-early-on-algorithm-supervision/

⁴⁰⁰⁶ Alexandra van Huffelen, *Toespraak Alexandra van Huffelen, 30 maart 2022, Brussel* (Mar. 30, 2022) https://www.rijksoverheid.nl/documenten/toespraken/2022/03/30/toespraak-alexandra-van-huffelen-30-maart-2022-brussel

⁴⁰⁰⁷ Ibid

⁴⁰⁰⁸ Yvette de Vries, FNV doet aangifte tegen vijf gemeenten om omstreden screening uitkeringsgerechtigden (Jan. 21, 2023),

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Al Registries

Amsterdam launched an AI registry in beta version to detail how city government uses algorithms to deliver services in 2020. "Each algorithm cited in the registry lists datasets used to train a model, a description of how an algorithm is used, how humans utilize the prediction, and how algorithms were assessed for potential bias or risks. The registry also provides citizens a way to give feedback on algorithms their local government uses and the name, city department, and contact information for the person responsible for the responsible deployment of a particular algorithm." ⁴⁰⁰⁹

The city of Amsterdam's system was used as a blueprint for a nation-wide mandatory registry for algorithms deployed in the public sector. The registry, available online starting December 2022, is freely accessible for citizens and shows information on the purpose, legal background, application, human rights impact assessments, and oversight of public sector algorithms. Ontribution to the registry is currently voluntary but the aim is to make it compulsory by the end of 2025. The Dutch government's Fundamental Rights and Algorithms Impact Assessment (FRAIA), launched in 2021, dovetails with the algorithm registry: the registry specifies whether a Human Rights Impact Assessment was performed.

The Dutch cities of Rotterdam and Eindhoven are among 7 European cities to participate in a public AI algorithm registry experiment, The Algorithmic Transparency Standard, led by Eurocities Digital Forum Lab. Building on the Amsterdam and Helsinki experiment, the aim is to provide cities with a common data schema for algorithm registries that is validated, open-source, publicly available, and ready for use in local algorithm registries.⁴⁰¹³

https://www.fnv.nl/nieuwsbericht/sectornieuws/uitkeringsgerechtigden/2023/01/fnv-doet-aangifte-tegen-vijf-gemeenten-om-omstrede

⁴⁰⁰⁹ Khari Johnson, *Amsterdam and Helsinki Launch Algorithm Registries to Bring Transparency to Public Deployments of AI*, (Sept. 28, 2020), https://venturebeat.com/2020/09/28/amsterdam-and-helsinki-launch-algorithm-registries-to-bring-transparency-to-public-deployments-of-ai/; See also Meeri Haataja, Linda van de Fliert and Pasi Rautio, *Public AI Registers: Realising AI Transparency and Civic Participation in Government Use of AI*, A White Paper (Sept. 30, 2020), https://ai.hel.fi/wp-content/uploads/White-Paper.pdf

⁴⁰¹⁰ Luca Bertuzzi, *Once bitten, Netherlands wants to move early on algorithm supervision* (Nov. 14, 2022), https://www.euractiv.com/section/digital/news/once-bitten-netherlands-wants-to-move-early-on-algorithm-supervision/

⁴⁰¹¹ Government of the Netherlands, *The Dutch Government's Algorithm Register* (2022), https://algoritmes.overheid.nl/nl

⁴⁰¹² European Commission, Open Source Observatory, *Dutch government launches Algorithms Register* (Dec. 23, 2022), https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/dutch-government-launches-algorithms-register

⁴⁰¹³ Eurocities, *How does your city use and manage your digital data?* (Jan. 19, 2023), https://eurocities.eu/latest/how-does-your-city-use-and-manage-your-digital-data/

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Predictive Policing

The Dutch police force, in collaboration with Utrecht University and the University of Amsterdam, established the National Police Lab AI to develop "AI techniques to improve the safety in the Netherlands in a socially, legally and ethically responsible way." In alignment with the government's commitment to experiment with technology to solve social issues, the Dutch police has launched pilot projects with predictive policing to anticipate and prevent crime that might be committed by a certain person or at a certain location.

The first was the Sensing Project in Roermond, where police used cameras and other sensors to reduce pickpocketing. The system monitored all people driving in and around Roermond and created a risk score, effectively transforming the "city into a living lab where every person travelling by car is subjected to mass surveillance and other human rights violations". The project violated the principles of human rights, informed consent, right to privacy and data protection, right to due process and non-discrimination. Amnesty International called on the Dutch government to "halt the Sensing project and comparable 'experimental' predictive policing projects" and to "implement a mandatory and binding human rights impact assessment requirement applicable to the public sector." The experiment was halted in 2022, with its "results unclear" and without leading to structural policy shifts. 4016

The second predictive policing project is *Criminaliteits Anticipatie Systeem* (Crime Anticipation System or CAS) implemented nationwide in 2017. The use of CAS to predict crime locations makes the Netherlands the first country in the world to deploy predictive policing on a national scale.⁴⁰¹⁷ The Dutch Court of Auditors critized the CAS for its lack of oversight, privacy, and transparency, deeming the system "high-risk," "worrying," and "prejudiced," but Dutch police has not made significant changes in response.⁴⁰¹⁸

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⁴⁰¹⁴ Utrecht University, *National Police Lab AI*, https://www.uu.nl/en/research/ai-labs/our-labs/national-police-lab-ai

⁴⁰¹⁵ Amnesty International, We Sense Trouble (2020),

https://www.amnesty.org/download/Documents/EUR3529712020ENGLISH.PDF

⁴⁰¹⁶ Gertie Driessen, Landelijke proef in Roermond rond opsporen zakkenrollers stille dood gestorven, resultaten onduidelijk (Nov. 11, 2020), https://www.limburger.nl/cnt/dmf20221111 95634631

⁴⁰¹⁷ Litska Strikwerda, *Predictive Policing: The Risks Associated with Risk Assessment.* The Police Journal (Aug. 2020), https://doi.org/10.1177/0032258X20947749

⁴⁰¹⁸ Esther Lammers, *Rekenkamer waarschuwt voor mogelijke 'vooringenomenheid' bij politie-algoritmes* (May 18, 2022), https://www.trouw.nl/politiek/rekenkamer-waarschuwt-voormogelijke-vooringenomenheid-bij-politie-algoritmes~bdcc1753/

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Environmental Impact of AI

The Dutch government's vision for generative AI in 2024 underscores the technology's potential to contribute to sustainability, while also emphasizing the importance of ethical principles such as privacy, non-discrimination, and fairness.⁴⁰¹⁹

The Dutch government has shown a strong commitment to these initiatives by allocating substantial resources through the National Growth Fund. This funding is specifically aimed at supporting research and development initiatives in AI, with a focus on fostering projects that address climate resilience and promote sustainable practices. A public-private initiative, known as the AiNed Program, has been established as part of the National Growth Fund to strategically position the Netherlands among the leading nations in AI advancement.⁴⁰²⁰ With funding amounting to €189 million from the National Growth Fund, the program aims to cultivate public-private investments in four areas:

- The establishment of a robust knowledge and innovation infrastructure
- The enhancement of AI-related skills
- The practical application of AI systems
- The encouragement of collaborative ecosystems among various stakeholders.

This program focuses on stimulating economic recovery and growth while reinforcing the economic foundation of the country. Central to the AiNed Investment Program, which is in partnership with the Dutch AI Coalition, is the promotion of human-centered and responsible AI utilization.

The Dutch AI Coalition (NL-AIC) has been operational since 2019. The NL-AIC engages collaboratively with various stakeholders, including governmental bodies, enterprises, educational institutions, research organizations, and societal groups, to advance the development of socially responsible applications of AI.⁴⁰²¹ The coalition underscores energy and sustainability as pivotal domains for the application of AI. Recognized as a foundational technology, AI plays a crucial role in mitigating energy consumption and fostering innovative initiatives that yield positive contributions to climate resilience. A specialized working group focused on Energy and Sustainability has been established.⁴⁰²²

https://nlaic.com/en/toepassingsgebied/energy-and-sustainability/

⁴⁰¹⁹ Government of the Netherlands, *Government-Wide Vision on Generative AI of the Netherlands* (Jan. 17, 2024), https://www.government.nl/documents/parliamentary-documents/2024/01/17/government-wide-vision-on-generative-ai-of-the-netherlands
https://www.nationaal.groeifonds.nl/overzicht-lopende-projecten/thema-veiligheid-en-digitalisering/ained

⁴⁰²¹ Netherlands AI Coalition, *Homepage*, https://nlaic.com/en/

⁴⁰²² Netherlands AI Coalition, Energy and Sustainability,

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The Royal Netherlands Meteorological Institute (KNMI) launched the KNMI DataLab in January 2016. 4023 This initiative is designed to encourage and coordinate innovations across multiple disciplines, including climate science, weather forecasting, and seismology. The KNMI DataLab disseminates knowledge in these respective fields and by providing access to the extensive datasets KNMI maintains. The overarching goal is to create a CO2-free energy system, thereby contributing to global efforts in mitigating climate change.

In a parallel effort, the Dutch Water Partnership (NWP) serves as a coalition of various Dutch organizations, encompassing governmental bodies, within the water sector dedicated to the collaborative development of sustainable water solutions.4024

Lethal Autonomous Weapons

In 2016, the Dutch government agreed with the conclusions of the Joint Committee of the Advisory Council on International Affairs (AIV) and the Advisory Committee on Issues of Public International Law (CAVV) advisory report that meaningful human control is required in the deployment of autonomous weapon systems and responsibility and accountability attribution needs to be considered in the design stage of weapon systems. 4025

The government also views a moratorium on fully autonomous weapon systems to be currently unfeasible. In a 2022 letter from the Government to the House of Representatives regarding Autonomous Lethal Weapons, the Minister of Foreign Affairs stated that the Dutch government agreed that the underlying mathematical models – and the data underlying those models – must be traceable and explainable at all times and further that it must be clear throughout the decision-making process where and how meaningful human control is assigned and who is responsible for what. 4026

The same year the Royal Netherlands Army became the first military in the West to deploy armed unmanned ground vehicles (UGVs) "for experimental use in an operational unit in a military-relevant environment."4027 Also in 2022, the Netherlands endorsed the UN's Joint Statement on Lethal Autonomous

⁴⁰²³ DataLab KNMI, *Homepage*, https://datalab.knmi.nl/en/

⁴⁰²⁴ Netherlands Water Partnership, *Homepage*, https://www.netherlandswaterpartnership.com/ ⁴⁰²⁵ Advisory Council on International Affairs, Government response to AIV/CAVV advisory report no. 97, Autonomous weapon systems: the need for meaningful human control (Mar. 2, 2016), https://perma.cc/J37M-UO33

⁴⁰²⁶ Government of the Netherlands, Letter to Parliament about Autonomous Weapon Systems (Oct. 13, 2022), https://www.government.nl/ministries/ministry-of-foreign-

affairs/documents/publications/2022/10/10/letter-to-parliament-autonomous-weapon-systems ⁴⁰²⁷ Alexander Stronell, Royal Netherlands Army commences armed robot trials in first among Western militaries (Oct. 14, 2022), https://www.janes.com/defence-news/royal-netherlandsarmy-commences-armed-robot-trials-in-first-among-western-militaries/

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Weapons Systems, 4028 which underlines "the need to maintain human responsibility and accountability in the use of force." 4029

At the 78th UN General Assembly First Committee in 2023, the Netherlands voted in favor⁴⁰³⁰ of resolution L.56⁴⁰³¹ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. The report should analyze ways to address the challenges and concerns autonomous weapon systems raise from humanitarian, legal, security, technological and ethical perspectives and reflect on the role of humans in the use of force.

In February 2024, at the High Level Segment of the Conference on Disarmament held in Geneva, the Minister of Foreign Affairs Hanke Bruins Slot announced that, as the current chair of the Government Group of Experts on Lethal Autonomous Weapons Systems, the Netherlands will preside over the discussions on the regulation of lethal autonomous weapons systems. The Minister stated, "One big challenge we face is the rapid evolution of emerging technologies. [...] we believe that the responsible development and use of emerging technologies in weapons systems are indispensable for modern armed forces. But those technologies also entail real and imminent risks to security, human rights and fundamental freedoms. [...] We must develop clear standards for responsible behaviour in this area. And we must strengthen the existing norms. The urgency is clear. [...] The risks and legal implications of weapons systems that take decisions fully outside the scope of human control are obvious."

He also clearly expressed the Dutch national position. "Autonomous weapons systems that can't be used in accordance with international law, including international humanitarian law, should be explicitly prohibited. And those that can be used in accordance with international law should be regulated. We must ensure human judgement and control with the development of new

⁴⁰²⁸ United Nations, *Joint Statement on Lethal Autonomous Weapons Systems* (Oct. 21, 2022), https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcS nnAm en.pdf

⁴⁰²⁹ Stop Killer Robots, *70 states deliver joint statement on autonomous weapons systems at UN General Assembly* (2022), https://www.stopkillerrobots.org/news/70-states-deliver-joint-statement-on-autonomous-weapons-systems-at-un-general-assembly/

⁴⁰³⁰ Stop Killer Robots, *164 states vote against the machine at the UN General Assembly* (Nov. 1, 2023), https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

⁴⁰³¹ General Assembly, *Resolution L56L Lethal Autonomous Weapons* (Oct.12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

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weapon systems. That should be the main objective of regulation."⁴⁰³² On November 5th, 2024, the UN General Assembly adopted the Draft Resolution L.77 on Lethal Autonomous Weapons Systems. The Netherlands was one of 161 countries that voted in favor of this.⁴⁰³³

In furtherance of regulating the use of AI in the military, the Minister of Foreign Affairs Wopke Hoekstra announced that in February 2023 the Netherlands will host an international summit on the responsible application of artificial intelligence in the military domain. The aim of the summit is to define an agenda for developing international agreements on AI applications in the military. At the end of the Summit, known as REAIM 2023, government representatives, including the Netherlands, agreed on a joint call for action on the responsible development, deployment and use of artificial intelligence (AI) in the military domain. In the joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." The Netherlands has also endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy.

At the 2023 REAIM Summit, the Netherlands also took the initiative to launch a Global Commission on Responsible AI in the Military Domain in the Hague. The Global Commission has been established for an initial period of two years to help promote mutual awareness and understanding regarding the global governance of AI in the military domain and support fundamental norm development and policy coherence in the field. The Global Commission will produce a strategic guidance report to identify short- and long-term

⁴⁰³² Government of the Netherlands, *Speech by Minister Hanke Bruins Slot at the High Level Segment of the Conference on Disarmament* (Feb. 27, 2024),

 $[\]frac{https://www.government.nl/documents/speeches/2024/02/27/speech-by-minister-hanke-bruins-slot-at-the-conference-on-disarmament}{}$

⁴⁰³³ UN General Assembly, *Lethal Autonomous Weapons*, *Resolution L77* (Nov. 5, 2024), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/24/resolutions/L77.pdf

⁴⁰³⁴ Ministry of Foreign Affairs, *About REAIM 2023* (2024),

 $[\]frac{\text{https://www.government.nl/ministries/ministry-of-foreign-affairs/activiteiten/reaim/about-reaim-}{2023}$

⁴⁰³⁵ Government of Netherlands, *Call to action on responsible use of AI in the military domain* (Feb. 16, 2023) Press Release, https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action

⁴⁰³⁶ US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Feb. 12, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

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recommendations for governments and the wider multi-stakeholder community. 4037

The Netherlands also participated in and endorsed the outcome document, Blueprint for Action, for the second REAIM summit, which took place in 2024 in Korea. 4038

Human Rights

The Netherlands has endorsed the Universal Declaration of Human Rights, The European Union (EU) Charter of Fundamental Rights and The European Convention on Human Rights (ECHR). The Dutch government has set up an AI, public values and human rights knowledge platform where ministries exchange knowledge and develop policy on public values and human rights in AI applications. Al

Freedom House classifies the Netherlands as "Free" on the Freedom in the World report with a score of 97/100 in 2024. 4041

Al Safety Summit

In November 2023, the Netherlands participated in the first AI Safety Summit and endorsed the Bletchley Declaration.⁴⁰⁴² The Netherlands thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that for

https://hcss.nl/gcreaim/#:~:text=The%20Global%20Commission%20on%20Responsible,Military %20Domain%20in%20The%20Hague

 $\frac{https://www.reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163\&shareBbsMngNo=10264\&shareMenuId=11613\&shareTabMenuId=11613$

⁴⁰³⁷ The Hague Centre for Strategic Studies, *Global Commission on Responsible Artificial Intelligence in the Military Domain (GC REAIM)*,

⁴⁰³⁸ REAIM 2024, *Blueprint for Action* (Sept. 11, 2024),

⁴⁰³⁹ EU Agency for Fundamental Rights, *The European Union (EU) Charter of Fundamental Rights in the Netherlands* (2015), https://fra.europa.eu/sites/default/files/fra_uploads/fra-2019-eu-charter-in-netherlands_en.pdf

⁴⁰⁴⁰ Government of the Netherlands, *Policy Brief AI*, *Public Values and Human* Rights (Oct. 8, 2019), https://www.digitaleoverheid.nl/wp-content/uploads/sites/8/2020/01/Dutch-policy-brief-on-AI-public-values-and-fundamental-rights DEF-T.pdf

⁴⁰⁴¹ Freedom House, *Freedom in the World 2024: Netherlands* (2024), https://freedomhouse.org/country/netherlands/freedom-world/2024

⁴⁰⁴² UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, *Prime Minister's Office, The Bletchley Declaration by Countries Attending the AI Safety Summit* (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration/the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

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the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible."

The Netherlands did not attend the AI Seoul Summit 2024, which was held in May 2024 and co-hosted by the UK and the Republic of Korea. 4043 The next AI Safety Summit took place in France in February 2025.

OECD / G20 AI Principles

The Netherlands endorsed the OECD AI Principles. In December 2020, the Netherlands joined the Global Partnership for AI,⁴⁰⁴⁴ a multi-stakeholder initiative which aims to foster international cooperation on AI research and applied activities and is "built around a shared commitment to the OECD Recommendation on Artificial Intelligence."

UNESCO Recommendation on AI Ethics

In November 2021, the Netherlands, alongside 192 other states, adopted the UNESCO Recommendation on the Ethics of AI.⁴⁰⁴⁵ In October 2022, the Netherlands, together with 8 other states, recalled the efforts made by the members of the Group of friends for the implementation of the Recommendation and called on Member States to be "actively involved throughout the implementation process of the Recommendation."⁴⁰⁴⁶

Council of Europe Convention on Al

The Netherlands contributed as a Council of Europe and EU Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of Law. The Committee on AI approved the Draft Framework Convention during its 10th Plenary session in March 2024⁴⁰⁴⁷ and it opened for signature in September 2024.⁴⁰⁴⁸ The Netherlands is party to the

https://www.gov.uk/government/publications/ai-seoul-summit-programme/ai-seoul-summit-participants-list-governments-and-organisations

⁴⁰⁴⁵ UNESCO, *Recommendation on the Ethics of Artificial Intelligence* (Nov. 23, 2021), https://unesdoc.unesco.org/ark:/48223/pf0000381137

⁴⁰⁴³ UK Department for Science, Innovation & Technology, *Guidance, AI Seoul Summit:* participants list (governments and organisations) (Jun. 2024),

⁴⁰⁴⁴ Global Partnership on AI, Community (2024), https://gpai.ai/

⁴⁰⁴⁶ UNESCO, *Implementation of the Recommendation on the Ethics of Artificial Intelligence* (Oct. 7, 2022), https://unesdoc.unesco.org/ark:/48223/pf0000382931; UNESCO Executive Board, *Decisions adopted by the Executive Board at its 215th session*, p. 41 (Nov. 18, 2022), https://unesdoc.unesco.org/permalink/PN-98f40d84-ad53-44dc-bb48-466d1d9450e5

⁴⁰⁴⁷ Council of Europe, *Draft Framework Convention on AI, human rights, democracy and the rule of law* (Mar. 2024),

https://search.coe.int/cm/pages/result_details.aspx?objectid=0900001680aee411

4048 Council of Europe, *The Framework Convention on Artificial Intelligence* (2025),
https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

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Convention through the European Commission signature but has not acted independently on this first legally binding international AI treaty. 4049

Evaluation

As of 2024, the Netherlands has gained global recognition for its responsible AI practices, ranking first in the Global Responsible AI Index. 4050 The Netherlands has taken positive steps towards the rights-based deployment of AI with endorsement of UNESCO Recommendation on the Ethics of AI and related implementing efforts, OECD AI Principles, GDPR, and creation of an AI watchdog within its DPA. The country has expanded algorithmic transparency with its AI public registry. The Netherlands has played a leading role in building international consensus towards the need to regulate the use of autonomous weapons. The Dutch judiciary should be credited with a landmark decision concerning the use of secret algorithms in government services. Still the rise of predictive policing and biometric databases, as well as risk-based systems that may adversely impact minority and vulnerable groups remains a concern.

New Zealand

In 2024, New Zealand's Cabinet released a paper defining the country's approach to AI governance that explicitly aligned to the OECD AI Principles. The country also initiated public consultations on a draft Biometrics Code of Practice and proposed amendments to the 2020 Privacy Act.

National AI Strategy

The process for developing a National AI strategy started in May 2021 and is still ongoing. The "working vision of the AI strategy [is that] Aotearoa New Zealand's people centered, inclusive and ethical AI benefits our economy and people and makes us a trusted partner in the global AI landscape."

The cornerstones for the proposed national AI strategy are:

- "Human-centered and trusted AI
- Preparing the workforce
- Our place in the world
- Investment in AI economy
- Uniquely New Zealand

⁴⁰⁴⁹ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 20, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

⁴⁰⁵⁰ GIRAI, *Corrected Edition Report 2024* (2024), https://girai-report-2024-corrected-edition.tiiny.site/

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All supported by enabling foundations."4051

The draft AI Strategy situates itself in a series of policy initiatives.

In 2018, the Ministry for Social Development published its Privacy, Human Rights and Ethics (PHRaE) framework. This set of tools started with a focus on predictive models and has been broadened to all initiatives where client data is used. It helps those who design services question whether it is 'right' to use information just because there is access to it and was designed to ensure that privacy, human rights and ethics are considered from the design and development stage of an initiative. 4052

In 2020, Stats NZ released the Algorithm Charter for Aotearoa and signed by a number of New Zealand government departments. The Algorithm Charter is a commitment by government agencies to carefully manage how algorithms that use government data are developed and used. The Algorithm Charter includes commitments to transparency by clearly explaining how decisions are informed by algorithms; to the incorporation of Te Ao Māori perspective⁴⁰⁵³ in the development and use of algorithms consistent with the principles of the Treaty of Waitangi; to keeping a focus on people through active engagement with stakeholders and affected people, communities and groups; to understanding the limitations in data and managing bias; to retaining human oversight by providing a channel to appeal decisions informed by algorithms; and to ensuring that privacy, ethics and human rights are safeguarded by regularly peer-reviewing algorithms to assess for unintended consequences and act on this information. 4054

In September 2022, New Zealand launched its Te Rautaki Matihiko mō Aotearoa, the Digital Strategy for Aotearoa (Digital Strategy)⁴⁰⁵⁵ with the aim to "[e]nabl[e] Aotearoa New Zealand's people, communities, economy, and environment to flourish and prosper in the digital era."4056 David Clark, the

⁴⁰⁵¹ AI Forum New Zealand, *Introducing Aotearoa's Proposed AI Cornerstones* (Apr. 29, 2021), https://aiforum.org.nz/2021/04/29/introducing-aotearoas-proposed-ai-cornerstones/.

⁴⁰⁵² Ministry of Social Development, Using Personal Information Responsibly: The Privacy, Human Rights and Ethics Framework, https://www.msd.govt.nz/about-msd-and-our-work/workprogrammes/initiatives/phrae/index.html

⁴⁰⁵³ Just Transitions Aotearoa Group, A Guide to Just Transitions for Communities in Aotearoa New Zealand: Principles from te ao Māori the Māori worldview, Motu Economic and Public Policy Research, Ministry of Business, Innovation and Employment (2023), https://www.mbie.govt.nz/business-and-employment/economic-development/just-transition/just-

transitions-guide/foundations/principles-from-te-ao-maori-the-maori-worldview

⁴⁰⁵⁴ Stats NZ, Algorithm Charter for Aotearoa New Zealand (Jun. 15, 2023), https://data.govt.nz/toolkit/data-ethics/government-algorithm-transparency-andaccountability/algorithm-charter

⁴⁰⁵⁵ Digital govt.nz and Department of Internal Affairs, *The Digital Strategy for Antearoa* (Sept. 2022), https://www.digital.govt.nz/dmsdocument/237~the-digital-strategy-foraotearoa/html#ministers-foreword

⁴⁰⁵⁶ Ibid

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Minister for the Digital Economy and Communications, introduced the digital strategy by stating that: "New Zealand stands on the precipice of a huge opportunity to design, build and use digital technologies in world-leading, ethical, equitable ways that reflect the culture and uniqueness of our country. To get there, we need to ask ourselves hard questions like: How can we build on New Zealand's inherently high levels of trust to benefit society, and the economy? What would it mean to be the first country to embrace the ethical deployment of Artificial Intelligence? Are we courageous enough to unlock the benefits of widespread digital thinking?" The Strategy is framed around 3 connected themes: *Mahi Tika* – Trust; *Mahi Tahi* – Inclusion; and *Mahi Aka* – Growth, supported by goals and measures.⁴⁰⁵⁷

The 2022–2023 Action Plan for the Digital Strategy was also published in September 2022 and provides a roadmap to 2027 and measures of success. Artificial Intelligence is included as a future issue, where there are not yet dedicated resources but where groundwork is required. The establishment of a Data Ethics and AI Center in scheduled for 2025. 4058

The Office of the Minister of Science, Innovation, and Technology of New Zealand released a cabinet paper titled Approach to Work on Artificial Intelligence in July 2024. 4059 The paper advocates for increasing AI use in New Zealand to drive innovation, economic growth, and more effective public services. It recommends a "light-touch, proportionate, and risk-based" approach to AI, prioritizing the use of existing regulatory mechanisms rather than developing a standalone AI Act. 4060 Additionally, the paper identifies the OECD AI Principles 4061 as key guidelines to direct NZ's approach to AI. 4062 The paper also acknowledges New Zealand's obligations arising from the Treaty of Waitangi in the development and use of AI. Furthermore, it highlights the Data Iwi Leaders' Group's (DILG) readiness to adopt AI, noting that, in discussions with the Cabinet Office, the DILG agreed that "the danger for Māori in AI lies in being excluded"

⁴⁰⁵⁷ Ibid

⁴⁰⁵⁸ New Zealand Government, *Action Plan for the Digital Strategy for Aotearoa* (Sept. 2022), https://www.digital.govt.nz/assets/Digital-government/Strategy/Action-Plan-for-the-Digital-Strategy-for-Aotearoa-English-PDF.pdf

⁴⁰⁵⁹ Office of the Minister of Science, Innovation, and Technology, *Approach to Work on Artificial Intelligence* (Jul. 25, 2024), https://www.mbie.govt.nz/dmsdocument/28913-approach-to-work-on-artificial-intelligence-proactiverelease-pdf

⁴⁰⁶⁰ Ibid, p. 1, para 4

⁴⁰⁶¹ OECD, OECD AI Principles Overview, https://oecd.ai/en/ai-principles

⁴⁰⁶² Office of the Minister of Science, Innovation, and Technology, *Approach to Work on Artificial Intelligence*, p. 1, para. 5 (Jul. 25, 2024),

 $[\]frac{https://www.mbie.govt.nz/dmsdocument/28913-approach-to-work-on-artificial-intelligence-proactive release-pdf}{}$

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from its ability to bring about substantial improvements in the provision of services for Māori."⁴⁰⁶³

Public Participation

The New Zealand Government processes have consistently included periods of public participation in policy and law development. Public participation opportunities for AI are across the government sector in a variety of industries from policy and instrument development, like the Algorithm Charter, 4064 to application and end use, like consultation on the use of AI in conservation efforts. 4065

Consultation opportunities on the development of AI and digital policy include the 2019 public consultation on its draft Algorithm Charter for the use of algorithms in the public sector with government data. The consultation period ran from 17 October to 31 December 2019, and submissions were solicited from a range of key stakeholders including central government agencies, academics, nongovernment organizations, civil society representatives, and regulators. 4066 Thirty-four written submissions were received in relation to the charter and related issues 4067

From August to September in 2022, the Ministry of Justice held public consultations on reforming the disclosure aspect of the Privacy Act to increase transparency regarding the collection, use, and disclosure of personal information is fundamental to protecting individuals' privacy rights and their dignity and autonomy. 4068 Based on public feedback, the Ministry of Justice is considering reforms but have not yet released final decisions. 4069

⁴⁰⁶⁴Government Information Services - The Department of Internal Affairs, *Consultation, and submission summary: draft algorithm charter* (Nov. 20, 2020), https://data.govt.nz/docs/subsummary-algorithm-charter/

⁴⁰⁶⁸ Ministry of Justice, *Broadening the Privacy Act's Notification Rules* (Mar. 3, 2023), https://www.justice.govt.nz/justice-sector-policy/key-initiatives/broadening-the-privacy-acts-notification-rules/

 $\underline{https://www.justice.govt.nz/assets/Documents/Publications/Summary-of-Submissions-notification-rules-Privacy-Act-2020.pdf}$

⁴⁰⁶³ Ibid, p. 24, para. 5

⁴⁰⁶⁵ Toitū Te Whenua, *Long-Term Insights Briefing 2023* (Oct. 1, 2024), https://www.linz.govt.nz/our-work/crown-property-management/biosecurity-and-biodiversity/long-term-insights-briefing

⁴⁰⁶⁶ Government Information Services, Department of Internal Affairs, *Consultation and submission summary: Draft algorithm charter* (Nov. 20, 2020), https://data.govt.nz/docs/subsummary-algorithm-charter/

⁴⁰⁶⁷ Ibid

⁴⁰⁶⁹ Ministry of Justice, *Possible changes to Notification Rules under the Privacy Act 2020: Summary of Engagement* (Dec. 2022),

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New Zealand's Digital Technologies Industry Draft Transformation Plan 2022-2032 was open for public consultations until 31st March 2022. 4070 The draft plan included a workstream tasked with the responsibility of delivering the AI Strategy for New Zealand including defining New Zealand's approach to supporting the ethical adoption of AI and helping grow a thriving AI ecosystem, ensuring the safe adoption and use of AI in New Zealand.

New Zealand does not have a single written constitution, rather several documents of constitutional importance. One of these, *Te Tiriti o Waitangi*/The Treaty of Waitangi, is a founding agreement between the English Crown and the Maori iwi (tribes). Through much jurisprudence *Te Tiriti* is applied in New Zealand through a series of core principles that can be applied in a circumstance; partnership, active protection, ⁴⁰⁷¹ and participation. These principles in this AI framework have specific mention in the AI Charter as a commitment to embed a *Te Ao Māori* perspective in the development and use of algorithms consistent with the Treat of Waitangi. ⁴⁰⁷²

New Zealand conducted two public consultations on biometric technology. The first consultation ran from August 15 to September 30, 2022, seeking public feedback on Privacy Regulation of Biometrics, particularly regarding concerns over facial recognition in retail CCTV. 4073 This received 100 submissions, leading to plans for a regulatory code. 4074 The second consultation occurred from April 10 to May 8, 2024, gathering feedback on the exposure draft of the Biometrics Code of Practice, with 250 submissions received. 4075

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⁴⁰⁷⁰ Ministry of Business, Innovation and Employment, *Consultation for Digital Technologies Industry Transformation Plan 2022–2032*, p. 15 (Feb. 2022), https://www.mbie.govt.nz/have-your-say/consultation-for-digital-technologies-industry-transformation-plan/.

⁴⁰⁷¹ Waitangi Tribunal, *Tribunal Releases Report on Treaty Principles Bill* (Aug. 16, 2024), https://waitangitribunal.govt.nz/en/news-2/all-articles/news/tribunal-releases-report-on-treaty-principles-bill

Stats NZ, Algorithm Charter For Aotearoa New Zealand (Jul. 2020),
 https://data.govt.nz/assets/data-ethics/algorithm/Algorithm-Charter-2020 Final-English-1.pdf
 Privacy Commissioner New Zealand, Public Input is Sought to Inform Privacy Rules for Biometrics, Office of the Privacy Commissioner of New Zealand (Aug. 15, 2022),
 https://www.privacy.org.nz/publications/statements-media-releases/public-input-sought-to-inform-privacy-rules-for-biometrics/

⁴⁰⁷⁴ Ibid

⁴⁰⁷⁵ Office of the Privacy Commissioner of New Zealand, *Kiwis Asked to Have their Say on New Draft Rules for Using Biometrics*, Office of the Privacy Commissioner of New Zealand (Apr. 10, 2024), https://www.privacy.org.nz/publications/statements-media-releases/kiwis-asked-to-have-their-say-on-new-draft-rules-for-using-biometrics/

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After the Privacy Amendment Bill introduced to Parliament in 2024 was referred to the to the Justice Committee for further consideration, 4076 the Chairperson called for comments. 4077 This process, as outlined by the NZ government, provided individuals and organizations an opportunity to offer their opinions, observations, and recommendations on the bill under review by the selected committee. 4078

Public consultations in 2024 have primarily addressed specific AI-related issues, such as privacy and biometrics, reflecting a targeted rather than comprehensive approach. However, the absence of public engagement on a cohesive national AI policy highlights a gap in broader participatory processes."

Data Protection

The Privacy Act 2020 came into force on 1 December 2020, replacing the Privacy Act of 1993. 4079 Separately, to the Privacy Act, the courts of New Zealand have developed a series of privacy torts recognizing the right of an individual to sue another for breach of privacy. 4080 The New Zealand Bill of Rights Act contains many rights founded on the right to privacy, such as the freedom from unreasonable search and seizure. 4081

The Privacy Act is intended to protect individual privacy by providing a framework for protecting an individual's right to privacy of personal information, including the right of an individual to access their personal information, and giving effect to internationally recognized privacy obligations and standards in relation to the privacy of personal information, including the OECD Guidelines and the International Covenant on Civil and Political Rights.

The Privacy Act set down 13 privacy principles that require an individual to be informed of the fact and purpose of data collection, that require that collection not to be through unfair or overly intrusive means, that require the information to be protected by the agency and not used or shared outside the

debates/rhr/combined/HansDeb 20240502 20240502 36

https://www.parliament.nz/en/pb/sc/make-a-submission/document/54SCJUST_SCF_56E3FBE7-1F3D-464E-B54D-08DBAE8917AE/privacy-amendment-bill#RelatedAnchor

⁴⁰⁷⁸ New Zealand Parliament, *How to Make a Submission* (Nov. 27, 2015),

https://www.parliament.nz/en/pb/sc/make-a-submission/document/54SCJUST_SCF_56E3FBE7-1F3D-464E-B54D-08DBAE8917AE/privacy-amendment-bill#RelatedAnchor

⁴⁰⁷⁹ Office of Privacy Commissioner, *Privacy Act 2020 and the Privacy Principles* (Nov. 30, 2022), https://www.privacy.org.nz/privacy-act-2020/privacy-principles/

4080 See *Hosking v Runting* [2004] NZCA 34 (Mar. 25, 2004),

http://www.nzlii.org/nz/cases/NZCA/2004/34.html

⁴⁰⁷⁶ New Zealand Parliament, *Privacy Amendment Bill* — *First Reading* (May 2, 2024), https://www.parliament.nz/en/pb/hansard-

⁴⁰⁷⁷ New Zealand Parliament, *Privacy Amendment Bill* (May 6, 2024),

⁴⁰⁸¹ Ministry of Justice, *New Zealand Bill of Rights Act 1990*, section 21 (Aug. 2022), https://legislation.govt.nz/act/public/1990/0109/latest/DLM224792.html

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purposes for which it was collected, held only as long as needed for the purpose, and may not transfer the information offshore except under particular circumstances that continue comparable protection of the information. 4082 The individual has some rights to access and correct the information collected. 4083 These principles were largely unchanged from the 1993 Act that was replaced, with the only addition being requirements around offshore transfers. A breach of the privacy principles may lead to fine or a claim of interference under the Act, but these are minimal when compared to the European fines under the General Data Protection Regulation, or those proposed in the Australian Privacy Reforms. Notably, there are no rights for individuals being subject to algorithmic decisioning, though elements of them can be read into existing legislation as set out below.

The Privacy Commissioner has the power under the Privacy Act to issue codes of practice that become part of the law. These codes apply the Privacy Act to specific scenarios, for example credit reporting or situations of national security. There are currently six codes of practice.

In May 2018, the New Zealand Privacy Commissioner and the Chief Government Data Steward jointly developed the "Principles for the safe and effective use of data and analytics" ⁴⁰⁸⁴ aimed at government agencies. Hon. Nicole McKee, the Minister for Courts, on behalf of the Minister of Justice, introduced the Privacy Amendment Bill to Parliament in 2023, The bill proposes to amend the Privacy Act 2020 by establishing a new Information Privacy Principle (IPP 3A) that would require agencies to notify individuals when their personal information is collected indirectly, addressing concerns about data collection practices and providing greater insight into how their personal information is acquired and used. 4085 Following its first reading, the bill was referred to the Justice Committee for further consideration⁴⁰⁸⁶. The Justice Committee presented its final report on October 25, 2024, recommending that the bill be passed with amendments. The report suggests specific exceptions to IPP 3A, such as for public-interest archiving and national security purposes. 4087

⁴⁰⁸² Ministry of Justice, New Zealand Bill of Rights Act 1990, Section 22, Principles 1–5, 10–12 (Aug. 2022), https://legislation.govt.nz/act/public/1990/0109/latest/DLM224792.html 4083 Ibid, Principles 6–7

⁴⁰⁸⁴ Privacy Commissioner and Stats NZ, Principles for the safe and effective use of data and analytics (May 2018), https://www.stats.govt.nz/assets/Uploads/Data-leadership-factsheets/Principles-safe-and-effective-data-and-analytics-May-2018.pdf

⁴⁰⁸⁵ New Zealand Parliament, *Privacy Amendment Bill* — First Reading (May 2, 2024), https://www.parliament.nz/en/pb/hansard-

debates/rhr/combined/HansDeb 20240502 20240502 36

⁴⁰⁸⁶ Ibid

⁴⁰⁸⁷ New Zealand Parliament, *Privacy Amendment Bill* (Oct. 25, 2024), https://selectcommittees.parliament.nz/v/6/3f752666-2260-4276-95e8-08dcf48e13a9

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The New Zealand Office of the Privacy Commissioner has also been active in the Global Privacy Assembly, co-sponsoring the 2020 resolution on facial recognition technology⁴⁰⁸⁸ and the 2018 Resolution on Accountability in the Development and Use of Artificial Intelligence. 4089

Algorithmic Transparency

The Privacy Act does not contain a right for an individual to understand how the AI decision was made. However, in New Zealand, where an automated decision is being made by a government agency, section 23 of the Official Information Act 1982 provides an individual with a right to obtain reasons for a government decision. These reasons are to be supplied in a written statement that includes any findings on material issues of fact and a reference to the information on which the findings were based to allow anybody with the power of review to understand the process of thought before a conclusion was reached. 4090

The Algorithm Charter⁴⁰⁹¹ commits its public sector signatories to transparency - clearly explaining how decisions are informed by algorithms. This transparency may include a plain English document, making information about data and processes available, and publishing information about how data are collected, secured and stored. 4092 Where algorithms are being employed by government agencies in a way that can significantly impact on the wellbeing of people, or there is a high likelihood many people will suffer an unintended adverse impact, the Charter signatories will make an assessment of their algorithm decisions using a risk matrix. 4093

The Joint AI Security Guidance, Deploying AI Systems Securely, developed with NZ's participation through its National Cyber Security Centre alongside Australia, Canada, UK, and US in 2024, provides further recommended practices for algorithmic systems. 4094 The guidance suggests government agencies

⁴⁰⁸⁸ Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate *Use of Personal Information in Facial Recognition Technology* (Oct. 2022). https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principlesand-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf.

⁴⁰⁸⁹ Global Privacy Assembly, Adopted Resolution On Accountability in the Development and Use of Artificial Intelligence (Oct. 2020), https://globalprivacyassembly.org/wpcontent/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN.pdf.

⁴⁰⁹⁰ Re Vixen Digital Ltd [2003] NZAR 418 (HC) at [43].

⁴⁰⁹¹ Stats NZ, Algorithm Charter for Aotearoa New Zealand (Jul. 2020), https://data.govt.nz/assets/data-ethics/algorithm/Algorithm-Charter-2020 Final-English-1.pdf ⁴⁰⁹² Ibid, Transparency

⁴⁰⁹³ Ibid

⁴⁰⁹⁴ National Security Agency's Artificial Intelligence Security Center NSA AISC Cybersecurity and Infrastructure Security Agency, Federal Bureau of Investigation, Australian Signals

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should implement protection, detection, and response methodologies when deploying externally developed AI systems, including maintaining comprehensive audit logs of algorithmic decisions and establishing clear monitoring protocols for system transparency. 4095"

There is no corresponding right to reasons for automated decisions made by private-sector agencies, but there is a right to access personal information, 4096 which could be argued to cover how the information has been the subject of processing by an algorithm. The Court has required that information provided to individuals under this access right is in a "form which can be comprehended", including "the key" which unlocks the information in a "meaningful way". 4097 In other words, the standard appears to require an explanation: evidence, support or reasoning for a decision.

The New Zealand Privacy Commissioner's submission on the Privacy Bill 2018 included a recommendation to add a new privacy principle to address automated decision-making and algorithmic transparency. While the Departmental Report on the Bill recognized the issues needed further consideration, no change was recommended to the then Privacy Bill. 4099

Data Scraping

The Office of the Privacy Commissioner and international data protection and privacy counterparts released a follow-up joint statement laying out expectations for industry related to data scraping and privacy. The initial statement in August 2023 established that "[social media companies] and other websites are responsible for protecting personal information from unlawful scraping." The follow-up, which incorporates feedback from engagement with

Directorate's Australian Cyber Security Centre, Canadian Centre for Cyber Security, New Zealand National Cyber Security Centre, and the United Kingdom's National Cyber Security Centre, *Deploying AI Systems Securely*, U.S. Department of Defense Media (Apr. 15, 2024), https://media.defense.gov/2024/Apr/15/2003439257/-1/-1/0/CSI-DEPLOYING-AI-SYSTEMS-SECURELY.PDF

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⁴⁰⁹⁵ lbid

⁴⁰⁹⁶ Ministry of Justice, *New Zealand Bill of Rights Act 1990*, Section 22, Principle 6 (Aug. 2022), https://legislation.govt.nz/act/public/1990/0109/latest/DLM224792.html

⁴⁰⁹⁷ Naidu v Australasian College of Surgeons [2018] NZHRRT 234.

 $^{^{4098}}$ John Edwards, Privacy Commissioner Submission to the Justice and Electoral Commission on the Privacy, Bill 2018 at [8.12]–[8.18] and rec A.7

⁴⁰⁹⁹ Ministry of Justice Departmental Report into the Privacy Bill: Part 1 (Mar. 13, 2019) at [182] ⁴¹⁰⁰ UK Information Commissioner's Office, *Global Privacy Authorities Issue Follow-Up Joint Statement on Data Scraping after Industry Engagement* (Oct. 28, 2024), https://ico.org.uk/about-the-ico/media-centre/news-and-blogs/2024/10/global-privacy-authorities-issue-follow-up-joint-statement-on-data-scraping-after-industry-engagement/

⁴¹⁰¹ Regulatory Supervision Information Commissioner's Office of the United Kingdom, *Joint Statement on Data Scraping and the Protection of Privacy* (Aug. 24, 2023),

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companies such as Alphabet (YouTube), X Corp (formerly Twitter), and Meta Platforms (Facebook, Instagram, WhatsApp), adds that organizations must "comply with privacy and data protection laws when using personal information, including from their own platforms, to develop AI large language models"; must regularly review and update privacy protection measures to keep pace with technological advances; and ensure that permissible data scraping, such as that for research, "is done lawfully and following strict contractual terms." 4102

Data scraping generally involves the automated extraction of data from the web. Data protection authorities are seeing increasing incidents involving data scraping, particularly from social media companies and the operators of other websites that host publicly accessible data. Scraped personal information can be exploited for targeted cyberattacks, identity fraud, monitoring, profiling and surveillance purposes, unauthorized political or intelligence gathering purposes, unwanted direct marketing or spam.

Use of AI in the Public Sector

The Algorithm assessment report, published in 2018, recommended that consideration be given to ways in which agencies ensure human rights, privacy and ethics are considered when developing algorithms, and that agencies embed a *Te Ao Māori* perspective where appropriate. The Data Ethics Advisory Group (DEAG) was created to assist in meeting those recommendations. The DEAG is convened by the Government Chief Data Steward (GCDS) to assist the New Zealand Government to maximize the opportunities and benefits from new and emerging uses of data, while responsibly managing potential risks and harms. The Group provides advice, comments, views and recommendations to the GCDS and State Sector agencies. 4103 It has provided advice on a number of matters including on population density assessment and a framework to work more collaboratively with *iwi* (tribes). 4104

 $\frac{https://ico.org.uk/media/about-the-ico/documents/4026232/joint-statement-data-scraping-202308.pdf$

⁴¹⁰² Office of the Privacy Commissioner of Canada, Concluding Joint Statement on Data Scraping and the Protection of Privacy (Oct. 2024), https://ico.org.uk/about-the-ico/media-centre/news-and-blogs/2024/10/global-privacy-authorities-issue-follow-up-joint-statement-on-data-scraping-after-industry-engagement/

⁴¹⁰³ Data Ethics Advisory Group, *Terms of Reference*, Stats NZ (Feb. 2023), https://www.data.govt.nz/assets/data-ethics/DEAG/Data-Ethics-Advisory-Group-Terms-of-Reference-February-2023-Final-Signed.pdf

⁴¹⁰⁴ Data Ethics Advisory Group, *Guidance from Data Ethics Advisory Group*, https://www.data.govt.nz/leadership/advisory-governance/data-ethics-advisory-group/guidance-from-data-ethics-advisory-group

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The Algorithm Charter⁴¹⁰⁵ finalized in July 2020 is considered a "commitment by government agencies to carefully manage how algorithms will be used to strike the right balance between privacy and transparency, prevent unintended bias and reflect the principles of the Treaty of Waitangi."4106 The Algorithm Charter stipulates that a review of it will be conducted to ensure that it is meeting its intended purpose of improving government transparency and accountability without stifling innovation or causing undue compliance burden. An independent review of the Charter - which involved interviewing signatories, non-signatories, and subject matter experts, was completed in December 2021. 4107 This report found almost universal support for the charter, but a lot of work remains on implementation to ensure compliance with all charter commitments. The report also noted there is little opportunity for New Zealanders to get individual recourse on decisions made about them that have been informed by an algorithm. It also noted that greater enforcement of the charter might be necessary to keep social license, as there is a lack of a clear oversight body. The report also noted that capability and capacity within agencies and the expert community is limited. Stats NZ is working to consider and implement the findings of the review.

In 2024, various NZ institutions worked to development and implement guidance to integrate AI in the public sector. The National Cyber Security Centre participated in developing the Joint AI Security Guidance in April 2024, providing security guidance for public sector AI. 4108 The Cabinet paper Approach to Work on Artificial Intelligence in July 2024 expanded on the Algorithm Charter's framework by outlining five key domains for public sector AI governance. 4109 The AI Blueprint for Aotearoa by the AI Forum of NZ also introduced guidelines for

⁴¹⁰⁵ New Zealand Government, *The Algorithm Charter*, https://www.justice.govt.nz/justicesector-policy/key-initiatives/cross-government/the-algorithm-charter/

⁴¹⁰⁶ Ministry of Internal Affairs and Stats NZ, Algorithm Charter for Aotearoa New Zealand (Jul. 2020), https://data.govt.nz/assets/data-ethics/algorithm/Algorithm-Charter-2020 Final-English-

⁴¹⁰⁷ Taylor Fry. 2021, Algorithm Charter for Aotearoa New Zealand 3 Year 1 Review (Dec., 2021, https://www.data.govt.nz/assets/data-ethics/algorithm/Algorithm-Charter-Year-1-Review-

⁴¹⁰⁸ National Security Agency's Artificial Intelligence Security Center NSA AISC, Cybersecurity and Infrastructure Security Agency, Federal Bureau of Investigation, Australian Signals Directorate's Australian Cyber Security Centre, Canadian Centre for Cyber Security, New Zealand National Cyber Security Centre, and the United Kingdom's National Cyber Security Centre, Deploying AI Systems Securely, United States Department of Defense Media (Apr. 15, 2024), https://media.defense.gov/2024/Apr/15/2003439257/-1/-1/0/CSI-DEPLOYING-AI-SYSTEMS-SECURELY.PDF

⁴¹⁰⁹ Office of the Minister of Science, Innovation and Technology, Cabinet Office, Cabinet Paper: Approach to Work on Artificial Intelligence, Ministry of Business Innovation and Employment (Jul. 25, 2024), https://www.mbie.govt.nz/dmsdocument/28913-approach-to-workon-artificial-intelligence-proactiverelease-pdf

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public sector AI adoption, emphasizing both innovation and ethical considerations aligned with Te Ao Māori principles. 4110

Facial Recognition

In October 2022, the New Zealand Office of the Privacy Commissioner co-sponsored a GPA resolution on the Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology.

The Office of the Privacy Commissioner launched a consultation paper on Privacy Regulation of Biometrics in Aotearoa New Zealand, in August 2022, and requested public feedback until 30 September 2022. This consultation aimed to hear from New Zealanders amid growing concern over the issue of biometrics, including stores using Facial Recognition Technology as part of their CCTV systems. The consultation document featured a set of specific questions aimed at building on information first presented in an OPC position paper on biometrics released last year. After analyzing the 100 submissions received, the Office of the Privacy Commissioner published its intention to explore a code to regulate biometric technologies in 2023, which involved a public consultation period.

The Office released an exposure draft of a Biometrics Code of Practice for public consultation in April 2024. The draft proposed rules focusing on transparency, proportionality, and limitations on biometric classification, with 250 submissions received from the public and agencies. The Office is currently reviewing feedback from this consultation to finalize the Biometrics Code of Practice, which will provide comprehensive rules for biometric use, ensuring innovation does not compromise privacy rights.

 $\underline{https://www.privacy.org.nz/publications/statements-media-releases/privacy-commissioner-to-\underline{explore-biometrics-code/}$

⁴¹¹⁰ AI Forum of New Zealand, *AI Blueprint for Aotear*oa, AI Forum of New Zealand (Jul. 24, 2024), https://aiforum.org.nz/wp-content/uploads/2024/07/AI-Blueprint-for-Aotearoa-2024.pdf
⁴¹¹¹ Privacy Commissioner New Zealand, *Public Input Is Sought to Inform Privacy Rules for Biometrics* (Aug. 2022), https://www.privacy.org.nz/publications/statements-media-releases/public-input-sought-to-inform-privacy-rules-for-biometrics/

⁴¹¹² Privacy Commissioner New Zealand, *Privacy Commissioner to Explore Biometrics Code*, Office of the Privacy Commissioner of New Zealand (Dec. 15, 2022),

⁴¹¹³ Office of the Privacy Commissioner of New Zealand, *Exposure Draft of a Biometric Processing Code of Practice: Consultation Paper* (Apr. 10, 2024), https://www.privacy.org.nz/assets/New-order/News/Consultations/Biometrics-April-

^{2024/}Consultation-paper-exposure-draft-of-a-biometrics-code-April-2024.docx
4114 Office of the Privacy Commissioner of New Zealand, *Kiwis Asked to Have their Say on New Draft Rules for Using Biometrics* (Apr. 10, 2024),

 $[\]underline{https://www.privacy.org.nz/publications/statements-media-releases/kiwis-asked-to-have-their-say-on-new-draft-rules-for-using-biometrics/$

⁴¹¹⁵ Office of the Privacy Commissioner of New Zealand, *Report on Public Consultation for Biometrics Code of Practice* (Aug. 2024), https://www.privacy.org.nz/assets/New-

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Environmental Impact of AI

The AI Forum, in partnership with the Ministry for the Environment (Manatū Mō Te Taiao) and Stats NZ, launched the 2022 report AI for the Environment in Aotearoa New Zealand, exploring how AI can contribute to positive environmental outcomes in the country. The report identifies five key areas where AI can provide impactful solutions: biodiversity preservation, understanding land use impacts, pollution reduction, freshwater and marine resource protection, and climate change mitigation. It highlights AI's capacity to process large data sets, improve predictions, enhance decision-making, and deliver real-time insights. Additionally, the report recommends the development of a cohesive environmental data ecosystem, strengthening capabilities, and aligning funding to maximize AI's potential in addressing environmental challenges.⁴¹¹⁶

Additionally, on its webpage, the Office of the Prime Minister's Chief Science Advisor stated that his office is considering how AI might be useful for improving outcomes for NZ's natural environment. The office's webpage also highlights existing applications and provides examples of AI research and technology that are already supporting positive environmental outcomes. However, beyond this, there are no other readily available references to specific environmental sustainability considerations or concrete government policies in this area.

Lethal Autonomous Weapons

In 2021, the Minister of Disarmament and Arms Control announced that New Zealand will push for a new international law to ban and regulate autonomous weapons systems (LAWS).⁴¹¹⁸

In October 2022, New Zealand endorsed, together with 69 other countries participating in the UN General Assembly, a joint statement on autonomous weapons systems. In this joint statement, States urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law

 $\frac{order/Resources-/Publications/Guidance-resources/Biometrics/070824-Summary-of-submissions-FINAL-A998874.pdf}{}$

⁴¹¹⁶ AI Forum of New Zealand, *AI for the Environment in Aotearoa New Zealand* (May 18, 2022), https://aiforum.org.nz/2022/05/18/ai-for-the-environment-in-aotearoa-new-zealand (May 18, 2022), https://aiforum.org.nz/2022/05/18/ai-for-the-environment-in-aotearoa-new-zealand (May 2, 2024), https://www.pmcsa.ac.nz/artificial-intelligence-2/ai-for-the-environment/

⁴¹¹⁸ New Zealand Ministry for Disarmament and Arms Control, *New Zealand Policy Position and Approach for International Engagement* (2021), https://www.mfat.govt.nz/assets/Peace-Rights-and-Security/Disarmament/Autonomous-Weapons-Systems-Cabinet-paper.pdf

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(IHL), including through maintaining human responsibility and accountability in the use of force."

At the Responsible AI in the Military Domain Summit (REAIM 2023) cohosted by the Netherlands and the Republic of Korea in February 2023, nearly sixty states agreed to issue a joint call to action on the responsible development, deployment, and use of AI in the military domain. New Zealand endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023.

South Korea hosted the second REAIM summit in September 2024, coorganized by the Republic of Korea, Kingdom of the Netherlands, Republic of Singapore, Republic of Kenya, and United Kingdom of Great Britain and Northern Ireland. During the closing session, the Blueprint for Action, which provides a roadmap for establishing norms of AI in the military space was presented as the official outcome document. However, NZ did not endorse the Blueprint for Action. Later 1224

Human Rights

Freedom House ranked New Zealand very highly (99/100) in the 2024 report and noted that New Zealand has "a long record of free and fair elections and of guaranteeing political rights and civil liberties." The total consists of a score of 40/40 on political rights and a score of 59/60 on civil liberties. The country

https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm en.pdf

https://www.reaim2024.kr/home/reaimeng/board/bbsDetail.do?encMenuId=417741686e424f486 b494c6e70724a6d7a53642b45413d3d&encBbsMngNo=6b5a5248516a3279443734505234324b6 8427a4c52513d3d&encBbsNo=644738674b35474859357254346a66684e684b5659773d3d&enc TabMenuId=71767939315241537152535156524c2b6177373562413d3d

⁴¹¹⁹ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

⁴¹²⁰ Government of Netherlands, *Call to action on responsible use of AI in the military domain*, (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action

⁴¹²¹ US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Feb. 12, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

⁴¹²² REAIM 2024, *REAIM Summit 2024* (2024), https://www.reaim2024.kr/reaimeng/index.do
⁴¹²³ REAIM 2024, *Outcome of Responsible AI in Military Domain (REAIM) Summit 2024* (Sept. 10, 2024),

⁴¹²⁴ REAIM 2024, Countries Supporting REAIM Blueprint for Action (Sept. 11, 2024), https://reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163&shareBbsMngNo=10 264&shareMenuId=11613&shareTabMenuId=

⁴¹²⁵ Freedom House, *Freedom in the World 2024: New Zealand* (2024), https://freedomhouse.org/country/new-zealand/freedom-world/2024

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maintains strong protections, though issues such as discrimination against Māori, Pacific Islanders, and other minority groups persist, including disparities in education, employment, and the justice system. Additionally, concerns about foreign influence in politics remain. 4126

The Bill of Rights Act of 1990 (NZBORA), the Human Rights Act of 1993 (HRA) and the Privacy Act of 2020 are the primary legislative instruments that recognize and safeguard human rights in New Zealand.

The Preamble of the NZBORA describes its purpose as the affirmation and promotion of human rights and fundamental freedoms and the expression of New Zealand's commitments to the International Convention on Civil and Political Rights. The rights in NZBORA qualifies the exercise of rights through section 5 "reasonable limits prescribed by laws as can be demonstrably justified in a free and democratic society." NZBORA is not supreme law and cannot be used by the Courts as a basis to strike down legislation. 4127 A statutory meaning consistent with the rights protected in NZBORA is preferred, however a statute that has direct conflict with NZBORA will remain in force. 4128 This situation has been criticized by the United Nations Human Rights Committee, which has called on New Zealand to strengthen the NZBORA.⁴¹²⁹

The HRA protects people in New Zealand from discrimination on a number of grounds including ethnic or national origins, race, sex, political opinion, amongst others. 4130 It applies to the public sector (with some limitations for national security) and the private sector in matters such as employment, education, provision of services and membership of organizations.

New Zealand has endorsed the Universal Declaration of Human Rights and was one of the 48 nations that voted in favor of the UDHR in 1948 under the UN General Assembly Resolution No. A/RES/217(III)[A]. 4131 In addition to the UDHR, New Zealand is a signatory to various international human rights treaties, including but not limited to the following core instruments: the International Covenant on Civil and Political Rights (ICCPR); the International Covenant on Economic, Social and Cultural Rights (ICESCR); the International Convention on

⁴¹²⁶ Ibid

⁴¹²⁷ The White Paper 'A Bill of Rights for New Zealand' (1985) proposed the enactment of a Bill of Rights that would have the power to strike down inconsistent legislation. This was not accepted by the Parliamentary Select Committee on Justice and Law Reform. See Final Report of the Justice and Law Reform Select Committee "On a White Paper of a Bill of Rights for New Zealand" [1998] AJHR 3.

⁴¹²⁸ New Zealand Bill of Rights Act 1990, s 6 and s 4.

⁴¹²⁹ Concluding Observations of the United Nations Human Rights Committee on New Zealand CCPR/C/NZL/CO/6 (31 March 2016) at [10(a)] and [10(c)].

⁴¹³⁰ Human Rights Act 1993, section 21.

⁴¹³¹ United Nations, *International Bill of Human Rights: Universal Declaration of Human Rights:* resolution/adopted by the General Assembly (1948), https://digitallibrary.un.org/record/670964

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the Elimination of All Forms of Racial Discrimination (CERD); the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW); the Convention on the Rights of the Child (CRC); the Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT); the Convention on the Rights of Persons with Disabilities (CRPD).⁴¹³²

OECD AI Principles / G20 AI Guidelines

New Zealand endorsed the OECD AI Principles in May 2019 and recommitted to the AI Principles as updated in May 2024. 4133

In June 2020, New Zealand also joined the Global Partnership on AI (GPAI) to "support the responsible and human-centric development and use of AI in a manner consistent with human rights, fundamental freedoms and our shared democratic values"4134 New Zealand is one of 29 member states in GPAI, and participates in the four working groups Responsible AI, Data Governance, Future of Work, and Innovation and Commercialization.⁴¹³⁵

The Office of the Minister of Science, Innovation, and Technology of New Zealand released a paper in July 2024 outlining a strategic approach to AI. The paper suggests promoting the OECD AI Principles as a key direction for responsible AI development. 4136

Council of Europe AI Treaty

The Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law opened for signature by member and non-member states in September 2024. 4137 NZ has not endorsed this first legally binding, international AI treaty.4138

https://www.justice.govt.nz/justice-sector-policy/constitutional-issues-and-human-rights/humanrights/international-human-rights/international-human-rights-legislation/

⁴¹³² Ministry of Justice, *International human rights legislation* (Sept. 2022),

⁴¹³³ OECD AI Policy Observatory, OECD AI Principles Overview, Countries Adhering to the AI Principles (2024), https://oecd.ai/en/ai-principles

⁴¹³⁴ GPAI, https://gpai.ai/

⁴¹³⁵ GPAI, Our Work, https://gpai.ai/projects/

⁴¹³⁶ Office of the Minister of Science, Innovation, and Technology, *Approach to Work on* Artificial Intelligence (Jul. 25, 2024), https://www.mbie.govt.nz/dmsdocument/28913-approachto-work-on-artificial-intelligence-proactiverelease-pdf

⁴¹³⁷ Council of Europe, *The Framework Convention on Artificial Intelligence* (Mar. 14, 2025), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificialintelligence

⁴¹³⁸ Council of Europe Treaty Office, Chart of Signatures and Ratifications of Treaty 225 (Mar. 14, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-bytreatv&treatvnum=225

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UNESCO Recommendation on the Ethics of AI

As a member state since 1946, New Zealand has endorsed the UNESCO Recommendation on the Ethics of AI.4139 NZ has neither implemented nor is currently in the process of implementing the Readiness Assessment Methodology (RAM) to assess its alignment with the ethical principles outlined in the Recommendation. 4140

Evaluation

The release of the Cabinet Paper on the Approach to Work on Artificial Intelligence marks progress toward adopting a national AI strategy emphasizing the adoption of AI to drive innovation, productivity, and public service improvements while advocating for a "light-touch, proportionate, and risk-based" regulatory framework. 4141 The paper also highlights New Zealand's intention to use the OECD AI Principles as a key direction to guide its approach to responsible $AI.^{4142}$

NZ has endorsed the UNESCO Recommendation on the Ethics of AI.4143 However, the country has neither implemented nor is it currently in the process of implementing the UNESCO Readiness Assessment (RAM) to evaluate its alignment with the ethical principles outlined in the Recommendation."4144 The release of the Algorithm Charter for Aotearoa marks progress toward ethical AI development and offers a unique opportunity to draft a national AI strategy in line with both the UNESCO Recommendation on the Ethics of AI and the Algorithm Charter. This would allow the country to carve its own approach to trustworthy AI and protect human rights broadly, including the rights and culture of indigenous people against encroachment by the new technology.

⁴¹³⁹ UN News, 193 Countries Adopt First-Ever Global Agreement on the Ethics of Artificial Intelligence (Nov. 25, 2021), https://news.un.org/en/story/2021/11/1106612

⁴¹⁴⁰ UNESCO Global AI Ethics and Governance Observatory, Global Hub: Country Profiles (oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

⁴¹⁴¹ Office of the Minister of Science, Innovation, and Technology, *Approach to Work on* Artificial Intelligence, p. 1, para. 4 (Jul. 25, 2024),

https://www.mbie.govt.nz/dmsdocument/28913-approach-to-work-on-artificial-intelligenceproactiverelease-pdf

⁴¹⁴² Ibid, p. 1, para. 5

⁴¹⁴³ United Nations News, 193 Countries Adopt First-Ever Global Agreement on the Ethics of Artificial Intelligence (Nov. 25, 2021), https://news.un.org/en/story/2021/11/1106612

⁴¹⁴⁴UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

Nigeria

In 2024, Nigeria launched a draft National AI Strategy for public consultation and implemented the updated data protection law. Internationally, Nigeria advocated for a legal instrument on lethal autonomous weapons.

National AI Strategy

Nigeria is making notable strides in AI governance with the National AI Strategy, driven by the Federal Ministry of Communications, Innovation, and Digital Economy (FMCIDE), Nigeria's IT standards regulator. Nigeria launched its first Artificial Intelligence and Robotics Centre to advance skills and innovation in emerging technologies, including AI and IoT, in November 2020. In August 2022, the National Information Technology Development Agency (NITDA) called for experts to contribute to a National AI Policy, leading to the establishment of a Volunteer Expert Group (VEG) in October 2022. Initial discussions at this inauguration indicate that Nigeria's national AI policy would be framed along clusters or sectoral applications in education, healthcare, security, finance, employment, agriculture and supply chain, transportation, and telecommunications with a generalist cluster of application.

Minister of Communications, Innovation and Digital Economy of Nigeria, Dr Bosun Tijani, launched a public call for the drafting of a National AI Strategy in August 2023, stating: "A National Strategy for Nigeria to responsibly steer the AI revolution towards achieving national goals around job creation, social inclusion, and sustainable development becomes imperative. With collaborative leadership, Nigeria seeks to pioneer ethical and inclusive AI innovation that improves welfare and expands opportunities for all its citizens." With that aim, the Minister, held the first session on the National AI Strategy workshop with Nigerians across the globe on March 27, 2024. A second workshop ran April 15–18, 2024.

According to the Minister, the objective of the National AI Strategy is to build on the existing work done by the National Information Technology Department (NITDA) to develop a National AI Strategy. However, the Minister

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⁴¹⁴⁵ Innovation Village, *FG Launches Nigeria's First Artificial Intelligence and Robotics Centre* (Nov. 20, 2020), https://innovation-village.com/fg-launches-nigerias-first-artificial-intelligence-and-robotics-centre/#google-vignette

⁴¹⁴⁶ Voice of Nigeria, *Agency Calls for Contribution to National Artificial Intelligence Policy* (Aug. 11, 2022), https://von.gov.ng/agency-calls-for-contribution-to-national-artificial-intelligence-policy/

⁴¹⁴⁷ FMCIDE, National Artificial Intelligence Strategy: Empower Nigerians through the Digital Nigeria Programme (Aug. 28, 2023), https://fmcide.gov.ng/initiative/nais/

⁴¹⁴⁸ Dr Bosun Tijani, LinkedIn Post (Mar. 27, 2024), https://www.linkedin.com/posts/dr-%E2%80%98bosun-tijani-1b027b excellent-session-today-as-we-kickstarted-activity-7178464543973552129-r4cU?

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adopted an expanded co-creation approach to include top AI researchers of Nigerian descent globally in the process of crafting a National AI Strategy. 4149

Pillar 7 of the National Digital Economy Policy and Strategy 2020 – 2030 (NDEPS)⁴¹⁵⁰ issued by the Federal Ministry of Communications and Digital Economy (the Ministry), considers AI as an emerging technology that must be harnessed for the development of Nigeria's digital economy to attain 7 of the sustainable development goals (SDGs) as prescribed by the United Nations. These SDGs include poverty eradication; good health and well-being; quality education; decent work and economic growth; industry, innovation, and infrastructure; reducing inequality; and sustainable cities and communities.

Subsequently, Nigeria launched its draft National AI Strategy on August 1, 2024.4151 The policy draft is open for public consultation, inviting comprehensive feedback to refine and shape the final strategy. As of the current draft, Nigeria's National AI Strategy reflects a commitment to fairness, accountability, and transparency by emphasizing inclusive AI development that considers social inclusion, ethical use, and public consultation. The draft also aligns with fundamental rights by aiming to address key societal needs and mitigate bias in AI applications. However, explicit provisions detailing the rule of law and comprehensive mechanisms for enforcement or oversight are still anticipated in the final version.

Nigeria hosted the Global Inclusivity and Artificial Intelligence: Africa (GIAA) Conference in Lagos, in September 2024.4152 The event brought together over 370 stakeholders to discuss inclusive AI development across Africa, further advancing Nigeria's engagement in AI initiatives as the country continues to develop the AI strategy and policies. The conference emphasized the need for AI development that benefits all communities, acknowledging Africa's diverse cultural landscape, including Nigeria's more than 300 ethnic groups and over 500 languages.

National Digital Economy Policy and Strategy.pdf

⁴¹⁴⁹ Bosun Tijani, Co-creating a National Artificial Intelligence Strategy for Nigeria (Aug. 28, 2023), https://www.linkedin.com/pulse/co-creating-national-artificial-intelligence-strategy-tijani? ⁴¹⁵⁰ Federal Ministry of Communications and Digital Economy, National Digital Economy Policy and Strategy (2020–2030), Young African Research Hub (Nov. 2019), https://youngafricanpolicyresearch.org/wp-content/uploads/2023/07/Policy-

⁴¹⁵¹ FMCIDE, National Center for Artificial Intelligence and Robotics, and National Information Technology Development Agency, National Artificial Intelligence Strategy 2024 (Aug. 8, 2024), https://ncair.nitda.gov.ng/wp-content/uploads/2024/08/National-AI-Strategy 01082024-copy.pdf ⁴¹⁵² U.S. Embassy and Consulate in Nigeria, Global Inclusivity and Artificial Intelligence Africa Conference (Sept. 13, 2024), https://ng.usembassy.gov/global-inclusivity-and-artificialintelligence-africa-conference/

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Earlier, Nigeria announced that it was working with the United Arab Emirates on Solar Energy and Artificial Intelligence⁴¹⁵³ after a meeting held in Nigeria between Nigeria's Minister of Science and Technology, and the Ambassador of the United Arab Emirates to Nigeria. The government announced that the National Agency for Science and Engineering Infrastructure would be responsible to develop AI in Nigeria. The government also established Nigeria's Robotics and Artificial Intelligence Centre.

Nigeria Communications Commission (NCC), the telecoms regulator, also announced the establishment of a new department on digital economy under the Office of the Executive Vice Chairman/CEO. The focus of the office is on implementing programs and policies aimed at fully supporting and promoting the national digital economy agenda of Nigeria's Federal Government. The department is under the office of the Chief Executive Officer to indicate the criticality of the objectives. The Nigerian Ministry of Science and Technology announced the goal of ensuring that Nigeria is well suited to the AI economy as critical to driving knowledge and Innovation and creating more job opportunities for Nigeria. 4154

Public Participation

The Nigerian government has made efforts to involve the public in the development of the National Artificial Intelligence Policy (NAIP). This was evident in the NITDA August call for the contribution of stakeholders in the information technology sector to the development of the AI Policy and workshops held in March and April 2024. Atticles in the popular press and social media posts announcing the release of the draft National AI Strategy in August 2024

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⁴¹⁵³ O Shogbola, *Nigeria and UAE to Cooperate on Artificial Intelligence and Solar Energy* (Oct. 24, 2018), https://perma.cc/GN67-8M8R

Alsa Nigerian Communications Commission (NCC), Press Statement: NCC Creates New Department to Accelerate FG's Digital Economy Agenda (Jul. 8, 2020), https://www.ncc.gov.ng/media-centre/press-releases/press-statement-ncc-creates-new-department-accelerate-fgs-digital

A155 Nkechi Isaac, NITDA Seeks Stakeholders' Contribution To National AI Policy, Science Nigeria (blog) (Aug. 11, 2022), https://sciencenigeria.com/nitda-seeks-stakeholders-contribution-to-national-ai-policy/

⁴¹⁵⁶ Uchenna Okonkwo, *Nigeria Unveils National Artificial Intelligence Strategy for Public Review*, Noir Press (Aug. 5, 2024), https://noirpress.org/nigeria-unveils-national-artificial-intelligence-strategy-for-public-review/

⁴¹⁵⁷ Alex Tsado, LinkedIn Post (Aug. 5, 2024), https://www.linkedin.com/posts/alex-tsado-44365b52 nigeria-ai-strategy-activity-7225562688490196993-rA5e?

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invited feedback with links to the strategy document. The draft itself includes an email address to receive public feedback and input on the back cover. 4158

The draft Data Protection Act also went through public consultation in 2021 before being enacted in 2023. 4159

Data Protection

Section 37 of the Nigerian Constitution provides for the right to privacy. Nigeria enacted a data protection law to address data privacy issues in the digital age in 2023. 4160 Currently, the National Data Protection Regulation (NDPR) 4161 and Data Protection Act (NDPA) are in force. The NDPA takes precedence where the Act conflicts with the NDPR and the related Implementation Act from 2020. 4162

The Nigeria Data Protection Act 2023 (NDPA) was signed into law and became the applicable data protection law in Nigeria in July 2023. The NDPA 2023 establishes the Nigeria Data Protection Commission (NDPC) as the data protection authority in the country, replacing the National Data Protection Bureau. NDPC's independence is enshrined in art. 7.

The NDPA 2023 applies to the processing of personal data of data subjects in Nigeria. Compared to the NDPR 2019, the Act establishes a new data portability right for data subjects and requires processors and controllers to obtain authorization for, and justify processing of, "sensitive data" relating to religious or other beliefs, sexual orientation, health, race, ethnicity, political views, trades union membership, criminal records. The NDPA 2023 adds a requirement for data controllers to consult the Nigeria Data Protection Commission prior to processing personal data, if the Data Privacy Impact Assessment performed signals high-risk potential of the operation. The NDPA 2023 also distinguishes between data processors and controllers of "major importance" and "not of major importance,"

[.]

⁴¹⁵⁸ FMCIDE, National Center for Artificial Intelligence and Robotics, and National Information Technology Development Agency, *National Artificial Intelligence Strategy 2024* (Aug. 8, 2024), https://ncair.nitda.gov.ng/wp-content/uploads/2024/08/National-AI-Strategy_01082024-copy.pdf ⁴¹⁵⁹ ITedge, *Nigerian Government Seeks Your Input on Draft Bill on Data Protection* (Aug 26, 2021), https://itedgenews.ng/2020/08/26/nigerian-government-seeks-your-input-on-draft-bill-on-data-protection/

⁴¹⁶⁰ National Data Protection Commission, *About Us* (2024), https://ndpc.gov.ng/about-us/
⁴¹⁶¹ Nigeria Information Technology Development Agency (NITDA), *Nigeria Data Protection Regulation* (2019), https://nitda.gov.ng/wp-content/uploads/2020/11/NigeriaDataProtectionRegulation11.pdf

⁴¹⁶² NITDA, *Nigeria Data Protection Regulation 2019: Implementation Framework* (2020), https://nitda.gov.ng/wp-content/uploads/2021/01/NDPR-Implementation-Framework.pdf (NDPC), *Nigeria Data Protection Act 2023*, Nigeria Data Protection Commission Resources (2023), https://ndpc.gov.ng/resources/#flipbook-df (2442/1/

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with the former required to formally register before the National Data Privacy Committee.4164

The National Data Protection Commission has authority to levy sanctions for infringement. Possible sanctions are:

- Whichever is greater between 10,000,000 nairs and 2% of the revenue of the preceding year- for data controllers or data processors of major importance;
- Whichever is greater between 2,000,000 nairas and 2% of the revenue of the preceding year- for data controllers or data processors not of major importance.

The Nigeria Data Protection Committee published a draft General Application and Implementation Directive to the NDPA 2023 in May 2024. 4165 The Directive provides guidance on the implementation of the NDPA 2023.

The Nigeria Data Protection Bureau (NDPB), which represented Nigeria before the General Privacy Assembly (GPA) until the Nigeria Data Protection Commission joined the GPA Assembly as a full member in October 2023, 4166 did not a sponsor the 2018 Declaration on Ethics and Data Protection in Artificial Intelligence, 4167 2020 Resolution on Accountability in the Development and Use of Artificial Intelligence, 4168 2022 Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology, 4169 or 2023 Resolution on Generative AI. 4170 The NDPC did not

Accountability-in-the-Development-and-Use-of-AI-EN.pdf.

⁴¹⁶⁴ Ibid

⁴¹⁶⁵ Mondaq, Data Protection in Nigeria – Draft General Application and Implementation Directive (2024), https://www.mondaq.com/nigeria/data-protection/1483286/data-protection-innigeria-draft-general-application-and-implementation-directive

⁴¹⁶⁶ Global Privacy Assembly, 45th Closed Session, Accreditation Resolution (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/8.-GPA2023-Accreditation-Resolution-EN.pdf

⁴¹⁶⁷ International Conference of Data Protection & Privacy Commissioner, *Declaration on Ethics* and Data Protection in Artificial Intelligence (Oct. 2018), http://globalprivacyassembly.org/wpcontent/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf.

⁴¹⁶⁸ Global Privacy Assembly, Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/11/GPA-Resolution-on-

⁴¹⁶⁹ Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate *Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principlesand-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁴¹⁷⁰ Global Privacy Assembly, Resolution on Generative Artificial Intelligence Systems (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

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sponsor the GPA Resolution on Generative AI, approved during the GPA October 2023 session.4171

Algorithmic Transparency

Nigeria established the right to algorithmic transparency in art. 3.1 (7) (1) of the NDPR, which required data controllers to explain the existence of automated decision-making and the logic involved. 4172 These provisions are now superseded by the right to algorithmic transparency in the NDPA 2023.4173 The NDPA 2023 establishes that data subjects have the right not to be subject to decisions taken solely based on automated processing of personal data, if those decisions produce legal or similar significant effects on the subject. The data subject is entitled to obtain human intervention in the decision, express his or her point of view, and contest the decision. The data subject is also entitled to be informed of the existence of automated decision-making, its significance, and his or her rights in relation to the process prior to being subject to processing of personal data by the controllers.4174.

AI Research & Development

According to the Director-General of Nigeria's National Information Technology Development Agency (NITDA), the National Centre for Artificial Intelligence and Robotics (NCAIR) is also expected to be a research development center.4175 The Communications Commission requested a study to assess the ethical and societal impact of AI to achieve economic diversification inclusively and sustainably.4176 The study concluded that regulators must govern artificial power while it is also the responsibility of programmers and engineers to ensure that ethical and security concerns are addressed during the initial design of these systems. The conclusions of the study urge the NCC to step move forward and develop frameworks for AI in Nigeria.

The private sector and the tech ecosystem are leading in AI initiatives in Nigeria, mostly in the private sector, with some participation from the Nigerian

content/uploads/2020/11/NigeriaDataProtectionRegulation11.pdf

⁴¹⁷² Nigeria Information Technology Development Agency (NITDA), Nigeria Data Protection Regulation (2019), https://nitda.gov.ng/wp-

⁴¹⁷³ Nigeria Data Protection Commission (NDPC), Nigeria Data Protection Act 2023, Art 37.1–3 (2023), https://ndpc.gov.ng/resources/#flipbook-df 2442/1/

⁴¹⁷⁴ Ibid, Art. 27.1(g) and 34.1(viii)

⁴¹⁷⁵ Synced, Nigerian Government to Set Up the Nation's Centre for AI and Robotics to Empower Students (Sept. 3, 2020), 'https://syncedreview.com/2020/09/04/nigerian-government-to-set-upthe-nations-centre-for-ai-and-robotics-to-empower-students/

⁴¹⁷⁶ Nigerian Communications Commission (NCC), Ethical and Societal Impact of Artificial Intelligence, https://www.ncc.gov.ng/market-data-reports/research-reports/study-ethical-societalimpact-artificial-intelligence-ai

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government. A government project was EagleScan, a homegrown plagiarism detection software, with an AI-driven data analytics and visualization engine.⁴¹⁷⁷

The NASS-AI project uses AI to classify parliamentary bills from the national assembly, to make them more accessible. Based on the principle of open data the system ensures that legislative-related documents are complete, accessible, and machine-processable, amongst other requirements.⁴¹⁷⁸

The Director-General of NITDA announced in July 2024 that the federal government is planning on developing research centers for six key areas of emerging technologies, including AI. The plan entails research funding and innovation sandboxes for local startups.⁴¹⁷⁹

Facial Recognition

Nigeria plans to use facial recognition technology as an essential part of its digital identification scheme. According to the Director-General of the Nigerian Identity Management Commission (NIMC), the agency has plans to capture the iris of prospective enrollees, and the agency already has the capacity for capturing the iris at its backend.⁴¹⁸⁰

In 2022, Nigeria added facial recognition for voter verification. The Independent National Electoral Commission (INEC) used an Automated Biometric Identification System (ABIS) that deduplicated fingerprints and used facial recognition to verify voters before issuing permanent voter registration cards. This was adopted in response to the issues identified with nullified registrations voters who were already registered and incomplete data. In 2023, the Federal Government indicated plans to install facial recognition technology at major airports across the federation. The Independent voter verification.

Biometrics

Nigeria has been keen to adopt biometric technology, despite the risks to violate human rights. The registrations of some citizens were invalidated, which may result in discrimination and limitation of the exercise of their political rights.

⁴¹⁷⁸ Adewale Akinfaderin and Olamilekan Wahab, *NASS-AI: Towards Digitization of Parliamentary Bills Using Document Level Embedding and Bidirectional Long Short-Term Memory* (Oct. 2, 2019), https://arxiv.org/abs/1910.04865v1

⁴¹⁷⁹ Amaka Nwaokocha, *Nigeria Plans Nationwide AI and Blockchain Research Centers*, *Cointelegraph* (Jul. 4, 2024), https://cointelegraph.com/news/nigeria-ai-blockchain-research-centers

⁴¹⁸⁰ ID4Africa, EP7 Nigeria's Identity Ecosystem (Sep 13, 2021),

https://www.youtube.com/watch?v=OgcKzQ8I7 U&t=4605s (Watch from 1:18:00)

⁴¹⁸¹ Dig Watch, Nigeria Adds Facial Recognition for Voter Verification (Apr. 13 2022),

https://dig.watch/updates/nigeria-adds-facial-recognition-for-voter-verification

⁴¹⁷⁷ EagleScan, About Eaglescan (2023), www.eaglescan.ng

⁴¹⁸² The Punch Newspaper, *FG to Install Facial Recognition Technology at Airports* (Mar. 22 2023), https://punchng.com/fg-to-install-facial-recognition-technology-at-airports/?amp

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The Nigerian government through the Independent National Electoral Commission (INEC) set a plan to use biometrics (fingerprint and face) matching systems (Automatic Biometric Identification System ABIS and Biometric Voter Accountability System BVAS) in the February 2023 presidential elections. This is despite the systems having invalidated around 2.78 million Nigerians. Despite these concerns, post-election analysis praised BVAS for significantly reducing electoral fraud. 4184

In 2021 during the governorship poll in Anambra State the failure of the BVAS system resulted in several votes deemed inconclusive. Elections for Ekiti State's governorship were held successfully with these systems. Reports from Oyo state showed that 42% of voter registrations were rendered invalid due to duplications. Al87

The World Bank issued recommendations to the Nigerian government to invest in AI-enabled Geospatial data to support the response to the COVID-19 crisis and build back better. Nigeria has multiple data sets, captured across multiple platforms such as Bank Verification Number (BVN), Voter's card, International passport, Road Safety, and National Identification Number (NIN). Reports suggest that the country loses up to US\$2 billion annually on biometric data collection duplication. Als9

To address these inefficiencies and improve Nigeria's digital identity infrastructure, the World Bank provided \$45.5 million in 2024 to Nigeria's National Identity Management Commission (NIMC) as part of the Digital

4184 Avang Macdonald, *Biometrics Reduced Fraud in 2023 Nigerian Elections, Analyst Argues* (Mar. 6, 2023), https://www.biometricupdate.com/202303/biometrics-reduced-fraud-in-2023-nigerian-elections-analyst-argues

https://www.biometricupdate.com/202111/nigeria-state-election-suffers-biometric-voter-verification-failures-polls-declared-inconclusive

4186 Ibid

⁴¹⁸³ Frank Hersey, *Calls for Nigeria to Test Integrity of Biometric Matching Systems Ahead of Elections Biometric Update* (Jan. 13, 2023), https://www.biometricupdate.com/202301/calls-for-nigeria-to-test-integrity-of-biometric-matching-systems-ahead-of-elections

⁴¹⁸⁵ Ayang Macdonald, Nigeria State Election Suffers Biometric Voter Verification Failures, Polls Declared Inconclusive, Biometric Update (Nov 8, 2021),

⁴¹⁸⁷ The Nation Newspaper, *CVR*: *42.3 per Cent of Oyo Registrations Invalid* (Jun 9, 2022, https://thenationonlineng.net/cvr-42-3-per-cent-of-oyo-registrations-invalid/

⁴¹⁸⁸ J Blummenstock *et al*, *Using Big Data and Machine Learning to Locate the Poor in Nigeria* (Feb 21, 2021), https://blogs.worldbank.org/opendata/using-big-data-and-machine-learning-locate-poor-nigeria

⁴¹⁸⁹ Justin Lee, *Nigeria Loses \$2b Annually to Agencies' Duplication of Biometrics Data Collection* (Aug. 14, 2021), https://www.biometricupdate.com/201708/nigeria-loses-2b-annually-to-agencies-duplication-of-biometrics-data-collection

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Identification for Development (ID4D) project.⁴¹⁹⁰ This funding, part of a larger \$430 million initiative, aims to upgrade biometric systems and increase the number of Nigerians enrolled in the NIN system.⁴¹⁹¹

Environmental Impact of AI

The draft National AI Strategy released in August 2024 includes "Ensure AI Contributes to Sustainable Development and Environmental ell-being" among the objectives. The objective includes a statement that "AI's energy and resource consumption warrants a specific focus on green and sustainable AI initiatives." The Outcomes and strategies focus on "green AI" solutions and projects, such as those used to monitor and management waste, without offering clarity on what "green AI" would entail.

Lethal Autonomous Weapons

Nigeria, though not a state party to the Convention on Certain Conventional Weapons (CCW), has actively participated in CCW meetings and supports a legally binding instrument on autonomous weapons. Nigeria endorsed both the 2024 Freetown Communiqué and the Vienna Conference's call for urgent regulation, 4193 while also contributing to a draft protocol proposing prohibitions on autonomous weapons systems without meaningful human control. 4194

The Humanity at the Crossroads conference in Vienna in April 2024, brought together over 1,000 representatives from 144 nations, including Nigeria,⁴¹⁹⁵ to discuss the urgent regulatory needs for Autonomous Weapons

 $\frac{https://documents1.worldbank.org/curated/en/099032924113511058/pdf/P1671831f4dde506218}{b6117b06811e35e0.pdf}$

⁴¹⁹³ Automated Decision Research, *Nigeria* (Apr. 18, 2024),

https://automatedresearch.org/news/state_position/nigeria/

https://documents.un.org/doc/undoc/gen/n24/154/32/pdf/n2415432.pdf

⁴¹⁹⁰ World Bank, *Nigeria Digital Identification for Development Project (P167183)* (Mar. 29, 2024),

⁴¹⁹¹ Cass Kennedy, *World Bank Provides \$45.5M for Nigeria's National Digital ID Program* (Jun. 27, 2024), https://mobileidworld.com/world-bank-provides-45-5m-for-nigerias-national-digital-id-program/

⁴¹⁹² FMCIDE, National Center for Artificial Intelligence and Robotics, and National Information Technology Development Agency, *National Artificial Intelligence Strategy 2024*, 1.4.4.5., Objective 3.5, p. 39 (Aug. 8, 2024), https://ncair.nitda.gov.ng/wp-content/uploads/2024/08/National-AI-Strategy 01082024-copy.pdf

⁴¹⁹⁴ United Nations General Assembly, *Lethal Autonomous Weapons Systems: Report of the Secretary-General* (Jul. 1, 2024),

⁴¹⁹⁵ Austrian Federal Ministry for European and International Affairs, *List of Associated States* (Apr. 2024), https://www.bmeia.gv.at/en/european-foreign-policy/disarmament/conventional-arms/autonomous-weapons-systems/2024-vienna-conference-on-autonomous-weapons-systems/list-of-associated-states

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Systems (AWS). 4196 Key concerns included maintaining human control, accountability, and adherence to international law, with AWS posing serious risks to global security and human rights. The conference's consensus on prohibiting certain AWS and regulating others underlined the closing window to prevent an autonomy arms race. For states like Nigeria, active participation and contributions signify a commitment to shaping international norms, protecting human dignity, and ensuring regional stability in the face of emerging AI-driven military technologies. 4197

In 2021, Nigeria issued a joint statement with ten other states at the CCW Group of Governmental Experts on Lethal Autonomous Weapons Systems (GGE on LAWS) meeting, calling to "adopt a legally binding instrument to ensure the prohibition of autonomous weapons systems." ⁴¹⁹⁸

At the 78th UN General Assembly First Committee in 2023, Nigeria voted in favor⁴¹⁹⁹ of resolution L.56⁴²⁰⁰ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. Nigeria contributed a statement to the report.⁴²⁰¹

Human Rights

Nigeria is party to the Universal Declaration of Human Rights (UDHR), and a member of the African Union (AU) and has ratified the African Charter on

https://automatedresearch.org/news/state_position/nigeria/

⁴¹⁹⁶ Austrian Federal Ministry for European and International Affairs, 2024 Vienna Conference on Autonomous Weapons Systems (Apr, 2024), https://www.bmeia.gv.at/en/european-foreign-policy/disarmament/conventional-arms/autonomous-weapons-systems/2024-vienna-conference-on-autonomous-weapons-systems

⁴¹⁹⁷ Austrian Federal Ministry for European and International Affairs, *Chair's Summary: Humanity at the Crossroads: Autonomous Weapons Systems and the Challenge of Regulation* (Apr. 30, 2024),

 $[\]frac{https://www.bmeia.gv.at/fileadmin/user_upload/Zentrale/Aussenpolitik/Abruestung/AWS_2024/}{Chair_s_Summary.pdf}$

⁴¹⁹⁸ Automated Decision Research, Nigeria, State Positions (2024),

⁴¹⁹⁹ Isabelle Jones, *164 States Vote against the Machine at the UN General Assembly*, Stop Killer Robots (Nov. 1, 2023), https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

⁴²⁰⁰ General Assembly, *Resolution L.56: Lethal Autonomous Weapons* (Oct. 12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

⁴²⁰¹ United Nations General Assembly, Lethal Autonomous Weapons Systems: Report of the Secretary-General (Jul. 1, 2024),

https://documents.un.org/doc/undoc/gen/n24/154/32/pdf/n2415432.pdf

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Human and People's Rights. 4202 The rights and freedoms in the treaties signed have been envisaged in Chapter IV of the Nigerian Constitution. 4203 In 2006 the government of Nigeria developed a National Action Plan for the Promotion and Protection of Human Rights (NAP) which was a response to the Recommendation of the Vienna Declaration and Program Action, adopted at the World Conference on Human Rights. NAP was an integrated and systematic national strategy to help realize the advancement of human rights in the country. There have been considerable improvements in the enforcement, promotion, and protection of human rights and freedoms in the country since the transition to democratic rule in 1999.

In the Freedom House Freedom in the World 2024 report, Nigeria ranks as "Partly Free" with a rating of 44/100. 4204 This has been attributed to the fact that the country has been facing security challenges, military and law enforcement officers engaging in extra-judicial killings, torture, and abuses. Further, civil liberties are undermined by religious and ethnic bias, women, and LGBT+ people face discrimination, and the media is constantly facing harassment and arrests over political issues.

In 2016, Nigeria joined the United States, Canada, Australia, the United Kingdom, and some European Union states to sponsor a United Nations Resolution that affirms that rights that apply offline must also apply online.⁴²⁰⁵

Nigeria's involvement in the UN's call for input on digital technologies in the administration of justice marks a pivotal step in shaping AI policy to protect human rights within its judicial system. 4206 By participating through its National Human Rights Commission, Nigeria is actively addressing the impacts of AI and digital tools, such as biometrics and predictive analytics, on privacy, accountability, and fair trials. This engagement demonstrates Nigeria's commitment to aligning with global human rights standards, particularly by

african charter on human and peoples rights e.pdf

https://freedomhouse.org/country/nigeria/freedom-world/2024

⁴²⁰² African Union, *African Charter of Human and People's Rights* (Jun. 1981), https://au.int/sites/default/files/treaties/36390-treaty-0011 -

⁴²⁰³ National Library of Nigeria, *Nigeria's Constitution of 1999 with Amendments through 2011* (2011), https://nigeriareposit.nln.gov.ng/items/4a370a96-b42f-4b09-ad68-4fd872b871f1/full Freedom House, *Freedom in the World 2024: Nigeria* (2024),

⁴²⁰⁵ UN Human Rights Council, *The Promotion, Protection and Enjoyment of Human Rights on the Internet: Resolution Adopted by the Human Rights Council,* A/HRC/RES/32/13 (Jul. 27, 2016), https://www.article19.org/data/files/Internet_Statement_Adopted.pdf

⁴²⁰⁶ OHCHR, Call for Input: Application of Digital Technologies in the Administration of Justice—Report to the General Assembly on Human Rights in the Administration of Justice (Jun. 19, 2024), https://www.ohchr.org/en/calls-for-input/2024/call-input-application-digital-technologies-administration-justice-report

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assessing and adapting its regulatory framework to safeguard the rights of vulnerable populations in justice-related digital initiatives."

Al Safety Summit

In November 2023, Nigeria participated in the first AI Safety Summit and endorsed the Bletchley Declaration. 4207 Nigeria thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible."

OECD/G20 Principles

Nigeria is not a member of the OECD and has not endorsed the OECD AI Principles. 4208 Nigeria submitted only two reports to the OECD AI Policy Observatory in relation to policies, strategies, or activities associated with AI.⁴²⁰⁹ The National AI Policy call for contributions is mapped to two OECD principles: Fostering a digital ecosystem for AI and Providing an enabling policy environment for AI. There is no evidence of the implementation of the OECD AI principles in the country.

Council of Europe AI Treaty

Nigeria has not signed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law. 4210

UNESCO Recommendation on AI Ethics

Nigeria is a member of UNESCO and endorsed the UNESCO Recommendation on the Ethics of AI. 4211 Nigeria also participates in the African

⁴²⁰⁷ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, Prime Minister's Office, The Bletchley Declaration by Countries Attending the AI Safety Summit (Nov. 2023), https://www.gov.uk/government/publications/ai-safetysummit-2023-the-bletchley-declaration/the-bletchley-declaration-by-countries-attending-the-aisafety-summit-1-2-november-2023

⁴²⁰⁸ OECD AI Policy Observatory, OECD AI Principles Overview, Countries Adhering to the AI Principles (2025), https://oecd.ai/en/ai-principles

⁴²⁰⁹ OECD AI Policy Observatory, AI in Nigeria (2025),

https://oecd.ai/en/dashboards/countries/Nigeria

⁴²¹⁰ Council of Europe Treaty Office, Chart of Signatures and Ratifications of Treaty 225 (Mar. 8, 2025), https://www.coe.int/en/web/Conventions/full-list/?module=signatures-bytreaty&treatynum=225

⁴²¹¹UNESCO, UNESCO Member States Adopt the First Ever Global Agreement on the Ethics of Artificial Intelligence (Apr. 21, 2022), https://www.unesco.org/en/articles/unesco-member-statesadopt-first-ever-global-agreement-ethics-artificial-intelligence

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Forum for Ethics and Governance of Artificial Intelligence (AFEGAI), which was created in 2019 following a recommendation by UNESCO and African Member States to establish an African Forum of Association of Artificial Intelligence (AI). ⁴²¹² AFEGAI brings together AI constituencies in Africa to support the ethical development of Artificial Intelligence. AFEGAI coordinates AI Governance Forums in Africa. ⁴²¹³

The country is partially implementing the recommendations through AI and data protection policies, such as, provisions requiring transparency of data controllers to data subjects where they use automated decision making.

Nigeria is also in the process of completing UNESCO's Readiness Assessment Methodology (RAM),⁴²¹⁴ a key step in aligning with the Recommendation on the Ethics of AI. The RAM aims to evaluate the country's readiness in terms of ethical AI development, governance frameworks, and regulatory measures.

Evaluation

Nigeria has made significant progress in developing its national AI strategy, launching a draft on August 1, 2024. While the process of public participation has not always been fully systematic or consistent, 4215 this step marks a clear advancement toward finalizing the strategy. A reform of the existing legal framework maintained the positive features, notably the establishment of an independent data protection agency and the right to algorithmic transparency. The newly created Nigeria Data Protection Commission also officially joined the Global Data Privacy assembly as a full member.

Nigeria is a signatory of the UDHR and the African Union Charter but is only "partially free" with a record of human rights protection that could be improved. Fulfilling the commitment taken by endorsing the UNESCO Recommendation on the Ethics of AI could provide a perfect opportunity to accomplish the reform necessary at national level to turn trustworthy AI into reality for the benefit of all. Beginning the RAM process is a step in the right direction.

⁴²¹² Forum on AI in Africa Summit, *The Benguerir Declaration* (Dec. 13, 2018), https://en.unesco.org/sites/default/files/ai_outcome-statement_africa-forum_en.pdf

⁴²¹³ UNESCO, *Multistakeholder Group Discusses Ten Building Blocks towards Creating inclusive AI Policies* (Jan. 24, 2022), https://www.unesco.org/en/articles/multistakeholder-group-discusses-ten-building-blocks-towards-creating-inclusive-ai-policies

⁴²¹⁴ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

⁴²¹⁵Voice of Nigeria, *Agency Calls for Contribution to National Artificial Intelligence Policy* (Aug. 11, 2022), https://von.gov.ng/agency-calls-for-contribution-to-national-artificial-intelligence-policy/

Norway

In 2024, Norway took various steps to ensure AI development complies with privacy regulations, such as AI inspections by the data protection agency and an expanded AI sandbox. Norway signed the Council of Europe AI Treaty and pledged to implement the provisions in the private as well as public sector.

National AI Strategy

The Norwegian Government presented the national artificial intelligence (AI) strategy in January 2020.⁴²¹⁶

The objective of the strategy is to outline the policy actions for the coming years to maximize the opportunities that AI can bring along for Norwegian individuals, for businesses and industry, and for the public sector.⁴²¹⁷ To achieve this outcome, the national AI strategy highlights the following policy initiatives:

- Expanding the offer of education programs and workplace trainings in the field of AI in order to create a solid basis of digital skills and capabilities
- Strengthening the Norwegian research in AI
- Enhancing the innovation capacity in AI in both the private and public sector
- Outlining ethical principles for AI to allow fair, reliable and trustworthy AIrelated developments
- Establishing digitalization-friendly regulations as to define the legislative framework in which AI developments take place
- Constructing a strong data infrastructure ensuring open data and data sharing across sectors and business areas. Dedicated opportunities for language data resources are established through the Norwegian language bank at the National library
- Deploying a telecommunication infrastructure that provides high-capacity connectivity and computing power, and that ensures security in AI-based systems.

In a section dedicated to ethics, the strategy highlights the adoption of the EU ethics guidelines for trustworthy AI⁴²¹⁸ and the OECD AI principles.

With regards to the public sector, the national strategy aims to support value creation and use of AI in the public sector; facilitate the sharing of public sector data among public sector agencies; review and update legal barriers to public sector AI, in particular issues regarding data protection and statutory

 $\frac{https://www.regjeringen.no/contentassets/1febbbb2c4fd4b7d92c67ddd353b6ae8/en-gb/pdfs/kistrategi_en.pdf}{}$

⁴²¹⁶ Ministry of Local Government and Modernisation, *National Strategy for Artificial Intelligence* (2020)

⁴²¹⁷ European Commission, *AI Watch, AI Policies by Country: Norway*, https://aiwatch.ec.europa.eu/countries/norway en

⁴²¹⁸ European Commission, *EU Ethics guidelines for trustworthy AI* (Apr. 2019), https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai

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authority; ensure that AI systems used by the government are transparent and explainable; issue guidelines to help public administrations overcome uncertainties. 4219

Norway has developed centralized, accessible repositories of open public data. In Norway, the Brønnøysund Register Centre and the Norwegian Digitalization Agency have established a national directory of data held by different public agencies, their relationships, what they mean and whether data can be shared and on what terms.⁴²²⁰

In 2021, Norway was the only European Free Trade Association (EFTA) country that performed activities to assess the political impact of open data. They launched "data as a resource," which aims to develop a common methodology for measuring and demonstrating the benefits and effects of public data, based on the work done in the EU and the OECD in this area.⁴²²¹

In November 2020, the Supreme Audit Institutions of Norway, Finland, Germany, the Netherlands and the UK jointly published a whitepaper called "Auditing machine learning algorithms for public auditors." This paper discussed in detail audits of machine learning (ML) algorithms by the Supreme Audit Institution with project management, data, model development, model in production and evaluation. The project auditingalgorithms.net is maintained by The Office of the Auditor General of Norway (*Riksrevisjonen*).

Norway developed its strategy after it signed a Declaration of cooperation on Artificial Intelligence together with 24 other European countries in May 2018.⁴²²³ Several other initiatives in 2018 paved the way for the drafting of the national strategy. For example, the Norwegian Data Protection Authority (DPA) published a report on artificial intelligence and privacy.⁴²²⁴ Another report Digital21 focused on national collaboration and encouraged engagement from

⁴²¹⁹ European Commission, *AI Watch*, *Norway: Public Sector dimension of AI Strategy*, https://aiwatch.ec.europa.eu/topics/public-sector/public-sector-dimension-ai-national-strategies/norway-public-sector-dimension-ai-strategy en.

⁴²²⁰ OECD (2021), State of Implementation of the OECD AI Principles: Insights from National AI Policies (Jun. 18, 2021), https://doi.org/10.1787/1cd40c44-en

⁴²²¹ European Commission, *Open Data Maturity Report 2021*, p. 77 (Dec. 2021), https://data.europa.eu/sites/default/files/landscaping_insight_report_n7_2021.pdf#page=5&zoom=auto,-128,19

⁴²²² Auditor General of Norway, *Auditing Machine Learning Algorithms for Public Auditors* (Apr. 27, 2023), https://www.auditingalgorithms.net

⁴²²³ European Commission, *EU Declaration on Cooperation on Artificial Intelligence* (Apr. 10, 2018),

 $[\]frac{https://digital\text{-strategy.ec.europa.eu/en/news/eu-member-states-sign-cooperate-artificial-intelligence}{\text{-intelligence}}$

⁴²²⁴ Datatilsynet, *Artificial Intelligence and Privacy* (Jan. 2018), https://www.datatilsynet.no/globalassets/global/english/ai-and-privacy.pdf

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industry, academia and government.⁴²²⁵ The Norwegian Board of Technology also published a report, Artificial Intelligence: Opportunities, Challenges and a Plan for Norway.⁴²²⁶

The national AI strategy emphasizes that implementation and progress will be closely reviewed and, if necessary, changed with further AI policies. The frequency with which revised strategy reports will be provided is not specified in the plan. The Norwegian Data Protection Authority, Datatilsynet, released the Strategy for Working with Artificial Intelligence in March 2024. The Datatilsynet strategy aligns with the 2024–2026 goals. The strategy ensures a coordinated and unified approach to artificial intelligence—both internally in its operations and externally towards society. The new strategy will:

- Provide a practical coordination of AI-relevant inquiries and activities in the Norwegian Data Protection Authority
- Provide direction for Datatilsynet's work with AI in business planning, case management, guidance and the use of IT tools
- Build a competent and targeted supervision in the AI area
- Improve efficiency and quality in Datatilsynet's work.⁴²²⁷

Nordic-Baltic and Nordic Cooperation on Al

As for the regional landscape, the Norwegian Minister for digitalization signed the declaration on AI in the Nordic-Baltic region, establishing a collaborative framework on "developing ethical and transparent guidelines, standards, principles and values to guide when and how AI applications should be used" and "on the objective that infrastructure, hardware, software and data, all of which are central to the use of AI, are based on standards, enabling interoperability, privacy, security, trust, good usability, and portability."⁴²²⁸

The ministerial declaration Digital North 2.0⁴²²⁹ builds on the common priorities of the Nordic-Baltic countries, and follows the previous ministerial declaration, Digital North 2017-2020. "In order to promote work with digitalisation, co-ordinate efforts, and follow up on the goals of the declaration, a council of ministers for digitalisation (MR-DIGITAL) was established in 2017.

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⁴²²⁵ Digital 21, https://digital21.no

⁴²²⁶ Teknologirådet, *Artificial Intelligence: Opportunities, Challenges and a Plan for Norway* (Nov. 26, 2018), https://teknologiradet.no/en/publication/ai-and-machine-learning-possibilites-challenges-and-a-plan-for-norway/

⁴²²⁷Datatilsynet, *Strategy for Work with Artificial Intelligence* [Norwegian] (Mar. 22, 2024), https://www.datatilsynet.no/contentassets/ccfdac22187b46af95873287bd3c8df6/datatilsynets-strategi-for-kunstig-intelligens.pdf

⁴²²⁸ Nordic and Baltic Ministers of Digitalization, *AI in the Nordic-Baltic region* (May 14, 2018), https://www.norden.org/en/declaration/ai-nordic-baltic-region

⁴²²⁹ Nordic and Baltic Ministers of Digitalization, *Ministerial Declaration Digital North 2.0* (Sept. 29, 2020), https://www.norden.org/en/declaration/ministerial-declaration-digital-north-20

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The aim is to promote development in three areas: (1) Increase mobility and integration in the Nordic and Baltic region by building a common area for cross-border digital services; (2) Promote green economic growth and development in the Nordic-Baltic region through data-driven innovation and a fair data economy for efficient sharing and re-use of data; and (3) Promote Nordic-Baltic leadership in the EU/EEA and globally in a sustainable and inclusive digital transformation of our societies."⁴²³⁰

The Nordic and Baltic ministers for digitalization released another joint statement in November 2021, announcing a focus on digital inclusion, striving to implement measures to make digital services more accessible to all Norwegian inhabitants and ensuring that those who do not possess the necessary level of skills get the opportunity to acquire them. 4231

The Nordic and Baltic ministers for digitalization issued a common statement in September 2022 on the importance of cooperation on digital security in the Nordic-Baltic region following the COVID-19 pandemic and the war in Ukraine. In their common statement, the ministers stressed that this "rapid transformation has challenged everyone to adapt to new, digital ways of doing business, learning and accessing public authorities." The ministers declared that they "have committed to ensuring that our region maintains its position as a leader in digitalisation, and that everyone in the region benefit from digitalisation regardless of age, wealth, education or level of digital skills. One important factor that helps ensure a strong level of digitalisation in the region is the trust citizens put in digital services from the public sector – be it at regional, national or local level. To keep up this high level of trust, we need to continue our efforts to make our digital public services human centric and accessible. [...] Robust and secure digital services, safeguarding users' privacy and ensuring that personal data are stored and processed in a trustworthy way, are crucial to the citizens' sustained trust in digital services."4232

As part of its action plan for Vision 2030 (2021–2024), the Nordic Council of Ministers identified innovation, digital integration, the safe use of artificial intelligence, data development and open data, education and digitalization as key

 $\underline{https://www.norden.org/en/information/nordic-baltic-co-operation-digitalisation}$

⁴²³⁰ Nordic Co-operation, Nordic-Baltic co-operation on digitalisation,

⁴²³¹ Nordic and Baltic Ministers of Digitalization, *Common statement on the importance of promoting digital inclusion as a central part of the digital transformation in the Nordic-Baltic region* (Nov. 26, 2021), https://www.norden.org/en/declaration/common-statement-importance-promoting-digital-inclusion-central-part-digital

⁴²³² Nordic and Baltic Ministers of Digitalization, *Common statement on the importance of cooperation on digital security in the Nordic-Baltic region* (Sept. 6, 2022), https://www.norden.org/en/declaration/common-statement-importance-cooperation-digital-security-nordic-baltic-region

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objectives. 4233 The Nordic Council of Ministers also emphasizes the involvement of civil society in efforts relating to our vision for 2030 thanks to "a Nordic civil society network and public consultations." During the May 30–31, 2024 Nordic Meeting, Nordic Data Protection Authorities signed a joint declaration addressing current data protection issues and emphasized that national legislation must ensure responsible AI and a legal basis to process personal data. This signals that the Nordic DPAs will continue to strengthen their cooperation moving forward. 4235

Public Participation

The Norwegian Ministry of Local Government and Modernization published the National Strategy for Artificial Intelligence on January 14th, 2020. 4236 Throughout 2019, the Minister of Digitalization travelled around Norway to listen to suggestions from different communities to inform the national strategy. Additionally, a variety of businesses and government agencies provided comments on the content of the through written statements. Close to 50 statements were received by the Ministry. There were no major public participation opportunities in 2024. However, in July 2024, Datatilsynet and the Norwegian Technology Council conducted a public survey about views on AI. 4237

Norway has worked to strengthen national funding for research and innovation in artificial intelligence, and to substantially increase their research collaborations. With the Norwegian Artificial Intelligence Research Consortium (NORA.ai), Norway has taken important steps to support the European ambition of increased cross-border co-operation in AI research.⁴²³⁸

⁴²³³ Nordic Council of Ministers, *The Nordic Region – Towards being the most sustainable and integrated region in the world, Action Plan for 2021–2024* (Dec. 14, 2020), https://www.norden.org/en/publication/nordic-region-towards-being-most-sustainable-and-integrated-region-world

⁴²³⁴ Nordic Council of Ministers, *Guidelines for Involving Civil Society in Work Relating to Our Vision 2030* (Feb. 12, 2021), https://www.norden.org/en/publication/guidelines-involving-civil-society-work-relating-our-vision-2030

⁴²³⁵ Datatilsynet, *Oslo Declaration: Nordic Data Protection Authorities Join Forces on Children's Data Protection in Gaming, AI, and Administrative Fines* (May 30–31, 2024), https://www.datatilsynet.no/contentassets/86d8d858f8cc47b18eef8ec000fe5cf8/oslo-declaration-signed.pdf.

⁴²³⁸ Norwegian Artificial Intelligence Research Consortium (NORA), *About NORA*, https://www.nora.ai/about/

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Data Protection

The European Economic Area (EEA) Agreement is an international agreement which enables three European Free Trade Area (EFTA) States, including Norway, to participate in the EU Single Market. All relevant EU legislation in the field of the Single Market is integrated into the EEA Agreement so that it applies throughout the whole EEA. The GDPR was incorporated in the EEA Agreement by a 2018 Joint Committee Decision. The new Norwegian Personal Data Act (PDA) implements the GDPR and became effective as of July 2018. Act (PDA) implements the GDPR and became effective as in the healthcare sector, to ensure compliance with the GDPR.

Norway is also a member of the Council of Europe. It ratified the Convention 108 for the protection of individuals with regard to the processing of personal data; however, it has not ratified its modernized version (108+) yet.⁴²⁴⁰

The Norwegian Data Inspectorate (*Datatilsynet*) is the national supervisory authority for Norway. The Datatilsynet is in charge of enforcing the GDPR in Norway. The Datatilsynet is a member of the European Data Protection Board (EDPB), however without voting rights and without the right to be elected as chair and vice-chair, for GDPR-related matters.⁴²⁴¹

In June 2018, the Data Inspectorate released a report on AI and privacy. The report showed how imperative further knowledge about the privacy implications of artificial intelligence is, "not only in order to safeguard the right to privacy of the individual, but also to meet the requirements of society at large." In this report, the Datatilsynet provides greater technical detail in describing artificial intelligence, including the black box, while also taking a closer look at four relevant AI challenges associated with the data protection principles enshrined in the GDPR: fairness and discrimination; purpose limitation; data minimization; and transparency and the right to information. A strong emphasis lays on bringing awareness to the ethical and privacy consequences of AI systems, as well as ensuring that the deployed systems respect privacy by design and meet the legislative requirements. 4243

The Datatilsynet is a member of the Global Privacy Assembly (GPA) since 2002. It did not endorse the 2018 GPA Declaration on Ethics and Data Protection

 $\underline{https://www.datatilsynet.no/globalassets/global/english/ai-and-privacy.pdf}$

https://www.datatilsynet.no/globalassets/global/english/ai-and-privacy.pdf
4243 Ibid

⁴²³⁹ Datasylnet, Artificial Intelligence and Privacy (Jan. 2018),

⁴²⁴⁰ Council of Europe, *Chart of Signatures and Ratifications of Treaty 223* (Mar. 23, 2025), https://www.coe.int/en/web/Conventions/full-list?module=signatures-by-treaty&treatynum=223

⁴²⁴¹ DLA Piper, Data Protection Laws of the World, Norway Data Protection Authority (Jan.

^{2024), &}lt;a href="https://www.dlapiperdataprotection.com/index.html?t=authority&c=NO">https://www.dlapiperdataprotection.com/index.html?t=authority&c=NO

⁴²⁴² Datatilsynet, Artificial Intelligence and Privacy (Jan. 2018),

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in Artificial Intelligence⁴²⁴⁴ or the 2023 GPA Resolution on Generative AI.⁴²⁴⁵ However, it did co-sponsor the 2020 GPA Resolution on AI Accountability⁴²⁴⁶ and the 2022 GPA Resolution on Facial Recognition Technology.⁴²⁴⁷

The Datatilsynet has been very active in both enforcement and publication of guidelines on a wide range of significant data protection concerns, including CCTV surveillance and codes of conduct. The Norwegian data protection authority has made a list of processing activities that they believe are likely to pose a significant risk to data subjects' rights and as such will always necessitate a data protection impact assessment. These include: processing of biometric data for identification purposes on a large scale; collecting and combining personal data from third parties in order to decide whether the data subject shall be offered, continue to receive, or shall be denied a product, service or offer; monitoring employees' internet activity, electronic communication or camera surveillance for the purposes of employee monitoring; systematic monitoring, including camera surveillance, on a large scale, in areas accessible by the public⁴²⁴⁸

Following a data protection impact assessment of Facebook, the Data Inspectorate announced that it will no longer communicate via the social media network. Datatilsynet Director-General Bjorn Erik Thon noted, "We believe the risks to the users' rights and freedoms associated with the processing of personal data through a Page on Facebook are too high."⁴²⁴⁹ This is not the first time the Data Inspectorate opposed Facebook. Back to 2012, the Datatilsynet raised important concerns about Facebook's facial recognition tool. Bjorn Erik Thon

⁴²⁴⁴ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922_ICDPPC-40th_AI-Declaration_ADOPTED.pdf
⁴²⁴⁵ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁴²⁴⁶Global Privacy Assembly, *Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

⁴²⁴⁷ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁴²⁴⁸ Datatilsylnet, *Processing operations subject to the requirement of a data protection impact assessment.* https://www.datatilsynet.no/globalassets/global/dokumenter-pdfer-skjema-ol/regelverk/veiledere/dpia-veileder/dpialist280119.pdf

⁴²⁴⁹ Datasylnet, *Norwegian Data Protection Authority choose not to use Facebook* (2021), https://www.datatilsynet.no/en/news/2021/norwegian-data-protection-authority-choose-not-to-use-facebook/

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stated that "It's a very powerful tool Facebook has and it's not yet clear how it all really works," and "They have pictures of hundreds of millions of people. What material Facebook has in its databases is something we need to discuss with them.",4250

In December 2021, the Datatilsynet issued its highest fine so far-65 million NOK (around 6.5 million Euros)—against Grindr for failing to comply with the consent requirements under the GDPR. 4251 Grindr appealed the fine and the Norwegian Data Protection Authority will assess the relevant appeal and consider whether there are grounds to rescind or alter the decision. By application of the Norwegian Public Administration Act, the Norwegian Consumer Council will also issue an opinion. If the decision is not rescinded/altered, the case may be assessed by the Privacy Appeals Board. 4252

Algorithmic Transparency

Although it has not yet ratified the Protocol amending the Convention 108 which provides for algorithmic transparency, Norway is subject to the PDA, implementing the GDPR. Norwegians have a general right to obtain access to information about automated decision-making and to the factors and logic of an algorithm.4253

The 2020 Recommendation of the Council of Europe Committee of Ministers on human rights impacts of algorithm systems⁴²⁵⁴ specifically emphasizes requirements on transparency, accountability and effective remedies. The recommendation states that "The use of algorithmic systems in decisionmaking processes that carry high risks to human rights should be subject to particularly high standards as regards the explainability of processes and outputs."4255 The Recommendation also clarifies that "Contestation should include an opportunity to be heard, a thorough review of the decision and the possibility to obtain a non-automated decision. This right may not be waived, and should be

⁴²⁵⁰ Bloomberg, Facebook faces Norway Probe over Facial-Recognition Tags (Aug. 2, 2012), https://www.bloomberg.com/news/articles/2012-08-02/facebook-faces-norway-probe-overfacial-recognition-photo-tags

⁴²⁵¹ IAPP, 2022 Global Legislative Predictions,

https://iapp.org/media/pdf/resource center/2022 iapp global legislative predictions.pdf

⁴²⁵² Datatilsynet, *Grindr has appealed the administrative fine imposed by the NO DPA* (Feb. 2022), https://www.datatilsynet.no/en/news/aktuelle-nyheter-2022/datatilsynet-har-mottatt-klagepa-overtredelsesgebyr-i-grindr-saken/

⁴²⁵³ See Recital 63 and Article 22 of the GDPR.

⁴²⁵⁴ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020),

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

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affordable and easily enforceable before, during and after deployment, including through the provision of easily accessible contact points and hotlines."4256

Data Scraping

The Datatilsynet and international data protection and privacy counterparts released a follow-up joint statement laying out expectations for industry related to data scraping and privacy. 4257 The initial statement in August 2023 established that "[social media companies] and other websites are responsible for protecting personal information from unlawful scraping."4258 The follow-up, which incorporates feedback from engagement with companies such as Alphabet (YouTube), X Corp (formerly Twitter), and Meta Platforms (Facebook, Instagram, WhatsApp), adds that organizations must "comply with privacy and data protection laws when using personal information, including from their own platforms, to develop AI large language models"; must regularly review and update privacy protection measures to keep pace with technological advances; and ensure that permissible data scraping, such as that for research, "is done lawfully and following strict contractual terms."4259

Data scraping generally involves the automated extraction of data from the web. Data protection authorities are seeing increasing incidents involving data scraping, particularly from social media companies and the operators of other websites that host publicly accessible data. Scraped personal information can be exploited for targeted cyberattacks, identity fraud, monitoring, profiling and surveillance purposes, unauthorized political or intelligence gathering purposes, unwanted direct marketing or spam.

Facial Recognition

The Norwegian Consumer Council urged "the Government to take⁴²⁶⁰ a more active role to ensure Norwegian consumers' privacy and turn words into

4256 Ibid

⁴²⁵⁷ UK Information Commissioner's Office, Global Privacy Authorities Issue Follow-Up Joint Statement on Data Scraping after Industry Engagement (Oct. 28, 2024), https://ico.org.uk/aboutthe-ico/media-centre/news-and-blogs/2024/10/global-privacy-authorities-issue-follow-up-jointstatement-on-data-scraping-after-industry-engagement/

⁴²⁵⁸ Regulatory Supervision Information Commissioner's Office of the United Kingdom, Joint Statement on Data Scraping and the Protection of Privacy (Aug. 24, 2023), https://ico.org.uk/media/about-the-ico/documents/4026232/joint-statement-data-scraping-202308.pdf

⁴²⁵⁹ Office of the Privacy Commissioner of Canada, Concluding Joint Statement on Data Scraping and the Protection of Privacy (Oct. 2024), https://ico.org.uk/about-the-ico/mediacentre/news-and-blogs/2024/10/global-privacy-authorities-issue-follow-up-joint-statement-ondata-scraping-after-industry-engagement/

⁴²⁶⁰ Forbrukerrådet, Forbrukerrådet ber Regjeringen ta personverngrep (Sept. 26, 2022), https://www.forbrukerradet.no/siste-nytt/forbrukerradet-ber-regjeringen-ta-personverngrep/

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action" in September 2022. Drawing on a report from the Privacy Commission report, 4261 the Consumer Council noted that the use of remote biometric identification, including facial recognition, puts great pressure on privacy. The Consumer asks the Government to support the proposal for a general ban on the use of facial recognition in public spaces.

Regulatory Sandbox

Pursuant to the national AI strategy, the Datatilsynet has created a regulatory sandbox for responsible AI. The goal is to promote the development of innovative artificial intelligence solutions that, from a data protection perspective, are both ethical and responsible. The sandbox provides free guidance to a handful of companies, of varying types and sizes, across different sectors, selected through regular calls for application issued by the Data Inspectorate, in exchange for full openness about the assessments that are made.⁴²⁶² In the fifth round of the regulatory sandbox, generative AI emerged as a common theme for projects in the sandbox, offering potential for valuable insights across the projects.⁴²⁶³

As illustrated in the proposed Norwegian state budget for 2023, the regulatory sandbox is now to be financed as a permanent initiative, not as a temporary pilot project as it was the previous two years.⁴²⁶⁴

Environmental Impact of Al

The Norwegian Ministry of Research and Education has formal collaboration agreements with the US Department of Energy to address AI challenges in climate, energy, and health through joint research projects, student exchanges, and a commitment to ethical AI.⁴²⁶⁵

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⁴²⁶¹ Regjeringen, *Ditt personvern – vårt felles ansvar — Tid for en personvernpolitikk* (Sept. 26, 2022), https://www.regjeringen.no/no/dokumenter/nou-2022-11/id2928543/

⁴²⁶² IAPP, 2022 Global Legislative Predictions,

https://iapp.org/media/pdf/resource_center/2022_iapp_global_legislative_predictions.pdf 4263 Datatilsynet, *Time for Generative AI in the Sandbox* (Sep. 1, 2024),

 $[\]frac{https://www.datatilsynet.no/en/news/aktuelle-nyheter-2023/time-for-generative-ai-in-the-sandbox/}{}$

⁴²⁶⁴Datatilsynet, Launching Regulatory Sandboxes for Responsible Artificial Intelligence Development [Starter regulatorisk sandkasse for utvikling av ansvarlig kunstig intelligens] (May 26, 2020), https://www.datatilsynet.no/aktuelt/aktuelle-nyheter-2020/regulatorisk-sandkasse-for-utvikling-av-ansvarlig-kunstig-intelligens/

⁴²⁶⁵ Memorandum of understanding between the Department of Energy of the United States of America and the Royal Ministry of Education and Research of the Kingdom of Norway on Collaboration on Artificial Intelligence and its applications to Science, Climate Energy and Health (Mar. 2022),

 $[\]frac{\text{https://www.regjeringen.no/contentassets/}110ee1b82d8a4478991faa95cc95d895/signertedokumenter-mou-on-collaboration-on-ai-and-its-applications-to-science-climate-energy-and-health.pdf}$

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Lethal Autonomous Weapons

Norway has regularly participated in the Convention on Certain Conventional Weapons meetings. The ethics committee of the Norwegian Government Pension Fund Global recommended in June 2020 that the Fund add lethal autonomous weapons systems to the exclusion list of weapons that it will not invest in. Participated in Fund add new criteria to the fund's policy, following endorsement by the Ministry of Finance in 2021. The proposal was aimed at breaking ties the fund may have with companies that sell weapons to parties that use them to violate international humanitarian law.

Norway's Government Pension Fund Global (GPFG) strengthened its ethical guidelines in 2023 by excluding companies linked to military sales that contravene international humanitarian law. This exclusion policy aims to prevent investments in companies that sell weapons used in ways that violate ethical and humanitarian standards.⁴²⁷⁰

In 2022, Norway and 69 other countries signed a UN statement calling for humans to stay in control of AI weapons. The countries called for clear limits and human oversight for military decisions.⁴²⁷¹ The statement details a two-tier approach where States should commit to (1) outlaw fully autonomous lethal weapons systems operating completely outside human control and a responsible

https://www.regjeringen.no/en/topics/theeconomy/the-government-pension-fund/id1441/

⁴²⁶⁶Norway in the UN, *IC: Conventional Weapons: Statement by Norway in the First Committee Thematic Discussion under the cluster of weapons of mass destruction* (Oct. 19, 2022), https://www.norway.no/en/missions/UN/statements/general-assembly-committees/2022/1c-conventional-weapons/

⁴²⁶⁷ Regjeringen, *The Government Pension Fund*,

⁴²⁶⁸Human Rights Watch, Stopping Killer Robots: Country Positions on Banning Fully Autonomous Weapons and Retaining Human Control (Aug. 10, 2020)

https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and#_ftn195; Human Rights Watch, *An Agenda for Action Alternative Processes for Negotiating a Killer Robots Treaty* (Nov. 10, 2022),

 $[\]underline{https://www.hrw.org/report/2022/11/10/agenda-action/alternative-processes-negotiating-killer-robots-treaty.}$

⁴²⁶⁹ Sovereign Wealth Funds, *The proposal was aimed at breaking any links the fund may have to companies that sell weapons to parties that use them to violate humanitarian law* (June 10, 2021), https://www.pionline.com/sovereign-wealth-funds/norwegian-parliament-calls-further-weapons-exclusions-wealth-fund

⁴²⁷⁰Norges Bank Investment Management, *Decisions on Exclusion* (Jan. 24, 2023), https://www.nbim.no/en/the-fund/news-list/2023/decisions-on-exclusion/

⁴²⁷¹ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee, 77th United Nations General Assembly Thematic Debate – Conventional Weapons* (Oct. 21, 2022),

 $[\]frac{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm_en.pdf}{}$

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chain of command, and (2) regulate other lethal weapons systems featuring autonomy in order to ensure compliance with the rules and principles of international humanitarian law by preserving human responsibility and accountability through appropriate human control and risk mitigation measures.

Norway reiterated this stance in 2024 by backing new global rules for AI weapons. The proposal would ban fully autonomous weapons and require human control over other military AI systems.⁴²⁷²

Norway endorsed a joint call for action on the responsible development, deployment and use of artificial intelligence in the military domain at the REAIM 2023 summit hosted by the Netherlands. States stressed that autonomous weapons should be "employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." Norway also participated in an endorsed the outcomes statement for the REAIM 2024 summit. The Blueprint for Action operationalized the principles for the 2023 REAIM call into a series of action steps for countries to collaborate on a legal instrument on AI in the military. 4274

Human Rights

Norway is a signatory to many international human rights treaties and conventions, among which the Universal Declaration of Human Rights and the Council of Europe's European Convention on Human Rights.⁴²⁷⁵ However, it has not yet ratified the modernized version of the Council of Europe Convention 108 for the protection of individuals with regard to the processing of personal data.⁴²⁷⁶

Freedom House ranks Norway among the world's most democratic and "Free" countries in the 2024 Freedom in the World report with a score of 98 out of 100 for its strong civil rights and transparent government.⁴²⁷⁷

Diversity in AI is valued in Norway through prioritizing the development of language technology systems that support communications in Norwegian,

 $\frac{https://reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163\&shareBbsMngNo=10}{264\&shareMenuId=11613\&shareTabMenuId=}$

⁴²⁷² Permanent Mission of Norway in Geneva, *Statement by Norway to the GGE on LAWS* (Mar. 2024), https://docs-library.unoda.org/Convention on Certain Conventional Weapons - Group of Governmental Experts on Lethal Autonomous Weapons Systems (2024)/2024-03 GGE LAWS Norway general statement.pdf

⁴²⁷³ Responsible AI in the Military Domain Summit, *REAIM Call to Action* (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action 4274 REAIM 2024, *Blueprint for Action* (Sept. 11, 2024),

⁴²⁷⁵ NIM, *The Human Rights Framework in Norway*, https://www.nhri.no/en/2019/the-human-rights-framework-in-norway/

⁴²⁷⁶ Council of Europe, *Chart of Signatures and Ratifications of Treaty 223* (Mar. 23, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=223 ⁴²⁷⁷ Freedom House, *Freedom in the World 2024: Norway* (2024), https://freedomhouse.org/country/norway/freedom-world/2024

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Sámi, and other dialects. The aim is to protect the indigenous rights of the Sámi people, a Finno-Ugric-speaking people inhabiting the region of Sápmi that Norway is part of. This focus on the Sámi language is also included in the Norwegian National AI Strategy.

In a 2020 Recommendation to member States on the human rights impacts of algorithmic systems, the Council of Europe Committee of Ministers clarified that their commitment to the Convention for the Protection of Human Rights and Fundamental Freedoms requires that "member States must ensure that any design, development and ongoing deployment of algorithmic systems occur in compliance with human rights and fundamental freedoms, which are universal, indivisible, inter-dependent and interrelated, with a view to amplifying positive effects and preventing or minimising possible adverse effects." 4278

OECD / G20 AI Principles

Norway is a member of the OECD and endorsed the OECD AI Principles in May 2019.⁴²⁷⁹ The country reaffirmed this commitment in 2024 by aligning its AI initiatives with updated OECD guidelines, which now emphasize risk management, data privacy, and AI accountability.⁴²⁸⁰ In terms of ethical principles, the Norwegian government emphasizes fairness, accountability, transparency, and trustworthiness in AI development with a focus on data privacy and integrity.⁴²⁸¹

Norway supports the OECD AI principles through initiatives such as norge.no, a public platform providing a centralized guide for accessing public services. The site includes open data from previous versions of the site via the National Data Catalog, which offers an overview of datasets, concepts, APIs, and models accessible to both public and private sectors. The project was established by the Brønnøysund Register Centre and the Norwegian Digitalization Agency.

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

⁴²⁷⁸ Recommendation CM/Rec(2020)1 of the Committee of Ministers to Member States on the Human Rights Impacts of Algorithmic Systems (Apr. 8, 2020),

⁴²⁷⁹ OECD Legal Instruments, *Recommendation of the Council on Artificial Intelligence* (May 3, 2024), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449#adherents
https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449#adherents
https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449#adherents
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⁴²⁸¹ Norway, *National Strategy for Artificial Intelligence* (Jan. 14, 2020) https://www.regjeringen.no/en/dokumenter/nasjonal-strategi-for-kunstig-intelligens/id2685594/

⁴²⁸² Norge.no, *About norge.no*, https://www.norge.no/en/about-norgeno

⁴²⁸³ Norwegian Digitization Agency, National Data Catalogue, https://data.norge.no/nb

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NORA.ai, Norway's national AI research network, maps all AI activities in Norway through its AI Directory. Its startup program helps research-based AI companies join a shared European network with France, Germany, and Sweden. 4284

In September 2022, Norwegian Research Council announced a 10-year financial support for Integreat, a purely AI focused Center of Excellence (CoE) that will offer groundbreaking research, and develop theories, methods, models, and algorithms from a sociological perspective that integrate general and domainspecific knowledge with data, laying the foundations of the next generation of machine learning. This initiative supports OECD's principle of shaping an enabling policy environment for AI and corresponds to the policy goal identified in the Norway's AI strategy to strengthen research in AI and enhance the innovation capacity in AI in both the private and public sector. 4285

Council of Europe AI Treaty

Norway contributed as a Council of Europe Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of law. The Committee on AI approved the Draft Framework Convention during its 10th Plenary session in March 2024. 4286 Norway signed the Council of Europe AI Treaty, the first international legally binding agreement on AI, on September 5, 2024. Norway pledged to apply the treaty to cover AI's lifecycle and risks for both public and private sectors. 4287

UNESCO Recommendation on AI Ethics

Norway has endorsed the UNESCO Recommendations on AI, the first ever global agreement on the ethics of AI.4288 Norway has not initiated the UNESCO Readiness Assessment Methodology (RAM). 4289

⁴²⁸⁴ Norwegian AI Directory, https://aidirectory.no

⁴²⁸⁵ Norwegian Artificial Intelligence Research Consortium, A New Centre of Excellence on AI Will Be Funded by the Research Council of Norway (Oct. 5, 2022),

https://www.nora.ai/norsk/news/2022/a-new-centre-of-excellence-on-ai-will-be-funded-by.html ⁴²⁸⁶ Council of Europe, Draft Framework Convention on AI, Human Rights, Democracy and the Rule of Law (Mar. 2024).

https://search.coe.int/cm/pages/result_details.aspx?objectid=0900001680aee411

⁴²⁸⁷Council of Europe, Council of Europe Opens First Ever Global Treaty on AI for Signature (Sept. 2024), https://www.coe.int/en/web/portal/-/council-of-europe-opens-first-ever-globaltreaty-on-ai-for-signature

⁴²⁸⁸ UNESCO, UNESCO member states adopt the first ever global agreement on the Ethics of Artificial Intelligence (Nov. 2021), https://www.unesco.org/en/articles/unesco-member-statesadopt-first-ever-global-agreement-ethics-artificial-intelligence.

⁴²⁸⁹ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

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Evaluation

Norway launched its national AI strategy in 2020, aiming to foster responsible and transparent AI aligned with ethical principles. The strategy includes the principles of fairness, transparency, accountability, and a commitment to protect civil rights in digital spaces. Norway endorsed the OECD AI Principles in 2019 and integrates them into its AI policy framework, supporting transparency, accountability, and human rights protections. Norway's oversight framework includes the Data Inspectorate (Datatilsynet) for data protection, the Consumer Council for consumer rights in digital platforms, and the Privacy Commission, which recently highlighted risks related to biometric and facial recognition technologies. As an EFTA state in the European Economic Area (EEA), Norway will be required to implement the EU AI Act by 2026. This will necessitate allocating resources for oversight to enforce the Act's provisions on high-risk AI and transparency. The Norwegian Consumer Council has voiced concerns over the use of facial recognition in public spaces, urging the government to consider regulatory measures to protect privacy rights, following reports by the Privacy Commission on risks related to biometric technologies.

Although Norway ranks high in the protection of civil liberties, Norway has yet to ratify the updated Council of Europe Convention 108+, which would enhance data protection and algorithmic transparency rights, strengthening protections for digital privacy. Following Norway's endorsement of the UNESCO Recommendation on the Ethics of AI, the government has engaged with UNESCO's Global AI Ethics Observatory, which provides frameworks for implementing ethical AI at national levels. Norway has also signed the Council of Europe AI Treaty and specified that it will apply to private as well as public AI uses. However, further action will be required to translate these recommendations and pledges into practice.

Pakistan

In 2024, the cabinet introduced the Regulation of Artificial Intelligence Act to the Senate, calling for a National AI Commission. Biometric surveillance and restrictions on expression threaten to deepen in Punjab province with the deployment of an AI-powered facial recognition system and the introduction of a Cybercrime Control Act to work alongside the national Prevention of Electronic Crimes Act (PECA).

National AI Strategy

The Federal Minister of Information Technology & Telecommunication (MoITT) Syed Aminul Haque announced government plans in December 2021 to

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introduce a national AI policy. 4290 A draft was finally released to the public in May 2023. 4291 The policy defines the purpose "to create a broad-based awareness of the use of AI-based platforms while keeping privacy at the forefront, upskilling human capital on AI and allied technologies, guiding investment in AI research and development, ensuring ethical and responsible use of AI, and provide a framework for addressing the challenges and risks associated with the socioeconomic outfit of the country."4292

No noticeable progress has been made on the substantial groundwork already laid towards AI and Digital Policy in Pakistan due to a series of crises related to political instability from April 2022 to March 2024. The MoITT webpage provides no details on the current state of the draft policy but provides an email for those who still may wish to contribute with comments. 4293 However, media sources indicate that consultations should resume soon.⁴²⁹⁴

The concept of "Digital Pakistan" was first introduced at the state level after a record year of revenues from software exports in 2016-2017⁴²⁹⁵. Official language focused on getting more citizens digitally connected, literate and brought under the government's data collection umbrella. It also mentioned the need for both digital skills training and the support of entrepreneurship in this area. 4296

A year later, the MoITT issued the 2018 Digital Pakistan Policy. This policy includes the need to develop necessary policy frameworks, laws, and rules to enable the creation of a sustainable IT environment, including the enactment of a data protection and privacy law. 4297 In December 2019, former Prime Minister Imran Khan launched the Digital Pakistan Vision. This initiative set out Pakistan's

⁴²⁹⁰ The International News, Centre to introduce national AI policy soon, says Amin (Dec. 5, 2021), https://www.thenews.com.pk/print/914203-centre-to-introduce-national-ai-policy-soonsays-amin

⁴²⁹¹ Ministry of Information Technology and Telecommunication, *Draft National Artificial* Intelligence Policy (2022),

https://moitt.gov.pk/SiteImage/Misc/files/National%20AI%20Policy%20Consultation%20Draft %20V1.pdf

⁴²⁹² Ibid, p. 7

⁴²⁹³ Ibid

⁴²⁹⁴ Business Recorder, *Ministry Yet to Finalise AI Policy* (Oct. 27, 2024),

https://www.brecorder.com/news/40329204/ministry-vet-to-finalise-ai-

policy#:~:text=The%20Draft%20AI%20Policy%20to,for%20the%20benefit%20of%20society

⁴²⁹⁵ Ministry of Finance, *Pakistan Economic Survey 2016–2017*, Chapter 13:Transport and Communication, p.221 (2017), https://www.finance.gov.pk/survey/chapters 17/13-Transport and Communications.pdf

⁴²⁹⁶ Apoorva Sudhakar, *Digital Pakistan – Ideas, Potential and Challenges*, NIAS Pakistan Reader (Aug. 17, 2021),

https://globalpolitics.in/view cir articles.php?url=Pakistan%20Reader&recordNo=631 ⁴²⁹⁷ Ministry of Information & Broadcasting, *Digital Pakistan Policy* (2018),

http://moib.gov.pk/Downloads/Policy/DIGITAL PAKISTAN POLICY(22-05-2018).pdf

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digital ambition and was designed for the government and the private sector to work towards a digitally progressive and inclusive Pakistan.⁴²⁹⁸

The five strategic pillars that upheld the Vision were access and connectivity, digital infrastructure, e-government, digital skill and literacy, and innovation and entrepreneurship. The vision focused heavily on human-centered development. Official language around the launch of the vision referred to the development of the inherent potential of the demographic youth bulge, and their existing tech-savviness and innovative mindset. It lauded the potential of widespread access and connectivity to transform the lives of all Pakistanis across all domains and promised to provide investment opportunities from diaspora communities to support in the human and social development of the country. There was however no reference made to human-centered AI.

In 2021, the MoITT announced a new Digital Pakistan Policy⁴³⁰⁰ with the aim to "improve citizens' quality of life and economic well-being by ensuring the availability of modern, affordable, and reliable digital services."⁴³⁰¹ The release of the Digital Pakistan Policy was initially planned for August 2021 but has been delayed.⁴³⁰² Since then, many changes have taken place in emerging technologies, making it necessary to cover them in a New Digital Pakistan Policy. The Ministry of IT and Telecom began working on Digital Pakistan Policy 2022 keeping in view current emerging technologies and Digital Pakistan Policy 2018, National Broadband Policy 2021, and National Freelancing Facilitation Policy.⁴³⁰³

In June 2024, the federal cabinet approved the Digital Nation Pakistan Act 2024 to establish the National Digital Commission and Pakistan Digital.⁴³⁰⁴ The Digital Pakistan Policy seeks to "serve as the foundation for the construction of a

⁴²⁹⁸ Dawn, 'Full potential of youth, women will be unleashed,' says PM on launch of Digital Pakistan Vision (Dec. 5, 2019). https://www.dawn.com/news/1520609/full-potential-of-youth

Pakistan Vision (Dec. 5, 2019), https://www.dawn.com/news/1520609/full-potential-of-youth-women-will-be-unleashed-says-pm-on-launch-of-digital-pakistan-vision

⁴²⁹⁹ The Express Tribune, *PM Imran Khan launches 'Digital Pakistan' initiative* (Dec. 5, 2019), https://tribune.com.pk/story/2112360/digital-pakistan-pm-imran-addresses-launch-ceremony ⁴³⁰⁰ Ministry of Information Technology & Telecommunication, *Government of Pakistan, Digital Pakistan Policy* (May 5, 2022),

http://moib.gov.pk/Downloads/Policy/DIGITAL_PAKISTAN_POLICY(22-05-2018).pdf 4301 Digital Pakistan, MOIT releases Digital Pakistan Policy priorities for 2021 (Aug. 5, 2021), https://digitalpakistan.pk/blog/moit-releases-digital-pakistan-policy-priorities-for-2021/; Business Recorder, Digital Pakistan Policy 2021 Road Show, Recorder Report (Mar. 25, 2021), https://www.brecorder.com/news/40077321

⁴³⁰² Ministry of Information Technology & Telecommunication, *Policies & Plan*, https://moitt.gov.pk/Detail/ZTA5MTI4ZWUtMzdhMS00ZDRhLWE0YmUtZjJjNThhYTdjNzdl ⁴³⁰³ Zakir Ahmed, *Final Dialogue on New Digital Pakistan Policy Draft Next Month* (Aug. 16, 2022), https://propakistani.pk/2022/08/16/ministry-of-it-to-hold-final-dialogue-on-draft-new-digital-pakistan-policy/

⁴³⁰⁴Dawn, *Cabinet approves law to digitise services sector* (Jun. 12, 2024) https://www.dawn.com/news/1839337

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holistic digital ecosystem with advanced concepts and components for the rapid delivery of next-generation digital services, applications and content. It will serve as an aggregator of demand for innovative digital services and as a supplier of data for value-added services and applications.⁴³⁰⁵

A few other initiatives also aim for Pakistan to bridge the digital divide. In 2018, the Presidential Initiative for AI and Computing (PIAIC) sought to reshape Pakistan by revolutionizing education, research, and business by adopting the latest technologies. The PIAIC envisioned Pakistan becoming a global hub for AI, data science, cloud-native computing, edge computing, Blockchain, augmented reality, and the internet-of-things.⁴³⁰⁶

The National Centre of Artificial Intelligence was created in 2018 "to grow the AI industry, aligning with international trends, and solving Pakistan's problems to boost the knowledge-based economy.⁴³⁰⁷ Since 2019, the annual Pakistan Artificial Intelligence Summit⁴³⁰⁸ brings academic, industry and government representatives together to discuss the most pressing issues confronting artificial intelligence and ICT in general in Pakistan.

Pakistan was one of the 11 countries which signed the Riyadh AI Call for Action Declaration (RAICA) launched during the 2022 Global AI Summit. 4309 This declaration was signed by all members of the Digital Cooperation Organization (DCO) and is a commitment to identify and address present, emerging, and future humanitarian issues in the field of AI. The declaration highlights seven key pillars through which AI can be used as a tool to benefit lives around the world – bridging the digital divide, empowering underprivileged communities, promoting digital development, ensuring fairness and non-discrimination, driving innovation in AI, combatting climate change in AI, and engaging in international collaboration and cooperation in AI. With a strong human-centered AI, focus, the Declaration refers repeatedly to the promise and potential of AI to transform societies, economies, and humanity's most pressing global issues, including climate change. The Declaration calls explicitly for the creation, adoption and promotion of comprehensive AI ethical guidelines and appeals to signatory countries to work with various stakeholders, from

⁴³⁰⁵ Ministry of Information Technology and Telecommunications, *Digital Pakistan Policy* (May 22, 2018), https://moib.gov.pk/Downloads/Policy/DIGITAL_PAKISTAN_POLICY(22-05-2018).pdf

⁴³⁰⁶ Presidential initiative for Artificial Intelligence and Computing (PIAIC), https://www.piaic.org

⁴³⁰⁷ National Center of Artificial Intelligence (NCAI), https://ncai.pk/overview/

⁴³⁰⁸ Pak AI Summit, Event Brief (Mar. 29, 2022), https://pakaisummit.com/public/archive-22/

⁴³⁰⁹ WIRED, *The Key Wins of Saudi Arabia's Global AI Summit* (Sept. 27, 2021), https://wired.me/technology/saudi-arabia-global-ai-summit/

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humanitarian organizations to innovative companies, to employ AI to advance universal human rights.⁴³¹⁰

In October 2022, the Government of Pakistan announced the China-Pakistan Digital Corridor, with a component of AI collaboration, building on the Sino-Pak strategic relationship through the China-Pakistan Economic Corridor. The former Additional Director-General of the Federal Investigation Agency and founder of Digital Pakistan expressed that Pakistan must collaborate with China to develop AI capabilities, naming cybersecurity as a primary collaborative area. The digital corridor is intended to use AI to improve areas like food security, agricultural development, and green development.

A joint statement from 2024⁴³¹² advances the collaboration on AI as the countries agree to "strengthen policy coordination in the field of artificial intelligence, deepen relevant practical cooperation, and jointly seek to promote the development of AI technology." They also agree to uphold the "principle of attaching equal importance to development and security in AI systems" and express a commitment to build an "open, fair and effective Al governance mechanism through dialogue, consultation and equal cooperation."

Public Participation

In keeping with a culture of regional and neighborhood-based political decision-making, the government of Pakistan does not offer centralized public participation opportunities to citizens per se. However, in an unprecedented first, in 2021 the Ministry of Information Technology and Telecommunications launched an online survey form that provided citizens the opportunity to weigh in on the Digital Pakistan Policy. The Ministry then issued a consultation draft of the 2021 Personal Data Protection Bill.⁴³¹³ Accompanying the draft, the Ministry conducted a road show in the large Pakistani cities and issued press statements to publicize the drafting of the Policy and the accompanying bill.⁴³¹⁴

 $\frac{https://mofa.gov.pk/press-releases/joint-statement-between-the-islamic-republic-of-pakistan-and-the-peoples-republic-of-china}{}$

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⁴³¹⁰ Digital Cooperation Organization, *Riyadh AI Call for Action (RAICA) Declaration* (Jun. 2024), https://dco.org/wp-content/uploads/2024/06/Riyadh-AI-Call-for-Action-RAICA-Declaration.pdf

⁴³¹¹ The Tribune, *Pak-China digital corridor to boost IT cooperation* (Oct. 22, 2022), https://tribune.com.pk/story/2382841/pak-china-digital-corridor-to-boost-it-cooperation

⁴³¹² Ministry of Foreign Affairs - Government of Pakistan, *Joint Statement between the Islamic Republic of Pakistan and the People's Republic of China* (Jun. 8 2024),

⁴³¹³ Pakistan Personal Data Protection Bill consultation draft (2021),

 $[\]frac{https://www.moitt.gov.pk/SiteImage/Misc/files/25821\%20DPA\%20Bill\%20Consultation\%20Dr}{aft(1).pdf}$

⁴³¹⁴ Business Recorder, *Digital Pakistan Policy 2021 Road Show*, Recorder Report (Mar. 25, 2021), https://www.brecorder.com/news/40077321

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By October 2024, the website of the Ministry presented a list of draft policies under review and provided an email address for receiving feedback in relation to four of them: the Draft National Freelancing Facilitation Policy, the Draft Telecom Infrastructure Sharing Framework", the Draft Framework for Frequency Spectrum Re-Farming, in addition to the Draft AI Policy already mentioned above.⁴³¹⁵ The Ministry also provides general contact information for MoITT officials, including telephone numbers and email addresses.⁴³¹⁶

In addition, since 2018, citizens have had access to the Prime Minister's Performance Delivery Unit (PDU), an online platform offering direct connection between the Government and citizens. One of PDU's initiatives is the Citizen's Portal, an app where citizens can submit and track complaints and make requests directly to the relevant government body. To date, the portal—which is also available as a mobile phone app—registered over 4.9 million complaints, of which over 4.8 million have been resolved. The portal has a participation rate of over 4 million Pakistani citizens. Further, success stories and testimonies are published on the website and promoted through social media. The portal continues to serve as a direct conduit for information flowing between the government and Pakistani citizens.

Language is a primary obstacle regarding the accessibility of most of these tools. While government websites are bilingual, policy documents within the websites are published exclusively in English, with no translation available. As more than 50% of Pakistan's population cannot read or write English, this serves as a major impediment to meaningful public participation from all levels of society.⁴³¹⁷

Meaningful connectivity and access to the internet also represent challenges to public participation, in particular access to online participatory tools and mechanisms. In 2024, the internet penetration in Pakistan is estimated to amount to 45.90%. The fixed broadband subscriptions per 100 persons in Pakistan stand at 1.4 and is phenomenally lower than the 30 subscriptions per 100 persons in high-income countries and lower than 4.4 in the lower-middle-income

⁴³¹⁵Ministry of Information Technology and Telecommunications, *Draft Policies*, https://moitt.gov.pk/Detail/NzUyZGE0MWMtMmYzZC00YmIzLTk2ODUtYmVjNTk1Nzg4M TBm

⁴³¹⁶ Ministry of Information Technology and Telecommunications, *Contact Us*, https://moitt.gov.pk/Detail/MTBlNDNlNzItOTJkMi00OTg5LTlmNDgtNDEzZDA1NDljM2E4 ⁴³¹⁷ *Here's How Pakistan Ranks Among World's English Speaking Countries*, Express Tribune (Nov. 19, 2016), https://tribune.com.pk/story/1236300/heres-pakistan-ranks-among-worlds-english-speaking-countries/

⁴³¹⁸ Statista, *Digital & Connectivity Indicators - Pakistan* (Nov. 5, 2024), https://www.statista.com/outlook/co/digital-connectivity-indicators/pakistan#digital-infrastracture

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countries.⁴³¹⁹ Pakistan has also experienced a number of internet disruptions in 2024, including: mobile network and social media disruptions; targeted shutdowns; a four-day blackout after the arrest of former Prime Minister Imran Khan in 2023; and blocked access to social media applications on more than six occasions over the past year.⁴³²⁰

Data Protection

The Pakistan Personal Data Protection Bill⁴³²¹ and the E-Safety Authority Bill 2023⁴³²² were approved by the cabinet in July 2023. The MoITT stated that the objective of the new legislation is to protect individuals and business communities' data and to provide them with a safe environment.⁴³²³

The PDPB governs the collection, processing, use, and disclosure of personal data and sanctions against violations of data subjects' rights. The PDPB provides for rights regarding automated processing, including profiling: A data subject shall have the right not to be subject to a decision based solely on automated processing, including profiling. The PDPB also provides for data subject rights with regard to the processing of personal data in clause 15 in the following words: "a data controller shall not process any sensitive and critical personal data of a data subject except under the following conditions: a) the data subject has given his explicit consent to the processing of the personal data

⁴³¹⁹ World Bank, *Pakistan: Evaluating Private Capital Mobilization Potential for Resilient Digital Connectivity* (May 16, 2024).

 $[\]underline{https://documents1.worldbank.org/curated/en/099062824080037094/pdf/P18110511eac280ae1af8715b95bc9d719b.pdf}$

⁴³²⁰Al Jazeera, *Internet: Pakistan's new political battleground* (Feb. 22, 2024),

 $[\]underline{\underline{https://www.aljazeera.com/opinions/2024/2/22/internet-pakistans-new-political-battleground}$

⁴³²¹ Ministry of Information Technology & Telecommunication, *Draft of the Personal Data Protection Bill*, 2023 (2023),

 $[\]frac{https://www.moitt.gov.pk/SiteImage/Misc/files/Final\%20Draft\%20Personal\%20Data\%20Protection\%20Bill\%20May\%202023.pdf}{}$

⁴³²² Govt to Regulate Content on Social Media Platforms Via 'e-Safety Bill 2023' (Aug. 4, 2023), https://propakistani.pk/2023/08/04/govt-to-regulate-content-on-social-media-platforms-via-e-safety-bill-2023/

⁴³²³ Tahir Amin, *Cabinet Likely to Approve 'Personal Data Protection Bill' Today*, Business Recorder (Feb. 15, 2022), https://www.brecorder.com/news/40154515

⁴³²⁴ Ministry of Information Technology & Telecommunication, *Draft of the Personal Data Protection Bill*, 2023 (2023),

 $[\]frac{https://www.moitt.gov.pk/SiteImage/Misc/files/Final\%20Draft\%20Personal\%20Data\%20Protection\%20Bill\%20May\%202023.pdf}{}$

Ministry of Information Technology & Telecommunication, *Draft of the Personal Data Protection Bill*, 2023, cl. 29(4) (2023),

https://www.moitt.gov.pk/SiteImage/Misc/files/Final%20Draft%20Personal%20Data%20Protection%20Bill%20May%202023.pdf

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provided that this consent is not restricted by any other applicable law."4326 However, immediately after this text, the draft mentions a list of caveats including legal compulsions, employment law, inability of data subject to provide consent, medical purposes, even "in order to protect the vital interests of the data subject or another person." These exceptions provide great leeway in the interpretation of the proposed rules and raise concerns as to their potential interpretation.

The PDPB also provides for the establishment of a National Commission for Personal Data Protection of Pakistan within six months after the entry into force of the legislation. The authority is purported to have the same independent status as the Civil Courts: "The Authority shall be competent to decide complaints and pass any order. To decide complaints the Authority shall be deemed to be Civil Court and shall have the same powers as are vested in the Civil Court." However, due to government and especially military interference and undue pressure on the existing judiciary, concerns arise about the potential lack of independence of this authority, once it does come into existence.

As of November 2024, the PDPB has not passed into law. Hence, the Commission has not yet been formed. There is also no indication, as a matter of public record, when and whether the law will be published in the Official Gazette of Pakistan.⁴³²⁸

The Federal Cabinet also approved the Cloud First Policy and the Social Media Rules in 2022. The Cloud First Policy provides a governance instrument toward cloud infrastructure and internal and cross-border data flows. Its purpose is to facilitate cloud adoption and to ease the provision of public services. The Policy references the need for cloud service providers to safeguard data privacy, though this is not explicitly listed as one of its twelve objectives. Instead, the Policy states the following: "CSP (cloud service providers) implement technical and administrative controls to protect data—both stored and in transit. Furthermore, formal engagements with CSP generally define data protection standards and establish SLA (service level agreements) that outline security and

 $\frac{https://moitt.gov.pk/Detail/YjVmNzU0MWMtYzBkMC00Yjg5LTk1ODktOTJiODYzZTY5ZW}{Rk}$

 $\underline{https://www.moitt.gov.pk/SiteImage/Misc/files/Final\%20Draft\%20Personal\%20Data\%20Protection\%20Bill\%20May\%202023.pdf}$

⁴³²⁶ Ministry of Information Technology & Telecommunications. *Personal Data Protection Bill* 2021 Consultation Draft: V.25.08.2021 (Aug. 2021),

⁴³²⁷ Ministry of Information Technology & Telecommunication, *Draft of the Personal Data Protection Bill*, 2023 (2023),

⁴³²⁸ Ministry of Law and Justice, Publications (2024), https://molaw.gov.pk/Publications

⁴³²⁹ Kalbe Ali, *Federal Cabinet approves Cloud First Policy, Personal Data Protection Bill*, Dawn (Feb. 16, 2022), https://www.dawn.com/news/1675330

⁴³³⁰ Data Guidance, *Pakistan: MOITT introduces Cloud First Policy* (Feb. 25, 2022), https://www.dataguidance.com/news/pakistan-moitt-introduces-cloud-first-policy

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privacy measures. These measures including but not limited to adequate technical controls, such as end-to-end encryption or tokenization as well as data loss prevention tools." The policy also provides data classification guidelines for public sector data, ranging from "open," "public," "restricted," "sensitive/confidential," to "secret." The policy defines sensitive/confidential data as "Information not intended to be published, which shall be accessed only by certain people having proper authorization and which justifies moderate protective measures," including such information as biometrics, addresses, and drafts of laws and regulations not yet in the public domain. 4331

Article 14 of Pakistan's 1973 Constitution protects the right to privacy in the home. This right has been interpreted to extend to digital communications as well. However, more recent laws allow for this right to be circumvented and called into question. The 2016 Prevention of Electronic Crimes Act (PECA) includes various data protection- and privacy-related provisions to reduce cyber blackmailing, defamation, and bringing disrepute to natural persons with the use of photoshopped images.

Concerns arise about PECA provisions that grant government agencies access to citizen's private data and restrict citizens' access to their government data. Section 31, for example, allows an authorized agent to require a person to hand over data without producing a court warrant if reasonably required for a criminal investigation. Other provisions are intended to grant the Pakistan Telecommunications Authority (PTA) and other law enforcement agencies access to the private data of citizens, along with restricting citizens from gaining access to government data. Section 32 of the PECA requires internet service providers to retain specified traffic data for a minimum of one year and subject to the PTA's demands outlined in Section 31. Section 42 outlined that powers are delegated to the government when it comes to sharing information with foreign entities. 4332

In February 2022, PECA's Ordinance (a series of proposed amendments) passed.⁴³³³ One of the passed amendments seeks to make the online defamation of authorities, including the military and judiciary, a criminal offense with harsh

⁴³³¹ Ministry of Information Technology & Telecommunication, *Pakistan Cloud First Policy* (Feb. 2022), https://moitt.gov.pk/SiteImage/Misc/files/Pakistan%20Cloud%20First%20Policy-Final-25-02-2022.pdf

⁴³³² Farieha Aziz. *Pakistan's cybercrime law: boon or bane?* Heinrich Boll Stiftung (Feb. 14, 2022), https://www.boell.de/en/2018/02/07/pakistans-cybercrime-law-boon-or-bane

⁴³³³ Radio Pakistan, *PECA Amendment Bill & Elections Act Amendment Ordinance in favour of all: Shibli*, (Jan 21, 2022) https://www.radio.gov.pk/21-02-2022/peca-amendment-bill-elections-act-amendment-ordinance-in-favour-of-all-shibli

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penalties. Both Human Rights Watch⁴³³⁴ and Amnesty International⁴³³⁵ termed it as the latest in a concerted campaign to restrict freedom of expression and stifle dissent. While the PECA already contained broad provisions around the criminalization of the defamation of natural persons, the amendment expanded those provisions to include the government, military, and judiciary redefining what a "person" is considered. Other passed amendments include making defamation a nonbailable offense and increasing its prison term to five years, expanding the definition of those who can initiate criminal proceedings for defamation, among other passed amendments. The amendment made no mention of AI or its use in online or other forms of disinformation.

On February 23, 2022, the Islamabad High Court restrained the Federal Investigation Agency (FIA)—the primary investigative body for PECA—from making any arrests under the newly passed Ordinance. Alongside this investigative restraint, the major opposition parties moved resolutions in the National Assembly to repeal the Ordinance and the National Commission for Human Rights (NCHR) issued a statement demanding the Ordinance's immediate repeal, expressing serious reservations on the promulgation of the Ordinance, stating it breached the right to freedom of speech and expression enshrined under Article 19 of the Constitution of Pakistan and protected under various international agreements to which Pakistan is a signatory, and violates the democratic process. In April 2022, PECA's Ordinance was struck down by the Islamabad High Court, a verdict lauded by the media and human rights organizations for upholding the constitutional right to freedom of speech.

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⁴³³⁴ Human Rights Watch, *Pakistan: Repeal Amendment to Draconian Cyber Law* (Feb 28, 2022), https://www.hrw.org/news/2022/02/28/pakistan-repeal-amendment-draconian-cyber-law (Feb. 28, 2022), https://www.amnesty.org/en/latest/news/2022/02/pakistan-repeal-draconian-cyber-crime-law/4336 [Ibid

⁴³³⁷ The Express Tribune, *Major parties move NA for PECA ordinance repeal* (Mar. 3, 2022), https://tribune.com.pk/story/2346215/major-parties-move-na-for-peca-ordinance-repeal

⁴³³⁸ National Commission for Human Rights, *Statement against the Prevention of Electronic Crimes (Amendment) Ordinance, 2022* (Feb 26, 2022),

 $[\]underline{\text{https://nchr.gov.pk/press}} \ \underline{\text{release/statement-against-the-prevention-of-electronic-crimes-amendment-ordinance-} \underline{2022/}$

⁴³³⁹ National Assembly of Pakistan, *The Constitution of the Islamic Republic of Pakistan* (Feb. 28, 2012), https://na.gov.pk/uploads/documents/1333523681_951.pdf

⁴³⁴⁰ International Federation of Journalists, *Pakistan: PECA ordinance overruled by Islamabad High Court* (Apr 11, 2022), https://www.ifj.org/media-centre/news/detail/category/press-releases/article/pakistan-peca-ordinance-overruled-by-islamabad-high-court.html
https://www.ifj.org/media-centre/news/detail/category/press-releases/article/pakistan-peca-ordinance-overruled-by-islamabad-high-court.html
https://www.ifj.org/media-centre/news/detail/category/press-releases/article/pakistan-peca-ordinance-overruled-by-islamabad-high-court.html
https://www.ifj.org/media-centre/news/detail/category/press-releases/article/pakistan-peca-ordinance-overruled-by-islamabad-high-court.html

⁴³⁴² Myra Imran, *NCHR welcomes govt's decision to agree with demands of repealing PECA Ordinance*, The News (Mar. 5, 2022), https://www.thenews.com.pk/print/938718-nchr-welcomes-govt-s-decision-to-agree-with-demands-of-repealing-peca-ordinance

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Still, on August 20, 2024, the Punjab Provincial Government issued a draft Punjab Cybercrime Control Act 2024. This proposed legislation incorporates comprehensive provisions for data protection and privacy and aligns with the 2016 PECA, while introducing stricter penalties of up to 15 years for cybercrime offenses.

In 2023, Pakistan issued the Pakistan Electronic Media Regulatory Authority (PEMRA) Ordinance, the Official Secrets Amendment Act, 2023, and the E-Safety Authority Bill 2023.

The PEMRA amendment lays out the procedures to register and monitor ratings of TV channels as well as elaborating on the definitions of disinformation and misinformation. It was first presented in the National Assembly on July 20, 2023, passed without deliberation or comment on August 2, 2023, and signed into law on August 15, 2023. This law and the way it was adopted has garnered criticism and protest from many parties, including media, civil society, and human rights bodies.

Only five days after the promulgation of the PEMRA Ordinance, the Official Secrets Amendment Act, 2023 was signed into law. The President denied having signed this bill into law. This law makes a person guilty of an offense if they "intentionally creates a problem of public order or acts against the state." In addition, if a person "attacks or damages a prohibited place and the purpose of this is to directly or indirectly benefit the enemy," this is also punishable.

The Social Media Rules were adopted in October 2020.⁴³⁴⁶ The spirit of these rules bears proximity to the 2016 Prevention of Electronic Crimes Act's (PECA) Section 20 on the defamation of public institutions.⁴³⁴⁷ The rules compel social media companies to establish offices within the country, localizing their database servers. They specify a new position of National Coordinator to liaise with these companies and seem to indicate the aspiration of greater control over Pakistani users. AI was not featured in these rules explicitly, though online

⁴³⁴⁴ Dawn, *President Alvi signs Pemra Amendment Bill into Law* (Aug. 15, 2023), https://www.dawn.com/news/1770281

⁴³⁴³ Punjab Police, *Punjab Cybercrime Control Agency on the Cards* (Aug 20, 2024), https://punjabpolice.gov.pk/node/19998

The Express Tribune, *Official Secrets, Army Act amendment bills become law* (Aug. 20, 2023), https://tribune.com.pk/story/2431501/official-secrets-army-act-amendment-bills-become-law

⁴³⁴⁶ The Gazette of Pakistan, *Notification Part II, S.R.O.1077(I)/2020* (Oct. 20, 2020), https://moitt.gov.pk/SiteImage/Misc/files/Social%20Media%20Rules.pdf

⁴³⁴⁷ Arshad Khan Eesha, *The Prevention of Electronic Crimes Act 2016 : An Analysis*, LUMS Law Journal, https://sahsol.lums.edu.pk/node/12862

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disinformation was. They were updated and released again a year later.⁴³⁴⁸ Twitter came under intense state scrutiny when an unhappy public used the platform to express their discontent with the government, which led to further restrictions.⁴³⁴⁹ Twitter remains banned in Pakistan while other companies such as YouTube⁴³⁵⁰ and Signal⁴³⁵¹ remain hard to access if not banned.

Algorithmic Transparency

Algorithmic transparency is not yet established as a legal right in Pakistan. The Personal Data Protection Bill (PDPB) provides for the "right not to be subject to a decision based solely on automated processing, including profiling" without any further details. The definition of processing in the bill is "any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organization, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction." Anonymized data means "personal data which has undergone the irreversible process of transforming or converting personal data to a form in which a data subject cannot be identified." Furthermore, the Bill defines vital interests as "matters relating to life, fundamental rights, security of data subject to humanitarian emergencies, in particular in situations of natural and man-made disasters, and monitoring and management of epidemics." 4353

Smart Surveillance

Two Acts contain concerning provisions regarding surveillance in Pakistan. The 1996 Act providing for the reorganization of the Pakistan Telecommunications Authority (PTA) permits the government to authorize any person(s) to intercept calls and messages, or to trace calls through any telecommunication system in the interest of national security or in the

2024), https://www.killswitch.pk/?q=node/185

⁴³⁴⁸ The Gazette of Pakistan, *Notification Part II, S.R.O.1077(I)/2020* (Oct. 20, 2020), https://moitt.gov.pk/SiteImage/Misc/files/Social%20Media%20Rules.pdf

⁴³⁴⁹ Ahmed Abbas, *Pakistan Tightens Restrictions on Social Media Giants*, International Bar Association (Jun. 22, 2022), https://www.ibanet.org/Pakistan-tightens-restrictions-on-social-media-giants# ednref6

⁴³⁵⁰ Pakistan Telecommunication Authority, *YouTube Shut Down in Pakistan* (Jun. 1, 2023), https://www.pta.gov.pk/category/youtube-shut-down-in-pakistan-713542977-2023-06-01 ⁴³⁵¹ Kill Switch Timeline in Pakistan, *Netizens Report Inaccessibility to Signal App* (Jul. 26,

⁴³⁵² Ministry of Information Technology & Telecommunications, *Draft of the Personal Data Protection Bill*, Section 29(4) (2023),

 $[\]underline{https://www.moitt.gov.pk/SiteImage/Misc/files/Final\%20Draft\%20Personal\%20Data\%20Protect}\\ \underline{ion\%20Bill\%20May\%202023.pdf}$

⁴³⁵³ Ibid, Section 2(00)

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apprehension of a person in relation to any offense.⁴³⁵⁴ Under the 2013 Investigation for Fair Trial Act, a judge has the power to issue a warrant of surveillance or interception, upon the fulfillment of certain conditions.⁴³⁵⁵

Aside from statutory provisions, some Pakistani software exhibits surveillance state aspects. Hotel Eye is software that combines surveillance technologies and government databases to track hotels and their customers. The software also collects citizens' data without their consent. Hotel Eye is now mandatory for hotel and private rest house operators throughout Pakistan. Asia Various provinces in Pakistan including Punjab, Balochistan, and Gilgit-Baltistan have reported on the deployment of Hotel Eye for purposes of crime prevention, lauding its efficacy in helping trace, track, and surveil suspected criminals. This widespread use raises concerns regarding surveillance of private citizens, in particular with regard to gender interactions and in view of discriminatory laws against women still in effect in the country.

In the case of the Balochistan province, technical, operational, and training support on the use of Hotel Eye (among other specialized software) was provided very recently by the United Nations Office on Drugs and Crime⁴³⁶⁰ under the European Union-funded Rule of Law Roadmap (RoLR) Balochistan project.⁴³⁶¹

The Government of Pakistan deployed several tech-related measures during COVID-19 that threaten the right to privacy, such as a track-and-trace system originally developed to track-and-trace possible terrorist activities. The system is opaque and lacks judicial oversight and reportedly combines personal

specialized-software-for-balochistan-police.html

⁴³⁵⁴ *The Pakistan Telecommunication (Re-organization) Act*, Section 54, The Gazette of Pakistan (1996), https://na.gov.pk/uploads/documents/1329727963 180.pdf

⁴³⁵⁵ *The Investigation for Fair Trial Act*, Section 11, The Gazette of Pakistan (2013), https://na.gov.pk/uploads/documents/1361943916 947.pdf

⁴³⁵⁶ Pubjab Information Technology Board website, *HotelEye*, https://pitb.gov.pk/hotel_eye
4357 United Nations Office on Drugs and Crime, *Road to Digitization: UNODC concludes*Training on Specialized Software for Balochistan Police (Mar. 15, 2023),
https://www.unodc.org/copak/en/Stories/SP2/road-to-digitization -unodc-concludes-training-on-

⁴³⁵⁸ Gilgit-Baltistan Police website, *Hotel Eye*, https://gbp.gov.pk/hotel-eye/

⁴³⁵⁹ Pakistan Qanun-e-Shahadat Ordinance 1984, Section 151 (4): "when a man is prosecuted for rape or an attempt to ravish, it may be shown that the prosecutrix was of generally immoral character," p.66 https://punjabpolice.gov.pk/system/files/qanun-e-shahadat-order-1984.pdf
⁴³⁶⁰ United Nations Office on Drugs and Crime, *Road to Digitization: UNODC concludes Training on Specialized Software for Balochistan Police* (Mar. 15, 2023),
https://www.unodc.org/copak/en/Stories/SP2/road-to-digitization_-unodc-concludes-training-on-specialized-software-for-balochistan-police.html

⁴³⁶¹ United Nations Office on Drugs and Crime website, 6th Provincial Steering Committee reinforces a new Rule of Law Roadmap for Balochistan, Press Release (Feb 28, 2023), https://www.unodc.org/copak/en/PR/6th-provincial-steering-committee-reinforces-a-new-rule-of-law-roadmap-for-balochistan.html

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call-monitoring mechanisms and geofence tracking to identify when a person leaves a given geographic location.⁴³⁶²

Practices of surveillance in public space and use of facial recognition are of concern. A report by Privacy International identified such practices in Pakistan during the COVID-19 pandemic. Privacy International found that the government of Pakistan retrofitted systems, originally designed for counterterrorism purposes by the Inter-Services Intelligence directorate, for COVID-19 surveillance. The absence of explanation of how the system operates, raised grave concerns among digital rights privacy activists, about tracking and tracing, monitoring and tracking suspected patients through VPN⁴³⁶⁴.

One of China's Belt and Road Initiative's flagship project is the \$63 billion USD China-Pakistan Economic Corridor. China is supporting numerous Safe City projects to allegedly improve security within Pakistan's major urban centers by providing low-interest loans and urging the involvement of Chinese state-owned enterprises. Safe City projects have effectively installed much of the Xinjiang digital security system across numerous Pakistani cities, including Islamabad, Peshawar, Lahore, Quetta, Karachi, and Gwadar. An example is Lahore's Huaweibuilt Safe City which uses approximately 8000 high-grade CCTV cameras, 4G wireless connectivity, facial recognition, automated vehicle number plate recognition, multiple tracking options, integrated communication platforms, geographic information systems, and specialized apps for security personnel use. These systems are controlled through a large 10,000-square-meter integrated command, control, and communication center that uses AI, big data, and cloud computing technology.⁴³⁶⁵

By January 2023, the National Database Registration Authority (NADRA), a government body reporting directly to the Ministry of Interior Affairs and responsible for all identification documents, shared data and images of 4,000 wanted people to a Safe City Islamabad for biometric matching, to lead

https://freedomhouse.org/country/pakistan/freedom-net/2021

https://privacyinternational.org/report/5003/under-surveillance-misuse-technologies-emergency-responses-global-lessons-covid-19

⁴³⁶² Freedom House, Freedom on the Net 2021 Report (2021),

⁴³⁶³ Privacy International, *Under Surveillance: (Mis)use of Technologies in Emergency Responses. Global lessons from the COVID-19 pandemic* (Dec. 14, 2022),

⁴³⁶⁴ Zuha Siddiqi, *Pakistan is using a Terrorism Surveillance System to Monitor the Pandemic. Future Tense* (July 15, 2020), https://slate.com/technology/2020/07/pakistan-isi-terrorism-surveillance-coronavirus.html

⁴³⁶⁵ Peter Layton, *Belt and Road means big data and facial recognition, too*, The Interpreter (Jun. 19, 2020), https://www.lowyinstitute.org/the-interpreter/belt-road-means-big-data-facial-recognition-too

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to their arrest. 4366 According to the report, Safe City Islamabad placed a request to NADRA in October 2021 for data on people suspected for serious crimes, including a category of "proclaimed offenders" (referring to individuals who avoided court warrants). By mid-January, Safe City Islamabad announced the arrest of three people and 887 alerts arising from facial recognition across the 106 cameras installed in the capital city. 4367 The Safe City Islamabad project continues to be featured in the country's annual budgetary appropriations for its Public Sector Development Program 2022–2023. 4368

In January 2023, the NADRA announced the use of an AI-based solution to verify fingerprints/records of senior citizens.⁴³⁶⁹ The solution aims to supplement the physical, biometric verification of fingerprints.⁴³⁷⁰ The project was allocated funding in the Public Sector Development Program 2020–2021⁴³⁷¹ and is being developed under the supervision of the National Center of AI at the National University of Science & Technology.⁴³⁷²

On September 29, 2024, the Punjab Safe City project,⁴³⁷³ a joint project between Punjab Police and Punjab Information Technology Board (PITB), deployed the AI-powered Face Trace System (FTS) to increase the effectiveness of biometric criminal identification and detention.

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⁴³⁶⁶ Chris Burt, *Pakistan ID authority shares data of 4K wanted people for biometric matching*, Biometric Update, (Jan. 11, 2023), https://www.biometricupdate.com/202301/pakistan-id-authority-shares-data-of-4k-wanted-people-for-biometric-matching; Chris Burt. *Biometric Registrations open for vehicles and guns in Pakistan*, Biometric Update (Jan. 18, 2023), https://www.biometricupdate.com/202301/biometric-registrations-open-for-vehicles-and-guns-in-pakistan

⁴³⁶⁷ Chris Burt, *Biometric Registrations open for vehicles and guns in Pakistan*, Biometric Update (Jan. 18, 2023), https://www.biometricupdate.com/202301/biometric-registrations-open-for-vehicles-and-guns-in-pakistan

⁴³⁶⁸ Planning Commission, Ministry of Planning, Development & Special Initiatives, *Public Sector Development Programme 2022-23: As Per NEC Directions of 8-6-2022* (Aug. 2020), https://www.pc.gov.pk/uploads/archives/PSDP 2022-23 Final.pdf

⁴³⁶⁹ Business Recorder, *Verifying fingerprints of senior citizens: Nadra introduces AI-based solution* (Jan. 13, 2023), https://www.brecorder.com/news/40219926/verifying-fingerprints-of-senior-citizens-nadra-introduces-ai-based-solution

⁴³⁷⁰ Chris Burt, *Pakistan Telecom Authority and NADRA to work together on multi-finger biometrics*, Biometric Update (Mar 7, 2023) https://www.biometricupdate.com/202303/pakistan-telecom-authority-and-nadra-to-work-together-on-multi-finger-biometrics

⁴³⁷¹ Planning Commission, Ministry of Planning, Development & Special Initiatives, *Public Sector Development Programme 2020–2021* (Jun. 2020), https://na.gov.pk/uploads/1591967333 830.pdf

⁴³⁷² Interview with Dr. Yasar Ayaz conducted by Manail Anis & Matthew Ogbeifun (Mar. 14, 2023), video recording available with the authors

⁴³⁷³ Punjab Police, *Punjab safe cities: Enhancing Security and Efficiency* (Sept. 29, 2024), https://punjabpolice.gov.pk/node/20831

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EdTech and Children Tracking

Pakistan is one of 49 countries subject of a 2022 study by Human Rights Watch about the use of government-endorsed Ed Tech tools for online learning during the COVID-19 pandemic. 4374 Based on technical and policy analysis of 163 EdTech products, Human Rights Watch found that governments' endorsements of the majority of these online learning platforms put at risk or directly violated children's rights. In the case of Pakistan, the report found that the Muse App developed for K-5 students in Pakistan and used by more than 120,000 students across 1,000 schools by April 2020 targeted children with behavioral advertising. The report also found that the Pakistani government endorsed Apps with the capability to collect the Android Advertising ID and identify, tag, and track billions of users, including children (Muse App, Taleemabad App); collected the WiFi MAC address of children (Muse App); collected aggregate numbers used to trace mobile devices (Taleemabad App); engaged in ID bridging (to bypass privacy controls) (Muse and Taleemabad); and collected WI-Fi SSID, which can be used to infer information about a child's habits and relationships (Taleemabad). Other websites and Apps shared their users' data to Facebook Pixel, which could track every moment of interaction across their platforms (Khan Academy, Learn Smart Pakistan, Sabaq Foundation). 4375

Use of AI by Courts

In April 2023, a judge in a Pakistani court used GPT-4,4376 Open AI's chatbot, to help render a judgment in a case. 4377 This decision sparked widespread debate regarding AI's capabilities and the possibility of it replacing legal professionals, including judges. This seems to have been a one-off incident, though, and has not led to a formalization of the use of AI by courts in Pakistan.

Already in 2022, an academic study reported the planned use of artificial intelligence to aid judicial decision-making. 4378 Plans to establish this project by the Deep Learning Lab of the National Centers for AI for this purpose were

⁴³⁷⁴ Human Rights Watch. How Dare They Peep into My Private Life? (May 25, 2022), https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rightsviolations-governments

⁴³⁷⁵ Ibid

⁴³⁷⁶ ChatGPT-4 Used in a Pakistani Judgment as an Experiment (Apr. 7, 2023), https://courtingthelaw.com/2023/04/07/laws-judgments-2/chatgpt-4-used-in-a-pakistanijudgment-as-an-experiment/

⁴³⁷⁷ International Bar Association, AI in Pakistani Courts of Law (Jun. 1, 2023), https://www.ibanet.org/AI-in-Pakistani-courts-of-law

⁴³⁷⁸ Uzma Nazir Chaudhry, Algorithmic Decision-Making in Pakistan, https://cfhr.com.pk/wpcontent/uploads/2022/04/Algorithmic-Decision-Making-in-Pakistan.pdf

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reported on in 2020.⁴³⁷⁹ However, no further detail is available about this project.⁴³⁸⁰

Lethal Autonomous Weapons

Pakistan was one of the first nations to call for a ban on lethal autonomous weapons systems. Since 2013, Pakistan and 30 other countries have called for a ban on fully autonomous weapon systems, which will prohibit weapons systems that lack human control. The Human Rights Council of Pakistan argued that lethal autonomous weapons systems raise complex moral, ethical, and legal dilemmas. Pakistan delivered a statement on behalf of the Organization of the Islamic Conference, representing more than 50 states, alerting about the negative impact of removing human control from the use of force, as this "fundamentally changes the nature of war" and raises the potential for an "accountability gap." Pakistan has presented multiple calls for a new international ban treaty of LAWS and denounced them as "illegal, unethical, inhumane, and unaccountable as well as destabilizing for international peace and security."

Despite active participation in every meeting of the Convention on Certain Conventional Weapons from 2014–2019, 4384 Pakistan has not acceded to the Convention. On October 2023, the Ministry of Foreign Affairs launched an official webpage to state Pakistan's Positions & Policies on Arms Control, Non-Proliferation & Disarmament Related Issues. The ministry reaffirmed the country's commitment to calling for a legally binding instrument regulating the use of Lethal Autonomous Weapons (LAWS) and denounced the use of transborder unauthorized armed drones outside of international armed conflict. 4385

Human Rights

Freedom House's 2024 annual report rates Pakistan as "Partly Free" with a score of 35/100. The report points out that, despite the competitive multiparty

 $\underline{\text{https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and}$

⁴³⁷⁹ Announcement video uploaded to the National Center of Artificial Intelligence – Pakistan facebook page (Feb. 18, 2023),

https://www.facebook.com/ncai.pk/posts/674605906623523/?paipv=0&eav=AfZNCXszVIDHOdy6FdhC4vpD16RhvqTjhW8vlO3wY5DtavQoPD 904pjc-oc7KIu0PY& rdr

⁴³⁸⁰ Interview with Dr. Yasar Ayaz conducted by Manail Anis & Matthew Ogbeifun, (Mar. 14, 2023), video recording available with the authors

⁴³⁸¹ Human Rights Watch, Stopping Killer Robots. Country Positions on Banning Fully Autonomous Weapons and Retaining Human Control (Aug. 10, 2020),

⁴³⁸² Ibid

⁴³⁸³ Ibid

⁴³⁸⁴ Ibid

⁴³⁸⁵ Government of Pakistan-Ministry of Foreign Affairs, Arms Control and Disarmament (Oct. 23, 2023), https://mofa.gov.pk/arms-control-and-disarmament

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political system in the country, Pakistan's military exerts substantial influence over security and other policy issues, intimidation of media outlets, and use of indiscriminate or extralegal use of force to manage religious militancy and attacks on religious minorities and opponents.⁴³⁸⁶ Relations between military and civilian leaders have grown more contentious in recent years.

Pakistan is rated "Not Free" in Freedom House's 2024 report on global internet freedom. All Pakistan frequently blocks content critical of Islam or the military as well as pornography or nudity websites, and political and social content. There are also allegations that the Pakistani government uses censorship equipment to block and regulate its citizens' internet access. According to another Freedom House report, digital controls tightened even further around the February elections. Mobile phone services and access to social media platforms were suspended nationwide on the day of general elections. In addition, the report claims: "People are frequently prosecuted for their online activities, often receiving harsh sentences," including the death penalty in some cases.

Pakistan is signatory of several human rights conventions. ⁴³⁹⁰ Pakistan is one of the original signatories of the Universal Declaration of Human Rights and signed the International Covenant on Civil and Political Rights (ICCPR) in 2008, which also upholds the right to privacy. In 1989, Pakistan adopted the Convention on the Rights of the Child, which include the right to privacy. In 1990, Pakistan signed the Cairo Declaration on Human Rights in Islam. ⁴³⁹¹ In 2004, the country signed the International Covenant on Economic, Social and Cultural Rights (ICESR). ⁴³⁹²

https://freedomhouse.org/country/pakistan/freedom-world/2024

https://freedomhouse.org/country/pakistan/freedom-net/2024

https://freedomhouse.org/country/pakistan/freedom-net/2022

⁴³⁸⁶ Freedom House, Freedom in the World 2024: Pakistan (2024),

⁴³⁸⁷ Freedom House, Freedom on the Net 2024: Pakistan (2024),

⁴³⁸⁸ Freedom House, Freedom on the Net 2022 Pakistan Country Report,

⁴³⁸⁹ Freedom House, *Pakistan at the Polls: February Election Results Reflect an Unexpected Rejection of the Status Quo* (May, 2 2024) https://freedomhouse.org/article/pakistan-polls-february-election-results-reflect-unexpected-rejection-status-quo

⁴³⁹⁰ Ministry of Human Rights, *Information and Learning Material on Core Human Rights Conventions Ratified by Pakistan* (2022),

 $[\]frac{https://mohr.gov.pk/SiteImage/Misc/files/Information\%20and\%20Learning\%20Material\%20on}{\%20Core\%20Human\%20Rights\%20Convention.pdf}$

⁴³⁹¹ Privacy International, *The Right to Privacy in the Islamic Republic of* Pakistan, Stakeholder Report, Universal Periodic Review, 28th Session – Pakistan,

https://privacyinternational.org/sites/default/files/2017-11/UPR28 Pakistan.pdf

⁴³⁹² The Office of the United Nations High Commissioner for Human Rights (OHCHR), *United Nations Human Rights Treaty Bodies, UN Treaty Body Database*,

 $[\]underline{https://tbinternet.ohchr.org/_layouts/15/TreatyBodyExternal/Treaty.aspx?CountryID=131\&Lang=\underline{EN}$

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The UN Office of the High Commissioner for Human Rights, in its 2022 Universal Periodic Review of Pakistan, 4393 made extensive recommendations 4394 regarding the protection and promotion of human rights in Pakistan. These include recommendations on civil and political rights, liberty and security of the person, sexual and gender-based violence, freedom of thought, conscience and religion, and freedom from persecution for those criticizing state institutions Pakistan submitted to the OHCHR statements to committees on racial discrimination, human rights, rights of the Child, and committees against torture. The OHCHR issued 18 recommendations for the Government of Pakistan, concluding on the need to take administrative and legislative measures to improve the state of human rights in the country, to be integrated systematically in national implementation and monitoring plans. 4395

OECD / G20 AI Principles

Pakistan is not a member of the OECD and has not endorsed the OECD AI principles as a non-member. Also Pakistan does not submit reports to the OECD AI Policy Observatory in relation to policies, strategies, or activities associated with AI. AI.

Council of Europe AI Treaty

Pakistan did not participate in negotiations for the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law⁴³⁹⁸ and has not signed this first legally binding AI treaty.⁴³⁹⁹

 $\underline{https://www.ohchr.org/en/press-releases/2022/11/universal-periodic-review-working-group-commence-fourth-cycle-holding-its}$

https://www.ohchr.org/sites/default/files/documents/hrbodies/upr/sessions/session42/pk/UPR42

Pakistan Thematic List of Recommendations.doc

ny.un.org/doc/UNDOC/GEN/G22/581/81/PDF/G2258181.pdf?OpenElement

⁴³⁹⁶ OECD Legal Instruments, *Recommendation of the Council on Artificial Intelligence, Adherents* (May 3, 2024), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449#adherents

https://oecd.ai/en/dashboards/overview

⁴³⁹⁸ Council of Europe, *The Framework Convention on Artificial Intelligence* (2025), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

⁴³⁹⁹ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 21, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

⁴³⁹³ OHCHR, Universal Periodic Review Working Group to commence fourth cycle with holding of its forty-first session from 7 to 18 November 2022 (Nov. 2, 2022),

⁴³⁹⁴ OHCHR, Matrix of Recommendations,

⁴³⁹⁷ OECD AI Policy Observatory, National AI Policies & Strategies (2025),

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UNESCO Recommendation on AI Ethics

Pakistan is a UNESCO member since 1949 and therefore one of the 193 countries that endorsed the UNESCO Recommendation on the Ethics of AI. Pakistan was part of the Member States providing input on the first Draft of the Recommendation. There is no evidence yet of measures (to be) adopted for the implementation of the Recommendation.

Evaluation

Pakistan is still in the early days of taking concrete measures to regulate AI. Pakistan's endorsement of the 2021 UNESCO Recommendation on the Ethics of AI and the 2022 Riyadh AI Call for Action Declaration on ethics of AI gives the country an opportunity to adopt a human-centered approach to AI. The Personal Data Protection Bill is also a positive step towards protecting data subjects' rights, although the right to algorithmic transparency is not provided. Pakistan's Digital Nation Pakistan Act approved in 2024 further signals the country's movement in a positive direction, as it establishes a national digital authority, and sets the tone for the country's commitment to developing AI policy and regulation. The Digital Nation Pakistan Act furthers the ongoing work towards refining and adopting the Digital Pakistan Policy, which is currently in the draft phase.

However, the widespread use of AI technology for surveillance purposes, coupled with political instability and endemic problems of discrimination against women, minorities and disadvantaged groups, are serious causes for concern. With the country benefitting from burgeoning and tech-savvy young, predominantly urban and rapidly urbanizing population, strengthening civic participation, promoting democratic values, facilitating the development of literacy (including digital literacy), and enabling digital access could go a long way in fostering the adoption of ethical, trustworthy, and human-centric AI and digital policies.⁴⁴⁰²

Peru

In 2024, Peru engaged industry stakeholders in a consultation for proposals to improve the AI ecosystem as part of efforts to complete the UNESCO Readiness Assessment Methodology (RAM). Peru reiterated its support for international

⁴⁴⁰⁰ UNESCO, *UNESCO Member States Adopt the First Ever Global Agreement on the Ethics of Artificial Intelligence* (Apr. 21, 2022), https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence

⁴⁴⁰¹ UNESCO, Compilation of Comments Received from Member States on the First Draft of the Recommendation (2021), https://unesdoc.unesco.org/ark:/48223/pf0000376747

⁴⁴⁰² Ministry of Information and Broadcasting, *High-Level Chinese Delegation to Soon Visit Pakistan: PM* (Jun. 11, 2024), https://www.moib.gov.pk/News/62321

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legal instruments to regulate autonomous weapons systems at the UN and the Vienna Conference. Peru also participated in the negotiations for the Council of Europe international AI treaty, although the country has not yet signed.

National AI Strategy

In 2021, the Government and the Digital Transformation Secretariat of the Presidency of the Council of Ministers, issued Peru's draft National Artificial Intelligence Strategy (ENIA) for the period of 2021–2026. As a leader in research, development and deployment of AI in Latin America, Peru's vision is to accelerate national development while promoting digital inclusion and ensuring the reduction of social gaps. ENIA aims to foster the necessary conditions to take advantage of the opportunities presented by developments in AI and to create value for the private and public sector, while mitigating potential risks. 4403

The key objectives of ENIA are to

- Train and attract talent
- Promote AI development and use to boost the country's development and welfare
- Create and strengthen digital and telecommunications infrastructure to support the development of AI
- Develop a data infrastructure to make high quality public data available in an open, reusable, and accessible format
- Adopt ethical guidelines for sustainable, transparent, and replicable use of AI with clear definitions of responsibilities and data protection
- Facilitate a collaborative AI ecosystem at the national and international level, such as through a National Center for Innovation and AI. 4404

Peru published Law No. 31814 to promote the use of AI for the economic and social development of the country in July 2023. The law designates the Presidency of the Council of Ministries as the supervising authority operating through the secretaries of Government and Digital Transformation through the National System of Digital Transformation. The law was open for public consultation again in 2024 to refine the regulatory framework.

In addition to Law no. 31814, Emergency Decree No. 007-2020, regulates AI. The Decree approves the Digital Trust Framework, establishes that "public

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 ⁴⁴⁰³ Presidency of the Council of Ministers, Estrategia Nacional de Inteligencia Artificial (ENIA) (2024), https://guias.servicios.gob.pe/creacion-servicios-digitales/inteligencia-artificial/enia
 4404 Presidency of the Council of Ministers, Estrategia Nacional de Inteligencia Artificial (ENIA) (2024), https://guias.servicios.gob.pe/creacion-servicios-digitales/inteligencia-artificial/enia
 4405 Congress of the Republic, Ley N. ° 31814 (Jul. 20, 2023),

https://www.gob.pe/institucion/congreso-de-la-republica/normas-legales/4565760-31814

4406 Presidency of the Council of Ministers, *New Draft Bill on the Artificial Intelligence Law*(Nov. 19, 2024), https://www.gob.pe/institucion/pcm/informes-publicaciones/6197119-nuevo-proyecto-de-reglamento-de-la-ley-de-intelligencia-artificial

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entities and private sector organizations promote and ensure the ethical use of digital technologies, the intensive use of data, such as internet of things, AI, data science, analytics and big data processing." 4407

Public Participation

The Digital Government Secretariat of the Presidency of the Council of Ministers requested consultation from the public and private sectors, civil society, academia, and citizens to participate in the co-design of the National AI Strategy with the purpose of driving the digital transformation of the country for the benefit of all people. Registration was open to all, and consultation took place from August 5 to August 12, 2020 via Zoom. He government presented a draft of the National Strategy and requested additional consultation from the public in 2021. No further public participation has been requested after the collection and analysis of the contributions in June 2021.

The Peruvian Government and Digital Transformation Lab launched the Participate Peru platform to receive suggestions and comments from citizens regarding current and potential regulations. Citizens can also send policy proposals on issues that interest them and make complaints about corruption in the public sector. To report the latter, citizens must provide an email address, where they will receive a report number, which they can then use to inform themselves about the status of their complaint. 4410

The Peruvian Government launched a public request for commentary on implementing the RAM methodology in the country on October 10, 2024. The request focused on the challenges, opportunities, and proposals to improve the current panorama of the AI ecosystem in Peru, emphasizing six thematic axes: health, education, productivity, data governance and cybersecurity, environment, and regulatory approaches. No further publications on this commentary have been compiled and shared at the time of writing. 4411 The request expired on October 28.

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⁴⁴⁰⁷ Martín Alberto Vizcarra Cornejo, President of Peru, *Decreto de Urgencia Nº 007-2020 Decreto de Urgencia que Aprueba el Marco de Confianza Digital y Dispone Medidas para su Fortalecimiento* (Jan. 9, 2020),

 $[\]frac{https://cdn.www.gob.pe/uploads/document/file/2790485/Decreto\%20de\%20Urgencia\%20N\%C2\%BA\%20007-2020.pdf?v=1643322610$

⁴⁴⁰⁸ Gov.Pe, *Co-Design Strategies for National Digital Transformation Policy and Strategy* (Mar. 12, 2023), https://www.gob.pe/10522-estrategias-de-co-diseno-para-la-politica-y-estrategia-nacional-de-transformacion-digital

⁴⁴⁰⁹ Gob.Pe, *Participate in the National Artificial Intelligence Strategy* (Mar. 12, 2023), https://www.gob.pe/13517-participar-de-la-estrategia-nacional-de-inteligencia-artificial 4410 Gob.Pe, Participa Peru, https://www.gob.pe/participa

⁴⁴¹¹ Presidency of the Council of Ministers, *Enviar aportes para la implementación de la metodología RAM para la inteligencia artificial* (Oct. 10, 2024), https://www.gob.pe/73222-enviar-aportes-para-la-implementacion-de-la-metodologia-ram-para-la-inteligencia-artificial

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Data Protection

The Personal Data Protection Law, passed in 2011, guarantees the fundamental right to personal data protection provided in Article 2, paragraph 6 of the Peruvian Constitution. 4412 The law was amended in 2017 to provide Peruvians with an updated level of data protection. 4413 The law covers personal data, automated or not, regardless of the medium, regardless of the form or modality of their creation, formation, storage, organization and access. 4414 The law has established various principles that data controllers and processors must comply with when processing personal data.⁴⁴¹⁵ These principles include legality, purpose, proportionality, quality, security, and an adequate level of protection.

The National Personal Data Protection Authority (ANPD) was established in 2011 within the Ministry of Justice to enforce and impose sanctions for violations of the law. Sanctions include administrative and monetary penalties against parties who are found to have violated the provisions of the law. 4416 The ANPD hears, investigates, and resolves complaints lodged by the data subjects for the violation of the rights granted to them and issues provisional and/or corrective measures, as established in the regulation. The ANPD is also responsible for recommending any minor or major amendments to the data protection law to ensure it keeps up with both technological advancements and potential legal challenges.

The ANPD established a National Register of Personal Data Protection, which keeps a public record of all the data processors and the type of data being collected on Peruvian residents. The ANPD is also required to publish a yearly report on the state of data protection within the country as well as recommendations for organizations on how to better adhere to the Peruvian legislation related to data protection.⁴⁴¹⁷

The Ministry of Justice and Human Rights published a new draft regulation, Law on Protection of Personal Data, on August 25, 2023, which aims to modernize the existing framework. Under the draft regulation, data controllers

⁴⁴¹² Hunton Privacy Blog, English Translation of Peru's Law for Personal Data Protection Released (Aug. 16, 2011), https://www.hunton.com/privacy-and-information-securitylaw/english-translation-of-perus-law-for-personal-data-protection-released

⁴⁴¹³ Caseguard.com, New Found Privacy Regulations for Peruvian Citizens (Nov. 10. 2021), https://caseguard.com/articles/new-found-privacy-regulations-for-peruvian-citizens/

⁴⁴¹⁴ Hunton Privacy Blog, English Translation of Peru's Law for Personal Data Protection Released (Aug. 16, 2011), https://www.hunton.com/privacy-and-information-securitylaw/english-translation-of-perus-law-for-personal-data-protection-released

⁴⁴¹⁵ Ibid

⁴⁴¹⁶ Dataguadiance.com, Peru - Data Protection Overview (Jul. 2022), https://www.dataguidance.com/notes/peru-data-protection-overview

⁴⁴¹⁷ Securiti, *Peru's Data Protection Law* (Apr. 26, 2022), https://securiti.ai/peru-data-protection-

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are required to notify the National Authority for Personal Data Protection (ANPD) within 48 hours of a security incident affecting personal data. Notifications must include details like the incident's nature, data types involved, affected individuals, and corrective or mitigation measures taken.

This update aligns Peru's standards with global best practices, especially those in the European Union. The draft regulation mandates DPIAs in specific cases. Organizations are now expected to evaluate risks in their data processing activities to preemptively identify and implement necessary organizational or security measures. The introduction of the right to data portability, allows individuals to receive their personal data in a structured format and transfer it between service providers. This promotes user control and aligns with international norms seen in the GDPR. Data portability encourages both innovation and secure data transfer practices, under the control of the data subject.

The new regulation's requirement for a designated representative, either within or outside Peru, to act as a contact between the ANPD and foreign companies processing Peruvian citizens' data enables the ANPD to enforce data protection standards even when data is handled abroad. This provision is crucial in maintaining oversight and accountability in cross-border data transfers, a common regulatory challenge.

The regulation also includes provisions for safeguarding minors' personal data, especially on social media and digital platforms. Organizations processing data of minors are required to take extra precautions to protect the rights of children in any digital service context. This focus aligns with global concerns about children's privacy and security in digital spaces.⁴⁴¹⁸ The new Law on the Protection of Personal Data was approved in November 2024 and enters into force in March 2025.⁴⁴¹⁹

The ADNP is a member of the Ibero-American Network for the Protection of Personal Data (*Red Iberoamericana de Protección de Datos*, RIPD), which comprises 16 data protection authorities from 12 countries. As a member, the ANDP adopted RIPD Standards for Personal Data Protection for Ibero-American States, 4420 a series of guiding principles and rights for the protection of personal data were recognized, that can be adopted and developed by the Ibero-American States in their national legislation in order to guarantee a proper treatment of

⁴⁴¹⁹ Catherine Escobedo, *The New Personal Data Protection Regulation Is Published in Peru*, IAPP [Spanish] (Jan. 8, 2025), https://iapp.org/news/a/se-publica-el-nuevo-reglamento-de-protecci-n-de-datos-personales-en-per-

⁴⁴¹⁸ Presidency of the Council of Ministers, *Resolución Ministerial N.*° 0270-2023-JUS (Aug. 25, 2023), https://www.gob.pe/institucion/minjus/normas-legales/4574374-0270-2023-jus

⁴⁴²⁰ Ibero-American Network for the Protection of Personal Data (RIPD), *Standards for Personal Data Protection for Ibero-American States* (2017), https://www.redipd.org/sites/default/files/2022-04/standars-for-personal-data.pdf.

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personal data, and to have homogeneous rules in the region. The guiding principles are legitimation, lawfulness, loyalty, transparency, purpose, proportionality, quality, responsibility, safety and confidentiality. Controllers must also guarantee the exercise of the following rights by data subjects: right of access, right to correction, right to cancellation, right to opposition, right not to be subject to automated individual decisions, right to portability of personal data and right to the limitation of treatment of personal data. ANDP has also adopted RIPD General Recommendations for AI-related data processing⁴⁴²¹ and Specific Guidelines for complying with these principles in AI projects.⁴⁴²²

The RIPD data protection authorities initiated a coordinated action regarding ChatGPT, developed by OpenAI, on the basis that it may entail risks for the rights and freedoms of users in relation to the processing of their personal data. Concerns regarding the risk of misinformation. The action acknowledges: "ChatGPT does not have knowledge and/or experience in a specific domain, so the precision and depth of the response may vary in each case, and/or generate responses with cultural, racial or gender biases, as well as false ones."4423

The Peruvian Data Protection Authority has been a member of the Global Privacy Assembly since 2012 but has not endorsed the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence, 4424 the 2020 GPA Resolution

personales-inician-accion-chatgpt

⁴⁴²¹ Ibero-American Network for the Protection of Personal Data (RIPD), General Recommendations for the Processing of Personal Data in Artificial Intelligence (Jun. 2019), https://www.redipd.org/documentos/guia-recomendaciones-generales-tratamiento-datos-ia
⁴⁴²² Ibero-American Network for the Protection of Personal Data (RIPD), Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects (Jun. 2019), https://www.redipd.org/documentos/guia-orientaciones-especificas-proteccion-datos-ia

⁴⁴²³ Ibero-American Network for the Protection of Personal Data (RIPD), *Las autoridades de la Red Iberoamericana de Protección de Datos Personales inician una acción coordinada en relación con el servicio ChatGPT* [Spanish only] (May 8, 2023), https://www.redipd.org/noticias/autoridades-red-iberoamericana-de-proteccion-de-datos-

⁴⁴²⁴ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

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on AI Accountability,⁴⁴²⁵ the 2022 GPA Resolution on Facial Recognition Technology⁴⁴²⁶ or the 2023 GPA Resolution on Generative AI.⁴⁴²⁷

Algorithmic Transparency

Peru's Data Protection Law does not contain a general right of algorithmic transparency and does not explicitly state the right to receive information about automated-decision systems or to object to a decision based solely on automatic data processing methods. 428 However, Article 23 on the rights of the data subject provides for the right not to be subjected to a decision with legal effects or affecting them significantly, supported only by a processing of personal data intended to evaluate certain aspects of their personality, unless it occurs within the negotiation, execution, or performance of a contract or in cases of evaluation with purposes of incorporation into a public entity, pursuant to the law, without prejudice to the possibility of defending his point of view for the protection of his legitimate interest. The data subject also has the right to obtain information processed about him in publicly or privately administered databases, the way his data were compiled, the reasons for their compiling, and at whose request the compiling was done, as well as the transfers made or planned to be made of such data. 4429

The Draft Regulation of the revised Law on AI for Development introduced in May 2024⁴⁴³⁰ includes transparency and explainability as a guideline. The draft regulation states that algorithmic transparency and explainability measures must be incorporated and users must be given information

⁴⁴²⁵ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

⁴⁴²⁶ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁴⁴²⁷ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁴⁴²⁸ ICLG.com, *Data Protection Laws and Regulations in Peru 2022–2023*, https://iclg.com/practice-areas/data-protection-laws-and-regulations/peru

⁴⁴²⁹ Hunton Privacy Blog, *Law for Personal Data Protection* (June 9, 2010), https://www.huntonprivacyblog.com/wp-

content/uploads/sites/28/migrated/Peru%20Data%20Protection%20Law%20July%2028_EN%20 2 .pdf

⁴⁴³⁰ Congreso de la República, *Ley N.* 31814 (Jul. 20, 2023), https://www.gob.pe/institucion/congreso-de-la-republica/normas-legales/4565760-31814

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on how AI use will affect them. However, the current law does not establish specific AI compliance and accountability processes or address contestability.⁴⁴³¹

These requirements align with the RIPD Specific Guidelines for data protection in Artificial Intelligence Projects, "The information provided regarding the logic of the AI model must include at least basic aspects of its operation, as well as the weighting and correlation of the data, written in a clear, simple and easily understood language, it will not be necessary to provide a complete explanation of the algorithms used or even to include them. The above always looking not to affect the user experience." 4432

While Peru's draft National AI Strategy highlights the development of a registry of AI algorithms in the public sector, and datasets used in use cases under its strategic objective of ethics, it remains unclear whether the registry will be publicly available. 4433

Use of AI in Public Administration

The National Strategy proposal highlights not only the value creation for the private sector, but also for the public sector which must meet the new demands of a digital citizenship. 4434 However, large economic groups have been the main driver of adoption of AI in Peru with fewer attempts made by the public sector. 4435 The Peruvian Public Sector AI Status Survey conducted in January 2021 revealed that only 39 out of 488 public institutions use AI. Common uses include prediction of criminal acts, facial recognition, risk management and virtual assistants with most of this use attributed to local governments.

The Presidency of the Council of Ministers launched the program TranformaGob in October 2024 to train government officials on AI and its use in Public Administration. The program stems from a collaboration of the Secretariat of Government and Digital Transformation, the Presidency of the Council of Ministers, Asuntos del Sur, and the National Foundation for Democracy (NED). 534 Public Servants from 25 Local governments signed up for the program and 19

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⁴⁴³¹ Baker McKenzie, *Peru: The Draft regulations of the law that promotes the use of AI have been published* (May 2, 2024) https://insightplus.bakermckenzie.com/bm/technology-media-telecommunications_1/peru-the-draft-regulations-of-the-law-that-promotes-the-use-of-ai-have-been-published_1

⁴⁴³² Ibero-American Network for the Protection of Personal Data (RED), *Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects*, p. 17 (Jun. 2019), https://www.redipd.org/documentos/guia-orientaciones-especificas-proteccion-datos-ia

⁴⁴³³ Presidency of the Council of Ministers, *Estrategia Nacional de Inteligencia Artificial (ENIA)* (2024), https://guias.servicios.gob.pe/creacion-servicios-digitales/inteligencia-artificial/enia
⁴⁴³⁴ Presidency of the Council of Ministers, *Estrategia Nacional de Inteligencia Artificial (ENIA)* (2024), https://guias.servicios.gob.pe/creacion-servicios-digitales/inteligencia-artificial/enia
⁴⁴³⁵ Ibid

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projects for digital innovation involving Artificial Intelligence were presented in it. 4436

As a member of the Latin American Centre for Development Administration (CLAD), Peru approved the principles in the Ibero American Charter on Artificial Intelligence in Civil Service in late 2023. 4437 The guiding principles include: human autonomy; transparency, traceability and explainability; accountability, liability and auditability; security and technical robustness; reliability, accuracy, and reproducibility; confidence, proportionality, and prevention of damage; privacy and protection of personal data; data quality and safety; fairness, inclusiveness, and non-discrimination; human-centering, public value, and social responsibility; and sustainability and environmental protection.

The Charter calls on member states to create policies and laws to require the assessment of the impact of AI systems on human rights and freedoms and the registration of algorithms to "anticipate risks, prevent undesirable effects and ensure its proper implementation." The Charter also proposes a risk classification mechanism that would require guardrails for middle-risk uses and prohibitions against high-risk applications. Prohibited uses include facial recognition systems; systems aimed at behavior and cognitive manipulation of specific individuals or vulnerable groups (children or the elderly); and social ranking systems based on certain personality traits, individual behaviors, sociodemographic features or economic status. 4439

Facial Recognition

Peru has deployed facial recognition technology across various sectors. On July 14, 2022, Peru's Victoria Municipality was sanctioned by the Personal Data Protection Authority (ANPD) for not complying with security measures in the use of surveillance cameras. The sanction followed an investigation initiated as a result of a complaint filed by civil society organizations Access Now and Hiperderecho in 2019 regarding the existence of facial recognition cameras in Victoria, which the organizations alleged were processing biometric data in contravention of Peru's Personal Data Protection Law. Although the investigation concluded that facial recognition software was not in use, and the cameras were

⁴⁴³⁶ Presidency of the Council of Ministers, *Programa Internacional TransformaGob* (Jun. 3, 2024), https://www.gob.pe/49835-programa-internacional-transformagob

⁴⁴³⁷ Latin American Centre for Development Administration (CLAD), *Ibero American Charter on Artificial Intelligence in Civil Service* (Nov. 2023), https://clad.org/wp-content/uploads/2024/03/CIIA-EN-03-2024.pdf

⁴⁴³⁸ Ibid, p. 10

⁴⁴³⁹ Ibid, p. 21

⁴⁴⁴⁰ Power Singh Inc, *Peru: Municipality sanctioned for illegitimate use of personal data in video surveillance system* (July 28, 2022), https://powersingh.africa/2022/07/28/peru-municipality-sanctioned-video-surveillance/

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only used to record and store images and videos to identify criminal activity reported to the National Police of Peru, the Authority sought to put corrective measures in place to address dangers that may arise in future because of the storing of personal data captured in the municipality's biometric system.⁴⁴⁴¹

Additionally, the director of APDP administered a fine to the municipality for failing to add safeguards in place to secure the images captured and for failing to provide information on how the images would be stored, and which entities could access them. The resolution also found that the municipality's conduct fell short of provisions in the Personal Data Protection Law relating to verification and management procedures for personal information. The municipality had 55 days to put in place appropriate documentation concerning the management of privileges and periodic verification of those privileges for the processing of personal data carried out within the video surveillance system. 4442

The APDP announced in October 2020 that it had launched an investigation into the National University of San Marcos, following a complaint alleging that the personal data of applicants was inadequately processed, and biometric data was collected. In the event that facial recognition technology was used in the university's admissions process, ADPD would administer a fine in accordance with the Personal Data Protection law.⁴⁴⁴³ At the time of publishing, ADPD has yet to release a final report on this investigation.

RecFaces announced in 2024 that its Id-Guard facial recognition solution would be implemented at Jorge Chávez International Airport in Lima, Peru. This major airport, which handles over 20 million passengers annually, will use the technology to enhance security by monitoring for potential threats and suspicious individuals. The implementation aims to strengthen the overall security structure while simplifying work processes for security personnel and could have implications for customs control, privacy protection, and border processing of citizens, tourists, migrants, and asylum seekers.⁴⁴⁴⁴

Peru has expanded use of facial recognition technology, particularly in smart city projects spearheaded by major telecom operators. In 2023, Bitel

https://powersingh.africa/2022/07/28/peru-municipality-sanctioned-video-surveillance/

⁴⁴⁴¹ Power Singh Inc, *Peru: Municipality sanctioned for illegitimate use of personal data in video surveillance system* (July 28, 2022),

⁴⁴⁴² Power Singh Inc, *Peru: Municipality sanctioned for illegitimate use of personal data in video surveillance system* (July 28, 2022),

https://powersingh.africa/2022/07/28/peru-municipality-sanctioned-video-surveillance/
4443 Data Guidance, *Peru: APDP investigates university for alleged inadequate processing of personal data and biometric data collection* (Oct. 6, 2020),

https://www.dataguidance.com/news/peru-apdp-investigates-university-alleged-inadequate
4444 Bianca González, *RecFaces Id-Guard Boosts Security at Jorge Chávez International Airport in Peru*, Biometric Update (Apr. 16, 2024), https://www.biometricupdate.com/202404/recfaces-id-guard-boosts-security-at-jorge-chavez-international-airport-in-peru

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invested significantly in smart city initiatives, notably in Trujillo's District Municipality of Salaverry, deploying advanced facial recognition and AI-powered surveillance systems aimed at enhancing public safety, urban services, and traffic management. The project integrates a Video Management System (VMS) and an intelligent operations center (IOC) software to enable real-time data analysis and response. Bitel's collaboration with the Municipality of Lima also introduced a \$500,000 smart city system utilizing facial recognition to bolster crime detection and response. Further pilots in cities like Chota and Moche reflect a broader trend of adopting biometric surveillance technologies to address public security challenges. However, these implementations raise critical concerns about compliance with Peru's Personal Data Protection Law, emphasizing the need for robust safeguards and transparent data management practices to protect citizens' rights. 4445

Disinformation

Peru signed the Community of Latin American and Caribbean States (CELAC) Buenos Aires Declaration in January 2023, through which the 33 countries pledged to deepen integration, climate action, democratic institutions, and multilateralism. The signatories recognized disinformation and the visible increase in cyber-attacks, including those through artificial intelligence and the use of algorithms, as generating risks to the stability of the essential infrastructure of States and companies and to the well-being of individuals. Furthermore, the signatories agreed that disinformation on social networks can create parallel realities and induce political radicalization, creating a threat to democratic values and the rule of law, all leading to the need to expand cooperation and coordination among States to advance in the fight against disinformation and illegal content on the Internet. 4447

The COVID-19 pandemic and the fake news "infodemic" that it created presented a real challenge for Peru as it was among the top 15 countries in the world in reported COVID-19 cases and second in Latin America, only after Brazil.⁴⁴⁴⁸ The excessive and unfounded disinformation that spread on social media in Peru and other countries hindered an appropriate public health response.

https://www.biometricupdate.com/202403/bitel-launches-smart-city-project-in-peru

⁴⁴⁴⁵ Abhidshek Jadhav, *Bitel Launches Smart City Project in Peru, Aims to Reduce Crime Rates and Streamline Services*, Biometric Update (Mar. 19, 2024),

⁴⁴⁴⁶ CELAC Summit, Declaration of Buenos Aires (Jan. 24, 2023),

https://www.cancilleria.gob.ar/userfiles/prensa/declaracion_de_buenos_aires_version_final.pdf 4447 Ibid

⁴⁴⁴⁸ The American Journal of Tropical Medicine and Hygiene, *The Peru Approach against the COVID-19 Infodemic: Insights and Strategies* (May 20, 2020), https://www.ajtmh.org/view/journals/tpmd/103/2/article-p583.xml

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The American Journal of Tropical Medicine and Hygiene highlighted the Peruvian government's response to the spread of disinformation and stated that disinformation about COVID-19 that occurred at the beginning of the pandemic became almost non-existent after the Ministry of Justice and Human Rights (MJDH) of Peru announced on April 8, 2020 via Twitter that "persons who share fake news and misinform others to obtain a benefit or to perturb the public tranquility can be sanctioned with a prison sentence." The Ministry urged people to share only official information, accompanied by the hashtag "Don't Spread #FakeNews." It further indicated that those who create and/or share false information to benefit themselves or cause perjury to others will receive a 2- to 4-year prison sentence, and if the fake news causes panic and perturbs the public tranquility, the sentence may be 3–6 years. Peru became the first country in Latin America to implement prison sentences for creating and disseminating fake news.

To evaluate the legitimacy of MJDH's statement, the organization Enfoque Derecho interviewed Peruvian lawyers. In conversation with César Landa, professor of Constitutional Law of the Catholic University of Peru and former President of the Constitutional Court, he concluded: "In this sense, in the context of COVID-19 pandemic, given that we are facing a situation of danger and threat, the dissemination of untruthful information is not a legitimate exercise of the right to freedom of expression or information. César Landa stated that such 'news' seeks to generate distress and disrupt public order. Thus, this type of information, which is practically inciting crime rather than protest, is obviously condemned by our constitutional legal system." ⁴⁴⁴⁹ This approach was widely applauded, as it appeared to result in a dramatic drop in fake news accounts. ⁴⁴⁵⁰

Environmental Impact of AI

Peru has demonstrated support for the ethical, responsible and humancentric use of AI in favor of environmentally related global goals such as clean water, affordable and clean energy, sustainable cities and communities, responsible consumption and production, climate action, life below water, and life on land⁴⁴⁵¹ through commitment to climate action in the CELAC Buenos Aires Declaration⁴⁴⁵² and through sponsorship of the UN Resolution on Safe, Secure, and

⁴⁴⁴⁹ Marina Pita, *Disinformation During the Pandemic and Latin America's Regulatory Response*, p.9, UNESCO (2021), https://unesdoc.unesco.org/ark:/48223/pf0000377721_eng ⁴⁴⁵⁰ The American Journal of Tropical Medicine and Hygiene, *The Peru Approach against the COVID-19 Infodemic: Insights and Strategies* (May 20, 2020),

https://www.ajtmh.org/view/journals/tpmd/103/2/article-p583.xml

⁴⁴⁵¹ UN Department of Economic and Social Affairs, *The 17 Goals*, https://sdgs.un.org/goals 4452 CELAC Summit, *Declaration of Buenos Aires* (Jan. 24, 2023),

https://www.cancilleria.gob.ar/userfiles/prensa/declaracion de buenos aires version final.pdf

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Trustworthy AI.⁴⁴⁵³ The UN Resolution recognizes that safe, secure and trustworthy artificial intelligence systems [...] have the potential to accelerate and enable progress towards the achievement of all 17 Sustainable Development Goals and sustainable development in its three dimensions—economic, social and environmental—in a balanced and integrated manner."⁴⁴⁵⁴

Lethal Autonomous Weapons

At the 77th UN General Assembly First Committee meeting in October 2022, Peru joined 69 other countries to endorse a joint statement on autonomous weapons systems. Peru stated that "Progress in military technology towards increasing autonomy has led us to a scenario where machines have the power and discretion to put an end to human life. This is morally unacceptable, but still uncertain in legal terms. LAWS are of great concern to humanity; they call for a legal and political response, which is urgent, from the international community. For Peru there is no other way than establishing legally binding prohibitions. Regulation through a new treaty is the most effective way of dealing with the increasing uncertainty about what is or is not acceptable for the increasingly complex systems of autonomous weapons." 4455

The joint statement addressed the need for "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations, and constraints." "We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law (IHL), including through maintaining human responsibility and accountability in the use of force,"⁴⁴⁵⁶ declared the States. Peru voted in support of the December 2023 UN General Assembly Resolution 78/241 on lethal autonomous weapons systems. Resolution 78/241 stressed the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems" and requested a report of members' views on LAWS.⁴⁴⁵⁷ Peru's submission to the

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https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm_en.pdf

⁴⁴⁵³ United Nations Press, Meetings Coverage and Press Releases, General Assembly Adopts Landmark Resolution on Steering Artificial Intelligence towards Global Good, Faster Realization of Sustainable Development (Mar. 21, 2024), https://press.un.org/en/2024/ga12588.doc.htm
4454 UNI General Assembly, 78th session 4/78/I 40 Sairing the apportunities of safe, seesure and

⁴⁴⁵⁴ UN General Assembly, 78th session—*A*/78/*L*.49 Seizing the opportunities of safe, secure and trustworthy artificial intelligence systems for sustainable development (Mar. 18, 2024) https://documents.un.org/doc/undoc/ltd/n24/065/92/pdf/n2406592.pdf

Automated Research, Peru, https://automatedresearch.org/news/state position/peru/
 United Nations (UN) General Assembly, First Committee, Joint Statement on Lethal Autonomous Weapons Systems First Committee, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

⁴⁴⁵⁷ United Nations, *UN General Assembly* (Dec. 2023), https://documents.un.org/doc/undoc/gen/n23/431/11/pdf/n2343111.pdf

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report reiterated the need for international legal instruments to regulate autonomous weapon systems. 4458

Peru endorsed the Belén Communiqué in February 2023, 4459 along with 30 other countries from Latin America and the Caribbean. The Communiqué calls for "urgent negotiation" of a binding international treaty to regulate and prohibit the use of autonomous weapons to address the grave concerns raised by removing human control from the use of force. On this occasion, Peru issued a statement affirming the country's commitment to multilateralism, disarmament, and non-proliferation, with the defense of international law—including international human rights law—as well as with the purposes and principles of the Charter of the United Nations. 4460

Peru also endorsed the summary by the Chair of the 2024 Vienna Conference Humanity at the Crossroads: Autonomous Weapons Systems and the Challenge of Regulation in April 2024. 4461 The Chair's Summary highlighted the commitment to "work with urgency and with all interested stakeholders for an international legal instrument to regulate autonomous weapons systems." The Vienna Conference hosted representatives from more than 144 states, UN international and regional organizations, academia, industry, parliamentarians, and civil society to discuss the challenges and legal, ethical, and humanitarian implications of AWS and potential avenues to address them.

Draft Statement Peru en-Costa-Rica 24Feb23 rev-1.pdf

⁴⁴⁵⁸ Gobierno de Perú, *Opinión de la República del Perú con respecto a los Sistemas de Armas Autónomos, en atención a la resolución 78/241 de la Asamblea General de las Naciones Unidas*, (May 2024), https://docs-library.unoda.org/General Assembly First Committee -Seventy-Ninth session (2024)/78-241-Peru-SP.pdf

⁴⁴⁵⁹ Communiqué of the Latin American and the Caribbean Conference of Social and Humanitarian Impact of Autonomous Weapons (Feb. 24, 2023), https://www.rree.go.cr/files/includes/files.php?id=2261&tipo=documentos

⁴⁴⁶⁰ Regional Conference on Latin America and the Caribbean States on the Social and Humanitarian Impact of Autonomous Weapons, *Peru Statement* (Feb. 24, 2023), https://conferenciaawscostarica2023.com/wp-content/uploads/2023/02/Peru-

⁴⁴⁶¹ Federal Ministry, European and International Affairs, *List of Associated States* (Oct. 11, 2024), https://www.bmeia.gv.at/en/european-foreign-policy/disarmament/conventional-arms/autonomous-weapons-systems/2024-vienna-conference-on-autonomous-weapons-systems/list-of-associated-states

⁴⁴⁶² Federal Ministry, European and International Affairs, *Humanity at the Crossroads Autonomous Weapons Systems and the Challenge of Regulation*, 2024 Vienna Conference (Apr. 30, 2024),

https://www.bmeia.gv.at/fileadmin/user_upload/Zentrale/Aussenpolitik/Abruestung/AWS_2024/Chair_s_Summary.pdf

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Human Rights

Peru has ratified 12 of the 14 UN human rights treaties, conventions, and protocols based on the Universal Declaration of Human Rights. Freedom House rated Peru as "Partly Free" with a score of 66/100 with 27/40 for political rights and 39/60 for civil liberties in 2024. Feru's score fell from 70/100 in 2023. The report notes that while Peru's democratic political institutions have facilitated multiple peaceful transfers of power, "high-profile corruption scandals have eroded public trust in government, while bitter divides within a highly fragmented political class have repeatedly produced political turmoil." Meanwhile, "Indigenous groups suffer from discrimination and inadequate political representation." 4465

In 2022, Transparency International scored Peru at 36/100 on the Corruption Perceptions Index (CPI) and ranked the country at 105 out of 180 countries scored for being able to stop corruption. The CPI is the most widely used global corruption ranking in the world. It measures how corrupt each country's public sector is perceived to be, according to experts and businesspeople.

OECD / G20 AI Principles

Peru, alongside 41 other countries, adopted the OECD Principles on Artificial Intelligence in 2019, and to the AI Principles as updated in 2024. 4467 and agreed to uphold international standards that aim to ensure AI systems are designed to be robust, safe, fair and trustworthy. According to OECD AI Principle 2.5 regarding international co-operation for trustworthy AI, "Governments, including developing countries and with stakeholders, should actively cooperate to advance these principles and to progress on responsible stewardship of trustworthy AI. Governments should work together in the OECD and other global and regional fora to foster the sharing of AI knowledge, as appropriate."4468

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⁴⁴⁶³ UN Human Rights, UN Treaty Database: Peru (Mar. 12, 2025),

 $[\]underline{\underline{\text{https://tbinternet.ohchr.org/_layouts/15/TreatyBodyExternal/Treaty.aspx?CountryID=136\&Lang}=EN$

⁴⁴⁶⁴ Freedom House, Freedom in the World 2024: Peru (2024),

https://freedomhouse.org/country/peru/freedom-world/2024

⁴⁴⁶⁵ Freedom House, Freedom in the World 2023: Peru (2023),

https://freedomhouse.org/country/peru/freedom-world/2023
4466 Transparency International, Corruption Perceptions Index,

https://www.transparency.org/en/cpi/2022/index/per

⁴⁴⁶⁷ OECD AI Policy Observatory, *OECD AI Principles Overview, Countries Adhering to the AI Principles* (2025), https://oecd.ai/en/ai-principles

⁴⁴⁶⁸ OECD AI Policy Observatory, *International Co-operation for Trustworthy AI (Principle 2.5)* (2025), https://oecd.ai/en/dashboards/ai-principles/P14

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The OECD acknowledges the work of the Inter-American Development and its "fAIr LAC" initiative to promote the responsible and ethical use of AI and improve the public services e.g., education, health, and social protection, in Latin American and Caribbean (LAC) countries."⁴⁴⁶⁹ In 2022, the OECD, in partnership with the Development Bank of Latin America (CAF) also published a report on the Strategic and Responsible Use of Artificial Intelligence in the Public Sector of Latin America and the Caribbean that assessed Peru's 2021 National AI Strategy draft.⁴⁴⁷⁰

The OECD recognized Peru's progress implementing the OECD Recommendation at a Ministerial Meeting in 2024. The Report highlighted the advance in AI capabilities with the founding of a National Centre for Innovation and AI as part of a broader initiative to foster collaboration between academia, industry, and government to promote research, development, and innovation in AI. The Report also recognized that Peru is actively linking its data policies with AI strategies, focusing on the creation of platforms and data infrastructure to centralize public sector data.

Council of Europe AI Treaty AI

Peru contributed to the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy, and the Rule of Law as a non-member state. The Committee on AI approved the Draft Framework Convention during its 10th Plenary session in March 2024. This first legally binding international treaty on AI opened for signature by members and non-members on September 5, 2024. Peru has not signed the treaty.

https://www.oecd-ilibrary.org/docserver/1cd40c44-en.pdf?expires=1679145707&id=id&accname=guest&checksum=4A7E8011553F4B626AD9EF4C04ACCDE1

⁴⁴⁶⁹ OECD, State of implementation of the OECD AI Principles, p. 76 (Jun. 2021),

⁴⁴⁷⁰ OECD, *LAC Artificial Intelligence Strategies* (Mar. 22, 2022), https://doi.org/10.1787/1f334543-en

⁴⁴⁷¹ OECD, Meeting of the Council at Ministerial Level, Report on the Implementation of the OECD Recommendation on Artificial Intelligence (2024),

https://one.oecd.org/document/C/MIN(2024)17/en/pdf

4472 Council of Europe, *The Framework Convention on Artificial Intelligence* (Mar. 12, 2025), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

⁴⁴⁷³ Council of Europe, *Draft Framework Convention on AI, human rights, democracy and the rule of law* (Mar. 2024),

https://search.coe.int/cm/pages/result_details.aspx?objectid=0900001680aee411

⁴⁴⁷⁴ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 12, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

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UNESCO Recommendation on AI Ethics

In November 2021, Peru, alongside 192 other states, adopted the Recommendation on Ethics of AI. 4475 The CAF-Development Bank of Latin America and UNESCO signed a letter of intent to work together on the implementation of the Recommendation on the Ethics of Artificial Intelligence in Latin America and the Caribbean, in part through a Regional Council composed of national and local governments.

Peru signed the 2023 Santiago Declaration to Promote Ethical Artificial Intelligence.4476 It aligns with the UNESCO Recommendation and establishes fundamental principles that should guide public policy on AI. These include proportionality, security, fairness, non-discrimination, gender accessibility, sustainability, privacy and data protection. 4477

UNESCO and Peru signed an agreement in May 2024 to implement the Readiness Assessment Methodology (RAM), which is a key tool intended to help Member States implement the UNESCO Recommendation on the Ethics of AI.4478 This was followed by the launch of an industry consultation on 10 Oct 2024, seeking inputs on the challenges, opportunities and proposals to improve the AI ecosystem in Peru, that takes reference from the UNESCO RAM methodology of assessing readiness for AI.4479

Evaluation

Peru endorsed the OECD AI Principles and the UNESCO Recommendation on the Ethics of AI. Peru has a full-fledged, modernized data protection legal regime. The regular revisions to the National AI Strategy and law on the use of AI leave citizens and other stakeholders without firm guardrails for protecting rights or developing AI innovations. The country's record on corruption and use of facial recognition make the need for a clear vision and guardrails for the development of safe, secure, and trustworthy urgent.

⁴⁴⁷⁵ UNESCO, Recommendation on the Ethics of Artificial Intelligence (Nov. 23, 2021), https://unesdoc.unesco.org/ark:/48223/pf0000381137

⁴⁴⁷⁶ Cumbre Ministerial y de Altas Autoridades de América Latina y el Caribe, *Declaracion de* Santiago "Para promover una inteligencia artificial ética en América Latina y el Caribe" (Oct. 2023), https://minciencia.gob.cl/uploads/filer_public/40/2a/402a35a0-1222-4dab-b090-5c81bbf34237/declaracion de santiago.pdf

⁴⁴⁷⁷ UNESCO, UNESCO and Leading Ministry in Santiago de Chile host Milestone Regional LAC Forum on Ethics of AI (Dec. 5, 2023), https://www.unesco.org/en/articles/unesco-andleading-ministry-santiago-de-chile-host-milestone-regional-lac-forum-ethics-ai?hub=387 ⁴⁴⁷⁸ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

⁴⁴⁷⁹ Presidency of the Council of Ministers, Enviar aportes para la implementación de la metodología RAM para la inteligencia artificial (Oct. 10, 2024), https://www.gob.pe/73222enviar-aportes-para-la-implementacion-de-la-metodologia-ram-para-la-inteligencia-artificial

Philippines

In 2024, the Philippines launched a new National AI Strategy Roadmap and a Center for AI Research and introduced two bills on AI Regulation and oversight in the House of Representatives.

National AI Strategy

The Philippines' Department of Trade and Industry (DTI) launched the country's national AI roadmap, 4480 which aims to make the Philippines a regional AI "powerhouse," accelerating "the adoption and utilization of AI in the country to advance industrial development, generate better quality entrepreneurship, and higher-paying opportunities for Filipinos" in 2021. The roadmap was developed by the Philippines Council for Industry, Energy and Emerging Technology Research and Development (DOST-PCIEERD) under the country's Department of Science and Technology. The roadmap identifies various intended applications of AI, including its use in "real estate, banking and financial services, surveillance, retail and e-commerce, education, space exploration, agribusiness, urban planning, manufacturing, healthcare, and logistics and transportation." The national AI roadmap describes the four important dimensions for AI readiness for implementation, infrastructure and investment, namely:

- 1. Digitization and Infrastructure
- 2. Research and Development
- 3. Workforce Development
- 4. Regulation. 4484

Central to the DTI's roadmap is the establishment of the National Center for AI Research (NCAIR), whose full-time scientists and research engineers will assist micro, small, and medium enterprises (MSMEs) interested in using AI technology — an element of the country's approach to inclusive AI development. The roadmap also includes plans to build a national data center (NDC).⁴⁴⁸⁵

https://www.pna.gov.ph/articles/1139198

http://projects.pcieerd.dost.gov.ph/roadmaps/AIICT.pdf

⁴⁴⁸⁰ Philippines' Department of Trade and Industry, *Artificial Intelligence Roadmap* (2021), http://innovate.dti.gov.ph/resources/roadmaps/artificial-intelligence/

 $^{^{4481}}$ Kris Crismundo, $DTI\ eyes\ PH\ as\ AI\ powerhouse\ in\ region\ (May\ 5,\ 2021),$

⁴⁴⁸² Philippines Council for Industry, Energy and Emerging Technology Research and Development, *Artificial Intelligence and Information & Communications Technology: Roadmapping Executive Report* (Aug. 2020)

⁴⁴⁸³ Kris Crismundo, *DTI eyes PH as AI powerhouse in region* (May 5, 2021), https://www.pna.gov.ph/articles/1139198

⁴⁴⁸⁵ Philippines' Department of Trade and Industry, *Artificial Intelligence Roadmap* (2021), https://pcieerd.dost.gov.ph/images/pdf/2021/roadmaps/sectoral_roadmaps_division/etdd/Artificial-Intelligence-RD-Roadmap.pdf

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In November 2021, an AI bill was filed under House Bill No. 10457 "Artificial Intelligence Development Act" ⁴⁴⁸⁶ establishing a National Strategy for the Development of Artificial Intelligence and Related Technologies, Creating for this Purpose the National Center for Artificial Intelligence Research, and for Other Purposes. The bill seeks to support and institutionalize the DTI's Artificial Intelligence roadmap to help realize the potential of Al in the Philippines.

Furthermore, in February 2020, the DOST launched the Smarter Philippines through Data Analytics, Research and Development, Training and Adoption (SPARTA) initiative to retool and upgrade the skills of an initial 30,000 workers by 2022. 4487 In a press release on November 2, 2022, the Development Academy of the Philippines shared that more than 40,000 scholarships have been awarded. In May 2024, the AI Regulation Act (HB 10385) was introduced into the Philippine House of Representatives. The Act created an AI Bureau within the Department of Information and Communication Technology (DICT) and established general principles of AI governance.

The Department of Trade and Industry (DTI) launched a National AI Strategy Roadmap 2.0 (NAISR 2.0) and a Center for AI Research in July 2024. Emphasizing the integration of recent technological advancements, including Generative AI and addressing emerging concerns such as ethics and governance, the NAISR 2.0 outlines seven strategic imperatives focused on invigorating the AI ecosystem, boosting research and development, and fostering innovation within various sectors including agriculture, urban planning, and disaster resilience. The Center for AI Research (CAIR) is set to be the nation's first AI hub, aimed at promoting socio-economic research and development (R&D) and enhancing the country's competitiveness in science and technology. Through these initiatives, the Philippines aspires to increase R&D spending to 1% of GDP, focusing on upskilling and reskilling the workforce to meet the future demands of AI-driven economies. 4490

The AI Research Center emphasize the importance of accelerating R&D to strengthen AI competitiveness and harness AI to improve sectors like agriculture, urban planning, and disaster resilience.

⁴⁴⁸⁶ House of Representatives, *HB 10457* (Nov. 9, 2021), https://ldr.senate.gov.ph/bills/house-bill-no-10457-18th-congress-republic

⁴⁴⁸⁷ Development Academy of the Philippines, *Smarter Philippines through Data Analytics R&D*, *Training and Adoption* (2022), https://sparta.dap.edu.ph/
⁴⁴⁸⁸ Ibid

⁴⁴⁸⁹ Republic of the Philippines, *House Bill 10385* (May 13, 2024), https://docs.congress.hrep.online/legisdocs/basic_19/HB10385.pdf

⁴⁴⁹⁰ Department of Trade and Industry, *DTI Launches National AI Strategy Roadmap 2.0 and Center for AI Research, Positioning the Philippines as a Center of Excellence in AI R&D* (Jul. 2, 2024), https://www.dti.gov.ph/archives/news-archives/dti-launches-national-ai-strategy-roadmap-2-0-center-ai-research-positioning-philippines-center-excellence-ai-rampd/

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The government also announced that it will launch a panel about Balancing AI Innovation and Responsible AI Adoption, convening public and private sector experts to discuss the government's AI strategy. DTI also announced the launch of the Center for AI Research (CAIR), an entity that will focus on performing AI research to leverage AI's potential to bolster the Philippine economy and improve the quality of life of Philippine citizens.⁴⁴⁹¹

The Artificial Intelligence Act (HB 10944) was introduced in the Philippine House of Representatives in September 2024. The Act created the Philippine Artificial Intelligence Board (PAIB). The purpose of the board is to exercise regulatory and supervisory authority over the development, research, application and use of AI systems.⁴⁴⁹²

Public Participation

There is some evidence of a public consultation process in the development and implementation of the country's national AI policy. The roadmap mandated the establishment of a "committee of experts in data and AI ethics who will guard against abuse/misuse of data and AI algorithms," but it is unclear whether this committee has been formed and if it will have a mechanism for public consultation. On October 28th, 2021, pursuant to the DTI's Inclusive Innovation Strategy, the DTI hosted "Artificial Intelligence: Opportunities and Challenges for Philippine Industries," a virtual session open to the public intended to "bring together participants from the government, industries, and academia not only to deliberate on matters of common interest concerning AI but more so to bring everyone into the fold as we embrace and adapt to our new economic realities."

The National Privacy Commission's website includes opportunities for the public to vocalize data-related concerns through its AskPRIVA tool and includes contact information to file complaints or to contact relevant authorities. 4495 It includes contact information to file complaints or to contact relevant authorities.

https://docs.congress.hrep.online/legisdocs/basic_19/HB10944.pdf

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⁴⁴⁹¹ Department of Trade and Industry, *DTI Launches National AI Strategy Roadmap 2.0 and Center for AI Research, Positioning the Philippines as a Center of Excellence in AI R&D* (Jul. 2, 2024), https://www.dti.gov.ph/archives/news-archives/dti-launches-national-ai-strategy-roadmap-2-0-center-ai-research-positioning-philippines-center-excellence-ai-rampd/

⁴⁴⁹² Republic of the Philippines, *House Bill 10944* (Sept. 18, 2024),

⁴⁴⁹³ Department of Trade and Industry, *Artificial Intelligence Roadmap* (2021), http://innovate.dti.gov.ph/resources/roadmaps/artificial-intelligence/

⁴⁴⁹⁴ Philippines' Department of Trade and Industry, *Artificial Intelligence: Opportunities and Challenges for Philippine Industries* (Oct. 22, 2021), https://www.dti.gov.ph/advisories/artificial-intelligence-opportunities-challenges-ph-industries/

⁴⁴⁹⁵ AskPriva, https://www.privacy.gov.ph/askpriva/

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DTI which is the primary government agency that developed the Philippines' National AI strategy is working on a white paper for a "Philippine AI Governance Framework" led by Mr. Peter A. Sy from the University of the Philippines. A live version of the white paper is open for stakeholder consultation, review, comments, and suggestions.4496 On April 2024, the Civil Service Commission (CSC) and the Department of Information and Communications Technology hosted a public consultation and released a Joint Memorandum Draft4497 to discuss guidelines to ensure responsible use of AI in the government. The event sought to "gather valuable inputs from various stakeholders, ensuring the promotion of responsible use of AI in government agencies while prioritizing transparency, fairness, and accountability.

Data Protection

The Philippines put in place the Data Privacy Act of 2012 (DPA) "to protect the fundamental human right of privacy, of communication while ensuring free flow of information to promote innovation and growth." The Act also ensures that "personal information in information and communications systems in the government and in the private sector are secured and protected."⁴⁴⁹⁸ Penalties are imposed for violations of the Data Privacy Act under Rule XIII of the DPA IRR with imprisonment and fine. ⁴⁴⁹⁹

The Act mandated the creation of the National Privacy Commission, an independent body, "To administer and implement the provisions of [the Data Privacy Act of 2012], and to monitor and ensure compliance of the country with international standards set for data protection." It was established in March 2016 and is required to make rules, provide advice and guidance, and public education, in addition to its compliance, monitoring, and enforcement duties. Its mission is to:

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⁴⁴⁹⁶ Department of Trade and Industry, *Developing an AI Governance Framework for the Philippines: A Report of Preliminary Stakeholder Consultations* and *Review of the Literature* (Sept. 4, 2022), https://innovate.dti.gov.ph/resources/roadmaps/artificial-intelligence/

⁴⁴⁹⁷ Department of Information and Communications Technology, *DICT and CSC leads JMC consultation on AI Guidelines in Government* (Apr. 29, 2024),

 $[\]underline{https://dict.gov.ph/ictstatistics/dict-csc-leads-jmc-consultation-on-ai-guidelines-in-the-\underline{government/}}$

⁴⁴⁹⁸ Republic Act 10173, Data Privacy Act of 2012, Section 1, https://www.privacy.gov.ph/data-privacy-act/#1

⁴⁴⁹⁹ National Privacy Commission, *NPC Circular No. 2022-01, Guideines on Administrative Fines* (Aug. 8, 2022), https://privacy.gov.ph/wp-content/uploads/2022/08/NPC-CIRCULAR-NO.-2022-01-GUIDELINES-ON-ADMINISTRATIVE-FINES-dated-08-AUGUST-2022-w-SGD.pdf

⁴⁵⁰⁰ Republic Act 10173, Data Privacy Act of 2012, Section 7, https://www.privacy.gov.ph/data-privacy-act/#7

⁴⁵⁰¹ Ibid, Section 1

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- 1. Be the authority on data privacy and protection, providing knowledge, know-how, and relevant technology.
- 2. Establish a regulatory environment that ensures accountability in the processing of personal data and promotes global standards for data privacy and protection.
- 3. Build a culture of privacy, through people empowerment, that enables and upholds the right to privacy and supports the free flow of information.

The Commission appears to be active. According to the Commission, by 2018, it had "a total of 23,081 registered Data Protection Officers (DPOs). The number of privacy-related cases the agency received so far, [in 2018] has also increased by 145% from 2017. Of the 542 cases in 2018, 35.52% involved unauthorized processing while 36.44% were on data breaches." 4502

The National Privacy Commission, the Philippines' independent data protection enforcement agency, is a co-sponsor to the Global Privacy Assembly (GPA)'s 2018 Resolution on AI and Ethics, its 2020 GPA Resolution on AI and Accountability and its 2022 GPA Resolution on Facial Recognition. However, the National Privacy Commission did not endorse the 2023 GPA Resolution on Generative AI. 4503

A proposal to amend the Data Privacy Act under House Bill No. 5612⁴⁵⁰⁴ was issued in November 2019. Its intention was to redefine the categories of "sensitive personal information" to include biometric and genetic data, and political affiliation, considering the innate sensitivity of these classes of personal data. Generally, the DPA amendment proposal seeks to improve the Data Privacy Act's implementation and alignment with international standards for data privacy and security. It also aims to address current data privacy challenges as concerns about privacy and other aspects of cross-border data processing are impediments to the country's digital transformation strategy and the creation of a knowledge-based economy.

Meanwhile, the NPC also issued in August 2022 the Advisory on the Adoption of International Data Protection Standard⁴⁵⁰⁵ based on ISO/IEC standards recommending its adoption for information and communication technology (ICT) systems or services where privacy controls are required for

⁴⁵⁰³ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁴⁵⁰² National Privacy Commission, *NPC Eyes fully digital PH by 2040* (Sept. 19, 2018), https://privacy.gov.ph/npc-eyes-fully-digital-ph-by-2040/

⁴⁵⁰⁴ House of Representatives, *House Bill No. 5612* (Nov. 25, 2019), https://issuances-library.senate.gov.ph/bills/house-bill-no-5612-18th-congress-republic

⁴⁵⁰⁵ National Privacy Commission, *Advisory on the Adoption of International Data Protection Standard No. 2021-001 ISO/IEC 29100* (Jul. 19, 2021), https://privacy.gov.ph/wp-content/uploads/2021/07/ISO-IEC Standard Adoption ISOIEC29100 pcrel.pdf

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personal data processing. This framework is a representation of international privacy principles which include:

- Consent and choice
- Purpose legitimacy and specification
- Collection limitation
- Data minimization
- Use, retention, and disclosure
- Accuracy and quality
- Openness, transparency, and notice
- Individual participation and access
- Accountability
- Information security
- Privacy compliance.

The National Privacy Commission issued NPC Circular No. 2022-04⁴⁵⁰⁶ as of December 2022 updating the requirement on registration of "Automated Decision-Making Systems." The Circular establishes the framework for the registration of data processing systems in the Philippines and imposes other requirements to achieve the following objectives:

- Ensure that personal information controllers (PICs) and personal information processors (PIPs) keep a record of their data processing activities
- Make information about data processing systems operating in the country accessible to both the Commission, for compliance monitoring, and data subjects, to facilitate the exercise of their rights under the DPA; and
- Promote transparency and public accountability in the processing of personal data.

In November 2023, the National Privacy Commission released a Guideline on Deceptive Design Patterns⁴⁵⁰⁷, which provides personal information controllers about deceptive design patterns and their impact on lawful personal data processing in relation with the data subject's consent, and general privacy principles. In August 2024, the National Privacy Commission issued Guidelines on sensitive personal data processing.⁴⁵⁰⁸

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⁴⁵⁰⁶ National Privacy Commission, NPC Circular 2022-04: Registration of Data Processing Systems and Notifications Regarding Automated Decision-Making (Dec. 5, 2022), https://privacy.gov.ph/wp-content/uploads/2023/05/Circular-2022-04-1.pdf

⁴⁵⁰⁷ National Privacy Commission, *Guidelines on Deceptive Design Patterns* (Nov. 7, 2023), https://privacy.gov.ph/wp-content/uploads/2023/11/NPC-Advisory-No.-2023-01-Guidelines-on-Deceptive-Design-Patterns 7Nov23.pdf

⁴⁵⁰⁸ National Privacy Commission, *Guidelines on Personal Data Processing Based on Section 13* (F) of the Data Privacy Act of 2012 (Aug. 12, 2024), https://privacy.gov.ph/wp-content/uploads/2024/08/NPC-Advisory-No.-2024-02-Personal-Data-Processing-Based-on-Section-13-f.pdf

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Algorithmic Transparency

The Philippines' national AI policies do not explicitly promulgate any commitments to transparency, but its Data Privacy Act mandates "adherence to the principles of transparency, legitimate purpose, and proportionality." ⁴⁵⁰⁹ It also includes provisions related to transparent automated processing. Notably, Section 16 furnishes citizens have the right to be informed whether their personal information pertaining to their identity is being or has been processed, with the right to information regarding the "Methods utilized for automated access, if the same is allowed by the data subject, and the extent to which such access is authorized," and the right "to access, correction, as well as the right to complain to the Commission." ⁴⁵¹⁰ These are all elements of transparency, which the National Privacy Commission has formally endorsed through its co-sponsorship of the 2020 and 2018 Global Privacy Assembly resolutions ⁴⁵¹¹ noted above.

Additionally, in November 2023, the Philippine Digital Workforce Competitiveness Act (or Implementing Rules and Regulations of Republic Act n. 11927)⁴⁵¹² was launched, which talks about algorithmic transparency in section 10, and in section 11 about the right to refuse AI-driven evaluations and requests for an alternative method.

Biometric Identification

The government is in the process of registering 105 million citizens, including infants, in its biometric national ID system, PhilSys, which is to include facial, iris, and thumbprint biometrics. ⁴⁵¹³ Law enforcement in the Philippines has also implemented and encouraged the use of real-time facial recognition software to identify "persons with Warrants of Arrest, High-Value Targets, and members of communist terror groups evading law enforcers." ⁴⁵¹⁴ According to Crizaldo Nieves, the regional director of the Cagayan Valley Police, all police will eventually have smartphones that enable real-time tracking, and "appropriate

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⁴⁵⁰⁹ Republic Act 10173, Data Privacy Act of 2012, Section 11, https://www.privacy.gov.ph/data-privacy-act/#7

⁴⁵¹⁰ Ibid, Section 16

⁴⁵¹¹ Global Privacy Assembly, *Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence* (October 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN.pdf

⁴⁵¹² Inter-Agency Council, *Implementing Rules and Regulations of Republic Act n. 11927* (Nov, 15, 2023), https://neda.gov.ph/wp-content/uploads/2023/11/RA-11927-IRR-SIGNEDv2-1.pdf
⁴⁵¹³ Congress of the Philippines, *Republic Act No. 11055*, Section 5(c), (Jul. 24, 2017), https://philsys.gov.ph/legal-bases/

⁴⁵¹⁴ Artemio Dumlao, *Cagayan Valley cops roll out facial recognition system vs crime* (Oct. 21, 2020), https://www.philstar.com/nation/2020/10/21/2051265/cagayan-valley-cops-roll-out-facial-recognition-system-vs-crime

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awards [will be given] to the first 10 police stations that will affect an arrest through this technology."⁴⁵¹⁵

As of August 2024, PhilSys has launched new services allowing registered individuals to update their demographic information in accordance with Section 11 of the Philippine Identification System Act (Republic Act No. 11055). This includes updates and corrections to nationality, age, status, and other details, facilitated by the Philippine Statistics Authority (PSA). Individuals must personally appear at a PSA registration center for updates, bringing their PhilID or an affidavit of loss if necessary. Additionally, a Digital National ID service has been launched to enhance service delivery and transaction ease, available through the eGov PH application or PhilSys website. The new system allows individuals to download their Digital National ID, authenticate through facial recognition, and use a QR code for verification. This digital advancement aims to improve efficiency, security, and transparency in transactions, aligned with the country's broader digitalization efforts. 4516

Environmental Impact of AI

In response to the growing environmental concerns associated with AI and digital technologies, the Philippines is actively pursuing a "twin transition" that encompasses both digital transformation and environmental sustainability. Recognizing these intertwined challenges, the Philippine government prioritizes sustainable consumption and production patterns to ensure that technological advancement does not come at the expense of environmental health, according to policies reflected in the Philippine Development Plan 2023-2028 and the National Innovation Agenda and Strategy Document. In addition, the University of the Philippines, a public university, has published its own Principles for Responsible and Trustworthy Artificial Intelligence, which incorporate references to environmental sustainability in AI in its principles as follows: 'Environment Friendly. AI should be evaluated in terms of its impacts on sustainability. AI models and tools must minimize risks to the environment. Developers should use computing resources more efficiently.⁴⁵¹⁷

In addition, there have been growing concerns around the significant energy usage by AI data centers. The Philippines faces an increasing demand for energy-intensive data processing infrastructure, which further accentuates the

⁴⁵¹⁵ Ibid

⁴⁵¹⁶ Philippine Statistics Authority, *PhilSys Launches New Services: Updating Demographic Information and Digital National ID Now Available* (Aug. 14, 2024),

https://rssocar.psa.gov.ph/content/philsys-launches-new-services-updating-demographic-information-and-digital-national-id-now

⁴⁵¹⁷ Philippine Institute for Development Studies (PIDS), *Green and Digital: Managing the Twin Transition toward Sustainable Development* (Sept. 19, 2023), https://pids.gov.ph/details/news/inthe-news/green-and-digital

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need for sustainable practices within the AI sector. The substantial growth in data center operations, driven by AI developments, emphasizes the urgency of adopting energy-efficient technologies and leveraging renewable energy sources to mitigate potential environmental impacts. As a consequence, the Department of Energy (DoE) said it has asked hyperscale data center developers to submit their plans to draw power from renewable sources in order to properly gauge the industry's demand, noting that all (government entities) are subject to energy audit within the current year and every three (3) years thereafter," according to the DoE's Administrative Order No. 15. As a consequence, the DoE's Administrative Order No. 15. As a consequence, the DoE's Administrative Order No. 15. As a consequence, the DoE's Administrative Order No. 15. As a consequence, the DoE's Administrative Order No. 15. As a consequence, the DoE's Administrative Order No. 15. As a consequence, the DoE's Administrative Order No. 15. As a consequence, the DoE's Administrative Order No. 15. As a consequence, the DoE's Administrative Order No. 15. As a consequence, the DoE's Administrative Order No. 15. As a consequence of the United No. 15. As a

Lethal Autonomous Weapons

Last July 2022, the Philippines along with 10 other countries submitted a draft treaty⁴⁵²⁰ that would ban autonomous weapon systems incapable of being controlled by humans to the UN Group of Government Experts (GGE) under the framework of the UN Convention on Conventional Weapons (CCW). Together with countries like Argentina, Costa Rica, Ecuador, El Salvador, Kazakhstan, Nigeria, Panama, Sierra Leone, and Uruguay, the Philippines collaborated in drafting and submitting the draft treaty to the Group of Government Experts (GGE) tasked with discussing proposals to address the issue of autonomous weapon systems under the framework of the UN Convention on Conventional Weapons (CCW). The proposed ban also includes autonomous weapon systems that violate international humanitarian law. It requires countries to regulate other autonomous weapon systems to ensure "meaningful human control is retained" throughout their entire life cycle.

The Philippines agrees that there is a need to firm up negotiations towards a robust and future-proof legally binding instrument to address the threats of autonomous weapons systems. "House Bill 10944, filed on September 18, 2024, the draft Artificial Intelligence Act, incorporates a definition of Lethal Autonomous Weapons as "Autonomous Weapons Systems (LAWS) refer to weapons that use artificial intelligence to identify, select, and kill human targets without human intervention," making this the first official proposed definition under PH laws. The same bill likewise included an outright prohibition on LAWS, stating that "It shall be unlawful for any person to use any Al system that shall cause unnecessary, unjustifiable and indiscriminate moral or pecuniary damage to

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⁴⁵¹⁸ BusinessWorld, *Energy Department Seeking to Gauge Major Data Centers' Renewable Energy Needs* (Feb. 25, 2024),

 $[\]underline{https://www.bworldonline.com/economy/2024/02/25/577716/energy-dept-seeking-to-gauge-major-data-centers-re-needs/}$

⁴⁵¹⁹ Department of Energy, Philippines, Implementing Guidelines of AO No. 15, s. (2024), https://doe.gov.ph/sites/default/files/pdf/issuances/AO15%20IG.pdf

⁴⁵²⁰ Philippines News Agency, *PH, 10 others propose draft treaty on autonomous weapon systems.* (Jul. 27, 2022), https://www.pna.gov.ph/articles/1179967

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individuals. The use of lethal autonomous weapon systems (LAWS), creation and proliferation of 'deep fake' videos, as well as any misuse of AI systems, are hereby prohibited."4521

Likewise, the Manila Meeting on Indo-Pacific Perspectives on Autonomous Weapons Systems in the country on 13–14 December 2023, and the Philippines' its input to the United Nations Secretary General Report on Resolution 78/241 (Lethal autonomous weapons systems) included a statement that 4522 the Philippines believes that there is a need to firm up negotiations towards a robust and future-proof legally binding instrument to address the threats of autonomous weapons systems."

Human Rights

The Philippines has adopted the Universal Declaration of Human Rights, having taken part in its formulation in 2008. 4523 However, its human rights implementation record is highly contested. The country is ranked "Partly Free" on the Freedom House Freedom in the World report, earning a middling score of 58/100.⁴⁵²⁴ The report explains that the "rule of law and application of justice is haphazard and heavily favor political and economic elites" in the country. 4525

Moreover, a 2020 Amnesty International report found instances of harassment, detention, unjust charges, and extrajudicial executions of human rights defenders and political activists, as well as other human rights violations, and "severe" curtailing of media freedom. 4526

Additionally, Republic Act (RA) 11934, or the SIM Registration Act was signed into law by President Ferdinand Marcos Jr. October 10, 2022. Users were required to register all mobile subscriber identity module (SIM) cards with respective public telecommunications entities within 180 days from December

https://freedomhouse.org/country/philippines/freedom-world/2025

⁴⁵²¹ Republic of the Philippines, *HB 10944*, *Artificial Intelligence Act*, House of Representatives (Sept. 18, 2024), https://docs.congress.hrep.online/legisdocs/basic 19/HB10944.pdf

⁴⁵²² Republic of the Philippines, *Philippines Input 78/241*, Statement on Disarmament and International Security Issues, United Nations General Assembly First Committee, Seventy-Ninth Session (2024), https://docs-library.unoda.org/General Assembly First Committee -Seventy-Ninth session (2024)/78-241-Philippines-EN.pdf

⁴⁵²³ Secretary of Foreign Affairs Alberto G. Romulo, Behind a Common Cause: Advancing with Resolve, Finding Strength in Synergy (Mar. 2008),

https://www.ohchr.org/sites/default/files/Documents/HRBodies/HRCouncil/RegularSession/Sess ion7/HLS/Philippines-E.pdf

⁴⁵²⁴ Freedom House, Freedom in the World 2025: Philippines (2025),

⁴⁵²⁵ Ibid

⁴⁵²⁶ Amnesty International, *Philippines* (2023), https://www.amnesty.org/en/location/asia-andthe-pacific/south-east-asia-and-the-pacific/philippines/

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2022. Privacy advocates raised concerns about the potential for abuse of the massive data collection mandated by the new regulation.⁴⁵²⁷

Al Safety Summit

In November 2023, the Philippines participated in the first AI Safety Summit and endorsed the Bletchley Declaration. The Philippines thus committed to participate in international cooperation efforts on AI to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential. Endorsing parties affirmed that AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible for the good of all. The next AI Safety Summit took place in France in 2025. The Philippines took part in sideline meetings at the Paris AI Action Summit that took place on February 10–11, following the UK AI Safety Summit in 2023 and the AI Seoul Summit in May 2024. The AI Action Summit 2025 was the most anticipated international event of the year on artificial intelligence moving away from an exclusive focus on safety to one on "action."

OECD / G20 Principles

The Philippines is not a member of the OECD or the G20, and its roadmap makes little direct mention of the OECD or G20 AI principles. However, the Philippines is a member state of the Association of Southeast Asian Nations (ASEAN), an organization that participates in the OECD Southeast Asian Regional Programme and has adopted the OECD AI Principles that AI should be innovative and trustworthy and respect human rights and democratic values. 4530 Despite having no explicit endorsement of these international principles, comments from leaders and provisions from the roadmap embody a commitment to OECD principles for human rights, inclusive growth, and

⁴⁵²⁷ Congress of the Philippines, *RA 11934* (Jul. 25, 2022),

https://www.officialgazette.gov.ph/downloads/2022/10oct/20221010-RA-11934-FRM.pdf

4528 UK Department for Science, Innovation & Technology, Foreign, Commonwealth &
Development Office, Prime Minister's Office, *The Bletchley Declaration by Countries Attending the AI Safety Summit* (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration/the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

⁴⁵²⁹ Department of Science and Technology, *DOST's Solidum Highlights PH Pivot to Advance AI at UNESCO* (Feb. 28, 2025), https://www.dost.gov.ph/knowledge-resources/news/86-2025-news/3927-dost-s-solidum-highlights-ph-pivot-to-advance-ai-at-unesco.html

⁴⁵³⁰ Department of Information And Communications Technology, *Draft Memorandum on the principles and Guidelines for the Ethical and Trustworthy Use of Ai In the Government* (Apr.18, 2024), https://dict.gov.ph/ictstatistics/wp-content/uploads/2024/05/DRAFT-COPY_JMC-on-the-Principles-for-an-Ethical-and-Trustworthy-Use-of-Artificial-Intelligence-AI-in-Government.pdf

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transparency. In a keynote speech, DTI Secretary Ramon Lopez remarked how regulation "will protect human rights and put into place equitable AI-activating opportunities into place."4531

In the same speech, Lopez noted that the roadmap itself is the "manifestation" 4532 of the Philippine Innovation Act, which articulates and mandates commitments to "innovation efforts to help the poor and the marginalized, enable micro, small and medium enterprises (MSMEs) to be a part of the domestic and global supply chain, and catalyze the growth of Philippine industries and local economies."4533 To this end, the roadmap itself includes plans to:4534

- Build a national data center (NDC) with reliable and robust data infrastructure and data management system
- Encourage government agencies, research institutions, top universities, and big state universities to main their own data centers linked to the NDC
- Make internet accessible and affordable and improve its quality
- Promote data literacy for all
- Identify jobs that are vulnerable to automation and other Industry 4.0 technologies and map the skills that need upgrading or retooling.

A Protection of Labor against Artificial Intelligence (AI) Automation Act (HB9448) was introduced in the Philippine House of Representatives in November 2023. With the aim to protect jobs and ensure fair treatment of workers, it focused on regulating AI use in company processes, covering hiring decisions and employee evaluations. 4535 Supreme Court Senior Associate Justice Marvic M.V.F. Leonen emphasized in August 2024 that the path moving forward is for the Philippine legal system to keep up with emerging technology while working to protect people's rights.⁴⁵³⁶

https://www.dti.gov.ph/archives/national-artificial-intelligence-roadmap-launch/

https://docs.congress.hrep.online/legisdocs/basic 19/HB09448.pdf

⁴⁵³¹ Department of Trade and Industry, Keynote Speech of Secretary Ramon M. Lopez, National Artificial Intelligence Roadmap Launch, (May 5, 2021),

⁴⁵³² Ibid

⁴⁵³³ National Economic and Development Authority, *Joint NEDA-DOST-DTI Administrative* Order, 01 Series of 2020 (Feb. 19, 2020), https://neda.gov.ph/the-philippine-innovation-act/ ⁴⁵³⁴ Department of Trade and Industry, Artificial Intelligence Roadmap (2021),

https://pcieerd.dost.gov.ph/images/pdf/2021/roadmaps/sectoral roadmaps division/etdd/Artificia 1-Intelligence-RD-Roadmap.pdf

⁴⁵³⁵ Republic of the Philippines, *HB 9448* (Nov. 7, 2023),

⁴⁵³⁶ Supreme Court of the Philippines, SAJ Leonen: Despite Risks, Legal System Should Keep Abreast With AI Developments (Aug. 6, 2024), https://sc.judiciary.gov.ph/saj-leonen-despiterisks-legal-system-should-keep-abreast_with-ai-developments/

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Council of Europe AI Treaty

The Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law was opened for signature by member and non-member States on September 5, 2024. The Philippines did not participate in its elaboration and has so far not endorsed this first legally binding international AI treaty. 4537

UNESCO Recommendation on AI Ethics

As a member of UNESCO, the Philippines along with all other member states adopted the Recommendation on the Ethics of Artificial Intelligence in November 2021, the first global standard on the ethics of artificial intelligence. 4538

In November 2023, UNESCO in the Philippines initiated the consultative process to assist the Philippines with the assessment of preparedness to utilize AI, using the internationally agreed AI Readiness Assessment Methodology, developed by the United Nations Educational, Scientific and Cultural Organization (UNESCO) as part of its implementation of the 2021 Recommendation on the Ethics of AI.

In February 2025, at the sidelines of the Artificial Intelligence (AI) Action Summit co-hosted by France and India, UNESCO organized a ministerial session on AI Governance entitled Preparing AI for the World, Preparing the World for AI, which sought to build on the momentum established by UNESCO's first and second Global Forum on the Ethics of AI held in Czech Republic in 2022 and in Slovenia in 2024, as well as the series of Global Dialogues on AI Governance in 2024. The session also set the stage for the third Global Forum on the Ethics of AI, scheduled to take place in Thailand this year. 4539

Evaluation

The Philippines continues to make strides in national AI policy, after having endorsed the UNESCO Recommendation on the Ethics of AI, 4540 Currently the country is implementing the Readiness Assessment Methodology (RAM) of UNESCO.4541 AI is in use across several initiatives in the country, including law

⁴⁵³⁷ Council of Europe, *Chart of signatures and ratifications of Treaty 225* (Nov. 5, 2024), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225 ⁴⁵³⁸ UNESCO, UNESCO Adopts First Global Standard on the Ethics of Artificial Intelligence (Apr. 8, 2022), https://www.unesco.org/en/articles/unesco-adopts-first-global-standard-ethicsartificial-intelligence

⁴⁵³⁹ Department of Foreign Affairs, *Philippines Participates in UNESCO Discussion on AI* Readiness (Feb. 25, 2025), https://dfa.gov.ph/dfa-news/news-from-our-foreign-servicepostsupdate/36166-philippines-participates-in-unesco-discussions-on-ai-readiness ⁴⁵⁴⁰ Philippine News Agency, 193 countries adopt 1st global agreement on Ethics of AI (Nov. 26, 2021), https://www.pna.gov.ph/articles/1161070

⁴⁵⁴¹ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

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enforcement,⁴⁵⁴² healthcare,⁴⁵⁴³ autonomous vehicles, infrastructure, and data processing.⁴⁵⁴⁴ The diligent work of the Philippines National Privacy Commission on both domestic issues and at the Global Privacy Assembly contributes to the country's overall favorable score.

Poland

In 2024, Poland released draft acts on AI systems and on data management. The country also carried out public consultations on implementing the EU AI Act and a digitization strategy to align with the EU digitization goals.

National AI Strategy

In September 2020, the Polish Council of Ministers Committee for Digital Affairs⁴⁵⁴⁵ adopted the Policy for the Development of Artificial Intelligence in Poland.⁴⁵⁴⁶ The Policy was then adopted by the Council of Ministers in December 2020.⁴⁵⁴⁷

The Policy is designed to support and complement the work of the EU and the OECD in AI. Strategic documents the Policy considers include: the EU Communication's Coordinated Plan on Artificial Intelligence;⁴⁵⁴⁸ the High-Level Expert Group on AI's Ethics Guidelines for Trustworthy Artificial

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⁴⁵⁴² Artemio Dumlao, *Cagayan Valley cops roll out facial recognition system vs crime* (Oct. 21, 2020), https://www.philstar.com/nation/2020/10/21/2051265/cagayan-valley-cops-roll-out-facial-recognition-system-vs-crime

⁴⁵⁴³ DOST-Science for Change Program, *Launching of DOST AI Programs and Technologies: AI for a Better Normal* (Jun. 23, 2021),

https://www.facebook.com/dost.s4cp/videos/3690780667689337/; Newsbytes, *DOST rolls out technologies for AI National Roadmap* (Jun. 24, 2021), https://newsbytes.ph/2021/06/24/dost-rolls-out-technologies-for-ai-national-roadmap/

⁴⁵⁴⁴ Philippine Council for Industry, Energy, and Emerging Technology Research and Development, *DOST-PCIEERD LAUNCH 9 NEW AI R&D PROJECTS*, (Apr. 8, 2021), https://pcieerd.dost.gov.ph/news/latest-news/422-dost-pcieerd-launch-9-new-ai-r-d-projects

⁴⁵⁴⁵ Komitet Rady Ministrów do Spraw Cyfryzacjisss (KRMC). The KRMC is an auxiliary body of the Council of Ministers and the Prime Minister. The Council of Ministers serves as Poland's Cabinet with the Prime Minister acting as the President of the Council of Ministers. https://www.gov.pl/web/digitalization/council-of-ministers-committee-for-digital-affairs

⁴⁵⁴⁶ Service of the Republic of Poland, *Policy for the Development of Artificial Intelligence in Poland* (Dec. 28, 2020) https://www.gov.pl/attachment/928200fa-b1a6-4c0c-b3a8-d1fbf1e1175a
⁴⁵⁴⁷ Ibid

⁴⁵⁴⁸ European Commission, *Coordinated Plan on Artificial Intelligence* (Dec. 7, 2018), https://digital-strategy.ec.europa.eu/en/policies/plan-ai

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Intelligence;⁴⁵⁴⁹ the High-Level Expert Group on AI's Policy and Investment Recommendations for Trustworthy Artificial Intelligence;⁴⁵⁵⁰ and the OECD Council Recommendation on Artificial Intelligence.⁴⁵⁵¹

The Policy establishes goals and actions for Poland in the field of AI in the short-term (until 2023), medium-term (until 2027), and long-term (after 2027). 4552 Six key thematic areas are identified: AI and society; AI and innovative companies; AI and science; AI and education; AI and international cooperation; and AI and the public sector.

The Polish strategy is providing strategic guidance and identifies some key policy initiatives to develop a holistic AI ecosystem. The main objectives are: Reforming the educational system and providing lifelong learning opportunities in AI-related fields; Encouraging growth and innovation of AI companies through dedicated support in AI research, including the provision of sufficient financial resources; Increasing national and international partnerships in AI; Creating a data ecosystem with trustworthy and high-quality data and increased data exchange mechanisms.

The Polish Council of Ministers Committee for Digital Affairs oversees steering the implementation of the strategy and evaluating its implementation on a yearly basis.

The Polish strategy was drafted based on the 2018 Assumptions to AI Strategy in Poland⁴⁵⁵³ released by the Minister for Digital Affairs. The Assumptions states that Poland's approach to ethical and legal issues with AI should: be proactive in creating ethical standards and legislation; be inclusive and cooperative; consider the specific circumstances in Poland; be flexible; instate consistent supportive measures; engage in discussion and consultation; and be firm in response to violations of ethical and legal standards.

The primary goals to be achieved listed in the Assumptions include developing transparent and effective mechanisms ensuring the protection of fundamental rights, gaining understanding of the social effects of AI, setting ethical standards, and creating high-quality legislation. The Assumptions identify

⁴⁵⁵⁰ European Commission, *Policy and Investment recommendations for trustworthy Artificial Intelligence* (Jun. 26, 2019), https://digital-strategy.ec.europa.eu/en/library/policy-and-investment-recommendations-trustworthy-artificial-intelligence

⁴⁵⁵¹ OECD Legal Instruments, *Recommendation of the Council on Artificial Intelligence* (May 21, 2019), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449

⁴⁵⁵² Council of Ministers, Policy for the Development of Artificial Intelligence in Poland (Dec. 2020), https://www.gov.pl/attachment/928200fa-b1a6-4c0c-b3a8-d1fbf1e1175a

⁴⁵⁵³ Ministry for Digital Affairs, *Assumptions for the AI Strategy in Poland* (Nov. 9, 2018), https://www.gov.pl/attachment/1a3fba75-c9f9-4aff-96d8-aa65ce612eab

⁴⁵⁴⁹ European Commission, *Ethics Guidelines for Trustworthy AI* (Apr. 8, 2019), https://www.europarl.europa.eu/cmsdata/196378/AI%20HLEG_Policy%20and%20Investment% 20Recommendations.pdf

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key fundamental rights and values for the development of a legal and ethical approach to AI in Poland: dignity; freedom (described as including freedom to understand processes with which individuals interact and the making of free and independent decisions); privacy and data protection; equality; and justice. The Assumptions call for the development of an ethical impact assessment mechanism.

Where AI projects are supported by public funds, ethical impact assessments should take place at various stages of a project's implementation, not just at the application stage. The Assumptions also propose the establishment of an entity designed to, amongst other things: monitor the social impact of AI; recommend regulatory actions; participate in the development of regulations and ethical standards; and perform ethical impact assessments on publicly funded projects. It is envisioned that such an entity would include representatives from science, government, business, and NGOs.

To that end, in January 2022, an inter ministerial task force was established for the implementation of the AI Policy. The tasks of the Team included: giving opinions on implementation plans submitted by each minister, conducting ongoing monitoring and evaluation of the implementation work of the AI Policy and Preparing proposals for recommendations for the Council of Ministers Committee for Digital Affairs. ⁴⁵⁵⁴ In February 2024, the Council of Ministers Committee for Digital Affairs set an advisory council for AI development with representatives from different stakeholders, to organize regular consultations with social partners and experts on AI issues, and to report on the progress and outcomes of the strategy. ⁴⁵⁵⁵

Article 30 of the Polish Constitution—which protects the inherent and inalienable dignity of the person—forms the basis of the Policy approach. While Poland recognizes the importance of the Charter of Fundamental Rights and international human rights treaties in providing a foundation for ethical principles, the Policy suggests that Article 30 of the Polish Constitution provides broader protection.

In response to the EU Commission's White Paper on Artificial Intelligence, Poland professed to sharing the Commission's view on the need to define a clear European regulatory framework that would contribute to building confidence in the AI among consumers and businesses, thereby accelerating the spread of this technology, while ensuring socially, environmentally, and

⁴⁵⁵⁴ Service of the Republic of Poland, *Establishment of a Task Force for the Implementation of the AI Policy* (Apr. 19 2022), https://www.gov.pl/web/ai/powolanie-zespolu-zadaniowego-do-spraw-realizacji-polityki-ai

⁴⁵⁵⁵ Council of Ministers Committee for Digital Affairs, *Decision No. 1/2024 of the Head of the Task Force for Breakthrough Technologies on the establishment of the Working Group "PL/AI Artificial Intelligence for Poland"* (Feb. 9, 2024), https://www.gov.pl/web/krmc/decyzja-nr-12024-kierownika-zespolu-zadaniowego-do-spraw-technologii-przelomowych-ws-utworzenia-grupy-roboczej-plai-sztuczna-inteligencja-dla-polski

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economically optimal results and compliance with EU's laws, principles, and values. However, Poland suggests limiting regulatory action "to the areas of intervention that are only necessary and that promote legal certainty and relations, ensure coordination within the EU, and limit any negative social impact."4556 Poland states that regulation "should be sufficiently effective to achieve their objectives, but should not be overly prescriptive, as this could lead to disproportionate burdens, especially for SMEs and MSMEs." Poland endorsed incentives for voluntary ex ante control rather than mandatory control. In particular, Poland cautioned against the imposition of mandatory certification regimes.

The Polish government introduced a draft law to integrate the European Union's Artificial Intelligence Act (Regulation 2024/1689) into national legislation in October 2024. The draft act aims to implement the EU AI Act by establishing a monitoring committee and a social council for diverse input, promoting safe AI use, ensuring transparency, and providing best practice recommendations for ethical implementation.⁴⁵⁵⁷

The Prime Minister and the Minister of Digital Affairs also presented the first draft of Poland's Digitization Strategy until 2035. 4558 The document outlines a comprehensive, cross-sector approach aimed at enhancing citizens' quality of life through digital advancements by 2035. Aligned with the European Union's digital goals, the strategy focuses on boosting computerization across state, citizen, and business sectors. The Digitization Strategy emphasizes the need to raise digital standards, foster international cooperation among government, academia, society, and businesses, as well as the importance of ensuring that digital progress protects the environment and workers' rights. Key areas include cybersecurity, responsible AI use, and child safety online. The strategy aligns with related national documents, including Poland's Cybersecurity Strategy, National Broadband Plan, and Digital Competence Development Program. 4559

In relation to the key area of cybersecurity, the Polish government introduced a draft act to amend the act on the national cybersecurity systems. The amendments strengthen protection against AI-powered cyber threats and address emerging risks to enhance resilience in both the public and private sectors. The amendments have significant implications for AI in cybersecurity by mandating

⁴⁵⁵⁶ Government of Poland, Poland's Position in the Consultations on the White Paper on Artificial Intelligence—A European Approach to Excellence and Trust (Jun. 12, 2020), https://www.gov.pl/attachment/583eb32c-7344-4317-b607-fee0532c3eeb

⁴⁵⁵⁷ Service of Republic of Poland, Draft Act on Artificial Intelligence Systems (Oct. 16, 2024), https://www.gov.pl/web/premier/projekt-ustawy-o-systemach-sztucznej-inteligencji

⁴⁵⁵⁸ Service of Republic of Poland, *Digitization Strategy of Poland until 2035* (Oct. 28, 2024), https://www.gov.pl/web/cyfryzacja/strategia-cyfryzacji-polski-do-2035-roku 4559 Ibid

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risk management protocols and reporting for critical entities, which will enhance AI-based threat detection and response capabilities across various sectors. Additionally, the increased supervisory powers enable more effective AI-driven monitoring, analysis, and intervention strategies, fostering a resilient cybersecurity environment that can rapidly address emerging threats in public and private sectors. 4560

Public Participation

Documents relating to Poland's development of its AI policy are accessible on the internet through the public archive's website of the Government Legislation Centre. 4561 The process that led to the drafting of the Assumptions to AI Strategy in Poland involved the participation of a broad range of stakeholders, from science, business, social organizations and public administration. 4562 The subsequent draft Policy document was released for public consultation in August 2019 until September 2019. 4563 According to the government website, 46 entities took part in the consultation. Furthermore, in 2024 the Polish Ministry of Digital Affairs launched two relevant public participation opportunities for the development of the country's AI regulatory framework. The first one concerned the creation of a uniform regulatory framework for the implementation of the EU AI Act. All parties were invited to submit comments, questions, and recommendations with particular focus on the provisions of Article 5. The second public participation opportunity was focused on the 2035 Digitization Strategy and offered the possibility to submit any comments and feedback on the first comprehensive draft. In both cases, public inputs could be submitted via email. 4564

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⁴⁵⁶⁰ Service of Republic of Poland, *Draft Act Amending the Act on the National Cybersecurity System and Some Other Acts* (Apr. 24, 2024), https://www.gov.pl/web/premier/projekt-ustawy-o-zmianie-ustawy-o-krajowym-systemie-cyberbezpieczenstwa-oraz-niektorych-innych-ustaw3

⁴⁵⁶¹ Government Legislation Centre, *Government Legislative Process*, (Nov. 8, 2024)

https://legislacja.rcl.gov.pl/lista?pSize=0&applicantId=38#list

⁴⁵⁶² Ministry of Digital Affairs, Artificial Intelligence - Poland 2018 (Nov. 9, 2018),

https://www.gov.pl/web/cyfryzacja/sztuczna-inteligencja-polska-2118

⁴⁵⁶³ Ministry of Digital Affairs, Public Consultations on the Project "Policy for the Development of Artificial Intelligence in Poland for 2019–2027" (Aug. 21, 2019),

https://www.gov.pl/web/cyfryzacja/konsultacje-spoleczne-projektu-polityki-rozwoju-sztucznej-inteligencji-w-polsce-na-lata-2019--2027

⁴⁵⁶⁴ Ministry of Digital Affairs, *The Ministry of Digital Affairs Invites You to Participate in the Work on the Implementation of the AI Act* (Sept. 27, 2024),

 $[\]frac{https://www.gov.pl/web/cyfryzacja/ministerstwo-cyfryzacji-zaprasza-do-udzialu-w-pracach-nad-wdrozeniem-ai-act}{}$

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EU Digital Services Act

As an EU member state, Poland shall apply the EU Digital Services Act (DSA).⁴⁵⁶⁵ The DSA regulates online intermediaries and platforms. Its main objective is to prevent illegal and harmful activities online and the spread of disinformation. The DSA bans targeted advertising based on a person's sexual orientation, religion, ethnicity, or political beliefs, and bans targeted advertising to minors based on profiling.

EU AI Act

As an EU member State, Poland is bound by the EU AI Act. 4566 The EU AI Act is a risk-based market regulation which supports the objective of promoting a human-centric approach to AI and making the EU a global leader in the development of secure, trustworthy and ethical AI. The AI Act entered into force August 1, 2024. 4567

The Polish government has introduced a draft law to integrate the European Union's Artificial Intelligence Act (Regulation 2024/1689) into national legislation. Artificial Intelligence Act (Regulation 2024/1689) into national legislation. This initiative aims to establish a comprehensive framework for the development, deployment, and oversight of AI systems within Poland. A central component of this framework is the creation of the Committee on Development and Security of Artificial Intelligence (the "Commission"), which will serve as the national market surveillance authority for AI technologies. The Commission will be led by a President appointed through an open and competitive process by the Prime Minister and will include representatives from key institutions involved in AI development. Its responsibilities encompass monitoring AI systems, processing applications for high-risk AI deployments, investigating complaints, and collaborating with public institutions to ensure compliance with the AI Act.

In addition to the Commission, the draft law designates the Minister of Digital Affairs as the notifying authority responsible for accrediting conformity assessment bodies, ensuring that AI systems meet established standards. The law

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⁴⁵⁶⁵European Parliament and Council of the European Union, Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act) (Oct. 27, 2022), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022R2065

⁴⁵⁶⁶ European Parliament and Council of the European Union, *Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act) (Jul. 7, 2024), http://data.europa.eu/eli/reg/2024/1689/oj*

⁴⁵⁶⁷ European Commission, *AI Act Enters into Force* (Aug. 1, 2024), https://commission.europa.eu/news/ai-act-enters-force-2024-08-01 en

⁴⁵⁶⁸ Service of Republic of Poland, *Draft Act on Artificial Intelligence Systems* (Oct. 16, 2024), https://www.gov.pl/web/premier/projekt-ustawy-o-systemach-sztucznej-inteligencji

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also outlines procedures for addressing violations of the AI Act, including mechanisms for lodging complaints and imposing administrative penalties. Decisions made by the Commission can be appealed to the District Court in Warsaw, specifically the Court of Competition and Consumer Protection. This legislative effort reflects Poland's commitment to fostering a secure and innovative AI ecosystem, aligning with broader European objectives to regulate and promote artificial intelligence responsibly. The Ministry of Digital Affairs initiated a public consultation to submit comments, questions, suggestions, and recommendations regarding the implementation of the EU AI Act by the end of December 2024.

Data Protection

Since Poland is an EU Member State, the General Data Protection Regulation (GDPR)⁴⁵⁷⁰ is directly applicable in Poland and to Poles. The aim of the GDPR is to "strengthen individuals' fundamental rights in the digital age and facilitate business by clarifying rules for companies and public bodies in the digital single market. A single law will also do away with the current fragmentation in different national systems and unnecessary administrative burdens." The GDPR entered into force on 24 May 2016 and applies since 25 May 2018. The Polish Personal Data Protection Act (PDPA) of 10 May 2018 also entered into force on 25 May 2018. It aims to help implement the GDPR in Poland. The old Personal Data Protection Act of 29 August 1997 has been repealed. The PDPA is accompanied by the 2019 GDPR Implementation Act. The Implementation Act amended Polish sectoral laws, such as labor, consumer protection, insurance, banking or telecommunication laws, in order to ensure compliance with the GDPR.

Poland transposed the EU Data Protection Law Enforcement Directive (LED)⁴⁵⁷². "The directive [will] ensure that the personal data of victims, witnesses,

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⁴⁵⁶⁹ Service of Republic of Poland, *The Ministry of Digital Affairs Invites You to Participate in the Implementation of the AI Act*, gov.pl (Sept. 27, 2024),

 $[\]frac{https://www.gov.pl/web/cyfryzacja/ministerstwo-cyfryzacji-zaprasza-do-udzialu-w-pracach-nad-wdrozeniem-ai-act}{}$

⁴⁵⁷⁰ European Parliament and Council of the European Union, *Regulation (EU) 2016/679 of the European Parliament and of the Council on the protection of natural persons with regard to the processing of personal data and on the free movement of such data* (Apr. 27, 2016), https://eurlex.europa.eu/EN/legal-content/summary/general-data-protection-regulation-gdpr.html

⁴⁵⁷¹ European Commission, *Legal Framework for Data Protection in the EU*, https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection_en

⁴⁵⁷² Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and

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and suspects of crime are duly protected and will facilitate cross-border cooperation in the fight against crime and terrorism."⁴⁵⁷³ The LED provides for the prohibition of any decision based solely on automated processing, unless it is provided by law, and of profiling that results in discrimination.⁴⁵⁷⁴

The EU Charter of Fundamental Rights more generally provides that EU citizens have the right to protection of their personal data. Article 8 of the Charter states that: "Everyone has the right to the protection of personal data concerning him or her. Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law."

Poland is also a member of the Council of Europe and ratified the Council of Europe's Convention 108+ for the protection of individuals with regard to the processing of personal data.⁴⁵⁷⁵

The Polish data protection authority (DPA) is called the Office of Personal Data Protection (*Urząd Ochrony Danych Osobowych*).⁴⁵⁷⁶ In December 2022, President of the Personal Data Protection Office approved the first Polish code of conduct compliant with the GDPR. The code of conduct, developed by the Federation of Healthcare Employers' Unions (FZPOZ), concerns the protection of personal data processed in small medical facilities.

The Polish supervisory authority has also granted accreditation to RS Jamano, which will act as a monitoring body for the application of the code. The Polish DPA stated, "the purpose of the code of conduct is to ensure the protection of the personal data of patients and other persons in healthcare facilities. Certainly, the adopted code of conduct will not only help medical facilities to comply with the requirements of the GDPR but also raise awareness of data protection among patients. Raising awareness and broadening of knowledge of the role of personal data protection and building appropriate attitudes among both controllers and

repealing Council Framework Decision 2008/977/JHA (Apr. 27, 2016), https://eur-lex.europa.eu/eli/dir/2016/680/oj/eng

⁴⁵⁷³ European Commission, *Legal Framework for Data protection in the EU*, https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection en

⁴⁵⁷⁴ European Parliament and Council of the European Union, *Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA (Apr. 27, 2016), https://eur-lex.europa.eu/eli/dir/2016/680/oj/eng ⁴⁵⁷⁵ Council of Europe, Convention 108 + and Protocols (June, 2018),*

 $[\]underline{https://www.coe.int/en/web/data-protection/convention108-and-protocol}$

⁴⁵⁷⁶ Personal Data Protection Office [*Urząd Ochrony Danych Osobowych*], *About Us* (2025), , https://uodo.gov.pl/en

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citizens is a process in which the Personal Data Protection Office is actively involved."4577

The Polish DPA is a member of the Global Privacy Assembly (GPA) since 2002. The DPA co-sponsored the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence⁴⁵⁷⁸ and the 2020 GPA Resolution on AI Accountability.⁴⁵⁷⁹ However, it did not endorse the 2022 GPA Resolution on Facial Recognition Technology⁴⁵⁸⁰ or the 2023 GPA Resolution on Generative AI.⁴⁵⁸¹

Regarding data retention, the Polish DPA took the position that a controller should delete the data, right after a relationship with a data subject ends. As a result, the controller cannot claim it has a legitimate interest to keep the data for the purpose of potential future legal claims. Polish courts overturned such decisions, stating a controller cannot predict if and when a data subject may raise a claim. But this does not exclude such claims being raised in the future, and the controller has a right to store data to defend itself or exercise its claims. 4582

In March 2019, the Polish DPA fined Bisnode, a digital marketing company, €220,000 for not notifying data subjects it had acquired their personal data through data scraping methods. The data protection authority ordered the company to reach out directly to these individuals, stating that a notice on its website would not be sufficient notification. It is to be noted that the company had reached out to 679,000 persons whose email addresses it had access to, but did not

⁴⁵⁷⁷ Polish Data Protection Authority, *The First Polish Code of Conduct Compliant with the GDPR Approved* (Dec. 12, 2022), https://uodo.gov.pl/en/553/1325

⁴⁵⁷⁸ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

⁴⁵⁷⁹ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-use-of-AI-EN-1.pdf

⁴⁵⁸⁰ Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁴⁵⁸¹ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁴⁵⁸² IAPP, *2022 Global Legislative Predictions* (2022), https://iapp.org/media/pdf/resource center/2022 iapp global legislative predictions.pdf

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reach out directly to the data subjects in relation to the 5.7 million other records, which it had estimated would cost it €8 million.⁴⁵⁸³

The Polish government introduced a draft act on data management in September 2024. The act aims to implement missing solutions according to the Data Governance Act (DGA) by establishing regulatory frameworks, designating responsible entities, and ensuring procedural compliance and data reuse for public sector data. The approach centers on regulating only those areas where the EU explicitly allows or requires Member State intervention. The proposed measures include designating specific bodies and authorities for implementing DGA's key elements, including data management, single information points, appeals processes, data brokerage, and data altruism.

The President of the Central Statistical Office (GUS) will oversee re-use provisions for protected data, while the Ministry of Digital Affairs will serve as the central information point for accessible data resources, supporting data re-use under DGA guidelines. To ensure compliance and proper oversight, the draft law designates the Minister of Digital Affairs as the primary appeals body for decisions on protected data re-use and the President of the Office for Personal Data Protection as the authority for data brokerage services and registration of data altruism organizations. These roles ensure that public sector data access, data brokerage, and data altruism activities comply with DGA standards. The regulatory environment within the draft law also aligns with established EU data regulations such as the GDPR, creating a consistent and integrated approach to data governance, monitoring, and penalties for non-compliance, thereby promoting a secure and efficient data-sharing ecosystem within Poland. 4584

Algorithmic Transparency

Poland is subject to the GDPR and Convention 108+. Poles have a general right to obtain access to information about automated decision-making and to the factors and logic of an algorithm.⁴⁵⁸⁵

The 2020 Recommendation of the Council of Europe Committee of Ministers on human rights impacts of algorithm systems⁴⁵⁸⁶ specifically emphasizes requirements on transparency, accountability and effective remedies.

https://www.gov.pl/web/premier/projekt-ustawy-o-zarzadzaniu-danymi2

⁴⁵⁸³ Szymon Sieniewicz, *Data Protected – Poland*, Linklaters (Aug. 2022), https://www.linklaters.com/en/insights/data-protected/data-protected---poland

⁴⁵⁸⁴ Service of Republic of Poland, *Draft Act on Data Management* (Sept. 11, 2024),

⁴⁵⁸⁵ See Recital 63 and Article 22 of the GDPR. Article 9 c) of the Convention 108+ as well as Recital 77, *Explanatory Report*, *Convention 108*+, p. 24 (2018), https://rm.coe.int/convention-108-convention-for-the-protection-of-individuals-with-regar/16808b36f1

⁴⁵⁸⁶ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020), https://search.coe.int/cm?i=09000016809e1154

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With regard to transparency, the Recommendation provides that "States should establish appropriate levels of transparency with regard to the public procurement, use, design and basic processing criteria and methods of algorithmic systems implemented by and for them, or by private sector actors. The legislative frameworks for intellectual property or trade secrets should not preclude such transparency, nor should States or private parties seek to exploit them for this purpose. Transparency levels should be as high as possible and proportionate to the severity of adverse human rights impacts, including ethics labels or seals for algorithmic systems to enable users to navigate between systems. The use of algorithmic systems in decision-making processes that carry high risks to human rights should be subject to particularly high standards as regards the explainability of processes and outputs." 4587

The Recommendation also clarifies with regard to "contestability: Affected individuals and groups should be afforded effective means to contest relevant determinations and decisions. As a necessary precondition, the existence, process, rationale, reasoning and possible outcome of algorithmic systems at individual and collective levels should be explained and clarified in a timely, impartial, easily-readable and accessible manner to individuals whose rights or legitimate interests may be affected, as well as to relevant public authorities. Contestation should include an opportunity to be heard, a thorough review of the decision and the possibility to obtain a non-automated decision. This right may not be waived, and should be affordable and easily enforceable before, during and after deployment, including through the provision of easily accessible contact points and hotlines."⁴⁵⁸⁸

In 2019, while taking steps to implement the GDPR, Poland provided all banking customers with the right to an explanation regarding their creditworthiness assessment when applying for a loan. STIR—System Teleinformatyczny Izby Rozliczeniowej—is a government tool that analyses information collected by financial institutions to detect illegal activity. If suspicion arises, the financial institution can block a flagged account for 72 hours at the request of the tax authorities. On the other hand, algorithms are used by Polish courts to aid in their decision-making, such as when assessing cases or rendering judgments. While some believe AI will transform the justice system, others are

⁴⁵⁸⁷ Ibid

⁴⁵⁸⁸ Ibid

⁴⁵⁸⁹ Panoptykon Foundation, *The Right to Explanation of Creditworthiness Assessment—First Such Law in Europe* (Jun. 12, 2019), https://en.panoptykon.org/right-to-explanation

⁴⁵⁹⁰ Algorithm Watch, Automating Society 2020 (Oct. 2020),

https://automatingsociety.algorithmwatch.org/report2020/poland/; Service of Republic of Poland, *The Success of STIR Analytics* (Jan. 15, 2020) https://www.gov.pl/web/premier/projekt-ustawyo-zarzadzaniu-danymi2

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concerned about the impact on judge's decisions as well as the lack of transparency and critical evaluation. 4591

Unemployment Scoring System

In 2014, an unemployment scoring system was introduced in Poland. The profiling system was dividing unemployed people into three categories based on their responses to a series of questions asked during a computer-based interview. 4592 In a report on the issue, the NGO, Panoptykon, described the process as the computer system calculating the "employment potential" of a given person on the basis of the provided answers. The amount of assistance the individual received was determined by their categorization. The Polish data protection supervisory authority expressed reservations regarding the use of profiling in this context. In particular, concerns were raised regarding the protection of personal data and the absence of a transparent procedure to facilitate appeals. In addition, concerns were raised by the Polish Supreme Audit Office (Najwyższa Izba Kontroli) and the Human Rights Commissioner. Eventually, Poland's Constitutional Court found the system to be in breach of the Polish Constitution. The system was abolished by the end of 2019.

Ultima Ratio

Poland has begun an online arbitration court which incorporates AI techniques. Ultimately, according to *Polish Science*, "artificial intelligence will automatically prepare a ready draft judgment together with justification, processing for this purpose the data and positions of the parties collected in the course of the proceedings." The first modules began in 2020. Ultimately, artificial intelligence will automatically prepare a ready draft judgment together with justification, processing for this purpose the data and positions of the parties

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https://legislacja.rcl.gov.pl/docs/2/171820/171829/171833/dokument89898.pdf

⁴⁵⁹¹ Alina Yanchur, "All rise for the honorable AI": Algorithmic Management in Polish Electronic Courts, Algorithm Watch (May 27, 2024), https://algorithmwatch.org/en/polish-electronic-courts/#

⁴⁵⁹² Jędrzej Niklas, Karolina Sztandar-Sztanderska, Katarzyna Szymielewicz, *Profiling the Unemployed in Poland: Social and Political Implications of Algoirthmic Decision Making*, Fundacja Panoptykon, p. 11 (2015), https://panoptykon.org/sites/default/files/leadimage-biblioteka/panoptykon_profiling_report_final.pdf

⁴⁵⁹³ Ibid, p. 12

⁴⁵⁹⁴ Ibid, pp. 9, 33–37; See also [Polish]

⁴⁵⁹⁵ Jedrzej Niklas, *Poland: Government to Scrap Controversial Unemployment Scoring System*, Algorithm Watch (Apr. 16, 2019), https://algorithmwatch.org/en/poland-government-to-scrap-controversial-unemployment-scoring-system/.

⁴⁵⁹⁶ Polish Science, *Ultima Ratio- The First Online Court of Arbitration in Poland to Implement Artificial Intelligence* (Jan. 2, 2020), https://polishscience.pl/en/ultima-ratio-the-first-online-court-of-arbitration-in-poland-to-implement-artificial-intelligence/

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collected in the course of the proceedings. The Ultima Ratio judgment has the same legal force as a decision before a common court.⁴⁵⁹⁷ The main legal issue raised by Ultima Ratio is whether it is compatible with Article 47 of the EU Charter on Fundamental Rights, which guarantees the right to a fair trial before an independent and impartial court.

Environmental Impact of AI

Poland has included the government's commitment to sustainable objectives into its 2035 Digitization Strategy and policy documents on AI. The draft Digitization Strategy until 2035 sets specific objectives to be reached within this timeframe, and one of them concerns the support for sustainable development in connection with the green energy transition and broader EU goals. 4598 Similarly, Poland's National AI Strategy recommends the implementation of trustworthy AI systems that enhance positive social change and support sustainable development as well as ecological responsibility. 4599 Furthermore, the Policy for the Development of AI in Poland fosters an AI ecosystem based on OECD principles such as inclusive and sustainable growth and well-being. 4600 The document highlights the opportunity offered by AI to positively impact the energy sector as well as climate and the environment at large by allowing the integration and stabilization of renewable energy sources and the efficient management of energy consumption. 4601 Environmental protection, water retention, agriculture, and therefore land use are mentioned among the sectors for which the development of AI-based solutions is encouraged. 4602 Although a dedicated action plan for implementing environmental sustainability objectives is not yet present in Poland's AI regulatory framework, the inclusion of sustainability goals within the country's policy documents on AI establishes a positive foundation for advancing these objectives.

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⁴⁵⁹⁷ Warsaw Business Journal, *Online Arbitration as Remedy for Closed Common Courts and Pandemics* (Mar. 16, 2020), https://wbj.pl/online-arbitration-as-remedy-for-closed-common-courts-and-pandemics/post/126416

⁴⁵⁹⁸ Service of Republic of Poland, *Digitization Strategy of Poland until 2035* (Oct. 28, 2024), https://www.gov.pl/web/cyfryzacja/strategia-cyfryzacji-polski-do-2035-roku

⁴⁵⁹⁹ Ministry of Digital Affairs, Ministry of Development, Ministry of Science and Education, Ministry of Funds and Regional Policy, and Chancellery of the Prime Minister, *Artificial Development Policy in Poland* (Aug. 20, 2019) https://www.gov.pl/attachment/a8ea194c-d0ce-404e-a9ca-e007e9fbc93e

⁴⁶⁰⁰ Monitor Polski Official Journal of the Republic of Poland, *On the Establishment of the* "Policy for the Development of Artificial Intelligence in Poland from 2020" (Dec. 28, 2020), https://monitorpolski.gov.pl/M2021000002301.pdf

⁴⁶⁰¹ Ibid

⁴⁶⁰² Ibid

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Lethal Autonomous Weapons

Poland was among the 70 countries that endorsed a joint statement on autonomous weapons systems at the 2022 United Nations General Assembly. The joint statement urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law (IHL), including through maintaining human responsibility and accountability in the use of force."

At the 78th UN General Assembly First Committee in 2023, Poland voted in favor of resolution L.56⁴⁶⁰⁴ on autonomous weapons systems, along with 163 other states. He Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. The report should analyze ways to address the challenges and concerns autonomous weapon systems raise from humanitarian, legal, security, technological and ethical perspectives and reflect on the role of humans in the use of force.

Poland participated in the REAIM international summit on the responsible application of artificial intelligence in the military domain hosted by the Netherlands in February 2023. At the end of the Summit, Government representatives, including Poland, agreed on a joint call for action on the responsible development, deployment and use of artificial intelligence in the military domain. 4606 In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." States also "stress the importance of a holistic, inclusive and comprehensive approach in addressing the possible impacts,

 $\underline{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm\ en.pdf}$

⁴⁶⁰³ United Nations (UN) General Assembly, First Committee, Joint Statement on Lethal Autonomous Weapons Systems First Committee, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

⁴⁶⁰⁴ UN General Assembly, *Resolution L56: Lethal Autonomous Weapons* (Oct.12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

⁴⁶⁰⁵ Isabelle Jones, *164 States Vote against the Machine at the UN General Assembly*, Stop Killer Robots (Nov. 1, 2023), https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

⁴⁶⁰⁶ Government of Netherlands, *Call to Action on Responsible Use of AI in the Military Domain*, Press Release (Feb.16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action

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opportunities and challenges of the use of AI in the military domain and the need for all stakeholders, including states, private sector, civil society and academia, to collaborate and exchange information on responsible AI in the military domain."⁴⁶⁰⁷

Poland also endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023. 4608

The Responsible AI in the Military Domain (REAIM) Summit 2024 in Seoul, South Korea was a follow-up to the inaugural summit held in The Hague in 2023. The event aimed to forge a global consensus on the responsible development and use of AI in military applications. The "Blueprint for Action" adopted at the summit provides a roadmap for setting guidelines on AI use in the military including emphasizing transparency, accountability, and human oversight. Poland is one of the 63 countries that endorsed the Blueprint for Action 4609

Human Rights

Poland is a member of the European Union and Council of Europe and is, accordingly, committed to the upholding of the Charter of Fundamental Rights and the European Convention on Human Rights. In addition, Poland has acceded to international human rights treaties and has signed the Universal Declaration of Human Rights. The Polish Constitution also grants basic rights to citizens and includes prohibitions against discrimination. While Poland is considered "Free" with a score of 80/100 in the Freedom House 2024 Freedom in the World Report, concerns were raised about the fairness of parliamentary elections, media freedom, judicial reforms, and LGBT+ rights. 4611

While NGOs rightly highlight several ongoing human rights issues, the government coalition formed in December 2023 has been working to restore judicial independence and bring Poland's policies in line with European Union

https://reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163&shareBbsMngNo=10264&shareMenuId=11613&shareTabMenuId=

https://www.sejm.gov.pl/prawo/konst/angielski/kon1.htm

https://freedomhouse.org/country/poland/freedom-world/2024; See also Case C-791/19 R Commission v Poland and Case C-619/18 Commission v Poland

⁴⁶⁰⁷ Responsible AI in the Military domain Summit, *REAIM Call to Action* (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action
⁴⁶⁰⁸ US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Feb. 12, 2024), https://www.state.gov/bureau-of-artificial-intelligence-and-autonomy

⁴⁶⁰⁹ REAIM 2024, Blueprint for AI Action (Sept. 11, 2024),

⁴⁶¹⁰ The Constitution of the Republic of Poland, Article 32 (Apr. 2, 1997),

⁴⁶¹¹ Freedom House, Freedom in the World 2024: Poland (2024),

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standards, in contrast to the previous conservative administration. 4612 The EU has in fact decided to end the procedure for rule of law scrutiny in light of the country's commitment to reinvigorate democracy. Nevertheless, concerns remain over Poland's political transition as the new government's action plan has not been fully implemented yet, highlighting the need to continue monitoring the status of rule of law and fundamental rights. 4613 Poland's ranking in the World Press Freedom Index has increased from 66th to 47th place in 2024. 4614

In 2020, the Presidency of the Council of the EU failed to secure unanimous support from the Member States for its conclusions on the application of the Charter of Fundamental Rights in the AI context. 4615 Poland objected to the inclusion of "gender equality." Poland was the only member state in the European Union to oppose the resolution on AI and fundamental rights. 4616 Although Ambassador Andrzej Saros said that Poland will work to support the conclusions in the future, he also stated that: "The Treaties refer to equality between women and men, similar to the Charter of Fundamental Rights. The meaning of 'gender' is unclear; the lack of definition and unambiguous understanding for all member states may cause semantic problems. Neither the Treaties nor the Charter of Fundamental Rights use the term 'gender.'"4617

The position occurs in the context of the Polish government opposition to the Convention on Preventing and Combating Violence against Women and Domestic Violence. While consensus was not reached as regards the Presidency's conclusions, the Presidency stressed that the core elements of the conclusions, anchoring the Union's fundamental rights and values in the age of digitalization, fostering the EU's digital sovereignty and actively participating in

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⁴⁶¹² European Council on Foreign Relations, *The Long Shadow of the Populists: Donald Tusk's First 100 Days* (Mar. 22, 2024), https://ecfr.eu/article/the-long-shadow-of-the-populists-donald-tusks-first-100-days/

⁴⁶¹³ Human Rights Watch, *European Commission Prematurely Ends Rule of Law Scrutiny of Poland* (May 30, 2024), https://www.hrw.org/news/2024/05/30/european-commission-prematurely-ends-rule-law-scrutiny-poland

⁴⁶¹⁴ Reporters Without Borders, *World Press Freedom Index* (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), https://rsf.org/en/index (2024), <a href="https://rsf.org/en/inde

 $[\]underline{https://www.consilium.europa.eu/en/press/press-releases/2020/10/21/artificial-intelligence-presidency-issues-conclusions-on-ensuring-respect-for-fundamental-rights/;}$

⁴⁶¹⁶ Warsaw Business Journal, *Poland rejects artificial intelligence because of gender* (Oct. 29, 2020), https://wbj.pl/poland-rejects-artificial-intelligence-because-of-gender/post/128788

⁴⁶¹⁷ Samuel Stolton, *Poland Rejects Presidency Conclusions on Artificial Intelligence, Rights*, Euroactiv (Oct. 26, 2020), https://www.euractiv.com/section/digital/news/poland-rejects-presidency-conclusions-on-artificial-intelligence-rights/

⁴⁶¹⁸ Eline Schaart, *Poland to Withdraw from Treaty on Violence against Women*, Politico (Jul. 25, 2020), https://www.politico.eu/article/poland-to-withdraw-from-istanbul-convention-treaty-on-violence-against-women/

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the global debate on the use of artificial intelligence with a view to shaping the international framework, were shared by all delegations.⁴⁶¹⁹

OECD / G20 AI Principles

As a member of the OECD, Poland is committed to the OECD Principles on Artificial Intelligence and references the OECD principles in its AI Policy document.

In December 2020, Poland joined the Global Partnership on AI (GPAI), a multi-stakeholder initiative that aims to foster international cooperation on AI research and applied activities and is "built around a shared commitment to the OECD Recommendation on Artificial Intelligence." 4620

Council of Europe AI Treaty

Poland contributed as a Council of Europe and EU Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of Law. The Committee on AI approved the Draft Framework Convention during its 10th Plenary session in March 2024. The Council of Europe Framework Convention on artificial intelligence and human rights, democracy, and the rule of law was opened for signature in September 2024. The treaty lays forth a legislative framework that addresses the hazards that AI systems may pose and spans their whole lifecycle, all the while encouraging ethical research. It is also open to non-members of the CoE. The European Union has endorsed the CoE Treaty, but Poland has not individually signed it.

⁴⁶¹⁹ Council of the European Union, *Presidency Conclusions - The Charter of Fundamental Rights in the context of Artificial Intelligence and Digital Change* (Oct. 21, 2020), https://www.consilium.europa.eu/media/46496/st11481-en20.pdf

⁴⁶²⁰ Digital Affairs – Chancellery of the Minister, *Poland Joins the Global Partnership on Artificial Intelligence* (Dec. 8, 2020), https://www.gov.pl/web/digitalization/poland-joins-the-global-partnership-on-artificial-intelligence

⁴⁶²¹ Council of Europe, *Council of Europe Opens First Ever Global Treaty on AI for Signature* (Sept. 5, 2024), https://www.coe.int/en/web/portal/-/council-of-europe-opens-first-ever-global-treaty-on-ai-for-signature

⁴⁶²² Council of Europe, *Council of Europe Adopts First International Treaty on Artificial Intelligence* (May 17, 2024), https://www.coe.int/en/web/portal/-/council-of-europe-adopts-first-international-treaty-on-artificial-intelligence

⁴⁶²³ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 11, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

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UNESCO Recommendation on AI Ethics

Poland is a member of the UNESCO and has endorsed the 2021 UNESCO Recommendation on AI Ethics. 4624 In 2024, however, Poland did not apply UNESCO's Readiness Assessment Methodology (RAM) to implement the recommendation on the ethics of AI. This methodology is designed to help nations assess and strengthen their preparedness to address ethical issues in AI by evaluating legal, institutional, and policy frameworks. Despite the importance of RAM in promoting responsible and ethical AI governance, Poland has not undertaken this assessment, leaving gaps in aligning with UNESCO's guidelines. This absence of action may affect Poland's ability to ensure AI is developed and used in ways that protect human rights, promote transparency, and prevent misuse. 4625

Evaluation

Poland's development in AI governance in 2024 reflects both promising strides and areas requiring refinement. The introduction of the draft law to incorporate the EU AI Act into national legislation signifies Poland's commitment to align with EU standards, establishing the Committee on Development and Security of Artificial Intelligence to oversee and regulate AI applications. This framework provides a structured approach to managing high-risk AI, engaging with stakeholders, and ensuring compliance. However, while these measures promote ethical and safe AI deployment, challenges remain in balancing regulatory thoroughness with innovation flexibility, particularly as the AI sector rapidly evolves. As a member of the EU, the Council of Europe, and the OECD, Poland has made commitments to upholding human rights and ethics and endorsed the OECD AI Principles. However, it still has substantial ground to cover in advancing human rights, for instance, by implementing the UNESCO recommendation on the Ethics of AI and signing the CoE Treaty.

The Polish government has made notable progress in reinforcing data protection and cybersecurity, with amendments to the national cybersecurity system and a new data management act addressing critical aspects of AI-related data and security. The cybersecurity amendments provide a foundation for risk management and incident reporting, fostering resilience against emerging threats. The Data Management Act aligns with the Data Governance Act, designating roles for data stewardship and reuse of public sector data. In addition, Poland endorsed the "Blueprint for Action", a global roadmap for setting guidelines on AI use in the military including emphasizing transparency, accountability, and human

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⁴⁶²⁴ UNESCO, *Recommendation on the Ethics of Artificial Intelligence* (Nov. 23, 2021), https://unesdoc.unesco.org/ark:/48223/pf0000381137

⁴⁶²⁵ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

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oversight and further attention to practical enforcement and interagency coordination will be essential. Finally, despite the absence of a concrete action plan towards environmental sustainability objectives through AI, Poland's commitment to integrating sustainable development into the use of AI sets a constructive framework for leveraging AI solutions to achieve broader environmental and societal targets.

Portugal

In 2024, Portugal advanced toward implementation of the EU AI Act by naming 14 agencies as supervisory authorities. Portugal updated policy commitments and implementation with revisions to the Digital Strategy 2030 and AI Portugal 2030. Portugal also supported the EU signature of the Council of Europe AI Treaty.

National AI Strategy

Portugal released its national artificial intelligence (AI) strategy under the name AI Portugal 2030 in February 2019. He strategy is promoted by the technical coordination of the National Initiative Digital Competencies e.2030 program, in cooperation with the Portuguese Science and Technology Foundation (*Fundação para a Ciência e a Tecnologia*, FCT), the National Innovation Agency, the Living Science Academy and the Agency for Administrative Modernization (AMA).

The implementation of the national strategy is supposed to be monitored by a committee coordinated by the FCT and reviewed annually. Representatives of the Portuguese government shared in 2024 that the work on drafting the National Data Strategy, National Web 3.0 Strategy, and review of the National Strategy for AI had been completed at the end of 2023 and handed over to the Executive. The portfolio was passed on to the new Government in 2024

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⁴⁶²⁶ Portugal INCoDe.2030, *AI Portugal 2030* (Feb. 2019), <a href="https://www.portugal.gov.pt/pt/gc21/comunicacao/documento?i=estrategia-inteligencia-artificial-inteligen

⁴⁶²⁷ Portugal INCoDe.2030 is an integrated public policy initiative dedicated to strengthening digital skills. It aims to increase the knowledge, qualifications and skills of the population, as well as to improve Portugal's positioning and competitiveness in the international context. In order to achieve these goals five lines of action have been defined: inclusion, education, qualification, specialization, and research. INCoDe.2030, https://www.incode2030.gov.pt/.

⁴⁶²⁹ APDC, Governo avança para consulta pública para as estratégias da IA, dados e Web 3.0 (May 16, 2024), https://www.apdc.pt/noticias/atualidade-nacional/governo-avanca-para-consulta-publica-para-as-estrategias-da-ia-dados-e-web-3-0

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and it was announced that the documents would soon be put out for public consultation.

AI Portugal 2030 is considered an important milestone for AI in Portugal. The aim is to promote research and innovation in AI for its development and application in the public and private sectors. One of the main goals of AI Portugal 2030 is to "foster a strong investment in AI at national and European levels, mobilise key actors, identify key areas for development and mitigate risks for the citizens and society."⁴⁶³⁰

The general objectives to reach by 2030 are: (1) Added economic growth; 4631 (2) Scientific excellence; 4632 (3) Human development, which includes increasing "the qualifications of the labour force, in particular the technological qualifications, while promoting inclusion and awareness at all levels of education" and taking into account the need for "societal robustness by building a clear vision of the impacts of AI on democracy, privacy, security, fairness, the labour market, governmental and commercial transparency and equity. Although AI is highly disruptive in all these dimensions it also provides, if made ethical-by-design, a set of powerful tools to actually improve society and democracy."

The defined action lines to achieve these objectives comprise:

- Inclusion and education. These are considered essential to provide the Portuguese population with minimum knowledge and skills to use the tools available, understand the benefits thereof and also "the risks and threats they have to face, from being screened and targeted with false information to being driven to options that are not necessarily in their benefit." It is further stated that "safety and privacy are critical issues where an acute sense of risk and responsibility should be achieved." Young students should understand the risks and threats that they face in the same way as the rest of the community aggravated with the fact that they spend most of their time immersed in cyberspace with the false feeling that since they are "digital natives", so at ease with technology and devices, their frail and superficial expertise protects them from hazards and attacks."
- Qualification and specialization. AI brings enormous potential for productivity growth in several sectors, but it requires a qualified workforce trained to

⁴⁶³⁰ AI Portugal 2030, p. 14

⁴⁶³¹ AI Portugal 2030, p. 24

⁴⁶³² Ibid

⁴⁶³³ Ibid

⁴⁶³⁴ *AI Portugal 2030*, p. 9

⁴⁶³⁵ AI Portugal 2030, p. 12

⁴⁶³⁶ Ibid

⁴⁶³⁷ Ibid

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identify AI opportunities, develop engineering solutions, adapt working environments, and deploy solutions following safe and ethical standards.⁴⁶³⁸

 Research, which should also address the challenges involved in "building trust through data curation in order to avoid biases assuring transparency in the way judgements are made promoting accountability and explainability."⁴⁶³⁹

AI Portugal 2030 features a human-centered approach. "Portugal's AI Strategy will be based on the fundamental principle of not compromising the dignity of citizens, strongly anchored by the promotion of wellbeing, fairness and quality of life." People are the central element of research, innovation, deployment and usage of any AI manifestation." According with the vision set forth in the AI Portugal 2030, "AI will improve the quality of services and the efficiency of processes while guarantying fairness, wellbeing and quality of life." The promotion of a better society should be encompassed by "strong ethical guidelines" protecting "the fundamental rights of citizens and core values."

AI Portugal 2030 also establishes specific steps to uphold its core values, such as human-centered AI, and to understand its impact on society. These steps are to:

- 1. "Define regulatory frameworks (also through the creation of regulatory sandboxes);"
- 2. "Define and deploy guidelines for ethical-by-design AI through an ethical committee for AI and automation;"
- 3. "Spread awareness on AI and technology in the entire population to promote inclusion;" and
- 4. "Study the impacts of AI on society (i.e., employment, democracy, and fairness) through focused observations and by promoting research in the respective scientific areas."⁴⁶⁴⁴

To face "societal challenges brought by AI" in terms of "Ethics and safety," the AI Portugal 2030 mentions that it will be necessary to apply "best practices to assess AI projects in terms of risks to safety and ethics and mechanisms to detect and prevent misuse of advanced AI techniques. The legal framework will have to be adjusted to determine liability in conflicts with the involvement of AI decision making." 4645

⁴⁶³⁸ *AI Portugal 2030*, p. 13 ⁴⁶³⁹ Ibid ⁴⁶⁴⁰ Ibid, p. 15

⁴⁶⁴¹ Ibid, p. 16

⁴⁶⁴² Ibid, p. 22

⁴⁶⁴³ Ibid

⁴⁶⁴⁴ Ibid, p. 26

⁴⁶⁴⁵ Ibid, p. 35

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At European and international levels, AI Portugal 2030 also lists some related objectives such as "Guarantee[ing] that AI is safely and ethically applied to the various domains"; "Help[ing] companies and regulators find appropriate legal frameworks"; "Further promot[ing] the participation in the European effort for developing regulation and protocols for an Ethical and Secure AI"; and "Develop[ing] regulatory sandboxes articulated with the EU."

In October of 2020, the Portuguese government, along with thirteen other EU Member States published a position paper on innovative and trustworthy AI.⁴⁶⁴⁷ This paper sets out two visions for the EU's development of AI: (1) promoting innovation, while managing risks through a clear framework and (2) establishing trustworthy AI as a competitive advantage. The countries call for a borderless single market for AI in the EU. They state that "[t]he main aim must be to create a common framework where trustworthy and human-centric AI goes hand in hand with innovation, economic growth, and competitiveness in order to protect our society, maintain our high-quality public service, and benefit our citizens and businesses. This can help the EU to protect and empower its citizens, stimulate innovation and progress in society, and ensure its values are protected."

Regarding public administration and its modernization, AI Portugal 2030 also recalls the objective of ensuring the ethical use of AI. 4648 Portugal further implemented such objective by means of for an Ethical, Transparent and Accountable AI in Public Administration developed by AMA and published in February 2022. 4649

The AI Guide sets out the main guidelines for implementing AI solutions in the Public Administration. The Guide outlines a set of values and principles in line with human rights protection, and addresses the themes of inclusion, equality, sustainable development and well-being. Harmful effects associated to the use of AI systems are also tackled, along with the importance of implementing rigorous monitoring, auditing, security and safety mechanisms in such cases. Although it was developed for the public sector, the AI Guide is also intended to serve as a reference for the private sector: "From a reflection that considers both discussions, it is intended to ensure the protection of democracy, the rule of law and fundamental rights, with the operationalization of these concepts in the way AI

⁴⁶⁴⁷ Denmark, Belgium, the Czech Republic, Finland, France Estonia, Ireland, Latvia, Luxembourg, the Netherlands, Poland, Portugal, Spain and Sweden, *Innovative and trustworthy AI: Two Sides of the Same Coin* (2020), https://eportugal.gov.pt/noticias/portugal-no-grupo-de-paises-europeus-mais-digitais; [English] https://www.netherlandsandyou.nl/web/pr-eu-brussels/documents?

⁴⁶⁴⁶ Ibid, p. 29

⁴⁶⁴⁸ *AI Portugal 2030*, p. 32

⁴⁶⁴⁹ Agência para a Modernização Administrativa (AMA), GuIA para a Inteligência Artificial Ética, Transparente e Responsável na Administração Pública, Version 1.1 (Jul. 2022), https://bo.digital.gov.pt/api/assets/etic/95bcaf56-87ba-446b-9f0b-ab06e1549aa0/

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services are thought, designed, and provided, both in the public and private sectors."⁴⁶⁵⁰ Relatedly, a risk assessment app has been developed based on two aspects: identification and mitigation, thus allowing support to public policies related to Data Science, Big Data, Machine Learning (ML), and AI, namely, to disseminate best practices and to establish assessment criteria that may support prior opinions and funding applications.⁴⁶⁵¹

The AI Guide provides an extensive list of safeguards that the government must establish concerning the implementation of AI. These are:

- The respect for privacy, the inviolability of human rights and the principle of social equity;
- The planning of security mechanisms to protect systems from errors, such as distortions, discrimination, manipulation and misuse of data;
- The mitigation of risks associated with its implementation and change;
- The regulation of data use;
- Compliance with a code of ethics;
- The efficiency and sustainability of technologies while enabling them to create benefits for the citizen, society, the environment, the economy and the country;
- Individual participation, social inclusion, freedom of action and selfdetermination of each citizen in relation to AI;
- Encouraging investment in AI research and development;
- Promoting the potential of emerging technologies;
- The growth of the business fabric, including small and medium enterprises;
- The creation of value in public administration and society; and
- The integration of an employment policy that facilitates the transition. 4652

The AI Guide further highlights concerns about the impact of AI programs and applications on human rights, and the importance of regulation to address them. The Guide specifies that "the values and principles should be respected by all actors during the life cycle of AI systems, should be promoted through continuous evaluation and evolution of existing laws, regulations, and various international guidelines, notably in relation to human rights, and be aligned with the goals of social, political, environmental, educational, scientific, and economic sustainability."⁴⁶⁵³

The AMA published an interim report on the status of the implementation of the Strategy for the Digital Transformation of Public Administration 2021–

4651 Ibid

⁴⁶⁵⁰ Ibid, p. 6

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⁴⁶⁵² Ibid, p. 32

⁴⁶⁵³ Ibid, p. 40

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2026, at the end of the first three-year period in September 2024. ⁴⁶⁵⁴ The report stated that the progress achieved had contributed to the fulfillment of 12 out of the 40 strategic objectives of ETDAP 2021–2026, through the completion of 39 crosscutting actions and 124 sectoral initiatives. A total investment of approximately 217 million euros was planned, of which 26.9 million euros has already been executed with the 2021–2023 Action Plan and 46 million euros with sectoral initiatives.

One of the key pillars of the 2020 Action Plan for Digital Transition⁴⁶⁵⁵ consists in the Digitalization of the State. The Action Plan refers to the need to define and implement a National Smart Cities Strategy. A working group was established to present a proposal for a national strategy. The working group has defined some guidance on Smart cities,⁴⁶⁵⁶ however, no further development has taken place to date.

The Strategy for the Digital Transformation of Public Administration 2021–2026 was approved in 2021.⁴⁶⁵⁷ The 2021 Strategy established as one of its objectives the assessment of all ongoing artificial intelligence projects regarding criteria ethics and responsibility, and such a report took place in 2024.⁴⁶⁵⁸

EU Digital Services Act

As an EU member state, Portugal shall apply the EU Digital Services Act (DSA).⁴⁶⁵⁹ The DSA regulates online intermediaries and platforms. Its main objective is to prevent illegal and harmful activities online and the spread of disinformation. Signatories commit to take action in several domains, such as demonetizing the dissemination of disinformation; ensuring the transparency of

https://digital.gov.pt/documentos/balan%C3%A7o-intercalar-da-estrategia-para-a-transforma%C3%A7%C3%A3o-digital-da-AP-2021-2026

⁴⁶⁵⁶ Portugal Digital, *National Smart City Strategy* (Jun. 20, 2022),

https://portugaldigital.gov.pt/en/promote-more-digital-public-services/more-digital-territories/national-smart-city-strategy/

https://bo.digital.gov.pt/api/assets/etic/ae192db5-bf90-44ec-b8f4-2cfbac6e1678/

4658 Presidencia do Conselho de Ministros, *Estratégia para a Transformação Digital da Administração Pública 2021–2026, Relatório Intercalar* (Mar. 2024),

⁴⁶⁵⁴ Portuguese Government, *Balanço intercalar da Estratégia para a Transformação Digital da Administração Pública 2021–2026* (Sept. 2024),

⁴⁶⁵⁵ Portugal Digital, *Moving Forward. Moving with a Purpose, Portugal's Action Plan for Digital Transition* (Mar. 5, 2020), https://portugaldigital.gov.pt/wp-content/uploads/2022/01/Portugal Action Plan for Digital Transition.pdf

⁴⁶⁵⁷ Presidencia do Conselho de Ministros, *Estratégia para a Transformação Digital da Administração Pública 2021–2026* (Sept. 10, 2021),

⁴⁶⁵⁹ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act) (Oct. 21, 2022), http://data.europa.eu/eli/reg/2022/2065/oj

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political advertising; empowering users; enhancing the cooperation with fact-checkers; and providing researchers with better access to data.

In the beginning of 2024, the Portuguese government designated the Portuguese National Communication Authority (*Autoridade Nacional de Comunicações*, ANACOM—the national body tasked with the regulation of the communication sector—as Digital Services Coordinator (DSC).⁴⁶⁶⁰ As a DSC, ANACOM sits on the European Board for Digital Services.⁴⁶⁶¹ This designation, however, does not give the competent authorities, including ANACOM, formal powers such as the imposition of sanctions for DSA noncompliance.

In further support of the alignment of national laws with the DSA, the Portuguese Council of Ministers set up a working group under ANACOM coordination. The group includes two other competent authorities: the Regulator for Social Communication (*Entidade Reguladora para a Comunicação Social*, ERC) and the General Inspectorate for Cultural Activities (*Inspeção-Geral das Atividades Culturais*, IGAC). The group will oversee the needs for legal and regulatory changes to ensure the application of the DSA. 4662

In its draft strategic guidelines and objectives for the triennial period 2025–2027, ANACOM committed to "take on a relevant role in defining digital policies, namely by coordinating the implementation of the applicable legal framework and the protection of users as Digital Services Coordinator." ANACOM will "actively participate in the discussion of developments concerning the supervision and regulation of digital services and markets, Artificial Intelligence, international connectivity, data regulation, quantum applicability and processing capacity." The regulator opened the draft for public consultation. The results are currently under review. 4664

Contributing to the implementation of the DSA and the EU Code of Practice on Disinformation, ANACOM issued a statement informing citizens on opportunities to report illegal or harmful content or disinformation in the context of the European

⁴⁶⁶⁰ Autoridade Nacional de Comunicações, *Decreto-Lei n.º 20-B/2024, de 16 de fevereiro*, Diário da República n.º 34/2024, 1º Suplemento, Série I de 2024-02-16 (Feb. 16, 2024), https://www.anacom.pt/render.jsp?contentId=1773664

⁴⁶⁶¹ Autoridade Nacional de Comunicações, *Competent Authorities* (Jun. 5, 2024), https://www.anacom.pt/render.jsp?categoryId=431210

⁴⁶⁶² Autoridade Nacional de Comunicações, *Despacho n.º 1747/2024, de 15 de fevereiro*, Diário da República n.º 33/2024, Série II de 2024-02-15 (Feb. 15, 2024), https://www.anacom.pt/render.jsp?contentId=1773490

⁴⁶⁶³Autoridade Nacional de Comunicações, *Plano Plurianual de Atividades 2025-2027: consulta pública sobre as orientações estratégias e objetivos*, pp. 15–17 (Jul. 2024), https://www.anacom.pt/streaming/Documento_consulta_plano_2025_2027.pdf?contentId=17915 87&field=ATTACHED FILE

⁴⁶⁶⁴ Autoridade Nacional de Comunicações, *ANACOM Publishes for Public Consultation Its Strategic Guidelines and Objectives for 2025–2027* (Aug. 22, 2024), https://www.anacom.pt/render.jsp?contentId=1792952

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Parliament elections 2024.⁴⁶⁶⁵ Similarly, ERC launched an awareness campaign on the risks of disinformation during the election period.⁴⁶⁶⁶ The XXIV Constitutional Government also made a commitment to "encourage the development of codes of conduct by political parties and agents" with "mechanisms to monitor and report cases of disinformation and fake news, namely through the use of generative artificial intelligence."⁴⁶⁶⁷

Despite these efforts, in April 2024, the European Commission opened infringement procedures against Portugal and five other EU countries, stating that "despite designating their Digital Services Coordinators, Cyprus, Czechia and Portugal still have to empower them with the necessary powers and competences to carry out their tasks, including the imposition of sanctions in cases of non-compliance." A second round of communication from the Commission followed in October 2024, stating that "despite exchanges since April, these Member States have still not empowered their designated Digital Service Coordinators, to implement the Digital Services Act." In case of continued non-compliance, the Commission "may refer the Member States to the Court of Justice of the European Union."

EU AI Act

As an EU member State, Portugal is bound by the EU AI Act. 4670 The EU AI Act is a risk-based market regulation which supports the objective of promoting a human-centric approach to AI and making the EU a global leader in the development of secure, trustworthy and ethical AI.

⁴⁶⁶⁵ Autoridade Nacional de Comunicações, *Eleições para o Parlamento Europeu 2024: O que fazer se identificar conteúdos ilegais ou desinformação em linha* (Jun. 06, 2024), https://anacom.pt/render.jsp?contentId=1787665

⁴⁶⁶⁶ Entidade Reguladora para a Comunicação Social, *ERC lança campanha de sensibilização para os riscos da desinformação no período eleitoral* (May 21, 2024), https://www.erc.pt/pt/a-erc/noticias/erc-lanca-campanha-de-sensibilizacao-para-os-riscos-da-desinformacao-no-periodo-eleitoral/

⁴⁶⁶⁷ República Portuguesa, *Programa XXIV Governo Constitucional*, p. 90 (Apr. 10, 2024), https://www.portugal.gov.pt/gc24/programa-do-xxiv-governo-pdf.aspx

⁴⁶⁶⁸ Shaping Europe's digital future, Commission calls on Cyprus, Czechia, Estonia, Poland, Portugal and Slovakia to designate and fully empower their Digital Services Coordinators under the Digital Services Act, European Commission (Apr. 24, 2024), https://digital-strategy.ec.europa.eu/en/news/commission-calls-cyprus-czechia-estonia-poland-portugal-and-slovakia-designate-and-fully-empower

⁴⁶⁶⁹ European Commission, *October infringements package: key decisions* (Oct. 03, 2024) Section 9. Digital economy, https://ec.europa.eu/commission/presscorner/detail/en/inf-24-4561 European Parliament, *Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonized rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act)*, Official Journal of the European Union L 2024/1689 (Jul. 12, 2024), https://eur-lex.europa.eu/eli/reg/2024/1689/oj

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The Portuguese Ministry of Youth and Modernization named 14 governmental agencies charged with the protection of fundamental rights under Article 77 of the EU AI Act. 4671

Although Portugal has yet to name a national competent authority, the President of the National Data Protection Commission (*Comissão Nacional de Proteção de Dados*, CNPD) made a public statement in September 2024 stating that "it seems [...] that the CNPD, as Portugal's National Data Protection Authority, has a special vocation to be the Supervisory Authority within the scope of the AI Act." CNDP's 2025 Activity Plan outlines key actions related to the governance of AI such as strengthening capacities and improving training in the context of AI, as well as increasing the effectiveness of sanctioning activities. 4673

ANACOM has also publicly supported the EU AI Act. At the Fifth Global Standards Symposium, 4674 the Chairwoman of the Board of Directors of ANACOM "referred to the need to balance stimuli for innovation in Artificial Intelligence (AI) with ethical considerations." She also emphasized "the crucial importance of establishing ethical frameworks in AI, which protect human rights, privacy and promote justice and responsibility [...] integrating these principles into all phases of AI development."4675

Finally, since 2024, the Agency for Administrative Modernization (*Agência para a Modernização Administrativa*, AMA) has been part of the EU AI Board, 4676 contributing to "the next steps to be taken in creating rules and supporting the development of Artificial Intelligence solutions, ensuring the evolution of technology and the security of European citizens and companies" in light of the implementation of the EU AI Act.

 $\underline{https://jornaleconomico.sapo.pt/noticias/governo-seleciona-entidades-responsaveis-pela-protecao-dos-direitos-fundamentais-na-ia/$

 $\underline{\text{https://www.cnpd.pt/comunicacao-publica/noticias/a-presidente-da-cnpd-participou-na-conferencia-a-regulacao-da-ia-em-portugal/}$

⁴⁶⁷¹ Nuno Braga, Governo seleciona entidades responsáveis pela proteção dos direitos fundamentais na IA, Sapo: O Jornal Económico (Nov. 1, 2024),

⁴⁶⁷² Comissão Nacional de Proteção de Dados, *The President of the CNDP Participated in the Conference "The Regulation of AI in Portugal"* (Oct. 7, 2024),

⁴⁶⁷³ Comissão Nacional de Proteção de Dados, *Plano Anual de Atividades para o Ano de 2025*, p. 7 (Jul. 30, 2024), https://www.cnpd.pt/media/1d5eggad/cnpd_plano-anual-de-atividades-2025.pdf

⁴⁶⁷⁴ International Telecommunication Union, *Fifth Global Standards Symposium* (2024), https://gss.itu.int/

⁴⁶⁷⁵ Autoridade Nacional de Comunicações, *ANACOM Took Part in the ITU's World Standards Symposium and World Telecommunication Standardization Assembly* (Oct. 25, 2024), https://www.anacom.pt/render.jsp?contentId=1796797&languageId=1

⁴⁶⁷⁶ European Commission, *AI Board* (Oct. 17, 2024), https://digital-strategy.ec.europa.eu/en/policies/ai-board

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Public Participation

AI Portugal 2030 clearly acknowledges that "[T]he opacity often seen around the implications of AI may be an obstacle for the wider society to make sense of it and take part in the dialogue. AI needs to integrate cognitive diversity to foster social inclusion and transformation. Therefore, we need a diversity of specialists that will foster different perspectives to better solve complex problems. But we also need the whole population to take part in the debate and to get involved in designing AI by voicing priorities of what AI should address in a human-centered approach."4677

The definition and adoption of AI Portugal 2030 was preceded by several public discussions, 4678 notably:

- The First National Forum on Digital Skills INCoDe.2030, including specific sessions on AI (December 7, 2017);
- The preparatory meetings and consultations for developing new research activities and further developing competences in AI within Public Administration in Portugal, leading to the approval of the AI Guide (January– February 2018);
- The preparatory meetings and consultations for AI Portugal 2030 strategy (November 2018);
- Consultations with different entities and business enterprises (January-February 2019);
- Presentation and public discussion of the AI Portugal 2030 strategy at FCUP, Porto, with representatives of research centers working on AI (February 15, 2019);
- Presentation and public discussion of a draft version of AI Portugal 2030 in the second National Forum on Digital Skills - INCoDe.2030 (December 12, 2018);
- Launch of a call within the System to Support the Modernisation and Capacitation of Public Administration (SAMA2020) to finance Data Science and Artificial Intelligence projects within Public Administration (January 14, 2019);
- Presentation and public discussion of the AI Portugal 2030 strategy at INL, Braga, with EC's Deputy DG Connect (February 12, 2019);
- Presentation and public discussion of the AI Portugal 2030 strategy in Porto, together with the presentation of OECD 2018 S&T Outlook (February 25, 2019); and

⁴⁶⁷⁷ Portugal INCoDe.2030, AI Portugal 2030 (Feb. 2019), p. 15, https://www.portugal.gov.pt/pt/gc21/comunicacao/documento?i=estrategia-inteligencia-artificial-

⁴⁶⁷⁸ AI Portugal 2030, pp. 4–5

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 Presentation and public discussion about the implications of AI Portugal 2030 strategy in Fórum de Governação da Internet 2022 in Lisboa, with multiple stakeholders.

The strategy adopted by Portugal involves a multisectoral approach that brings together many representatives from research, academia, companies, and public administration. 4679 Some sectoral initiatives are also worth mentioning.

The AI Guide mentions the goal of bringing "into public discussion the need to establish the pillars of regulation, supervision, leadership, and governance, develop a code of ethics, and foster regulation and laws that provide guidance and support for technological developments."⁴⁶⁸⁰ Additionally, recognizing that the risk assessment app is an "evolving platform" and should gather contributions from its users, AMA allows users to report, at any time, any errors or elements that may benefit its development, e.g. regarding assessment dimensions or issues crucial for the risk assessment of intelligent systems. ⁴⁶⁸¹ After the AI Guide was first announced in late January 2022, AMA launched a public consultation on the text of the document in February 2022, with the goal of enriching the AI Guide with the contributions of experts and society as a whole. ⁴⁶⁸²

In 2021, the Office for Strategy and Planning of the Ministry of Labor, Solidarity and Social Security and the Institute of Employment and Vocational Training launched a public consultation on a Green Paper on the Future of Work. The goal was to move towards a broad and comprehensive discussion of the Green Paper with the "engagement of academics, thinkers, civil society, and social partners, creating guidelines to prepare the country for the challenges of the future of work, transform uncertainties into opportunities, respond to the challenges posed by the digital revolution." The final version of the Green Paper mentions that "the entire Paper, from the beginning to the final stages, was based on a process of participatory consultation – of social partners, experts, research centers, international organizations, companies, other stakeholders,

⁴⁶⁷⁹ AI Portugal 2030, p. 10.

⁴⁶⁸⁰ Agência para a Modernização Administrativa (AMA), GuIA para a Inteligência Artificial Ética, Transparente e Responsável na Administração Pública, Version 1.1, p. 7 (Jul. 2022), https://bo.digital.gov.pt/api/assets/etic/95bcaf56-87ba-446b-9f0b-ab06e1549aa0/

⁴⁶⁸¹ Ibid, p. 58

⁴⁶⁸² Ibid

⁴⁶⁸³ Gabinete de Estratégia e Planejamento (GEP) and& Instituto do Emprego e Formação Profissional (IEFP), *Green Paper on the Future of Work 2021* (Mar. 2022), https://www.gep.mtsss.gov.pt/pesquisa/-/journal_content/56/10182/198145?p_p_auth=r3InTvvT
⁴⁶⁸⁴ Portuguese Government, *Livro Verde sobre o Futuro do Trabalho* (Jun. 2, 2021), https://www.portugal.gov.pt/pt/gc22/comunicacao/documento?i=livro-verde-sobre-o-futuro-dotrabalho

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different areas of government - culminating in the public consultation it underwent." ⁴⁶⁸⁵

Between June and July of 2022, the Portuguese Securities and Exchange Commission (CMVM) launched a public consultation on AI in the financial sector, more precisely regarding capital markets, inviting all interested parties to contribute to the public discussion. The objective was to deepen knowledge on implementing this technology in the Portuguese market and identify AI tools that may be used in areas under CMVM supervision. It was also CMVM's goal to foster the use of responsible AI and improve the services and tools that investors can access to have more efficiency gains and create new business models. The production of the public discussion of the public discussion.

The opening of the consultation was accompanied by the launch of a consultation and reflection document, in which the CMVM presented a possible definition of AI and listed the economic developments it enables and the laws that frame it. It clarified that, in the specific case of capital markets, AI has a "transformative potential", namely with the implementation of applications that offer advice to the general public or make automated decisions "based on the analysis of large amounts of data" or "on the interpretation of information." If further acknowledged risks relating to the use of AI in capital markets: "alongside the potential benefits there are risks that may arise or be enhanced by the use of AI. At the investor level, if AI systems are not properly implemented and monitored, they can lead to potentially discriminatory outcomes, unfairly rewarding certain groups at detrimental to others. Additionally, the collection, storage and extensive use of data may raise privacy and data protection issues, for example if exploited inappropriately."

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 $\frac{\text{https://www.cmvm.pt/PInstitucional/Content?Input=}A4A6047CD1EAAF1DDF8AD4F33A26B5}{1A566B7FE96E5BC6A59A69BE1A5789DF24}$

https://www.cmvm.pt/PInstitucional/Content?Input=A4A6047CD1EAAF1DDF8AD4F33A26B51A566B7FE96E5BC6A59A69BE1A5789DF24#

⁴⁶⁸⁵ Gabinete de Estratégia e Planejamento (GEP) and Instituto do Emprego e Formação Profissional (IEFP), *Green Paper on the future of work 2021*, p. 15 (Jun. 2022), https://www.portugal.gov.pt/download-

⁴⁶⁸⁶ Comissão do Mercado de Valores Mobiliários (CMVM), *CMVM lança consulta pública sobre Inteligência Artificial (IA)* (Jun. 7, 2022),

⁴⁶⁸⁷ Ibid

⁴⁶⁸⁸ Ibid

⁴⁶⁸⁹ Comissão do Mercado de Valores Mobiliários (CMVM), *Artificial Intelligence and Capital Markets: Consultation and Reflection Document [Inteligência Artificial e o Mercado de Capitais: Documento de Reflexão e Consulta]*, p. 3 (Jun. 2022),

⁴⁶⁹⁰ Ibid, p. 6

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Between August and September 2024, the Business Council of the Center/Chamber of Commerce and Industry of the Center (CEC/CCIC) conducted a public consultation to address the application of AI in automated contracts and data-driven commercial practices. The consultation sought to examine "new forms of contracting enabled by smart contracts and AI, and the economic relevance of using these technologies for a successful transition to a digital economy" and to evaluate "business practices in which companies use customer data to increase revenue and/or make business decisions." ⁴⁶⁹¹

Data Protection

Since Portugal is an EU Member State, the General Data Protection Regulation (GDPR)⁴⁶⁹² is directly applicable in Portugal and to Portuguese citizens. The aim of the GDPR is to "strengthen individuals' fundamental rights in the digital age and facilitate business by clarifying rules for companies and public bodies in the digital single market. A single law will also do away with the current fragmentation in different national systems and unnecessary administrative burdens."⁴⁶⁹³ The GDPR entered into force on 24 May 2016 and applies since 25 May 2018. Law no. 58/2019 of 8 August 2019 (Portuguese Data Protection Law, PDPL) adapts Portuguese law to the GDPR. The Portuguese Data Protection Law revoked the 1998 data protection law, Law no. 67/98, of 26 October 1998. In September 2019, the National Commission for Data Protection (CNPD) issued a resolution stating that it will disregard the parts of the PDPL which do not comply with the GDPR. ⁴⁶⁹⁴

Regarding the activities of law enforcement authorities, Portugal transposed the EU Data Protection Law Enforcement Directive (LED)⁴⁶⁹⁵ in 2019

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⁴⁶⁹¹ CEC/CCIC - Business Council of the Center/Chamber of Commerce and Industry of the Center, *Consultas Públicas Painel Sobre Inteligência Artificial e Contratos Inteligentes 2024* (Aug. 2, 2024), https://cec.org.pt/blog/2024/08/02/consultas-publicas-painel-sobre-inteligencia-artificial-e-contratos-inteligentes-2024/

⁴⁶⁹² EUR-Lex, Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, https://eur-lex.europa.eu/EN/legal-content/summary/general-data-protection-regulation-gdpr.html

⁴⁶⁹³ European Commission, *Legal Framework of EU Data Collection* (2025), https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection_en

⁴⁶⁹⁴ CNPD, Resolution no. 2019/494. See Carlos Pinto Correia, Data Protected – Portugal (Jul. 2022), https://www.linklaters.com/en/insights/data-protected/data-protected----portugal
⁴⁶⁹⁵ Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

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Law no. 59. "The directive protects citizens' fundamental right to data protection whenever personal data is used by criminal law enforcement authorities for law enforcement purposes. It will in particular ensure that the personal data of victims, witnesses, and suspects of crime are duly protected and will facilitate cross-border cooperation in the fight against crime and terrorism." The LED provides for the prohibition of any decision based solely on automated processing, unless it is provided by law, and of profiling that results in discrimination.

EDPB stresses that facial recognition tools should only be used in strict compliance with the Law Enforcement Directive (LED). Moreover, such tools should only be used if necessary and proportionate, as laid down in the Charter of Fundamental Rights."⁴⁶⁹⁸

The CNPD decided in March 2024 to suspend, in the national territory, the collection of biometric data on the iris, eyes and face carried out by the Worldcoin Foundation, with a view to safeguard the fundamental right to the protection of personal data, especially that of minors. This is relevant considering that during the year 2024 more than 300 thousand people in Portugal had already provided their biometric data, an essential condition to receive cryptocurrency, called Worldcoin. 4699

The EU Charter of Fundamental Rights more generally provides that EU citizens have the right to protection of their personal data. Article 8 of the Charter states that: "Everyone has the right to the protection of personal data concerning him or her. Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law."

Portugal is also a member of the Council of Europe and ratified the Council of Europe's Convention 108+ for the protection of individuals with regard to the processing of personal data.⁴⁷⁰⁰

⁴⁶⁹⁶ European Commission, *Legal Framework of EU Data Protection in the EU* (2025), https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection en

⁴⁶⁹⁷ Article 11 (1) and (2) of the LED, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

⁴⁶⁹⁸ European Data Protection Board, *EDPB adopts Guidelines on calculation of fines & Guidelines on the use of facial recognition technology in the area of law enforcement*, Press release (May 16, 2022), https://edpb.europa.eu/news/news/2022/edpb-adopts-guidelines-calculation-fines-guidelines-use-facial-recognition en

⁴⁶⁹⁹ Comissão Nacional de Proteção de Dados (Mar. 26, 2024).

 $[\]underline{https://www.cnpd.pt/media/bzwb5k5j/comunicado-de-imprensa_cnpd-suspende-recolha-de-\underline{ddos-da-worldcoin_26-mar\%C3\%A7o-2024.pdf}$

⁴⁷⁰⁰ Council of Europe, *Modernised Convention for the Protection of Individuals with Regard to the Processing of Personal Data* (May 18, 2018) https://www.coe.int/en/web/data-protection/convention108-and-protocol

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The CNPD is a member of the Global Privacy Assembly (GPA) since 2002. The CNPD co-sponsored the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence, ⁴⁷⁰¹ as well as the 2020 GPA Resolution on AI Accountability. ⁴⁷⁰² However, it did not endorse the 2022 GPA Resolution on Facial Recognition Technology ⁴⁷⁰³ or the 2023 GPA Resolution on Generative AI. ⁴⁷⁰⁴

Al Oversight

Portugal has a group of agencies responsible for institutional oversight on AI systems. The Government created the Council for Digital in Public Administration (CDAP) in July 2024 with a mandate that ends in December 2028. A key objective of the CDAP is to contribute and develop the National Digital Strategy and related Action Plan by setting strategic objectives for the advancement of public service digitalization and the State's digital transformation. This includes clearly defining actions, assigning responsibilities, developing an implementation plan, setting performance indicators, and identifying expected impacts. And the state is a set of the council for Digital in Public Administration (CDAP) in July 2024 with a mandate that ends in December 2028.

The CDAP enables institutional oversight in the governance of AI systems, among other new technologies, in the public administration. It harmonizes the governmental approach to developing and using new technologies. This institution is directly relevant in AI governance considering that the National Digital Strategy includes objectives related to AI systems in diverse sectors and is positioned as an

Use-of-AI-EN-1.pdf

⁴⁷⁰¹ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922_ICDPPC-40th_AI-Declaration_ADOPTED.pdf
<a href="https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-content/upload

⁴⁷⁰³ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology (Oct. 2022*), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁴⁷⁰⁴ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁴⁷⁰⁵ Presidency of the Council of Ministers, *Resolução do Conselho de Ministros n.º 94/2024* (*Resolution of the Council of Ministers No. 94/2024*), Diário da República (Jul. 25, 2024), https://diariodarepublica.pt/dr/detalhe/resolucao-conselho-ministros/94-2024-873371754
⁴⁷⁰⁶ Ibid

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"innovation and growth strategy to foster Artificial Intelligence in Portugal in the European context." 4707

As a member of the Ibero-American Network for the Protection of Personal Data (RIPD), which comprises 16 data protection authorities from 12 countries, the CNPD endorsed the General Recommendations for the Processing of Personal Data in Artificial Intelligence⁴⁷⁰⁸ and the accompanying Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects.⁴⁷⁰⁹ Both have been framed in accordance with the RIPD Standards for Personal Data Protection for Ibero-American States.⁴⁷¹⁰ The guiding principles of personal data protection are: legitimation, lawfulness, loyalty, transparency, purpose, proportionality, quality, responsibility, safety and confidentiality. Controllers must also guarantee the exercise of the following rights by data subjects: right of access, right to correction, right to cancellation, right to opposition, right not to be subject to automated individual decisions, right to portability of personal data and right to the limitation of treatment of personal data.

Algorithmic Transparency

Portugal is subject to the GDPR and Convention 108+. Portuguese citizens have a general right to obtain access to information about automated decision-making and to the factors and logic of an algorithm.⁴⁷¹¹

AI Portugal 2030 also considers that AI-based systems must be able to explain their decisions, on top of promoting a high level of adaptability and accountability of their decision-making, advancing accountability and fairness. In order to face "societal challenges brought by AI" in terms of "Ethics and safety," it is clearly recognized in AI Portugal 2030 that "AI systems will make important

⁴⁷⁰⁷ Portugal INCoDE 2023. *AI Portugal 2030, Portuguese National Initiative on Digital Skills* (Jan. 22, 2022), https://www.incode2030.gov.pt/wp-content/uploads/2022/01/relatorio-preliminar-estrategia-dados-abertos 0.pdf

⁴⁷⁰⁸ Ibero-American Network for the Protection of Personal Data (RIPD), *General Recommendations for the Processing of Personal Data in Artificial Intelligence* (Jun. 2019), https://www.redipd.org/en/document/guide-general-recommendations-processing-personal-data-ai-en.pdf

⁴⁷⁰⁹ Ibero-American Network for the Protection of Personal Data (RIPD), *Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects* (Jun. 2019), https://www.redipd.org/en/document/guide-specific-guidelines-ai-projects-en.pdf

⁴⁷¹⁰ Ibero-American Network for the Protection of Personal Data (RIPD), *Standards for Personal Data Protection for Ibero-American States* (2017),

https://www.redipd.org/sites/default/files/2022-04/standars-for-personal-data.pdf.

⁴⁷¹¹ See Recital 63 and Article 22 of the GDPR. Article 9 c) of the Convention 108+ as well as Recital 77, *Explanatory Report*, *Convention 108*+, p. 24, https://rm.coe.int/convention-108-convention-for-the-protection-of-individuals-with-regar/16808b36f1

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and critical decisions autonomously" and that "society will demand transparency (the ability to explain the decisions) and audibility (the ability to trace the flow of decisions and actions from humans to algorithm) in order to promote safety and ethical principles, including privacy protection and fairness."⁴⁷¹²

Regarding policies involving algorithmic transparency, Portugal has proposed an Open Data Strategy in the scope of Portugal INCoDe.2030 to create knowledge in the scientific area and promote the efficient use of public resources as well as transparency within public administration. The strategy takes a pragmatic approach to "build social and technical bridges that enable the sharing and reuse of data." The view is that the multisectoral and transversal strategy can bring together academia, so that it can propose practical principles and limits to the implementation of the open data policy; the economic agents that will be able to exploit such data; the public administration that will use such data in its accountability and transparency mechanisms; and society that has the right to be informed and participate in the decision-making processes that involve its data. A114

The 2020 Recommendation of the Council of Europe Committee of Ministers on human rights impacts of algorithm systems⁴⁷¹⁵ also emphasizes requirements on transparency, accountability and effective remedies, with increased requirements for higher-risk systems. The Recommendation stresses that the right to contest a decision "may not be waived, and should be affordable and easily enforceable before, during and after deployment, including through the provision of easily accessible contact points and hotlines."⁴⁷¹⁶

Use of AI in Public Administration

A Council of Ministers' Resolution in July 2024 established the Council for Digital in Public Administration (CDAP) to advance digital transformation and streamline Portugal's Public Administration. CDAP is tasked with developing, monitoring, and updating the National Digital Strategy and its action plans to promote standardization, modernization, and reduced bureaucracy in public services. 4717

⁴⁷¹⁵ Recommendation CM/Rec(2020)1 of the Committee of Ministers to Member States on the Human Rights Impacts of Algorithmic Systems (Apr. 8, 2020),

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

⁴⁷¹² GuIA para a Inteligência Artificial Ética, Transparente e Responsável na Administração Pública, p. 35.

⁴⁷¹³ Portugal INCoDe.2030, *Open Data Strategy INCoDE.2030: Preliminary Report (Estratégia de Dados Abertos INCoDE.2030 - Relatório Preliminar*), p. 3 (Jan. 20, 2021), https://www.incode2030.gov.pt/wp-content/uploads/2022/01/relatorio-preliminar-estrategia-dados-abertos 0.pdf

⁴⁷¹⁴ Open Data Strategy, p. 3.

⁴⁷¹⁷ Diary of the Republic, *Resolution of the Council of Ministers No. 94/2024* (Jul. 25, 2024), https://diariodarepublica.pt/dr/detalhe/resolucao-conselho-ministros/94-2024-873371754

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The Council comprises three committees: Strategic, Operational, and Advisory. The Strategic Committee, led by the Minister for Modernization, oversees high-level strategy and coordination. The Operational Committee, managed by the AMA, is responsible for implementation. Supporting these are technical working groups of Public Administration specialists focusing on areas such as AI, data governance, and cloud technologies. An Advisory Board of independent experts offers insights on global trends and best practices.

With a mandate until December 31, 2028, the CDAP must produce regular progress reports and a final activity report. Its operations are supported by the AMA and aligned with the Public Administration Forum.

As a member of the Latin American Centre for Development Administration (CLAD),⁴⁷¹⁸ Portugal approved the Ibero American Charter on Artificial Intelligence in Civil Service. The Charter aims to provide a roadmap and common framework for CLAD member states to adapt their AI policy strategies and laws for the challenges and opportunities involved in the implementation of AI in public administration. The guiding principles are human autonomy; transparency, traceability and explainability; accountability, liability and auditability; security and technical robustness; reliability, accuracy, and reproducibility; confidence, proportionality, and prevention of damage; privacy and protection of personal data; data quality and safety; fairness, inclusiveness, and non-discrimination; human-centering, public value, and social responsibility; and sustainability and environmental protection.

In addition to common principles, the Charter recommends specific tools for monitoring AI impact as well as a risk classification mechanism that guardrails for high-risk use cases and prohibitions against uses that violate human rights. Prohibited uses include facial recognition systems; systems aimed at behavior and cognitive manipulation of specific individuals or vulnerable groups (children or the elderly); and social ranking systems based on certain personality traits, individual behaviors, socio-demographic features, or economic status.⁴⁷¹⁹

Use of AI in COVID-19 Response

In 2020, the Portuguese government intended to deploy a system called Smart Crowd to help control the occupation rates of the Portuguese beaches in the context of the COVID-19 pandemic. The system involved using cameras that collected images and processed them with machine learning (ML) technology to inform users about the occupancy level of a particular beach. The Portuguese Agency for Environment (APA) requested the CNPD to analyze the Smart Crowd system.

⁴⁷¹⁸ CLAD, Ibero American Charter on Artificial Intelligence in Civil Service (2024), https://clad.org/wp-content/uploads/2024/03/CIIA-EN-03-2024.pdf ⁴⁷¹⁹ Ibid, p. 21

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In June 2020, the CNPD issued a deliberation in response to APA's request. ⁴⁷²⁰ The CNPD acknowledged that "people on beaches are particularly exposed, and therefore the capture of images is likely to lead to improper use with direct repercussions on their private lives." ⁴⁷²¹

With regards to the ML technology used by the system, the CNPD noted, "The documentation provided refers in this respect to "an ML (and others) algorithm", which run internally in the computer without recourse to external libraries or functions. However, it is neither explained which algorithm is to be applied, nor what the others are. The use of AI, in particular when it involves self-learning techniques, requires an effort of transparency precisely to create indispensable trust in its use, especially in the context of the processing of personal data. Even if one may admit that the algorithm has only the purpose of adapting the characteristics of the photograph to the external environmental conditions (e.g., luminosity, wind), as it is alleged, it is up to those who develop the system and use it to demonstrate that these technologies are not able to generate discriminatory treatments to people. Moreover, in this context, it is incomprehensible how one can refer to 'others', without specifying what is at stake."

The CNPD continues explaining that: "in the same way, the processing carried out on the server—which only accepts invocations from certain IP addresses—also applies a Machine Learning algorithm, "trained through the variables it collects, namely identifying the effective areas of sand and taking into account the useful variations of the same throughout the day due to the tidal effect, so that the result returned is as reliable as possible. The machine learning algorithm is trained to learn over time with different occupation patterns." Now, this explanation of the rationality of the algorithm, although relevant, does not demonstrate the existence of guarantees that it is sufficiently shielded against the possible application of other factors that may generate discrimination. And this is a question that is not and cannot be ignored by those who use self-learning technologies. Furthermore, nothing is made clear as to how the learning is carried out over time, and it seems essential, in order for this to occur, to confirm the acuity of the learning (by the quality of the conclusions) and change the algorithm accordingly, which, unless otherwise demonstrated, will always require human intervention.",4723

⁴⁷²⁰ Comissão Nacional de Proteção de Dados (CNPD), *Resolution 2020/251* (3 June 2020) https://www.cnpd.pt/umbraco/surface/cnpdDecision/download/121802.

⁴⁷²¹ Agência para a Modernização Administrativa, *GuIA para a Inteligência Artificial Ética, Transparente e Responsável na Administração Pública*, Version 1.1, p.4 (Jul. 2022), https://ani.pt/wp-content/uploads/2024/09/projeto-guIA-responsavel-manual.pdf

⁴⁷²² Ibid, p. 3

⁴⁷²³ Ibid

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The CNPD then concluded that it "believes that the responsible party should be able to demonstrate that the machine learning algorithms are sufficiently shielded against the possible application of other factors that may generate discrimination." ⁴⁷²⁴

Facial Recognition

In September 2021, a legislative proposal aimed at regulating the use of video surveillance for security purposes was submitted to the Portuguese Parliament.⁴⁷²⁵ The draft Article 18 allowed for the use of an "analytical management system for the data captured, by application of technical criteria under the purposes for which the systems are intended"; authorized the collection of biometric data for such purposes; and established that the analytical management system "may not allow the reversal, decoding and digitalized reproduction of the image of the biometric characteristic."⁴⁷²⁶

Upon consultation by the Committee on Constitutional Affairs, Rights, Freedoms and Guarantees of the Portuguese Parliament, the CNPD issued an opinion on the Proposal on November 4, 2021. The CNPD concluded that Article 18 contains a covert provision for the use of facial recognition and criticized such provision. The circumstance that the national legislator, in the present Proposal, incorporates in the same article the permission to use data analytics technology and the permission to process biometric data, without expressly stating the permission to use facial recognition technology, is certainly surprising, when in a democratic State governed by the rule of law the restrictions to rights, freedoms and guarantees must be clearly and exhaustively determined by law."

The CNPD continues, "it is, in fact, about giving a green light to mass surveillance by security forces and services, denying any dimension of privacy that might still remain in public space (and in private space open to the public). It allows the tracking of citizens enhanced by the possibility of relating the information available in the video-surveillance systems of public and private establishments and other private spaces open to the public, to which is added the use in the daily activity of the security forces and services of portable cameras also with drones. The impact that such control can have on any democratic society is clear, due to the ease with which this tool can be used as a means of repression of freedom of expression, demonstration and assembly, as recent examples from

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⁴⁷²⁴ TL: 1

⁴⁷²⁵ Portuguese Parliament, Law Proposal 111/XIV/2 (Sept. 2021),

https://www.parlamento.pt/ActividadeParlamentar/Paginas/DetalheIniciativa.aspx?BID=121083

⁴⁷²⁶ Law Proposal 111/XIV/2, Article 18

⁴⁷²⁷ Comissão Nacional de Proteção de Dados (CNPD), *Opinion 2021/143* (Nov. 4, 2021), https://www.cnpd.pt/umbraco/surface/cnpdDecision/download/121933

⁴⁷²⁸ Ibid, para, 125

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other parts of the world have shown".⁴⁷²⁹ The CNPD further considered that the error rates associated with facial recognition technologies, "and especially with the relevance that ethnic or racial origin assumes in its promotion, the risk of discrimination is too great to be taken lightly in our legislation."⁴⁷³⁰

The CNPD concluded: "In short, Article 18 of the Proposal provides for a mass surveillance system through the generic use of data analytics and facial recognition technologies, which represents a restriction of citizens' fundamental rights, without complying with the rule of law, even as regards the essential clarity and transparency regarding the provision of these restrictions, and without providing any guarantees of these rights, and therefore proves to be in breach of the requirements set out in paragraphs 2 and 3 of Article 18 of the CRP [Portuguese Constitution]. This is contrary to the requirements laid down in Article 18(2) and (3) of the Charter of Fundamental Rights of the European Union and is liable to affect the essential content of the right to respect for private life, manifestly infringing the principle of proportionality."⁴⁷³¹

The Proposal also suffered criticism from civil society organizations. On 15 November 2021, European Digital Rights (EDRi) released a statement⁴⁷³² in which it mentioned that the Proposal put "forward sweeping measures which would permit the constant video and biometric mass surveillance of each and every person" and that such law was "likely to be incompatible with the essence of Portugal's constitutional obligations to ensure that restrictions on fundamental rights are necessary and proportionate (Article 18(2) CRP); with Portugal's obligations under the Charter of Fundamental Rights of the European Union (including but not limited to articles 1, 7, 8, 11, 12, 20, 21, 41, 47, 48 and 49); and the European Convention on Human Rights."

The following aspects of the Proposal were especially criticized by EDRi: (i) the removal of "current legal safeguards limiting the use of invasive video surveillance"; (ii) the possibility of "video surveillance by aerial drones without limits"; and (iii) the possibility of combining the video surveillance networks "with facial recognition and other AI-based systems in public spaces." EDRi maintained that the combination of these measures "would be highly likely to

⁴⁷²⁹ Ibid, para. 126

⁴⁷³⁰ Ibid, para. 132

⁴⁷³¹ Ibid, para. 140

⁴⁷³² European Digital Rights (EDRi), *Letter re. Serious fundamental rights concerns about proposed Portuguese video surveillance Law 111/XIV/2* (Nov. 15, 2021), https://edri.org/wpcontent/uploads/2021/11/EDRi-Civil-Society-letter-to-Portuguese-Parliament-on-proposed-video-surveillance-law.pdf.

⁴⁷³³ Ibid, p. 1

⁴⁷³⁴ Ibid

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unduly restrict the rights and freedoms of large parts of the Portuguese population and to constitute unjustified biometric mass surveillance practices."⁴⁷³⁵

After all the public scrutiny and intense discussion in Parliament,⁴⁷³⁶ the Proposal was sent to the Committee for final drafting and on December 29, 2021, Law 95/2021 was passed with several significant changes to the initial wording. The installation of these systems now follows several additional principles of use and general obligations, namely:

- The video surveillance systems can only be used for the purposes provided in the Internal Security Law, approved by Law No. 53/2008 of August 29, and only for specific cases established in Article 3(1);
- The use of video cameras should be regulated by the principle of proportionality (Article 4(1));
- When considering, on a case-by-case basis, the specific purpose for which the video-surveillance system is intended, the possibility and degree of affectation of personal rights arising from the use of video cameras should be considered (Article 4(3));
- The capturing of images and sounds is forbidden when such capturing directly and immediately affects the sphere of the privacy of intimate and private life (Article 4(6));
- The installation of video surveillance systems using fixed cameras is subject to authorization by the member of the government that exercises control over the requesting security force or service or the National Authority for Emergency and Civil Protection (Article 5(1));
- The application for authorization to install video surveillance systems must be accompanied by the following elements Article 6(1):
 - Justification of the need and convenience of installing the surveillance system by video cameras;
 - Identification of the location and area covered by the capture;
 - Identification of the camera installation points;
 - Technical characteristics of the equipment used;
 - Identification of the security force service responsible for the conservation and treatment of the data;
 - Procedures for informing the public about the existence of the system;
 - Description of the criteria used in the analytic management system of the captured data;
 - Mechanisms to ensure the correct use of the recorded data:

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⁴⁷³⁵ Ibid, p. 2

⁴⁷³⁶ For more information and details about the Proposal approval process, https://www.parlamento.pt/ActividadeParlamentar/Paginas/DetalheIniciativa.aspx?BID=121083

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- Proof of approval, capacity or guarantee of financing for the installation of the equipment used and the respective maintenance costs;
- Assessment of the impact of data processing on personal data protection;
- The authorization decision is preceded by an opinion from the CNPD on the request regarding compliance with the rules on the security of the processing of the data collected and those foreseen in cases involving sensitive data (Article 5(3)); and,
- For the purposes set out in Article 3, the data processing may be underpinned by an analytical management system for the data captured, by applying technical criteria in accordance with the purposes for which the systems are intended. In this context, the capture and processing of biometric data is not permitted (Article 16 (1) and (2)).

In 2022, the Legislative Assembly of the Azores Region requested the CNPD to issue an opinion on Law Proposal 15/XII, on the first amendment to Law 95/2021, of December 29 ("Regional Proposal").⁴⁷³⁷ This proposal was aimed exclusively at extending the purposes of Article 3 of the proposed legislation to allow for the installation and use of systems for the protection and conservation of marine environments and the conservation and recovery of marine living resources. The CNPD recommended that the capture be prohibited as required and that a specific regime be established for the use of drones for this specific purpose, with the exclusion of the coastal zone. The Regional Proposal has not yet been voted by the Legislative Assembly of the Azores Region.⁴⁷³⁸

Use of AI in Education

The Conselho Nacional de Educação (CNE) issued a recommendation on the problems and scenarios of using AI technology in exams and admission to higher education, noting that "If algorithms are useful in automating tasks, it is no less true that special care must be taken to ensure that they do not increase social inequalities or reproduce prejudices. The concerns not only stem from bias in the data, but also from the people developing the systems." The recommendation calls attention to key questions such as "what level of transparency should be

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⁴⁷³⁷ Legislative Assembly of the Azores Region, *Law Proposal 15/XII*, *first amendment to Law no. 95/2021*, *of December 29*, *which regulates the use and access by the security forces and services and by the ANEPC to surveillance systems for capturing, recording and processing images and sound* (Nov. 2021), https://base.alra.pt:82/4DACTION/w pesquisa registo/3/3467
https://saww.cnpd.pt/umbraco/surface/cnpdDecision/download/122041

⁴⁷³⁹ Conselho Nacional de Educação, *Recomendação n.º 2/2024*, Diário da República n.º 62/2024, Série II de 2024-03-27 (Mar. 27, 2024), https://diariodarepublica.pt/dr/detalhe/recomendacao/2-2024-857575004

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guaranteed? What risks are possible, arising from prejudices and addictions that last over time? How to minimize their existence?"4740

CNE also published a State of Education 2022 (2023 edition) report, reflecting on five key problematic areas that "should be considered in the development of public education policies." AI and its relationship with the educational and training system is one of these five areas. 4741 The report states that "Ethical issues, which were barely mentioned in the early days, are now unavoidable and extremely pertinent. The reasons are legitimate fears that the autonomy of students and teachers will be compromised, that data will be collected and diverted to other purposes, and that AI will introduce additional biases into educational decisions, increasing the inequalities that already exist."4742 Within this context, CNE calls for: a long-term strategy; training for educators and administrators focused on ethical as well as technological issues, including data management; and an AI training framework that reinforces the significance of public spaces and social learning. The CNE recommendations and annual report are substantively linked with the work and guidance on AI in education by the Council of Europe, UNESCO, and the OECD.

Portugal was among the countries identified as having developed specific Al curricula for the purpose of enabling citizens to "recognize Al in their environments, understand its benefits and potential challenges, and be empowered to advocate for safe, beneficial and transparent AI technologies"⁴⁷⁴³ in a UNESCO report on mapping government-endorsed AI curricula. In this regard, the representative for Portugal stated, "We have a clear vision of the impact of technology in the future, and the need for a workforce and citizens who relate to technology in a healthy way on a daily basis. This includes the concepts, awareness, and skills to improve these areas, work with machines, and see robotics as complementary to society. This is the big picture." 4744

Portugal's progress on the digital and AI learning follows attention to setting up systems for protecting children and other users during the COVID-19 pandemic. The CNPD issued guidance for the use of technologies supporting distance learning in April 2020. 4745 The CNPD considered that distance learning

⁴⁷⁴⁰ Ibid

⁴⁷⁴¹ Conselho Nacional de Educação, *Publicação Estado da Educação 2022: Caracterizar*, analisar e avaliar a evolução do sistema educativo e formativo português (Feb. 2, 2024), https://www.cnedu.pt/pt/noticias/cne/2188-publicacao-estado-da-educacao-2022-caracterizaranalisar-e-avaliar-a-evolucao-do-sistema-educativo-e-formativo-portugues ⁴⁷⁴² Ibid, p. 94

⁴⁷⁴³ UNESCO, K-12 AI Curricula: A Mapping of Government-Endorsed AI Curricula (Sept. 2022), p. 22, https://unesdoc.unesco.org/ark:/48223/pf0000380602 ⁴⁷⁴⁴ Ibid

⁴⁷⁴⁵ Comissão Nacional de Proteção de Dados (CNPD), *Orientações para utilização de* tecnologias de suporte ao ensino à distância (Apr. 8, 2020),

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could enhance "the automated collection of information and the subsequent analysis and prediction of aspects related, namely, to intellectual skills, professional skills, personality traits, professional performance and even the users' health. This is especially evident in platforms that provide educational content specifically tailored to each user, which results in automated decision-making based on artificial intelligence systems that analyze student behaviour and performance (learning analytics)."⁴⁷⁴⁶

The CNPD further noted that the use of such technologies could pose "risks for the fundamental rights of users, in particular, the right to respect for private and family life and the right to equality, in terms of non-discrimination."⁴⁷⁴⁷ The guidance document intends to address such risks, framing the use of technology to "a set of legal obligations and good practices that mitigate the risks to privacy and prevent discrimination against students and professionals."⁴⁷⁴⁸

The guidance was especially aimed at data controllers and processors, as well as public bodies taking decisions involving the use of technologies that encompass automated decision-making. In this context, it encompasses a set of specific recommendations aimed at minimizing the impact on the privacy of students and teachers. Regarding the use of automated decision-making technologies, "the use of any performance analysis algorithms (learning analytics) should always be judicious and done in a fair and transparent way to the data subjects and only if any of the conditions for the lawfulness of this treatment are met. It is important to reinforce here that no educational establishment can impose the use of this specific artificial intelligence technology on its students, as such use depends on the informed, free, specific and explicit will of the student or, when minor, of the person representing them. Clear information should be given to the bearers regarding how the analysis algorithms work, namely when automated decisions are involved. And the data subject's right to obtain human intervention in the process should always be guaranteed." 4749

In November 2020, the Council of Europe Consultative Committee of Convention 108 issued Guidelines on Children's Data Protection in an Education Setting, also applicable to remote e-learning solutions and services. ⁴⁷⁵⁰ The Committee recalls that "The UN Convention Committee on the Rights of the Child"

⁴⁷⁴⁷ Ibid, p. 2

https://www.cnpd.pt/media/q0jha0dk/orientacoes_tecnologias_de_suporte_ao_ensino_a_distanci_a.pdf

⁴⁷⁴⁶ Ibid

⁴⁷⁴⁸ Ibid

^{4/49} Ibid, pp. 4-5

⁴⁷⁵⁰ Council of Europe Consultative Committee of the Convention for the Protection of individuals with regard to automatic processing of personal data Convention 108, *Guidelines on Children's Data Protection in an Education Setting* (Nov. 20, 2020), https://rm.coe.int/t-pd-2019-6bisrev5-eng-guidelines-education-setting-plenary-clean-2790/1680a07f2b

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set out in 2001, that 'Education must be provided in a way that respects the inherent dignity of the child and enables the child to express his or her views freely.'"⁴⁷⁵¹

The Committee also states that: "Stakeholders should collaborate to create a rights-respecting environment, to uphold Article 8 of the European Convention on Human Rights and protect the human dignity and fundamental freedoms of every individual, in respect of data protection."

Use of AI in the Health Sector

The 2019 Health Data Strategy "sets out the vision, key areas and principles for secondary use of data, advanced analytics and artificial intelligence to improve the Portuguese population's health." One of the key areas identified in the Strategy concerns the legal and ethical framework that should apply to the use of a data-driven national health service. "To ensure the best possible ethical framework for secondary use of data and sustainable AI, our strategy endorses strong commitment to the foundational values of the NHS and the rule of law, as well as to the ethical principles set out in the European Commission Ethics Guidelines for Trustworthy AI."

"The positive impact that big data and AI systems already have and will continue having, both in public health and healthcare must ensure that the risks and other adverse impacts with which these technologies are associated are properly and proportionately handled. Citizens and health professionals will only have confidence in information and technology development and its applications if a clear and comprehensive framework for achieving trustworthiness is in place." It is further stressed that: "Trustworthy secondary use of data and AI must ensure compliance with all applicable laws and regulations, ethical principles and values and robustness both from a technical and social perspective. Development, deployment and use of health information technologies and AI systems must be made in a way that adheres to ethical principles (respect for human autonomy, prevention of harm, fairness and explicability); pays attention to situations involving more vulnerable groups such as children, persons with disabilities and others at risk of exclusion; and acknowledges that these systems pose risks that may be difficult to measure or anticipate." 4755

⁴⁷⁵¹ Ibid, p. 3

⁴⁷⁵² Shared Services of the Ministry of Health (SPMS), Advanced Analytics and Intelligence Unit Information Systems Department, *From Big Data to Smart Health, Putting Data to Work for the Public's Health*, p. 4 (Dec. 2019), https://www.spms.min-saude.pt/wp-content/uploads/2020/07/Data-Strategy_VERSAOFINAL_07.01.2020.pdf

⁴⁷53 Ibid, p. 18.

⁴⁷⁵⁴ Ibid

⁴⁷⁵⁵ Ibid

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The Strategy also foresees the creation of an internal Health Information and Technology Ethics Board to ensure accountability with these principles and frameworks. The Strategy provides that "accountability frameworks, including disclaimers as well as review and redress mechanisms should be facilitated by traceability and auditability procedures, particularly when dealing with AI systems in critical contexts or situations." Such a Board, however, has not yet been created.

Use of AI in Labor Relations

The 2022 Green Paper points out ways "to use artificial intelligence to minimize new risks, ensuring privacy and data protection, and also to take advantage of new technologies as a way of eliminating bureaucracy and ensuring greater effectiveness in the relationship between the State and citizens and businesses."⁴⁷⁵⁸

The document comments on risks involved in the use of AI in the labour market, noting, for instance, that "AI is also expected to impact more strongly on social groups such as young people and women, since the risk of automation is higher among jobs performed by these groups. Moreover, women are underrepresented in the STEM professional fields and AI can reinforce algorithmic gender bias and discrimination, especially if the machine learning teams that define how the algorithm works are not more diverse in terms of socio-economics, gender and ethnicity." 4759

"The lack of transparency and explanation about how the algorithms' decisions and predictions work can lead to the exclusion of jobseekers due to factors unrelated to the profile of the job to be filled. This can also lead to workers' insecurity. AI, by enabling the monitoring of workers' performance, can increase pressure on workers and increase stress regarding productivity and how bosses interpret information." ⁴⁷⁶⁰

The Green Paper further acknowledges risks relating to automated management. "The use of algorithmic management has been on the rise and was strongly boosted with the COVID-19 pandemic through the use of remote working software that enables the collection and monitoring of work performance data. Although this type of algorithmic management has essentially emerged in the collaborative economy for work on digital platforms, as Adams-Prassl (2020)

⁴⁷⁵⁷ Ibid

⁴⁷⁵⁶ Ibid

⁴⁷⁵⁸ Gabinete de Estratégia e Planejamento (GEP) and Instituto do Emprego e Formação Profissional (IEFP), *Green Paper on the future of work 2021*, p. 10 (Mar. 2022), http://www.gep.mtsss.gov.pt/documents/10182/79392/livro_verde_do_trabalho_2021_EN.pdf/7e63e982-8a4e-45a1-bc0c-ad707fbbe1b2

⁴⁷⁵⁹ Ibid, pp. 77–78

⁴⁷⁶⁰ Ibid, p. 78

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points out, it is now commonplace in various industries, and is used to support management in information gathering, information processing and worker control based on that gathered information, often in a non-transparent manner."⁴⁷⁶¹

The Green Paper contains a section with guidelines for reflection on public policies for the future of work in Portugal. The guidelines concerning technological diversity, AI and algorithms include a recommendation to "regulate the use of algorithms in their different dimensions, so as to promote transparency and responsibility in their use, particularly in the context of employment relations." This is followed by a recommendation to "encourage, in particular, regulation of the use of algorithms in collective bargaining, involving social partners and ensuring that the issue is dealt with at the level of collective bargaining agreements, so as to ensure the appropriate adequacy of AI and to reflect the specific needs of each sector."

The Green Paper also includes a recommendation to "introduce provisions in legislation that minimise the new risks associated with autonomous AI behaviour by setting requirements to ensure the protection of privacy and personal data, equality and non-discrimination (see specific points for further details), ethics, transparency and the explainability of algorithm-based systems, both in the selection of job applicants and in the performance of the work contract and the monitoring of the worker's professional activity."⁴⁷⁶⁴

Another recommendation seeks to "promote trusted AI by investing in infrastructure development, the integrated and regulated progress of the algorithmic bases of AI, improved use of public and industry data and the creation of data repositories." 4765

Finally, the Green Paper recommends that Portugal "invest, in coordination with universities, research centers and other agents, in building the skills of the State and Public Administration in the use of AI and its potential, so as to ensure the existence of public competence centers and the capacity for adequate regulation and supervision of the use of AI in different domains, including the labour market; encourage the use of AI in the public sector, with full respect for the ethical principles that should underlie it (see point on Public Administration)."⁴⁷⁶⁶

⁴⁷⁶¹ Ibid

⁴⁷⁶² Ibid, p. 169

⁴⁷⁶³ Ibid

⁴⁷⁶⁴ Ibid, pp. 169–170

⁴⁷⁶⁵ Ibid, p. 170

⁴⁷⁶⁶ Ibid

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Amendments to the Portuguese Labor Code⁴⁷⁶⁷ in 2023 were introduced to integrate the use of algorithms and artificial intelligence within the scope of the law.⁴⁷⁶⁸ The changes to Article 3 allow for the conclusion of collective labor agreements in relation to AI use.⁴⁷⁶⁹ The updated Article 24 provides that "The worker or job seeker has the right to equal opportunities and treatment with regard to access to employment, training and promotion or professional career and working conditions" including "in the case of decision-making based on algorithms or other artificial intelligence systems."⁴⁷⁷⁰ The revised Articles 106, 424, and 466 affirm, respectively, the individual and collective (workers' committee and worker unions) right of workers to receive information from their employer about "The parameters, criteria, rules and instructions on which algorithms or other artificial intelligence systems are based that affect decision-making on access to and maintenance of employment, as well as working conditions, including profiling and control of professional activity."⁴⁷⁷¹

The 2024 Program of the XXIV Constitutional Government also makes mention of the role of AI in the labor market, noting the need "to reform the education and vocational training system in order to bring it into line with the needs and potential of the Portuguese economy and its business fabric, to create an environment where universities and companies can connect, and to prepare the national workforce for the technological transformations underway and the fundamental changes in the future of work, namely through digitalisation and the transformations generated by the spread of artificial intelligence." ⁴⁷⁷²

Environmental Impact of AI

Portugal leverages AI to enhance environmental sustainability, such as in combating illegal fishing by identifying marine areas with high fish populations and determining species abundance in specific zones. Portugal plans a national pact centered on sustainable development that includes leveraging AI for climate management as well as decarbonization.⁴⁷⁷³ Additionally, Portugal uses AI

⁴⁷⁷⁰ Ibid, Article 24

⁴⁷⁶⁷ Assembleia da República, *Código do Trabalho*, Diário da República n.º 30/2009, Série I de 2009-02-12, Consolidated version (Nov. 2, 2024), https://diariodarepublica.pt/dr/legislacao-consolidada/lei/2009-34546475

⁴⁷⁶⁸ Assembleia da República, *Lei n.º 13/2023*, Diário da República n.º 66/2023, Série I de 2023-04-03 (Apr. 3, 2023), https://diariodarepublica.pt/dr/detalhe/lei/13-2023-211340863

⁴⁷⁶⁹ Ibid, Article 3

⁴⁷⁷¹ Ibid, Articles 106, 424 and 466

⁴⁷⁷² República Portuguesa, *Programa XXIV Governo Constitucional*, p. 37 (Apr. 10, 2024), https://www.portugal.gov.pt/gc24/programa-do-xxiv-governo-pdf.aspx

⁴⁷⁷³ Republica Portuguesa, *A Country of Sustainable Development* (Apr. 16, 2024), https://www.portugal.gov.pt/pt/gc24/comunicacao/noticia?i=um-pais-de-desenvolvimento-sustentavel

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algorithms to analyze and control waste management, supporting biodiversity and ecosystem preservation.⁴⁷⁷⁴

The country presented their first National Strategy for Intelligent Territories (NSST) and became a Living-in.EU signatory in December 2023. Under the motto "transforming data into action," the Living-in program offers a benchmark to make life easier for people and companies through data, through efficient and sustainable management of the territory and based on innovation and transparency. 4775

Lethal Autonomous Weapons

During the 2019 Group of Governmental Experts ("GGE") meeting, Portugal's statement reaffirmed the need for human oversight of such weapons: "The development, use and/or transfer of this specific type of military or security technologies must always safeguard human control and supervision during the entire Lethal Autonomous Weapon Systems ("LAWS") life cycle. The human-machine interaction must be designed and programmed in such a way that ensures that the persons responsible for supervising the use of LAWS are fully accountable for the effects of that use and are able to immediately interrupt an initiated attack should they decide to do so. Therefore, in the autonomy spectrum, the degree of independence of weapons systems has to be limited."

Portugal proposed for the GGE to confer a mandate "to produce a reference document compiling existing norms and principles of International Law applicable to LAWS and identifying related good practices for producers, commanders and operators". ⁴⁷⁷⁷ This reference document "would be a useful and practical tool with a clarifying effect" for the purpose of future negotiations regarding a convention on LAWS.

In August 2020, at the request of the Chair of the 2020 GGE on Emerging Technologies in the Area of LAWS within the Convention on Certain Conventional Weapons ("CCW"), Portugal commented on the operationalization of the 11 guiding principles on LAWS adopted at the 2019 Meeting of the High

Group of Governmental Experts (2019)/PT%2B%2BStatement%2BGGE%2BLAWS%2B25

⁴⁷⁷⁴ OECD, *The State of Implementation of the OECD AI Principles Four Years On*, p. 33 (Oct. 2023), https://www.oecd.org/content/dam/oecd/en/publications/reports/2023/10/the-state-of-implementation-of-the-oecd-ai-principles-four-years-on_b9f13b5c/835641c9-en.pdf

⁴⁷⁷⁵ Living.in.eu, *Portugal Launches Its First National Smart Territories Strategy* (Jan. 11, 2024), <u>living-in.eu/news/portugal-launches-its-first-national-smart-territories-strategy-0</u> 4776 Portugal, CCW Group of Governmental Experts on Lethal Autonomous Weapons Systems, *Statement by Portugal*, pp. 1-2 (Mar. 25, 2019), https://unoda-documents-library.s3.amazonaws.com/Convention on Certain Conventional Weapons -

MAR19.pdf

⁴⁷⁷⁷ Ibid, p. 2

⁴⁷⁷⁸ Ibid, p. 3

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Contracting Parties to the CCW.⁴⁷⁷⁹ Portugal's comments emphasize the need for a human-centered approach to LAWS. "Automation and artificial intelligence should be tools in assisting the human actors (enhancing human perception and human action) rather than being the (non-human) actors themselves—see our comment to Guiding Principle (i). The will and decision to use force must therefore always remain with a human being. Especially during the deployment phase, considering that no weapon is developed without defect or possibility of malfunction, its human users must be trained and able to quickly act in order to avoid or minimize the negative consequences of a malfunctioning LAWS. The use of force must be planned and executed in such a way that it can always be retraceable to the human being operating the machine, in order to prevent any accountability gaps for violations of international law—see our comment to Guiding Principle (d)."⁴⁷⁸⁰

Portugal was one of the 70 countries that endorsed a joint statement on autonomous weapons systems at the 2022 United Nations General Assembly. The joint statement urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law, including through maintaining human responsibility and accountability in the use of force." 4781

Portugal participated in an international summit on the responsible application of artificial intelligence in the military domain (REAIM) hosted by the Netherlands in February 2023. At the end of the Summit, Portugal endorsed a joint call for action on the responsible development, deployment and use of artificial intelligence in the military domain. ⁴⁷⁸² In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability."

⁴⁷⁷⁹ Portugal, *Commentaries on "Operationalising all eleven guiding principles at a national level"* (Aug. 2020), https://documents.unoda.org/wp-content/uploads/2020/09/20200831-Portugal1.pdf.

⁴⁷⁸⁰ Ibid, pp. 2–3

⁴⁷⁸¹ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

 $[\]frac{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm\ en.pdf$

⁴⁷⁸² Government of Netherlands, *Call to Action on Responsible Use of AI in the Military Domain*, Press Release (Feb. 16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action

⁴⁷⁸³ Responsible AI in the Military domain Summit, *REAIM Call to Action* (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action

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Portugal also endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023. 4784

The second REAIM summit took place in September 2024 in Seoul. Portugal endorsed the outcome document titled Blueprint for AI Action, which offers specific actions for countries and the international community to take over the next year to ensure the responsible use of AI in defense.⁴⁷⁸⁵

At the 78th UN General Assembly First Committee in 2023, Portugal voted in favor⁴⁷⁸⁶ of resolution L.56⁴⁷⁸⁷ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on ways to address the challenges and concerns autonomous weapon systems raise from humanitarian, legal, security, technological and ethical perspectives and reflect on the role of humans in the use of force.

The Secretary-General of the United Nations issued the report in July 2024. Portugal's contribution focused on the social and humanitarian impact of LAWS and the need for new prohibitions and regulations guided by international law, including international humanitarian law and international human rights law, to prevent the effects of displacement, injury and death of civilians, and destruction of civilian objects. 4788

Human Rights

According to Freedom House, Portugal is classified as "free," with a score of 96/100. Freedom House defines Portugal as "a parliamentary democracy with a multiparty political system and regular transfers of power between rival parties" in which "civil liberties are generally protected."

 $\frac{\text{https://reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163\&shareBbsMngNo=10}{264\&shareMenuId=11613\&shareTabMenuId=}$

⁴⁷⁸⁴ US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Feb. 12, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

⁴⁷⁸⁵ REAIM 2024, *Blueprint for AI Action* (Sept. 11, 2024),

⁴⁷⁸⁶ Stop Killer Robots, *164 states vote against the machine at the UN General Assembly*, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

⁴⁷⁸⁷ UN General Assembly, *Resolution L56: Lethal Autonomous Weapons*, Resolution L56 (Oct.12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

⁴⁷⁸⁸ UN General Assembly, *Lethal Autonomous Weapons Systems: Report of the Secretary-General*, pp. 20–21 (Jul. 1, 2024),

https://documents.un.org/doc/undoc/gen/n24/154/32/pdf/n2415432.pdf

⁴⁷⁸⁹ Freedom House, *Freedom in the World 2024: Portugal* (2024), https://freedomhouse.org/country/portugal/freedom-world/2024

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Portugal is party to the most important international legal instruments for the protection and defense of human rights.⁴⁷⁹⁰

A Council of Europe Committee of Ministers recommendation on the human rights impacts of algorithmic systems in 2020 stressed to member States that their commitment to the Convention for the Protection of Human Rights and Fundamental Freedoms to "stands throughout the continuous processes of technological advancement and digital transformation." As such, "member States must ensure that any design, development and ongoing deployment of algorithmic systems occur in compliance with human rights and fundamental freedoms, which are universal, indivisible, inter-dependent and interrelated, with a view to amplifying positive effects and preventing or minimising possible adverse effects."

Parliament adopted the Portuguese Charter of Human Rights in the Digital Age (Charter) in May 2021 with the aim of promoting the free exercise of human rights and social inclusion in the digital environment. Ariole 9 of the Charter concerns the use of AI and establishes that it "must be guided by respect to fundamental rights, ensuring a fair balance between the principles of explainability, security, transparency and accountability, taking into account the circumstances of each specific case and establishing procedures to avoid bias and discrimination. The Charter further establishes that "decisions with a significant impact on recipients that are taken by the use of algorithms must be communicated to interested parties, be appealable and appealable and auditable, as provided by law."

OECD / G20 AI Principles

Portugal is a member of the Organization for Economic Co-operation and Development (OECD) and endorsed the OECD AI Principles, including Principles

https://portaldiplomatico.mne.gov.pt/en/foreign-policy/human-rights

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

⁴⁷⁹⁰ Ministry of Foreign Relations, *Human Rights*,

⁴⁷⁹¹ Recommendation CM/Rec(2020)1 of the Committee of Ministers to Member States on the human rights impacts of algorithmic systems (Apr. 8, 2020),

⁴⁷⁹² Portuguese Parliament, Law No. 27/2021, *Portuguese Charter on Human Rights in the Digital Age (Carta Portuguesa de Direitos Humanos na Era Digital)* (May 17, 2021), https://files.dra.ph/15/2021/05/00500/000550010 pdf

https://files.dre.pt/1s/2021/05/09500/0000500010.pdf

⁴⁷⁹³ Ibid, Article 9(1)

⁴⁷⁹⁴ Ibid, Article 9(2)

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updated in May 2024.⁴⁷⁹⁵ The OECD Survey on the implementation of the OECD AI Principles in 2021 took note of the Portuguese policy approach to AI.⁴⁷⁹⁶

Various Portuguese policy initiatives are inspired by and acknowledge the OECD AI Principles. This is the case of AI Portugal 2030, the AI Guide, 4797 and the SPMS Health Data Strategy. 4798 The Guide to Artificial Intelligence in the Public Administration increases accountability requiring the documentation of the robust and safe operation of AI systems. 4799

Council of Europe AI Treaty

Portugal contributed as a Council of Europe and EU Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of law. The Committee on AI approved the Draft Framework Convention during its 10th Plenary session in March 2024. In August 2024, 24 EU delegations, including Portugal, voted in favor of adopting the CoE Convention. In a statement to the Council Secretariat, the Portuguese Republic affirmed its commitment to adopt the treaty. However, the country has not signed independently from the EU.

⁴⁷⁹⁵ OECD AI Policy Observatory, *OECD AI Principles Overview, Countries Adhering to the AI Principles* (2025), https://oecd.ai/en/ai-principles

https://search.coe.int/cm/pages/result_details.aspx?objectid=0900001680aee411

⁴⁷⁹⁶ OECD, State of Implementation of the OECD AI Principles: Insights from National AI Policies, p. 31 (Jun. 18, 2021), https://www.oecd.org/digital/state-of-implementation-of-the-oecd-ai-principles-1cd40c44-en.htm

⁴⁷⁹⁷ Agência para a Modernização Administrativa (AMA), *GuIA para a Inteligência Artificial Ética, Transparente e Responsável na Administração Pública*, p. 21 (Feb. 2022), https://tic.gov.pt/documents/37177/293193/GuIA+Respons%C3%Alvel+para+a+IA+na+AP.pdf /9bc6b247-ffbb-6c3c-4b7c-7f7dc579525f.

⁴⁷⁹⁸ Shared Services of the Ministry of Health (SPMS), Advanced Analytics and Intelligence Unit Information Systems Department, *From Big Data To Smart Health, Putting Data To Work For The Public's Health*, p. 4 (Dec. 2019), https://www.spms.min-saude.pt/wp-content/uploads/2020/07/Data-Strategy VERSAOFINAL 07.01.2020.pdf

⁴⁷⁹⁹ OECD, *The State of Implementation of the OECD AI Principles Four Years On*, p. 44 (Oct. 2023), https://www.oecd.org/content/dam/oecd/en/publications/reports/2023/10/the-state-of-implementation-of-the-oecd-ai-principles-four-years-on_b9f13b5c/835641c9-en.pdf

⁴⁸⁰⁰ Council of Europe, *Draft Framework Convention on AI, Human Rights, Democracy and the Rule of Law* (Mar. 2024),

⁴⁸⁰¹ Council of the European Union, Council Decision on the Signing, on Behalf of the European Union, of the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law – Adoption, pp. 4-5 (Aug. 29, 2024), https://data.consilium.europa.eu/doc/document/CM-3871-2024-INIT/en/pdf

⁴⁸⁰² Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 11, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

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UNESCO Recommendation on AI Ethics

Portugal has endorsed the UNESCO Recommendations on AI, the first ever global agreement on the ethics of AI. 4803

The UNESCO developed the Readiness Assessment Methodology (RAM) to support the implementation of its Recommendation on the Ethics of AI. Many African and Latin American states have undergone this process, but only few did in Europe. Portugal has not initiated the RAM process.⁴⁸⁰⁴

Evaluation

In evaluating Portugal's AI initiatives, Portugal has demonstrated a strong commitment to international AI governance frameworks, particularly through its support of the Council of Europe's Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law, which the EU signed in September 2024. 4805

Portugal's AI Strategy, AI Portugal 2030, and related policies included public feedback and participation in their making process with reports summarizing feedback published after. Although a public participation opportunity associated with the revision of AI Portugal 2030 was planned, it has not been launched yet, hence the decrease of the related score this year. The same decrease was observed in the public access to AI policies in the Republic due to the lack of access to the evolution of these documents.

In terms of AI oversight, Portugal has recently enhanced its institutional framework by establishing the Council for Digital in Public Administration (CDAP) in July 2024. This oversight structure includes setting strategic objectives, defining clear actions, and developing implementation and evaluation metrics, providing a

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⁴⁸⁰³ United Nations Educational, Scientific and Cultural Organization (UNESCO), *UNESCO Member States Adopt the First Ever Global Agreement on the Ethics of Artificial Intelligence* (Nov. 2021), https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence

⁴⁸⁰⁴ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (2024), www.unesco.org/ethics-ai/en/global-hub

⁴⁸⁰⁵ Council of the European Union, Council Decision on the signing, on behalf of the European Union, of the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law – Adoption, (p, 4-5) (Aug. 29, 2024), https://data.consilium.europa.eu/doc/document/CM-3871-2024-INIT/en/pdf

⁴⁸⁰⁶ Hugo Séneca, *Congresso das Comunicações: Governo deu luz verde para estratégia da Inteligência Artificial ir para consulta pública*, Expresso, (May 14, 2024) https://expresso.pt/economia/economia_tecnologia/2024-05-14-congresso-das-comunicacoes-governo-deu-luz-verde-para-estrategia-da-inteligencia-artificial-ir-para-consulta-publica-b8bde43d

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robust governance framework for AI in the public sector. Additionally, the National Data Protection Commission (CNDP) is bolstering its AI oversight capabilities, focusing on data protection within AI systems, with plans to further enhance its role in 2025. Furthermore, in October 30, the working group on AI studied the diverse institutions that should oversee the implementation of the EU AIA, along later releasing a list of fourteen agencies tasked with supervising fundamental rights in the use of AI systems. However, Portugal has not officially named a competent authority or main contact for the AI Act.

Overall, Portugal's commitment to global AI standards is reflected in the Republic's alignment with the OECD AI principles, its endorsement of the UNESCO recommendations, and support of the CoE AI Treaty. In these engagements, Portugal showcases a commitment to transparency, fairness, and human oversight, prioritizing also sustainable AI applications.

Puerto Rico

In 2024, Puerto Rico passed data protection legislation modeled on the EU GDPR and California Consumer Privacy Act and a Cybersecurity Act to safeguard government data and systems from AI-enabled attacks.

National AI Strategy

Puerto Rico does not have a specific national AI strategy.

Puerto Rico (or officially the Commonwealth of Puerto Rico) is relatively self-governed but is an unincorporated territory of the United States. Even though new laws are proposed and ratified without U.S. approval, Puerto Ricans are U.S. citizens subject to most US federal laws without representation by voting members of Congress. Puerto Rico is a sub-national administrative division overseen by the U.S. government.

At the federal level, Puerto Rico follows the U.S. position on AI, composed of a 2020 Presidential Executive Order, a 2019 Executive Order, OMB Guidance

⁴⁸⁰⁷ Presidency of the Council of Ministers, *Resolution of the Council of Ministers No. 94/2024* [Resolução do Conselho de Ministros n.º 94/2024], Diário da República (Jul. 25, 2024), https://diariodarepublica.pt/dr/detalhe/resolucao-conselho-ministros/94-2024-873371754 National Data Protection Commission (CNDP), *Plano Anual de Atividades para o Ano 2025*, (Jul. 30, 2024) https://www.cnpd.pt/media/1d5eggad/cnpd_plano-anual-de-atividades-2025 pdf

digital.gov.pt, *Primeira reunião do Grupo Técnico de Trabalho de Inteligência Artificial*, (Oct. 30, 2024), https://digital.gov.pt/noticias/primeira-reuniao-do-grupo-tecnico-de-trabalho-de-inteligencia-artificial

⁴⁸¹⁰ Nuno Braga, *Governo seleciona entidades responsáveis pela proteção dos direitos fundamentais na IA*, Sapo (Nov. 1, 2024), https://jornaleconomico.sapo.pt/noticias/governo-seleciona-entidades-responsaveis-pela-protecao-dos-direitos-fundamentais-na-ia/

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for Regulation of AI Applications, the recommendations of a National Security Commission on AI, and various initiatives and programs established by the National AI Initiative Act (NAIIA), explained further in the U.S. section of this report. An Executive Memorandum on Advancing U.S. Leadership in Artificial Intelligence was released in October 2024, with further guidance for harnessing AI technologies for national security and contributing to international AI governance. Although the 2023 Executive Order clarified in the memo was rescinded in January 2025, the memorandum was not rescinded at the time.

Public Participation

The website of Puerto Rico's House of Representatives serves as an interactive space designed to engage citizens directly in public decision-making and legislative processes, promoting greater democratic participation and governmental transparency.⁴⁸¹⁴

The University of Puerto Rico at Río Piedras (UPRRP) has established the Puerto Rican Public Opinion Laboratory (LabPOP) to address the historical lack of current public opinion data on key political and social issues in Puerto Rico. 4815 With a \$724,347 grant from NSF's Build and Broaden program, LabPOP will conduct its first comprehensive national survey in January, employing 60 students. The two-year project will focus on examining public perceptions of U.S.-Puerto Rico relations.

The Coalition of Artificial Intelligence in Puerto Rico held an inaugural convention on public policy, cybersecurity, health, education, and human

⁴⁸¹¹ Biden White House Archives, *Memorandum on Advancing the United States' Leadership in Artificial intelligence* (Oct. 24–2024), https://bidenwhitehouse.archives.gov/briefing-room/presidential-actions/2024/10/24/memorandum-on-advancing-the-united-states-leadership-in-artificial-intelligence-harnessing-artificial-intelligence-to-fulfill-national-security-objectives-and-fostering-the-safety-security/">https://bidenwhitehouse.archives.gov/briefing-room/presidential-actions/2024/10/24/memorandum-on-advancing-the-united-states-leadership-in-artificial-intelligence-to-fulfill-national-security-objectives-and-fostering-the-safety-security/

⁴⁸¹² President Joseph R. Biden, *Executive Order 14110 on Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence* (Oct. 30, 2023), https://www.federalregister.gov/d/2023-24283

⁴⁸¹³ President Donald Trump, *Initial Rescissions of Harmful Executive Orders and Actions* (Jan. 28, 2025), https://www.federalregister.gov/documents/2025/01/28/2025-01901/initial-rescissions-of-harmful-executive-orders-and-actions

⁴⁸¹⁴ House of Representatives of Puerto Rico, *Official Page of the House of Representatives of Puerto Rico* [Spanish] (Oct. 2024), https://www.camara.pr.gov/

⁴⁸¹⁵ Universidad de Puerto Rico, *Puerto Rican Public Opinion Research Lab Based on Rio Piedras Campus Receives Grant to Realize Its First Survey* (Oct. 7, 2024), https://www.upr.edu/laboratorio-puertorriqueno-de-opinion-publica-de-la-upr-recinto-de-rio-piedras-recibe-subvencion-para-realizar-su-primera-encuesta-nacional/

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resources in July 20224. The coalition is made up of government, civil society, academia and private sector actors. 4816

Data Protection

The right to privacy is a fundamental right enshrined in Section 8 of Puerto Rico's Bill of Rights.

U.S federal data protection regulations apply in Puerto Rico,⁴⁸¹⁷ though Puerto Rico has also implemented additional regulations. The existing U.S. legislation was created as an instrument of customer protection, in terms of establishing obligations and procedures when data breaches are detected and providing consumers with common privacy rights including the right to know, optout rights, and increased control over the sharing of personal information.⁴⁸¹⁸ Puerto Rico has also passed the Citizen Information of Data Banks Security Act, a breach notification and data disposal law.⁴⁸¹⁹

There is currently no data protection authority (DPA) in Puerto Rico. However, a new cybersecurity law mandates the creation of the Chief Information Security Officer (CISO) under the Puerto Rico Innovation & Technology Service (PRITS). He Cybersecurity Act (Act 40) passed in January 2024 aims to create a framework prioritizing government data security to foster innovation, development, and sustainable economic growth through collaborative mandates and an expanded role for cybersecurity within the government. He Act 40 also mandates the establishment of an Officer of Cyber Incident Evaluation under PRITS. He Act 40 also mandates are currently as a contract of the contract of th

https://inteligenciaartificial.upr.edu/noticias/; El Nuevo Día, "This is for Puerto Rico": Artificial Intelligence Coalition Plans Its Roadmap (Jul. 11, 2024),

https://www.elnuevodia.com/noticias/locales/notas/esto-es-por-puerto-rico-coalicion-de-inteligencia-artificial-traza-su-ruta-de-trabajo/

⁴⁸¹⁶ Artificial Intelligence Coalition of Puerto Rico, *1st Meeting: Artificial Intelligence Coalition of Puerto Rico*, Noticias, University of Puerto Rico (Jul. 2024),

⁴⁸¹⁷ US Office of Privacy and Open Government, *Privacy Laws, Policies, and Guidance*, https://www.commerce.gov/opog/privacy/privacy-laws-policies-and-guidance

⁴⁸¹⁸ One Trust, *Data Guidance by jurisdiction*, https://www.dataguidance.com/jurisdiction/puerto-rico

⁴⁸¹⁹ Davis Write Tremaine LLP, *Puerto Rico Security Breach, Title 10 – Commerce*, https://www.dwt.com/files/Uploads/Documents/Publications/PuertoRico%20Security%20Breach_pdf

⁴⁸²⁰ Puerto Rico Innovation & Technology Service, *Ley de Ciberseguridad del Estado Libre Asociado de Puerto Rico* (Jan. 18, 2024),

https://docs.pr.gov/files/prits/Leyes/Ley%20N%C3%BAm.%2040-

 $[\]underline{2024\%20 Ley\%20 de\%20 Ciberseguridad\%20 del\%20 Estado\%20 Libre\%20 Asociado\%20 de\%20 Pu\underline{erto\%20 Rico.pdf}$

⁴⁸²¹ PRITS, *Cybersecurity: Full Plan* (2025), https://www.cybergrant.pr.gov/full-plan (4822 Ibid

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The Consumer Data and Personal Information Protection Act was approved by the Puerto Rico Senate on November 8, 2023. The bill aims to supersedes data collection and privacy laws in Puerto Rico and aligns these laws with more regulated jurisdictions such as California's Consumer Privacy Act or the EU's General Data Protection Regulation (GDPR).

Algorithmic Transparency

There is no legislation, currently in force or pending, addressing algorithmic transparency. The Puerto Rico House Bill 2027, introduced on February 15, 2024, outlines policies on how government agencies should use AI algorithms. The Bill notes challenges from AI for "ethics, privacy, information security, and respect for human rights." However, in its current form, the Bill does not state any algorithmic transparency measures to be implemented.

Digitization of Public Administration

Law 75 of 2017 established the Puerto Rico Innovation and Technology Service (PRITS) that promotes public policy on the preparation, management, development, coordination and effective interagency integration of innovation and the technological and information infrastructure of the Government of Puerto Rico. PRITS has been contributing to Puerto Rico's digital transformation through several platforms such as CESCO Digital, Which enables vehicle and license renewal and payment of fines; VACU ID, as smart health card capturing COVID vaccines; and IDEAL, application platform that digitizes documents, certificates, and information held by the state on citizens, and serves as a citizen information portal provides government data to citizens to promote transparency.

https://open.pluralpolicy.com/pr/bills/2021-2024/PC2027/

⁴⁸²³ Senado de Puerto Rico, *Procedimientos y Debates de la Decimonovena Asamblea Legislativa Sexta Sesión Ordinaria año 2023* (Nov. 8, 2024).

https://senado.pr.gov/document_vault/session_diary/2583/document/110823.pdf

⁴⁸²⁴ Open States, Puerto Rico House Bill 2027 (2024),

⁴⁸²⁵ Puerto Rico Innovation & Technology Service, *Delinean agenda tecnológica para el Gobierno de Puerto Rico* (Jan.11, 2022) https://www.prits.pr.gov/comunicados/delinean-agendatecnologica-para-el-gobierno-de-puerto-rico.

⁴⁸²⁶ Cesco, https://www.cesco.pr.gov

⁴⁸²⁷ Vacu ID, https://www.vacuid.pr.gov

⁴⁸²⁸ IDEAL, https://www.prits.pr.gov/ideal

⁴⁸²⁹ Puerto Rico Innovation & Technology Service Innovation, *Technological Agenda Outlined* for the Government of Puerto Rico (Nov. 1, 2022),

 $[\]underline{https://www.prits.pr.gov/comunicados/delinean-agenda-tecnologica-para-el-gobierno-de-puerto-\underline{rico}$

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AI in Public Administration

As a part of the Civil Service Reform, Puerto Rico through the Office of Human Resource Administration and Transformation (OARTH) and the Financial Oversight Management Board launched an AI pilot project for talent recruitment on March 11, 2024. The project aims to increase efficiency and effectiveness in the government's hiring process, pairing the candidates with the best role using the AI technology whilst minimizing biases. Several government agencies have participated in the project, such as PRITS and the Puerto Rico Department of Education (PRDE).

Smart Port

In February 2023, a California-based artificial-intelligence company announced that it would invest in the Port of Ponce, which serves Puerto Rico's second city, to transform it into a "smart port of the future." The company plans to "develop autonomous inspection systems, computer-assisted surveillance systems, and digital receipt registries that will track and monitor container movement."

Facial Recognition

Since Puerto Rico is an unincorporated territory of the USA, the U.S. Customs and Border Protection announced the implementation of the Simplified Arrival process at the Luis Muñoz Marin International Airport, Puerto Rico. This process uses facial biometrics to automate the manual document checks that are required for admission into the United States.⁴⁸³⁴

Livescan systems are also in use at 130 USCIS Application Support Centers across America, as well as Puerto Rico. In November 2022, "Idemia Identity & Security North America has had its biometrics contract with U. S.

⁴⁸³⁰ Microjuris al Dia, *Nueva plataforma para reclutamiento en las agencias públicas utilizando la inteligencia artificial* (Mar. 11, 2024), https://aldia.microjuris.com/2024/03/11/nueva-plataforma-para-reclutamiento-en-las-agencias-publicas-utilizando-la-inteligencia-artificial/4831 Financial Oversight & Management Board for Puerto Rico, *New Hiring Platform Expedites Recruitment at Government Agencies* (Jul. 15, 2024), https://oversightboard.pr.gov/new-hiring-platform-expedites-recruitment-at-government-agencies/

⁴⁸³² Financial Oversight & Management Board for Puerto Rico, *Civil Service Reform: Transforming Education in Puerto Rico through Improved Hiring and Talent Management* (Jun. 13, 2024), https://oversightboard.pr.gov/civil-service-reform-transforming-education-in-puerto-rico-through-improved-hiring-and-talent-management/

⁴⁸³³ Jim Wyss, *AI Trial to Turn Sleepy Puerto Rico Port Into Model for Future*, Bloomberg (Feb. 16, 2023), https://www.bloomberg.com/news/newsletters/2023-02-16/supply-chains-latest-scale-ai-to-transform-puerto-rico-port-into-ai-test-site

⁴⁸³⁴ U.S. Customs and Border Patrol, *CBP Introduces Simplified Arrival at SJU in San Juan, Puerto Rico* (Mar. 26, 2021), https://www.cbp.gov/newsroom/local-media-release/cbp-introduces-simplified-arrival-sju-san-juan-puerto-rico

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Citizenship and Immigration Services (USCIS) extended through 2027. The extension means Idemia I&S NA will provide biometric identity verification and criminal background screening as part of the immigration application process. Idemia Livescan will be used to capture fingerprint biometrics from applicants and submit them to the Federal Bureau of Investigation (FBI) and Office of Biometric Identity Management (OBIM). USCIS then carries out the checks and makes a decision on the application."⁴⁸³⁵

Environmental Impact of AI

Puerto Rico itself has not created new policy on the environmental impact of AI. However, on February 1, 2024, the Artificial Intelligence Environmental Impacts Act of 2024 was introduced in the United States. Also The legislation will "assess AI's environmental footprint and create a standardized system for tracking energy use and emissions" and provide transparency of the AI industry. The legislation will direct the US National Institute of Standards and Technology (NIST) to develop standards, reporting measures, and a voluntary framework for AI developers. As Puerto Rico is impacted by US legislation at the federal level, the impact of this Act may extend to Puerto Rico. The Act has been endorsed by groups like Greenpeace USA, Friends of the Earth Action, and CAIDP and is being considered in the Senate 4838 with an identical bill in the House. In both houses, the bills were referred to relevant committees and never acted on in the 2023–2024 session.

Lethal Autonomous Weapons

In July 2015, an open letter signed by several Puerto Rican researchers called for a ban on autonomous weapons. The open letter was released at a Joint

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⁴⁸³⁵ Chris Burt, *Idemia NA fingerprint biometrics contract for US immigration extended, upgrade coming* (Nov. 3, 2022), https://www.biometricupdate.com/202211/idemia-na-fingerprint-biometrics-contract-for-us-immigration-extended-upgrade-coming

⁴⁸³⁶ US Congress, *Artificial Intelligence Environmental Impacts Act of 2024*, 118th Congress (Feb. 1, 2024), https://www.congress.gov/bill/118th-congress/senate-bill/3732/text (Feb. 1, 2024), https://www.greenpeace.org/usa/news/greenpeace-usa-endorses-bill-to-assess-ai-environmental-impact/

⁴⁸³⁸ Massachusetts Senator Office, *Markey, Heinrich, Eshoo, Beyer Introduce Legislation to Investigate, Measure Environmental Impacts of Artificial Intelligence* (Feb. 1, 2024), https://www.markey.senate.gov/news/press-releases/markey-heinrich-eshoo-beyer-introduce-legislation-to-investigate-measure-environmental-impacts-of-artificial-intelligence

⁴⁸³⁹ US Congress, *H.R.* 7197–Artificial Intelligence Environmental Impacts Act of 2024 (Feb. 1, 2024), https://www.congress.gov/bill/118th-congress/house-bill/7197/text

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Conference on Artificial Intelligence in Buenos Aires. 4840 Nevertheless, there are no official comments on this topic.

As a commonwealth of the United States, Puerto Rico does not have representation to the United Nations and cannot vote on resolutions.

Human Rights

As an unincorporated territory of the United States, Puerto Ricans have limited representation in the federal government. The U.S. House of Representatives consists of 435 members serving two-year terms. Puerto Rico is represented by one elected delegate in the House who can perform most legislative functions but cannot participate in floor votes. Puerto Rico does not have electoral college votes in presidential elections.

Puerto Rico does not receive a separate ranking from Freedom House. Even though the United States scored 83/100 in 2024, 4843 with wide civil liberties including a robust freedom of expression, the Freedom House report claims that in recent years its democratic institutions have gradually weakened, with "mistreatment and dysfunction in the criminal justice and immigration systems, harmful policies on immigration and asylum seekers, and growing disparities in wealth, economic opportunity, and political influence." This affects Puerto Rico as an unincorporated territory. According to Freedom House report in 2016, access to justice is difficult for those who lack resources to pay legal fees and speak Spanish as their primary language, with federal court proceedings being conducted in English. 4844

According to the Freedom on the Net report, Puerto Rico is recorded as having an internet penetration rate of 84.8% in 2024. 4845

OECD / G20 AI Principles

As an unincorporated territory of the United States, Puerto Rico does not independently adopt international agreements such as the OECD AI Principles/G20 AI Guidelines. However, Puerto Rico aligns its policies with U.S.

https://freedomhouse.org/country/united-states/freedom-world/2024

⁴⁸⁴⁴ UNHCR, Freedom in the World 2016: Puerto Rico (Sept. 28, 2016),

https://www.refworld.org/docid/57f4d8d126.html

⁴⁸⁴⁰ Jorge L. Colón, et al., *Autonomous weapons: an open letter from AI & robotics researchers, signatories*, Future of Life Institute (Jul. 28,2015), https://futureoflife.org/2016/02/09/awossignatories/

⁴⁸⁴¹ Freedom House, *Freedom in the World 2024: United States* (Feb. 2024), https://freedomhouse.org/country/united-states/freedom-world/2024

⁴⁸⁴² National Archives and Records Administration, *About the Electors, Electoral College Information* (Oct. 2024), https://www.archives.gov/electoral-college/electors#qualifications
⁴⁸⁴³ Freedom House, *Freedom in the World 2024* (2024),

⁴⁸⁴⁵ Freedom House, F*reedom on the Net 2024: United States* (Sept. 2024), https://freedomhouse.org/country/united-states/freedom-net/2024

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federal standards and has initiated strategies to implement the OECD AI principles.

The Puerto Rico Science, Technology, and Research Trust released a strategic document titled Leveraging AI for Economic Development and Shaping the Future in Puerto Rico in September 2024. 4846 This strategy outlines initiatives to integrate AI across various sectors, including healthcare, smart cities, sustainable agriculture, education, and disaster management. The plan emphasizes ethical AI development, transparency, and inclusivity, reflecting OECD principles.

Council of Europe AI Treaty

The United States signed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law when it opened on September 5, 2024. 4847 Puerto Rico is subject to the treaty through the U.S. signature.

Although Puerto Rico has no independent representation to the CoE, the state's progress legislating Artificial Intelligence aligns to the treaty's aims to "ensure that activities within the lifecycle of artificial intelligence systems are fully consistent with human rights, democracy and the rule of law, while being conducive to technological progress and innovation."4848

UNESCO Recommendation on AI Ethics

The United States rejoined UNESCO in 2023, after leaving in 2018.⁴⁸⁴⁹ Although the Recommendation on the Ethics of Artificial Intelligence was established in the interim, the United States accepted the Recommendation on return.

Despite having no independent membership to UNESCO, Puerto Rico has engaged the organization to contribute to international dialogues on ethical AI and development. For example, the University of Puerto Rico (UPR) signed a collaborative agreement with UNESCO to "broaden the horizons of research on AI" and to address "the impact that this represents for society in all areas" 4850

⁴⁸⁴⁶Puerto Rico Science, Technology, and Research Trust, *Leveraging AI for Economic* Development and Shaping the Future in Puerto Rico (Sept. 2024), https://prsciencetrust.org/wpcontent/uploads/2024/09/Puerto-Rico-AI-Strategy-PRSTRT.pdf

⁴⁸⁴⁷ Council of Europe, Chart of Signatures and Ratifications of Treaty 225 (Nov. 6, 2024), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225 ⁴⁸⁴⁸ Council of Europe, *The Framework Convention on Artificial Intelligence* (Sept. 5, 2024), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificialintelligence

⁴⁸⁴⁹ UNESCO, Member States (Mar. 10, 2025), https://www.unesco.org/en/countries ⁴⁸⁵⁰ Odotonline, "This is for Puerto Rico": Artificial Intelligence Coalition Outlines its Work Route (Jul. 12, 2024), https://www.odotonline.org/this-is-for-puerto-rico-artificial-intelligencecoalition-outlines-its-work-route/

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following the first International Conference on Artificial Intelligence in Higher Education, hosted at the UPR Rio de Piedras Campus.

The United States, including Puerto Rico, has not initiated the Readiness Assessment Methodology (RAM) to facilitate implementation of the UNESCO Recommendation. 4851

Evaluation

The example of the Smart Port of Ponce might point to Puerto Rico, an unincorporated territory of the United States, becoming a testbed for AI. However, the lack of a national AI strategy, comprehensive data protection law, and data protection authority raises concerns about the protection of Puerto Ricans' fundamental rights in the age of AI. In a recent column, Roberto López Davila, a member of the Puerto Rican judiciary, asked: "When will Puerto Rico join other countries and begin its journey toward the elaboration of its own national AI strategy for these technologies not only to provide economic and industrial benefits but also to contribute to the improvement of the daily life and well-being of the whole Puerto Rican society? It should be a strategy that puts fundamental rights, respect for the rule of law and democratic institutions at its core, considering the risks that AI entails. In a context in which AI applications are gradually being deployed in the country, some of them for uses that are particularly concerning, calling for a national AI strategy has never been more urgent." 4852

Qatar

In 2024, Qatar's National Cyber Security Agency, which oversees data protection, and the Ministry of Communications and Information Technology each introduced guidelines for the ethical AI deployment and use. The Qatar Central Bank also issued regulatory guidelines for the financial sector.

National AI Strategy

The Government of Qatar released a National Strategy for AI in October 2019. The aim of the strategy is to provide a realistic view of AI technologies and their potential in the 21st century. The strategy was developed from a blueprint

https://aldia.microjuris.com/2023/03/13/columna-ante-la-inteligencia-artificial-y-valores-democraticos/

⁴⁸⁵¹ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

⁴⁸⁵² Roberto L. López Dávila, *COLUMNA – Ante la inteligencia artificial y valores democráticos*, Microjuris.com (Mar. 13, 2023),

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produced by Qatar Computing Research Institute (QCRI), part of Hamad Bin Khalifa University (HBKU).⁴⁸⁵³

The AI strategy sets two goals for Qatar:⁴⁸⁵⁴ 1) Qatar must become capable of producing world-class AI applications in areas of national interest and have a business environment enabling the use of AI as a driver for innovation.2) Qatar must be an efficient consumer of AI, with a properly educated citizenry, sound laws, and ethical guidelines.

The AI strategy is divided into six pillars:⁴⁸⁵⁵

- Pillar 1: Race for Talent in the AI+x era
- Pillar 2: Data Access is Paramount (Data and Computing Infrastructure)
- Pillar 3: The Changing Landscape of Employment (AI Augmented Jobs)
- Pillar 4: New Business and Economic Opportunities (Knowledge Economy)
- Pillar 5: Qatar AI + X Focus areas
- Pillar 6: Ethics and Public Policy.

Each pillar features components to build an inclusive AI framework. As part of Pillar 6, which focuses on Ethics and Public Policy, Qatar's AI strategy emphasizes the importance of robust guidelines to ensure AI aligns with ethical principles and societal norms. To fulfill this commitment, Qatar's Ministry of Communications and Information Technology released Artificial Intelligence in Qatar—Principles and Guidelines for Ethical Development and Deployment. This document emphasizes human-centered AI principles, including transparency, system robustness, and alignment with Qatari cultural values. The guidelines encourage responsible AI development focused on public benefit, security, and ethical deployment, reinforcing adherence to both international standards and local norms.

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⁴⁸⁵³ HBKU, Minister of Transport and Communications Announces Qatar's National Artificial Intelligence Strategy Developed by HBKU's Qatar Computing Research Institute (Oct. 19, 2019), https://www.hbku.edu.qa/en/news/qitcom-qcri-hbku

⁴⁸⁵⁴ Ministry of Communications and Information Technology, *National Artificial Intelligence Strategy for Qatar* (2019), https://www.mcit.gov.qa/wp-

content/uploads/sites/4/2025/02/national artificial intelligence strategy for qatar 2019 en.pdf ⁴⁸⁵⁵ Ibid; Ashraf Aboulnaga et al., *AI-Enabled Future for Qatar and the Region*, Communications of the ACM 64, no. 4, 59–61 (Apr. 2021), https://cacm.acm.org/magazines/2021/4/251345-an-ai-enabled-future-for-qatar-and-the-region/fulltext

⁴⁸⁵⁶ Ministry of Communications and Information Technology, *National Artificial Intelligence Strategy for Qatar*, pp. 14–15 (2019), https://www.mcit.gov.qa/wp-

content/uploads/sites/4/2025/02/national artificial intelligence strategy for qatar 2019 en.pdf 4857 Ministry of Communications and Information Technology, *Artificial Intelligence in Qatar—Principles and Guidelines for Ethical Development and Deployment* (Mar. 2024), https://prod16-assets.sprinklr.com/prod16-cdata/DAM/160136/33fb390b-d120-47f2-8708-532dcb1e15c3-1252740832/MCIT National AI Strategy - AI.pdf

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Qatar's artificial intelligence (AI) committee launched in 2021⁴⁸⁵⁸ to ensure that the National AI Strategy is implemented with proper mechanisms and oversight and act as a connecting bridge between the ministries and relevant authorities in developing plans and programs "for preparing human cadres in the field of artificial intelligence applications." The committee sits under the Ministry of Communications and Information Technology (MCIT) and includes representatives from the MCIT, Ministry of Interior, Ministry of Education & Higher Education, Ministry of Commerce and Industry, Hamad bin Khalifa University, Qatar National Research Fund, and Qatar Development Bank.

In addition to the overarching ethical framework set by the MCIT, Qatar's National Cyber Security Agency (NCSA) introduced sector-specific ethical AI guidelines in March 2024. 4860 These guidelines are designed to strengthen transparency, privacy, and security within AI applications in critical sectors such as healthcare, finance, and education. The NCSA guidelines provide targeted standards that address the specific regulatory and ethical requirements of each sector, reinforcing Qatar's commitment to responsible AI deployment as outlined in the national AI strategy.

The AI strategy underlies Qatar's Third National Development Strategy (NDS-3) for 2024–2030,⁴⁸⁶¹ which highlights AI as a pivotal sector for driving economic diversification and innovation. Complementing this, the Ministry of Communications and Information Technology launched the National Digital Agenda 2030 on February 27, 2024, serving as a roadmap to advance Qatar's digital economy, emphasizing innovation, inclusivity, and sustainable development.⁴⁸⁶²

In the financial sector, Qatar Central Bank issued comprehensive guidelines in September 2024 to regulate AI use, emphasizing transparency,

⁴⁸⁵⁸ Hukoomi, *Cabinet Approves Draft Decision Setting Up Artificial Intelligence Committee* (Mar. 4, 2021), https://hukoomi.gov.qa/en/news/cabinet-approves-draft-decision-setting-up-artificial-intelligence-committee

⁴⁸⁵⁹ Ministry of Communications and Information Technology, *Artificial Intelligence Committee* (2025), https://www.mcit.gov.qa/en/artificial-intelligence-committee/?csrt=11876465378606195374

⁴⁸⁶⁰ National Cyber Security Agency, *AI Guidelines – Ethical Development and Deployment* (Mar. 2024), https://www.ncsa.gov.qa/sites/default/files/2024-02/AI-Guide-en-V6.pdf?csrt=17839479512700623602

⁴⁸⁶¹ National Planning Council, *Third National Development Strategy, 2024–2030* (2025), https://www.npc.qa/en/planning/nds3/Pages/default.aspx; for PDF, https://www.npc.qa/en/planning/nds3/Documents/QNDS3 EN.pdf

⁴⁸⁶² Qatar News Agency, *Ministry of Communications and Information Technology Launches Digital Agenda 2030* (Feb. 27, 2024), https://www.qna.org.qa/en/News-Area/News/2024-02/27/0088-ministry-of-communications-and-information-technology-launches-digital-agenda-2030

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operational efficiency, and customer security. These guidelines are part of Qatar's broader FinTech strategy, aligning with international standards to ensure ethical AI deployment in finance. Through recent guidelines and sector-specific standards, Qatar is signaling a commitment to ethical, human-centered AI practices that align with both international standards and national development priorities.

Public Participation

Qatar's National Development Strategy has set goals of developing modern public sector institutions, efficient and transparent delivery of services, and larger space for civil society. A864 Relatedly, the national Digital Government 2020 strategy identifies open government as a key strategic objective, and recognizes Open Data, e-Participation, and related policies as key initiatives. A865 The Open Data Policy of 2014 requires government agencies to ensure that their data is published using an open format both technically and legally. The e-Participation Policy established in 2015 requires the Ministry of Communications and Information Technology (MCIT) to promote e-Participation between government agencies and the public.

Qatar has enhanced the GaaS (Government as a service) initiatives, with an array of citizen Digital Government services such as Metrash, Hukoomi, Baladiya/Oun. These applications aim to facilitate Inter/Intra Government Departmental transfer of data to create a modern and efficient public sector. There are 1,400 Hukoomi Services, with 650 services that aim to show higher efficiency, transparency, and openness of the government. This degree of interaction garnered Qatar the 2018 United Nations e-Gov benchmark as a "high level of interaction index." 4868

content/uploads/sites/4/2024/11/p003 eparticipation v1.0.2 en v3-

4867 Thales Group, Hukoomi: eGovernment services in Qatar,

 $\underline{\text{https://www.thalesgroup.com/en/markets/digital-identity-and-security/government/customer-} \underline{\text{cases/qatar-egov}}$

 $\frac{https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2018-Survey/E-Government%20Survey%202018_FINAL%20for%20web.pdf$

⁴⁸⁶³ Qatar Central Bank, *Artificial Intelligence Guidelines for the Financial Sector* (Sept. 2024), https://www.qcb.gov.qa/en/Pages/FinancialTechnology.aspx

⁴⁸⁶⁴ General Society for Development Planning. *Qatar's Second National Development Strategy* 2018-2022 (Sept. 2018), https://www.npc.qa/en/planning/Documents/nds2/NDS2Final.pdf ⁴⁸⁶⁵ Ministry of Information and Communication Technology, *Qatar e-Government 2020* Strategy (2020), https://www.mcit.gov.qa/sites/default/files/qatar-e-government-2020-strategy-en-0.pdf

⁴⁸⁶⁶ Ministry of Communications and Information Technology, *E-Participation Policy* (Apr. 2015), https://www.mcit.gov.qa/wp-

^{2 2.}pdf?csrt=2507209873283014317

⁴⁸⁶⁸ United Nations, *E-government Survey 2018* (2018),

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The MCIT initiated a public consultation in 2024 to gauge digital inclusivity among citizens and residents. 4869 While the survey was not specifically focused on emerging technologies like artificial intelligence, it aimed to gather valuable insights into how Qatar's population interacts with modern technologies.

Data Protection

Qatar adopted law 13 Concerning Personal Data Privacy Protection (PDPPL) in 2016. 4870 Qatar became the first Gulf Cooperation Council member state to issue an applicable Data Protection Law, supplemented with a set of regulatory guidelines issued by the Compliance and Data Protection Department. The guidelines incorporate concepts from EU data protection legal frameworks providing further clarity for compliance purposes.

The PDPPL defines the rights of individuals to the processing of their data within "the framework of transparency, honesty, and respect of human dignity."4871 Chapter 4 establishes special permissions required to process Personal Data of Special Nature, namely ethnic origin, children, health, physical or psychological condition, religious creeds marital relations, and criminal offenses.

The National Cyber Governance and Assurance Affairs body under the National Cyber Security Agency oversees the PDPPL, including offering guidance, promoting good practice, investigating complaints, monitoring compliance, and supporting enforcement as necessary. 4872

The Ministry of Transport and Communications was the authority designated in Article 20 of Decree-Law No 8 of 2016 to propose legislation, policies, and standards necessary to regulate government information technology systems, transactions, and services to enable government agencies to achieve their digital transformation objectives. 4873 Restructuring created a Ministry of Communications and Information Technology (MCIT) to oversee digital transformation⁴⁸⁷⁴ and "supervise, regulate, and develop the sector of Information

⁴⁸⁶⁹ Marhaba Qatar, MCIT Invites Public Participation in Digital Inclusivity Survey (May 24, 2024), https://marhaba.qa/mcit-invites-public-participation-in-digital-inclusivity-survey/

⁴⁸⁷⁰ Compliance and Protection Department, Law No. 13 of 2016, Personal Data Privacy Protection (2016), https://compliance.gcert.org/sites/default/files/library/2020-

^{11/}Law%20No.%20%2813%29%20of%202016%20%20on%20Protecting%20Personal%20Data %20Privacy%20-%20English.pdf

⁴⁸⁷¹ Ibid, Chapter Two

⁴⁸⁷² National Cyber Security Agency, National Cyber Governance and Assurance Affairs, Personal Data Privacy (2025),

https://assurance.ncsa.gov.qa/en/privacy?csrt=75190470011708430

⁴⁸⁷³ Qatar Open Data Portal, *Open Data Licensing Policy*, Legal Mandate (2024), https://www.data.gov.qa/pages/license/

⁴⁸⁷⁴ Ministry of Communications and Information Technology, *About Us: What We Do* (2024), https://www.mcit.gov.qa/en/about-us/what-we-do/?csrt=2507209873283014317

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and Communications Technology."⁴⁸⁷⁵ The MCIT created a Data Management Policy to regulate data protection in government services in 2015.⁴⁸⁷⁶ The MCIT oversaw the related Open Data Portal until the function was taken over by the National Planning Council in 2023.⁴⁸⁷⁷ The Ministry released guidelines in 2021 to "help the target audience; individuals, regulated entities and stakeholders, understand their respective responsibilities, rights and practices" related to the data privacy protection law.⁴⁸⁷⁸

The Qatar Central Bank provides guidance for the protection of data in the financial sector. The Central Bank guidance on Artificial Intelligence noted that Providers of High-Risk AI Systems may process personal data only in compliance with the PDPPL and "to the extent that it is strictly necessary for the purposes of ensuring Bias monitoring, detection, and correction."

The Qatar Financial Centre, a financial services free zone in Qatar, updated its Data Protection Regulations and Rules (originally issued in 2005), to align with international data protection laws, such as the GDPR in 2021. 4880 Key changes include removing mandatory notification for sensitive data processing, requiring that consent is freely given and easily withdrawn, and expanding the definition of sensitive data to include criminal records. The new regulations also introduce accountability principles, data protection by design, and Data Protection Impact Assessments for high-risk processing. The QFC Data Protection Office can impose penalties up to \$1.5 million per infringement.

The Qatar National Cyber Security Agency became a member of the Global Privacy Assembly in 2024.⁴⁸⁸¹ The agency did not sponsor any of the earlier resolutions

Personal Data Privacy Protection Law (Jan. 31, 2021), https://mot.gov.qa/en/news/motc-releases-guidelines-personal-data-privacy-protection-law

⁴⁸⁷⁵ Ministry of Communications and Information Technology, *Data Management Policy*, Version 1.0.1 (Apr. 2015), https://www.mcit.gov.qa/wp-content/uploads/sites/4/2024/11/p001_data_management_v.1.0.2_en_v2-2_1.pdf

⁴⁸⁷⁶ Ibid

⁴⁸⁷⁷ Qatar Open Data Portal, *About the Portal* (2024), https://www.data.gov.qa/pages/about/
https://www.data.gov.qa/pages/about/
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⁴⁸⁷⁹ Qatar Central Bank, *Artificial Intelligence Guidelines for the Financial Sector* (Sept. 2024), https://www.qcb.gov.qa/en/Pages/FinancialTechnology.aspx

⁴⁸⁸⁰ Data Guidance. *Qatar: QFC Updates Its Data Protection Law in Line with the GDPR* (Mar. 2022), https://www.dataguidance.com/opinion/qatar-qfc-updates-its-data-protection-law-line-gdpr

⁴⁸⁸¹ Global Privacy Assembly, *Accreditation Resolution* (Oct. 2024), https://globalprivacyassembly.org/wp-content/uploads/2024/12/Resolution-on-accreditation-members-GPA-2024.pdf

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Algorithmic Transparency

Qatar's Personal Data Privacy Protection Law does not address automated decision-making or impose requirements for algorithmic transparency. The Qatar Financial Centre updated provisions in 2021 offer some protection. The National Cyber Security Agency Guidelines for Secure Adoption and Usage of Artificial Intelligence highlights the importance of transparency and explainability along with human oversight in automated decision-making with regular references to the GDPR. However, these guidelines are voluntary.

The Technical Office of the Ministry of Labour of Qatar announced on February 6, 2023, the use of data algorithms in job localizations, as an initiative supported by United Nations Economic and Social Commission for Western Asia (UN ESCWA),⁴⁸⁸³ and two corporate partners.⁴⁸⁸⁴ The algorithm "automatically recommends Qatari employee percentage given the firms' absorptive capacity,⁴⁸⁸⁵ tailoring the nationalization % based on the capital, number of employees, average salaries, and the entity's activity. The algorithm provides recommendations for upskilling to candidates and develops statistics. The support of ESCWA to the Ministry of Labor and the Digital Transformation Unit includes creating the model, which is based on ESCWA's Skills Monitor.⁴⁸⁸⁶ There is no disclosure about the specifics of the model and the extent of the complexity, accuracy, or reliability of the algorithm.

Facial Recognition

Qatar used AI to manage crowds during the 2022 FIFA World Cup and to control stadium conditions such as temperature.⁴⁸⁸⁷ The "connected stadium"

⁴⁸⁸² National Cyber Security Agency, *Guidelines for Secure Adoption and Usage of Artificial Intelligence*, Version 1.0 (2024), https://www.ncsa.gov.qa/sites/default/files/2024-02/AI-Guide-en-V6.pdf

⁴⁸⁸³ UNESCWA, *Building national capacities on big data policies and applications in Qatar* (Dec. 14, 2021), https://www.unescwa.org/news/building-national-capacities-big-data-policies-and-applications-qatar

⁴⁸⁸⁴ The Peninsula, *Ministry of Labor Launches Electronic System to Develop Nationalization Program Data in Private Sector* (Feb. 6, 2023),

 $[\]frac{https://thepeninsulaqatar.com/article/06/02/2023/ministry-of-labor-launches-electronic-system-to-develop-nationalization-program-data-in-private-sector$

⁴⁸⁸⁵ Ministry of Labor Qatar, *The job localization program data algorithm contributes to the access to private functions*, https://twitter.com/MOLQTR/status/1622548471231270912

⁴⁸⁸⁶ Doha Directory, *Electronic System based on AI Launched; aims to develop data related to the nationalization program in the private sector* (Feb. 7, 2023),

 $[\]underline{https://www.doha.directory/electronic-system-based-on-ai-launched-aims-to-develop-data-related-to-the-nationalization-program-in-the-private-sector/1052/n}$

⁴⁸⁸⁷ Osama Bin Javaid, *AI at World Cup 2022 to check crowds, control climate*, Al Jazeera (Nov. 13, 2022), https://www.aljazeera.com/news/2022/11/13/eye-in-the-sky-ai-at-world-cup-to-check-crowds-control-climate

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concept implemented during the event⁴⁸⁸⁸ included facial recognition receiving input from 22,000 security cameras installed at stadiums.⁴⁸⁸⁹ Data was set to predict crowd patterns based on the movement of people. All people attending the FIFA World Cup in Qatar were required to download the Hayya app⁴⁸⁹⁰ to enter stadiums and use public transportation.

Biometric Identification

In 2007, Qatar rolled out biometric-enabled national ID cards and developed an ambitious digital government program.⁴⁸⁹¹ In 2011, the Ministry of Interior introduced smart card services for expatriates⁴⁸⁹². These smart cards are of compulsory use as e-gate cards, storing biometric data (e.g. fingerprints and eye scan) on a chip. Residents can also use the smart cards for immigration control. Relevant information is protected under the Data Protection Law.

The Ministry of Interior launched the Qatar Digital Identity application in 2024.⁴⁸⁹³ The Qatar Digital Identity application provides digital versions of ID cards and documents, allowing users to access electronic services, through biometric data, without the need for physical documents. The application can be obtained on the Ministry of Interior's website or downloaded from Google Play.

Environmental Impact of AI

Qatar's National Vision 2030 addresses five major challenges facing the country, including environmental management.⁴⁸⁹⁴ Environmental protection and development is a central theme. The Vision emphasizes the need to establish legal frameworks and environmental institutions to safeguard the country's environmental heritage and stresses the importance of raising citizens' awareness of their role in

⁴⁸⁸⁹ Chris Burt, *Qatar Equips 15,000 Cameras with Facial Recognition for Soccer World Cup 2022*, BiometricUpdate (Aug. 18, 2022), https://www.biometricupdate.com/202208/qatar-equips-15000-cameras-with-facial-recognition-for-soccer-world-cup-2022

⁴⁸⁹² Ananda Shakespeare. *MEED. National Identity Card in Qatar* (Jun. 5, 2014), https://www.meed.com/national-identity-card-in-qatar/

⁴⁸⁸⁸ Hazar Kilani, *Artificial Intelligence to help control crowds and climate at Qatar World Cup*, Doha News (Nov. 15, 2022), https://dohanews.co/artificial-intelligence-to-help-control-crowds-and-climate-at-qatar-world-cup/

⁴⁸⁹⁰ Al Jazeera. What is a Hayya card and why do you need it for World Cup 2022? Qatar World Cup 2022 News, https://www.aljazeera.com/sports/2022/10/26/no-hayya-no-entry-fifa-world-cup-2022

⁴⁸⁹¹ Thales Group, *National ID Cards in Qatar: From ID to Digital Government* (2022) https://www.thalesgroup.com/en/markets/digital-identity-and-security/government/customer-cases/qatar-id

⁴⁸⁹³ Qatar New Agency, *Minister of Interior Launches Qatar Digital Identity Application* (Oct. 29, 2024), https://www.qna.org.qa/en/newsbulletins/2024-10/29/0048-minister-of-interior-launches%C2%A0qatar-digital-identity-application

⁴⁸⁹⁴ Government Communication Office, *Qatar National Vision 2030* (2024), https://www.gco.gov.qa/en/about-qatar/national-vision2030/

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protecting the environment.⁴⁸⁹⁵ However, there are no specific guidelines or established authorities to concretely implement this vision.

Qatar's National AI Strategy highlights the potential for AI technology to facilitate national priorities such as food security but does not address the environmental costs of developing AI systems.⁴⁸⁹⁶

Human Rights

Qatar has endorsed the Universal Declaration of Human Rights (UDHR). Qatar is signatory to the International Covenant on Civil and Political Rights (ICCPR) and International Covenant on Economic, Social and Cultural Rights (ICESCR) (2018).⁴⁸⁹⁷

According to Freedom House Qatar is rated "Not Free," with a score of 25/100. The report highlights "Political parties are not permitted and public participation in the political arena is extremely limited. While Qatari citizens are among the wealthiest in the world, most of the population consists of noncitizens with no political rights, few civil liberties, and limited access to economic opportunity." 4898

The Qatar Constitution is based on Sharia Law. The substantive list of rights (or protections) reside in Part 3: Public Rights and Duties, including equality of citizens in rights and duties (Art. 34); equality of "all persons" before the law and without discrimination "whatsoever" on "grounds of sex, race, language or religion" (Art. 35); protection against unlawful arrest or detention (Art. 36); protection of privacy (Art. 37); the right to elect and be elected (Art. 42); the right of assembly (Art. 44) and of association (Art. 45); freedom of expression (Art. 48); freedom of religion (Art. 50). 4899

Media reports cite issues with human rights in Qatar, associated with deaths of migrant workers in the 10 years since Qatar was awarded World Cup

https://www.npc.qa/en/qnv/pages/default.aspx#environmenttab

 $\underline{https://freedomhouse.org/country/qatar/freedom-world/2024}$

⁴⁸⁹⁵ National Planning Council, *Qatar National Vision 2030* (2025),

⁴⁸⁹⁶ Ministry of Communications and Information Technology, *National Artificial Intelligence Strategy for Qatar*, p. 13 (2019), https://www.mcit.gov.qa/wp-content/uploads/sites/4/2025/02/national artificial intelligence strategy for qatar 2019 en.pdf

⁴⁸⁹⁷ See Declaration by the State of Qatar, 32 International Review of the Red Cross 100–100 (1992)

⁴⁸⁹⁸ Freedom House, *Freedom in the World 2024: Qatar* (2024),

⁴⁸⁹⁹ State of Qatar, *The Constitution* (2004) https://www.gco.gov.qa/wp-content/uploads/2016/09/GCO-Constitution-English.pdf

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hosting rights.⁴⁹⁰⁰ Qatar has taken steps in passing laws to protect migrant workers, including adjustments in their minimum wage and living conditions.⁴⁹⁰¹

The World Bank's Doing Business project, which also makes projections on the Strength of legal rights index (0–weak to 12–strong), scored Qatar as 1.⁴⁹⁰² Qatar's international cooperation with multilateral entities (i.e. UNESCO, UN Development Programmes, World Bank, and others) are set to support the country in "measur[ing] progress towards the national and international development goals, human rights protection, transparency and the fight against corruption.⁴⁹⁰³

The UN Committee on the Elimination of Racial Discrimination applauded Qatar in April 2024 for creating a memorial for enslaved Africans. The Committee discussed eliminating of the Kafala system and mandatory HIV testing for migrant workers. 4904

OECD / G20 AI Principles

Qatar is not a member of the OECD and did not endorse the OECD AI principles. 4905 The country has not submitted reports to OECD AI Observatory on AI initiatives. 4906

Council of Europe AI Treaty

Qatar did not participate in negotiations for the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy,

 $\underline{development/2021/feb/23/revealed-migrant-worker-deaths-qatar-fifa-world-cup-2022}$

⁴⁹⁰³ General Society for Development Planning, *Qatar's Second National Development Strategy* 2018-2022, https://www.psa.gov.qa/en/knowledge/Documents/NDS2Final.pdf

⁴⁹⁰⁰ The Guardian, *Revealed: 6,500 migrant workers have died in Qatar since World Cup awarded* (Feb. 23, 2021), https://www.theguardian.com/global-

⁴⁹⁰¹ Amnesty International, *Qatar: New laws to protect migrant workers are a step in the right direction* (2022), https://www.amnesty.org/en/latest/news/2020/08/qatar-annoucement-kafala-reforms/

⁴⁹⁰² World Bank, *Data: Qatar, Strength of legal rights index*—Qatar (Sept. 16, 2021), https://data.worldbank.org/indicator/IC.LGL.CRED.XQ?locations=QA

⁴⁹⁰⁴ UN Humans Rights Office of the High Commissioner, Experts of the Committee on the Elimination of Racial Discrimination Applaud Qatar's Memorial for Enslaved Africans, Raise Questions on Mandatory HIV Testing for Migrant Workers and the Kafala System (Nov 9, 2024), https://www.ohchr.org/en/news/2024/04/experts-committee-elimination-racial-discrimination-applaud-qatars-memorial-enslaved

⁴⁹⁰⁵ OECD Legal Instruments, *Recommendation of the Council on Artificial Intelligence, Adherents* (May 3, 2024), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449#adherents

⁴⁹⁰⁶ OECD.AI, National AI Policies & Strategies (2025), https://oecd.ai/en/dashboards/overview

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and the Rule of Law⁴⁹⁰⁷ and has not signed this first legally binding international AI treaty.4908

UNESCO Recommendation on Al Ethics

Qatar is a member state of UNESCO since 1972, 4909 and was one of the 193 countries that endorsed the UNESCO recommendation on the Ethics of AI.⁴⁹¹⁰ With The recent adoption of the Artificial Intelligence in Qatar – Principles and Guidelines for Ethical Use, the Qatari Ministry of Communications and Information Technology has provided guidelines for AI system users, aiming to promote the ethical use of AI.4911 These guidelines outline six key principles: safeguarding personal and organizational data, complying with relevant laws and regulations, ensuring the wellbeing of individuals and society, assuming accountability, acknowledging AI's capabilities and limitations, and do not use AI systems to perpetuate bias.

These principles closely align with the UNESCO Recommendations, which include concepts such as Do No Harm, Fairness and non-discrimination, Safety and security, Right to Privacy and Data Protection, and Responsibility and accountability. This alignment can be seen as Oatar's ongoing efforts to implement the UNESCO Recommendations. However, further steps and concrete actions are needed to fully integrate the UNESCO Recommendations such as completing the Readiness Assessment Methodology (RAM).4912

Evaluation

Oatar is a forward-looking nation with a digital transformation agenda, to propel economic development and sustainability and build a path toward a knowledge-based economy. The formulation of the national AI strategy positions Qatar in a leading space in the Gulf region. Qatar's endorsement of the UNESCO Recommendation on the Ethics of AI might provide the country with an

⁴⁹⁰⁷ Council of Europe, *The Framework Convention on Artificial Intelligence* (2025), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificialintelligence

⁴⁹⁰⁸ Council of Europe Treaty Office, Chart of Signatures and Ratifications of Treaty 225 (Nov. 12, 2024), https://www.coe.int/en/web/conventions/full-list?module=signatures-bytreaty&treatynum=225

⁴⁹⁰⁹ UNESCO, Member States: Qatar (2023), https://www.unesco.org/en/countries/qa ⁴⁹¹⁰ UNESCO, UNESCO Member States Adopt the First Ever Global Agreement on the Ethics of Artificial Intelligence (Nov. 25, 2021), https://www.unesco.org/en/articles/unesco-memberstates-adopt-first-ever-global-agreement-ethics-artificial-intelligence

⁴⁹¹¹ Ministry of Communications and Information Technology, *Artificial Intelligence in Qatar*— Principles and Guidelines for Ethical Use (2024), https://prod16-assets.sprinklr.com/prod16cdata/DAM/160136/2a1a28c1-5405-40f3-8860-f1004f217f09-254242868/MCIT -

National AI Strategy - .pdf

⁴⁹¹² UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

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opportunity to develop a trustworthy AI approach to policy developments in the field. The enactment of the Data Protection Law (DPL) of 2016 signals the commitment of the country to develop data governance rules, which needs to be furthered by a commitment to algorithmic transparency sustained by an independent supervisory authority.

Russia

In 2024, Russian President Vladimir Putin amended the National AI Strategy to further developments toward the 2030 goal. Putin also signed a law establishing legal requirements for handling the anonymization of personal data was also passed.

National AI Strategy

Russian president Vladimir Putin famously said, in a 2017 address to students in Moscow, "Artificial intelligence is the future not only of Russia but of all of mankind. There are huge opportunities, but also threats that are difficult to foresee today. Whoever becomes the leader in this sphere will become the ruler of the world." Putin then stated that it is better to avoid a monopoly on the sector and promised that if Russia became the leader in developing AI, then Russia will share their technology with the rest of the world, just as they share their atomic and nuclear technology today. Later, Putin suggested that "the nuclear arms control treaties of the Cold War could be a guide" for addressing the social impacts of advances in areas such as artificial intelligence.

Russia's national strategy for Artificial Intelligence (AI) was announced in October 2019⁴⁹¹⁵ with subsequent developments and actions in February 2024.⁴⁹¹⁶ This strategy defines the goals and primary objectives of the development of

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⁴⁹¹³ Radina Gigova, *Who Vladimir Putin thinks will rule the world*, CNN (Sept. 2, 2017), https://www.cnn.com/2017/09/01/world/putin-artificial-intelligence-will-rule-world/index.html ⁴⁹¹⁴ Reuters, *What Did Putin Say on War and Peace, WW3 and AI?* (Feb 9, 2024), https://www.reuters.com/world/europe/what-did-putin-say-war-peace-ww3-ai-2024-02-09/ ⁴⁹¹⁵ President of the Russian Federation, *Decree of the President of the Russian Federation on the Development of Artificial Intelligence in the Russian Federation* [Translation of 2019 version] Center for Security and Emerging Technology (Oct. 28, 2019), https://cset.georgetown.edu/wp-content/uploads/Decree-of-the-President-of-the-Russian-Federation-on-the-Development-of-Artificial-Intelligence-in-the-Russian-Federation-.pdf

⁴⁹¹⁶ President of the Russian Federation, *Decree of the President of the Russian Federation on the Development of Artificial Intelligence in the Russian Federation*, Artificial Intelligence of the Russian Federation (Feb. 15, 2024), https://ai.gov.ru/knowledgebase/dokumenty-po-razvitiyu-ii-v-

rf/2024 nacionalynaya strategiya razvitiya iskusstvennogo intellekta na period do 2030 god a national strategy for the development of artificial intelligence over the period extending up to the year 2030/

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artificial intelligence in the Russian Federation, as well as the measures aimed at its use for the purpose of protecting national interests and implementing strategic national priorities, including those in the field of scientific and technological development.

The goals of the development of AI in the Russian Federation include the improvement of the well-being and quality of life of its population, national security and rule of law, and sustainable competitiveness of the Russian economy, including leading positions the world over in the field of AI. The primary objectives of the Russian development of AI are to support scientific AI research, engineering AI software development, data quality, hardware availability, qualified personnel and integrated system to extend Russian artificial intelligence technology market.⁴⁹¹⁷

In the strategy, the basic principles of the development and use of artificial intelligence technologies include the protection of human rights and liberties, security, transparency, technological sovereignty, innovation cycle integrity, reasonable thrift, and support for competition in the field of artificial intelligence.

The use of AI technologies in sectors of the economy supports the efficiency of planning, forecasting, and management decision-making processes; the automation of routine production operations; the use of self-contained intelligent equipment, robotic systems, and intelligent logistic management systems; the improvement of employee safety during the performance of business processes; an increase in the loyalty and satisfaction of customers, and; the optimization of the personnel selection and training processes.⁴⁹¹⁸

The use of AI technologies in the social sphere facilitates the creation of conditions that favor the improvement of the standard of living of the population including an increase in the quality of healthcare services; the improvement of the quality of education services, and; the improvement of the quality of the provision of public and municipal services, as well as the reduction of the cost of their provision.⁴⁹¹⁹

In 2020, the Government of the Russian Federation adopted Decree No. 2129-r on the Development of Regulatory Relations in the Field of Artificial Intelligence and Robotic Technologies by 2024. The main purpose of the Decree is to set forth basic approaches to transforming the regulatory framework

⁴⁹¹⁸ Ibid

⁴⁹¹⁷ Ibid

⁴⁹¹⁹ Ibid

⁴⁹²⁰ Garant, Decree of the Government of the Russian Federation No. 2129-r On Approval of the Concept for the Development of Regulation of Relations in the Field of Artificial Intelligence and Robotics Technologies for the Period up to 2024 [Распоряжение Правительства РФ от 19 августа 2020 г. № 2129-р Об утверждении Концепции развития регулирования отношений в сфере технологий искусственного интеллекта и робототехники на период до 2024 г.] (Aug. 27, 2020), https://www.garant.ru/products/ipo/prime/doc/74460628/#1000

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in the Russian Federation to enable the development and use of such technologies across various economic sectors while upholding citizens' rights and protecting the security of individuals, the public and the state. The Decree also enshrines some important principles. It clearly defines the need for accountability for possible negative consequences of using AI. The Decree also defined a human-centric approach, which asserts that the ultimate goal of the development of artificial intelligence and robotics technologies, guided by regulatory influence, is to ensure the protection of human rights and freedoms guaranteed by Russian and international law and to improve the well-being and quality of life of citizens.

Digital Economy in Russia

Russian government has put high priority and already achieved some remarkable accomplishments in the Digital Transformation. A key strategic objective formulated by its leadership in the May 2018 Presidential Decree (The Decree on the National Goals and Strategic National Development Tasks of the Russian Federation until 2024)⁴⁹²¹ is that policymakers must build on the country's traditional industrial strengths, develop new technology processes for fast implementation in all the main competitive domains and continuously tackle any obstacles.⁴⁹²²

The Russian government has centered the development of unmanned aircraft systems (UAS) in pursuing digital innovation. Two recent resolutions introduce experimental legal frameworks for the advancement of UAS in designated areas. Resolution No. 185, dated February 17, 2024⁴⁹²³, establishes an experimental regime in Innopolis, Tatarstan, aimed at fostering digital innovation through the development and testing of UAS technologies within a regulated environment. Resolution No. 641⁴⁹²⁴, dated May 23, 2024, extends this experimental regime to Moscow. This expansion aims to apply similar principles to a larger urban environment, exploring the potential integration of UAS within a highly populated city. Both resolutions underscore Russia's commitment to digital innovation by testing UAS in diverse environments, addressing regulatory needs, and setting the stage for broader adoption of drone technology in urban and innovative hubs.

⁴⁹²¹ The President signed Executive Order on National Goals and Strategic Objectives of the Russian Federation through to 2024, http://en.kremlin.ru/events/president/news/57425 ⁴⁹²² World Bank Group, *Competing in Digital Age: Policy Implications for the Russian Federation* (Sept. 2018),

 $[\]frac{\text{http://documents1.worldbank.org/curated/en/860291539115402187/pdf/Competing-in-the-Digital-Age-Policy-Implications-for-the-Russian-Federation-Russia-Digital-Economy-Report.pdf}{}^{4923}$ Government of the Russian Federation, *Resolution No 185* (Feb 17, 2024),

http://publication.pravo.gov.ru/document/0001202402190024

⁴⁹²⁴ Government of the Russian Federation, *Resolution Nº 641* (May 23, 2024), http://publication.pravo.gov.ru/document/0001202405240044

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Due to limitations on funding related to COVID-19 and sanctions, the funding available for development of AI projects was reduced. Moreover, the findings of 2021 research suggest that Russia's AI strategy had in many ways been stifled by the country's poor climate for innovation and investment, as well as budget cuts due to COVID-19.⁴⁹²⁵ IntelliNews announced in 2023 that the military invasion of Ukraine caused Russia to slash support for the development of AI technologies more than 10-fold.⁴⁹²⁶

Al Strategy for Russian Start-ups

Russia aims to increase the start-up ecosystem and many companies have been helped by the traditional hard science education in the country. This report breaks down the importance of Artificial Intelligence in Russian startups, with a large number of startups active in AI. At the same time, the war with Ukraine has had a dramatic effect on the Russian IT industry. It has led to many IT professionals to leave the country, thus impacting the AI industry in the country. However, the Russian government has sought avenues to reverse drawbacks of the war by promoting international cooperation, such with an AI cooperation agreement with China signed in August 2024.

Al Policy in Russia

Russian President Vladimir Putin approved a list of instructions in January 2019, 4930 following the meeting of the supervisory board of the Agency for Strategic Initiatives. The list included instructions to the Russian government to create a national AI strategy. A draft version of a national AI strategy, developed by the country's largest bank – Sberbank, was announced September 2019. 4931

https://www.intellinews.com/russia-to-slash-ai-development-support-267359/?source=russia 4927 GMIS, *Artificial Intelligence: A Strategy for Russian start-up* (June 11, 2019), https://cms-files.gmisummit.com/static/pdf/49b5cf7a114d5c6871f90c099ffa8258

https://tadviser.com/index.php/Article:Labor market in Russia (IT and telecom)#Due to mob ilization.2C at least 100 thousand IT specialists may leave Russia

⁴⁹²⁹ Russia Today, *Russia and China Agree to Step Up Cooperation in AI* (Aug. 22, 2024), https://ria.ru/20240822/ii-1967728169.html

⁴⁹³⁰ President of the Russian Federation, *List of instructions following the meeting of the Supervisory Board of the Agency for Strategic Initiatives* [Russian], http://kremlin.ru/acts/assignments/orders/59758

⁴⁹²⁵ Stephanie Petrella, Chris Miller, Benjamin Cooper, *Russia's Artificial Intelligence Strategy: The Role of State-Owned Firms*, Orbis, Volume 65, Issue 1, pp. 75-100, (2021), https://doi.org/10.1016/j.orbis.2020.11.004

⁴⁹²⁶ IntelliNews, Russia to slash AI development support (Jan.19, 2023),

⁴⁹²⁸ Johannes Wachs, *Digital Traces of Brain Drain: Developers during the Russian Invasion of Ukraine* (Sept. 2, 2022) https://arxiv.org/pdf/2209.01041.pdf; Tadviser, *Labor market in Russia (IT and telecom)* (Jan. 13, 2021),

⁴⁹³¹ Defense One, *Sneak Preview: First Draft of Russia's AI strategy* (Sept.19, 2019), https://www.defenseone.com/technology/2019/09/whats-russias-national-ai-strategy/159740/

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According to the Future of Life Institute, 4932 several projects helped pave the way for a domestic approach throughout 2018. In March 2018, for example, a conference was organised by the Russian Defense Ministry, Education and Science Ministry and the Academy for Science on AI issues and alternatives and a 10-point AI development plan in Russia was subsequently published. The plan involves the establishment of an AI and Big Data Consortium among academic and industrial organisations; The development of a fund to assist provide knowledge on automated systems; Increased state aid to AI education and training; The establishment of an AI laboratory at the leading technological university; The establishment of a national AI R&D center.

Russia adopted law No. 123-FZ⁴⁹³³ to regulate the conditions for developing and implementing AI technologies in April 2020, though an amendment to the bill disallows foreign firms from applying to participate in the experimental regime. In addition to Russian firms whose share of participating in foreign legal entities registered in offshore zones amounts to 50 percent or more.⁴⁹³⁴

Russia is developing AI regulation in the fields of autonomous vehicles and healthcare. In the area of autonomous vehicles, the Russian Government issued a regulation on highly automated vehicles on public roads in 2018 to allow the testing of autonomous vehicles.⁴⁹³⁵ In 2020, Russia adopted the concept of road safety with autonomous vehicles on public roads and in 2021, the Russian government began developing measures for the testing of highly automated vehicles on public roads.⁴⁹³⁶ In the area of healthcare, Russia established Rules for registering AI systems as medical software devices to simplify AI system registration procedures.⁴⁹³⁷

legislation.com/document.fwx?rgn=124089; [Russian]

http://publication.pravo.gov.ru/Document/View/0001202004240030

⁴⁹³² Future of Life, *AI Policy – Russia* (Feb. 2020), https://futureoflife.org/ai-policy-russia/

⁴⁹³³ Official Internet Portal of Legal Information, *Federal Law of 24.04.2020 № 123-FZ* [unofficial English translation] (Apr. 24, 2020), <a href="https://cis-pubm.ncb/https

⁴⁹³⁴ CNA, Artificial Intelligence in Russia, Issue 7, p. 2 (Jul. 31, 2020),

https://www.cna.org/archive/CNA_Files/centers/cna/sppp/rsp/newsletter/dop-2020-u-027701-final2.pdf

⁴⁹³⁵ Library of Congress, *Russia: Government Begins Testing Driverless Cars* (Jan.18, 2019), https://www.loc.gov/item/global-legal-monitor/2019-01-18/russia-government-begins-testing-driverless-cars/

⁴⁹³⁶ International Information Group (Interfax), *Russia to Test Fully Autonomous Vehicles on Public Roads in 2021–2024* (Mar. 15, 2021), https://interfax.com/newsroom/top-stories/71342/4937 WEBIOMED, *On the rules for registering software as a medical device in Russia* (Oct. 02, 2020), https://webiomed.ru/en/blog/on-the-rules-for-registering-software-as-a-medical-device-in-russia/

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The Russian Government supports the initiative on autonomous vehicle development. In 2022, the Russian Government adopted regulation No. 1849⁴⁹³⁸ on "On establishing an experimental legal regime in the field of digital innovation and approval of the Program of experimental legal regime in the field of digital innovation for the operation of highly automated vehicles for the implementation of the initiative 'Unmanned logistics corridors.'" The regulation provides definition of Automatic driven system, Automatic control mode and Unmanned Cargo Transportation; establishes procedures and requirements for operators of vehicles, describes risks.4939

Digital Rights Law and AI Regulation

According to the OECD, Russia's Digital Rights Law, which came into force in October 2019 and introduced several new legal concepts, including digital rights, e-transactions, smart contracts, and big data. 4940 The law aimed to enable the development of an efficient legal framework of digital economy in Russia, reflecting current digital technologies and challenges including big data and AI.

Russia's national AI strategy includes a draft legal framework on AI Technologies and Robotics that focuses on eliminating excessive legal barriers. The initiative aims to give guidance for regulators and is under the responsibility of the Ministry of Economic Development. 4941

Considering that AI technology is mainly used by state authority in Russia as a means of digital authoritarianism, the new initiative on the development of AI technology for the public authority needs to be drafted. Thus, in October 2022 the Russian State Duma passed a bill regulating the development of artificial intelligence and information technologies by means of concession agreements and agreements on public-private and municipal-private partnership. 4942

⁴⁹³⁸ CIS Legislation, Order of the Government of the Russian Federation of October 17, 2022, No. 1849 [unofficial translation] (amended Sept. 21, 2024), https://cislegislation.com/document.fwx?rgn=145114

⁴⁹³⁹ Ibid

⁴⁹⁴⁰ Government of Russia, Official Internet Portal for Legal Information, Federal Law of 18.03.2019 No. 34-FZ "On Amendments to Parts One, Two and Article 1124 of Part Three of the Civil Code of the Russian Federation [GT],

http://publication.pravo.gov.ru/Document/View/0001201903180027

⁴⁹⁴¹ President of the Russian Federation, Decree of the President of the Russian Federation on the Development of Artificial Intelligence in the Russian Federation, Artificial Intelligence of the Russian Federation (Feb. 15, 2024), https://ai.gov.ru/knowledgebase/dokumenty-po-razvitiyu-ii-

rf/2024 nacionalynava strategiya razvitiya iskusstvennogo intellekta na period do 2030 god a national strategy for the development of artificial intelligence over the period extending up to the year 2030/

⁴⁹⁴² Tass, The State Duma passed in the first reading a bill on the development of artificial intelligence with the help of PPPs (Oct. 19, 2022), https://tass.ru/ekonomika/16099497

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Data Protection

There are many laws in Russia that regulate the processing of personal data, including the Constitution of the Russian Federation, the Council of Europe Convention 108+, and federal law.⁴⁹⁴³ The Law on Personal Data of 2006 is the most comprehensive federal law and sets out broad rights and responsibilities associated with the collection and use of personal data.⁴⁹⁴⁴ The Roskomnadzor, Russia's data protection agency, interprets the federal law and brings enforcement actions.

Russia is moving to update and expand its national data protection law.⁴⁹⁴⁵ A draft law on the Protection of Consumer Rights would limit the ability of companies to collect personal data from consumers, unless there is a legal basis or the data is necessary for the transaction. A proposed law in the Duma would expand penalties for breach of personal data confidentiality and infringement of personal data anonymization rules.

Russian President Vladimir Putin signed a law establishing guidelines for processing depersonalized personal data in August 2024.⁴⁹⁴⁶ This legislation permits the transfer of facial images and voice recordings of Moscow residents in a depersonalized format for further processing, without requiring the individual's consent. The law authorizes the Ministry of Digital Development (Минцифры) to define personal data categories that, once anonymized, can be grouped by specific characteristics, provided they remain non-identifiable.

The law excludes the formation of datasets from biometric information, and data security will be overseen by the Federal Security Service (FSB) and the Federal Service for Technical and Export Control (FSTEC). In Moscow, this law also introduces changes for an AI technology experiment, allowing regional authorities to use depersonalized facial images and voice recordings to enhance municipal and state administration. However, strict limitations prevent data use if it risks harming individuals, the environment, or national security. The law will

http://archive.government.ru/eng/gov/base/54.html

https://www.dlapiperdataprotection.com/?t=law&c=RU

⁴⁹⁴³ Constitution of the Russian Federation (Articles 23 and 24),

⁴⁹⁴⁴ Roskomnadzor, Federal Law of 27 July 2006 N 152-FZ on Personal Data,

https://eng.rkn.gov.ru/personal_data/protecting_the_rigthts_of_personal_data_subjects/; also see DLA Piper, *Data Protection Laws in Russia* (Jan. 17, 2024),

⁴⁹⁴⁵ Olga Novinskaya, *Recent changes in personal data regulation in Russia, International Lawyers Network* (Nov. 12, 2020), https://www.jdsupra.com/legalnews/recent-changes-in-personal-data-58095/.

⁴⁹⁴⁶ Official Internet Portal of Legal Information, Federal Law No. 233-FZ on Amendments to the Federal Law "on Personal Data" and the Federal Law "on Conducting an Experiment to Establish Special Regulation in order to Create the Necessary Conditions for the Development and Implementation of Artificial Intelligence Technologies" (Aug. 8, 2024), http://actual.pravo.gov.ru/content/content.html#pnum=0001202408080031

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take effect on September 1, 2025, following further guidelines from Roskomnadzor on data anonymization standards."

Algorithmic Transparency

The Parliamentary Assembly unanimously adopted an Opinion that considered the cessation of Russia's membership to the Council of Europe (CoE) under Article 8 of the Statute on March 15, 2022. 4947 However, Russia's ratification of Convention 108 remains valid as a non-member state. 4948 Russian data protection law does broadly provide rights of access and transparency to the data subject in automatic decision-making, 4949 and Russia signed but has not ratified CoE Convention 108+.4950

Facial Recognition

Russia is moving rapidly to deploy AI-based face surveillance across the country, often with government funding that goes to business associates of President Putin. According to the *Moscow Times*, more than 43,000 Russian schools will be equipped with facial recognition cameras ominously named "Orwell." The system will be integrated with face recognition developed by NTechLab, a subsidiary of Russian President Vladimir Putin's associate Sergei Chemezov's Rostec conglomerate. NTechLab has already deployed facial recognition technology in Moscow to identify criminal suspects across a network of almost 200,000 surveillance cameras. "Critics have accused the technology of violating citizens' privacy and have staged protests against the system by painting their faces," reported *Moscow Times*.

Kommersant daily reported in September 2020 that CCTV cameras with facial recognition software, already used in Moscow, will be installed by the regional authorities in public spaces and at the entryway of apartment buildings in 10 pilot cities across Russia with the purported aim of protecting public safety. 4952

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⁴⁹⁴⁷ Council of Europe, *The Russian Federation is excluded from the Council of Europe* (March 16, 2022) https://www.coe.int/en/web/portal/-/the-russian-federation-is-excluded-from-the-council-of-europe

⁴⁹⁴⁸ Council of Europe, *Chart of Signatures and Ratifications of Treaty 108* (Jan. 17, 2023), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=108
https://www.dataguidance.com/notes/russia-data-protection-overview

⁴⁹⁵⁰ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 223* (Mar. 7, 2025), https://www.coe.int/en-GB/web/conventions/full-list?module=signatures-by-treaty&treatynum=223

⁴⁹⁵¹ Moscow Times, *Russia to Install 'Orwell' Facial Recognition Tech in Every School – Vedomosti* (Jun. 16, 2020), https://www.themoscowtimes.com/2020/06/16/russia-to-install-orwell-facial-recognition-tech-in-every-school-vedomosti-a70585

⁴⁹⁵² Kommersant, *Regions will recognize by sight: Moscow video surveillance system will be launched in ten more cities* (Sept. 25, 2020) [GT], https://www.kommersant.ru/doc/4503379

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Moscow authorities are also planning to expand the use of this technology, installing CCTV cameras with facial recognition software in trams and underground trains.

Human Rights Watch said "The authorities' intention to expand the use of invasive technology across the country causes serious concern over the potential threat to privacy. Russia's track record of rights violations means that the authorities should be prepared to answer tough questions to prove they are not are undermining people's rights by pretending to protect public safety." HRW also stated that Russian national security laws and surveillance practices enable law enforcement agencies to access practically any data in the name of protecting public safety.

Earlier in 2020, Amnesty International criticized Russia's plans to broaden the use of widespread facial-recognition systems, saying their expected deployment during public gatherings will "inevitably have a chilling effect" on protesters. 4954

The face detection system has been used for tracking conscripts in Moscow as stated on BBC in October 2022. According to a recent study by the information and analytical agency <u>TelecomDaily</u>, more than 13 million CCTV cameras existed in Russia in 2020. The face detection systems are spread over the Russian regions. When it came to the number of cameras per 1,000 people, Russia also ranked third, after the United States and China. ABBC noted, the Moscow Unified Data Center (UDChD), which is connected to the facial recognition system, is planning to transfer data from other regions of Russia to collect and systematize personal data.

The facial recognition surveillance has been used to limit public expression. In 2022, police detained at least 43 people in the Moscow metro, clearly fearing protests. Among them were journalists and activists, whose photos were clearly marked in the system in a special way. In this case, as soon as the

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⁴⁹⁵³ Human Rights Watch, Russia Expands Facial Recognition Despite Privacy Concerns - Lack of Accountability, Oversight, Data Protection (Oct. 2, 2020),

 $[\]underline{https://www.hrw.org/news/2020/10/02/russia-expands-facial-recognition-despite-privacy-\underline{concerns}}$

⁴⁹⁵⁴ Radio Free Europe, *Watchdog Warns About 'Chilling Effect' Of Russia's Use Of Facial-Recognition Technology* (Jan. 31, 2020), https://www.rferl.org/a/watchdog-warns-about-chilling-effect-of-russia-s-use-of-facial-recognition-technology/30410014.html

⁴⁹⁵⁵ RadioFreeEurope, *We See You! How Russia Has Expanded Its Video-Surveillance System* (Jan. 19, 2021), https://www.rferl.org/a/russia-video-surveillance/31052482.html

⁴⁹⁵⁶ BBC, From the subway to the front. How Moscow authorities monitor "dodgers" with the help of facial recognition system (Oct. 24, 2022), https://www.bbc.com/russian/features-63346138?ocid=wsrussian.social.in-app-messaging.telegram.russiantelegram_.edit

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right person enters the station, the system reports this to law enforcement agencies. 4957

Al for Censorship

Roskomnadzor, a Russian agency founded to establish telecom licensing requirements, has become an online censorship authority monitoring online protest activities since 2020.⁴⁹⁵⁸ In every Russian region, local branches of Roskomnadzor trace "points of tension," or events that could cause public discontent. Their primary goal is to identify local troublemakers whose names they then share with the Federal Security Services (FSB) and the Interior Ministry to ensure they are punished.

Independent investigative stories and the Russian pro-government business daily Kommersant have reported that Roskomnadzor is experimenting with the use of AI to enhance its control and censorship of online information. Specifically, the agency is testing AI technologies to refine its monitoring of news and information on Runet (the Russian Internet). This could lead to increasingly sophisticated censorship techniques that go beyond the current systems, which mainly focus on searching for prohibited keywords on the Internet and social media platforms. ⁴⁹⁵⁹"

Environmental Impact of AI

Russia has not implemented the UNESCO Recommendation on the Ethics of Artificial Intelligence, which emphasizes that environmental and ecosystem flourishing should be recognized, protected, and promoted throughout the AI system lifecycle. Therefore, all actors involved in the lifecycle of AI systems are expected to comply with applicable international law, domestic legislation, standards, and practices, such as precautionary measures aimed at environmental and ecosystem protection, restoration, and sustainable development.

Russia and Russian organizations have also made commitments to evaluating environmental impacts of AI in more local initiatives. Russia's National Strategy for Artificial Intelligence establishes that an effective system for assessing the results of implementing AI technologies should include the

4957 BBC, Anger, Fear and Silhouettes. Moscow Mayor's Office Reveals Algorithms That
Recognize People by Their Faces (Aug. 22, 2022). https://www.bbc.com/russian/features

Recognize People by Their Faces (Aug. 22, 2022), https://www.bbc.com/russian/features-62658404

4958 Moscowy Times, How the Kramlin Quieth, Built Pussia's Surveillance State (Nov. 18, 2)

⁴⁹⁵⁸ Moscow Times, *How the Kremlin Quietly Built Russia's Surveillance State* (Nov. 18, 2022), https://www.themoscowtimes.com/2022/11/12/how-the-kremlin-quietly-built-russias-surveillance-state-a79307

⁴⁹⁵⁹ Reporters without Borders, RSF Is Concerned about Russia's Media Regulator Experiments with AI Use in Censorship (May 27, 2024), https://rsf.org/en/rsf-concerned-about-russia-s-media-regulator-experiments-ai-use-censorship

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evaluation of economic, social, ethical, environmental, and institutional outcomes. 4960

Furthermore, the AI Alliance Russia Code of Ethics for Artificial Intelligence states that AI actors must not allow the use of AI technologies to cause harm to human life and/or health, the property of citizens and legal entities, or the environment. Additionally, any use, including the design, development, testing, integration, or operation of an AI system capable of purposefully causing harm to the environment, human life and/or health, or the property of citizens and legal entities, is prohibited.⁴⁹⁶¹

Lethal Autonomous Weapons

In the international debate about Lethal Autonomous Weapons Systems (LAWS), Russia officially opposes a ban on LAWS and limitations on the development of weaponized AI. In 2019 the Russian delegation at the UN Group of Governmental Experts on LAWS stated that human control over the operation of [LAWS] is "an important limiting factor," but that "specific forms and methods of human control should remain at the discretion of States."

Defense Minister Sergei Shoigu said that Russia has already begun producing "weapons of the future" such as combat robots that are "capable of fighting on their own," just like those shown in science-fiction movies. 4963

Moreover, Russia has actively used LAWs in Ukraine since February 2022. As Stop Killer Robot stated, Russia has used "one-way attack drone which carries an explosive payload of approximately 36kg/80lb, has a flight range of approximately 2500km, and possesses autonomous flight capabilities."⁴⁹⁶⁴

Russia has also publicized the use of loitering munitions, particularly the KUB-BLA and the Lancet. The use of the KUB-BLA raised concerns about the deployment of an "AI-based autonomous weapon" because the system was

⁴⁹⁶¹ AI Alliance Russia, *AI Ethics Code* (2022), https://a-ai.ru/ethics_EN/AI_Ethics_Code.pdf
⁴⁹⁶² Group of Governmental Experts of Russian Federation, *Potential opportunities and limitations of military uses of lethal autonomous weapons systems, section 7 (Mar. 15, 2019), https://reachingcriticalwill.org/images/documents/Disarmament-fora/ccw/2019/gge/Documents/GGE.2-WP1.pdf*

⁴⁹⁶⁰ President of the Russian Federation, *Decree of the President of the Russian Federation No.* 490, Section 5111, subparagraph n (Oct. 10, 2019), http://www.kremlin.ru/acts/bank/44731/page/5

⁴⁹⁶³ Nadibaidze Anna, *Russia's Perspective on Human Control and Autonomous Weapons: Is the Official Discourse Changing?* (Jun. 2021), https://www.autonorms.eu/russias-perspective-on-human-control-and-autonomous-weapons-is-the-official-discourse-changing-2/; Tass: Russian News Agency, *Russia Launches Serial Production of Combat Robots* (May 21, 2021), https://tass.com/science/1292483

⁴⁹⁶⁴ Catherine Connolly, *Loitering Munitions with Autonomous Capabilities Used in Ukraine*, Stop Killer Robots (Oct. 17, 2022), https://www.stopkillerrobots.org/news/loitering-munitions-with-autonomous-capabilities-used-in-ukraine/

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reportedly capable of "real-time recognition and classification of detected objects" using AI, or as some have put it, identify targets using AI.

Human Rights

Russia is a signatory to the Universal Declaration of Human Rights. Russia ceases to be a Party to the European Convention on Human Rights on September 16, 2022. 4966 Also, as noted, since March 15, 2022, Russia is no longer a member of the Council of Europe, but ratification of the original Convention 108 is still valid. And a recent decision from the European Court of Human Rights, Zakharov v. Russia, found that Russia's legislation on surveillance "does not provide for adequate and effective guarantees against arbitrariness and the risk of abuse."4967Freedom House rates Russia 13 out of 100 marks for political rights and civil liberties and marks as "Not Free" in the 2024 Freedom in the World report. 4968 According to Freedom House, "Power in Russia's authoritarian political system is concentrated in the hands of President Vladimir Putin. With subservient courts and security forces, a controlled media environment, and a legislature consisting of a ruling party and pliable opposition factions, the Kremlin manipulates elections and suppress genuine opposition. Rampant corruption facilitates shifting links among bureaucrats and organized crime groups." Authorities have further restricted individual liberties to stifle dissent over the full-scale invasion of Ukraine in 2022.

Moreover, as Human Rights Watch reports, the Russian Supreme Court ordered the closure of Memorial, Russia's most prominent human rights organizations: International Memorial Society and Memorial Human Rights Center for violations of the "foreign agents" law. The liquidation was finalized in February 2022, when the Supreme Court rejected their respective appeals. Moreover, in late December 2021, Russian authorities blocked the website of OVD-Info, a human rights watchdog focusing on freedom of assembly. In April 2022, Russian authorities revoked the registration of 15 foreign NGOs and

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⁴⁹⁶⁵ Zachary Kallenborn, *Russia May Have Used a Killer Robot in Ukraine. Now What?* Bulletin of the Atomic Scientists (Mar 15, 2022), https://thebulletin.org/2022/03/russia-may-have-used-a-killer-robot-in-ukraine-now-what/

⁴⁹⁶⁶ European Stability Initiative (ESI), *Why Russia had to be expelled from the Council of Europe* (Nov. 14, 2022), https://www.esiweb.org/proposals/why-russia-had-be-expelled-council-europe

⁴⁹⁶⁷ European Court of Human Rights, *Roman Zakharov v. Russia*, No. 47143/06 (Dec. 4, 2015), https://hudoc.echr.coe.int/fre?i=001-159324; Paul De Hert and Pedro Cristobal Bocos, *Case of Roman Zakharov v. Russia: The Strasbourg follow up to the Luxembourg Court's Schrems judgment*, Strasbourg Observers (Dec. 23, 2015),

https://strasbourgobservers.com/2015/12/23/case-of-roman-zakharov-v-russia-the-strasbourg-follow-up-to-the-luxembourg-courts-schrems-judgment/

⁴⁹⁶⁸ Freedom House, Freedom in the World 2024: Russia (2024), https://freedomhouse.org/country/russia/freedom-world/2024

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foundations, forcing them to shut their offices in Russia, including Human Rights Watch and Amnesty International. 4969

Meanwhile, the United Nations Human Rights Office of the High Commissioner (OHCHR) documented violations of international human rights law and international humanitarian law (IHL) by the belligerent parties in relation to the treatment of prisoners of war and persons hors de combat.⁴⁹⁷⁰

OECD / G20 AI Principles

Russia, a member of the G20, endorsed the G20 AI Principles at the G20 Ministerial in 2019.⁴⁹⁷¹ However, Russia has not endorsed the OECD principles updated in 2024.⁴⁹⁷² The first OECD State of Implementation report on the principles acknowledged Russia's alignment with the principles in formulating a national AI strategy, developing legal frameworks such as the concept for regulations on developing robotics, and facilitating innovation through developments such as sandboxes.⁴⁹⁷³ However, Russia's profile on the OECD AI Policy Observatory is no longer available.

Council of Europe Al Treaty

The Council of Europe Framework Convention on Artificial Intelligence, Human Rights, Democracy, and the Rule of Law, commonly referred to as the Council of Europe AI Treaty, was opened for signatures on September 5, 2024. However, Russia has not signed this first legally binding AI Treaty. 4975

 $\underline{https://www.ohchr.org/sites/default/files/documents/countries/ua/2022-09-23/ReportUkraine-1Feb-31Jul2022-en.pdf$

https://www.oecd.org/en/publications/state-of-implementation-of-the-oecd-ai-principles 1cd40c44-en.html

⁴⁹⁶⁹ Human Rights Watch, *Russian Federation, Events of 2022*, https://www.hrw.org/world-report/2023/country-chapters/russia#981f12

report/2023/country-enapters/russia#981112

4970 OHCHR, Report on the Human Rights Situation in Ukraine (Sept. 27, 2022),

⁴⁹⁷¹ G20 Information Centre, *G20 Digital Economy Ministers Meeting* (Jul. 22, 2020), https://g20.utoronto.ca/2020/2020-g20-digital-0722.html

⁴⁹⁷² OECD AI Policy Observatory, *OECD AI Principles Overview, Countries Adhering to the AI Principles* (Mar. 7, 2025), https://oecd.ai/en/ai-principles

⁴⁹⁷³ OECD, State of Implementation of the OECD AI Principles: Insights from National AI Policies, OECD Digital Economy Papers (Jun. 18, 2021),

⁴⁹⁷⁴ Council of Europe, *The Framework Convention on Artificial Intelligence* (2024), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

⁴⁹⁷⁵ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 7, 2025), https://www.coe.int/en-GB/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

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UNESCO Recommendation on the Ethics of AI

Russia voted for the UNESCO Recommendation on the Ethics of AI, although it has not implemented it entirety. At least 17 executive bodies associated with the Russian Federation and more than 330 Russian organizations belong to the AI Alliance Network and adopted the AI Code of Ethics. 4976 The Code which was developed by the Alliance Russia's Commission on AI Ethics, is non-binding and voluntary. 4977

Russia has not initiated the UNESCO Readiness Assessment Methodology (RAM).⁴⁹⁷⁸ The RAM is a tool designed to help countries evaluate their preparedness to implement AI ethically and responsibly aligned to UNESCO's Recommendation on the Ethics of Artificial Intelligence.⁴⁹⁷⁹

Evaluation

Russia's development of a National AI Strategy, which has recently been amended to include sections that further the principles of transparency, security, and accessibility; endorsement of the G20 AI Principles; efforts to develop laws for digital rights and regulation of AI; and initiatives to involve the public in AI policy development, are positive steps forward. The adoption of an AI Ethics Code by more than 43 federal executive bodies and 17 executive bodies of the constituent entities of the Russian Federation, indicates a level of commitment to the ethical use of AI.

However, the use of Lethal Autonomous Weapon Systems (LAWS) in the war in Ukraine; lack of robust measures to limit surveillance and protect human rights; rapid adoption of facial recognition technology in public spaces; and use of AI to execute more sophisticated censorship and control of news and information on Runet (the Russian Internet), all raise concerns about the future implications of Russia's AI program.

Rwanda

In 2024, Rwanda launched the AI Playbook for Small States with Singapore and contributed to the East African Community (EAC) Data Policy Framework.

⁴⁹⁷⁶ AI Alliance Network, Our Members (2025), https://aianet.org/members/

⁴⁹⁷⁷ AI Alliance Russia, AI Code of Ethics (2022), https://a-ai.ru/ethics_EN/index.html

⁴⁹⁷⁸ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

⁴⁹⁷⁹ UNESCO, Readiness Assessment Methodology: A Tool of the Recommendation on the Ethics of Artificial Intelligence (Aug. 28, 2023), https://www.unesco.org/en/articles/readiness-assessment-methodology-tool-recommendation-ethics-artificial-intelligence

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National AI Strategy

Rwanda, with Vision 2050, aspires to increase the quality of life and develop modern infrastructure⁴⁹⁸⁰ by strengthening capacity, service delivery, and accountability of public institutions; increasing citizens' participation and engagement in development; and strengthening justice and rule of law. National Strategy for Transformation (NST1) is the first medium-term strategy that implements the Vision 2050 from 2017–2024. The new National Strategy for Transformation (NST2) runs from 2025–2029 and focuses on job creation, economic growth and climate resilience.⁴⁹⁸¹ The government pledges to establish legal frameworks that spur economic development and instill fairness, transparency, and accountability across institutions. The Emerging Technologies Strategy and Action Plan aim to position Rwanda as an emerging technology test bed, solution, and export hub; propel the social and economic application of new technologies; prepare the foundations for new technologies and protect citizens and institutions from the negative consequences.⁴⁹⁸²

As a member of the African Union, Rwanda is taking concrete steps to align the country's efforts to the vision of the Union to build a continental digital transformation strategy. The Government of Rwanda has legislated a national AI strategy to equip government agencies and other stakeholders in the country to empower AI developers, citizens, and users and support the beneficial and ethical adoption of AI. A report by the Africa Policy Institute (AfriPoli) highlights Rwanda's National AI Strategy with an emphasis on data policies and access to public data. Critical to Rwanda's progress is the adoption of the Continental Data

 $\frac{https://www.minecofin.gov.rw/fileadmin/user_upload/Minecofin/Publications/REPORTS/Nation_al_Development_Planning_and_Research/Vision_2050/English-$

Vision 2050 Abridged version WEB Final.pdf

⁴⁹⁸³ African Union, The Digital Transformation Strategy for Africa (2020–2030),

 $\underline{https://au.int/sites/default/files/documents/38507-doc-dts-english.pdf}$

 $\underline{https://rura.rw/fileadmin/Documents/ICT/Laws/Rwanda} \ \underline{national} \ \underline{Artificial} \ \underline{intelligence} \ \underline{Policy.} \\ \underline{pdf}$

⁴⁹⁸⁰ Republic of Rwanda, *Vision 2050* (2015),

⁴⁹⁸¹ Republic of Rwanda, *Office of the Prime Minister, Summary of the 5-year Government Program/Second National Strategy for Transformation (NST2:2024–2029)* (Aug. 23, 2024), https://www.gisagara.gov.rw/index.php?eID=dumpFile&t=f&f=105584&token=fb04d3feca2d4a8b86889206e625abc3535e80e2

⁴⁹⁸² Digital Transformation Center Rwanda, *Transforming Rwanda into a Living Laboratory of Emerging Technologies: MINICT and DigiCenter Develop National Emerging Technology Strategy and Action Plan*, Digital Transformation Center Kigali (Jun. 15, 2020), https://digicenter.rw/transforming-rwanda-into-a-living-laboratory-of-emerging-technologies/

⁴⁹⁸⁴ Republic of Rwanda, *National AI Policy* (Apr. 20, 2023),

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Policy Framework, under the recommendation of the African Union's Digital Transformation strategy⁴⁹⁸⁵

In 2020, the Ministry of ICT and Innovation (MINICT) engaged in National AI Policy Stakeholders Workshops with The Future Society (TFS) and GIZ FAIR Forward⁴⁹⁸⁶. The Future Society supports the development of Rwanda's national artificial intelligence framework and development plans, along with the development of AI ethical guidelines, and a practical implementation strategy fit for the local context.⁴⁹⁸⁷ For implementation, Rwanda has the support of GIZ FAIR Forward—Artificial Intelligence for All.⁴⁹⁸⁸ FAIR Forward—Artificial Intelligence for All is a global initiative of German Development Cooperation, working together with Rwanda and four other countries to lay the foundations for developing local AI, to strengthen local skills and knowledge in AI; remove barriers of entry to developing AI and to develop AI policy frameworks on ethical AI, data protection and privacy.⁴⁹⁸⁹ FAIR Forward advocates for ethical AI that is rooted in human rights, international norms such as accountability, transparency of decision-making, and privacy and draws on European experiences such as the EU General Data Protection Regulation (GDPR).

The result of this partnership is the National AI Policy framework of the Government of Rwanda.⁴⁹⁹⁰ The Rwanda National AI Policy encompasses six priority areas for effective AI policy in Rwanda.

- 1. 21st-century skills and high AI literacy
- 2. Reliable infrastructure and compute capacity
- 3. Robust Data Strategy
- 4. Trustworthy AI adoption in the public sector
- 5. Widely beneficial AI adoption in the private sector, and
- 6. Practical Ethical Guidelines.

⁴⁹⁸⁵ African Union, AU Data Policy Framework. (Feb. 2022),

 $\underline{\text{https://au.int/sites/default/files/documents/42078-doc-AU-DATA-POLICY-FRAMEWORK-ENG1.pdf}$

https://www.giz.de/expertise/html/61982.html

⁴⁹⁸⁶ OECD AI Policy Observatory, AI in Rwanda, National AI Policy: Stakeholders Workshops, (2021), https://oecd.ai/en/dashboards/countries/Rwanda

⁴⁹⁸⁷ The Future Society, *The Development of Rwanda's National Artificial Intelligence Policy* (Aug. 31, 2020), https://thefuturesociety.org/2020/08/31/development-of-rwandas-national-artificial-intelligence-policy/

⁴⁹⁸⁸ GIZ, FAIR Forward—Artificial Intelligence for All,

⁴⁹⁸⁹ Timon Bucher, *FAIR Forward: A Summary* (Feb. 25, 2025), https://toolkit-digitalisierung.de/en/fair-forward/

⁴⁹⁹⁰ Republic of Rwanda, *National AI Policy* (Apr. 20, 2023), https://rura.rw/fileadmin/Documents/ICT/Laws/Rwanda national Artificial intelligence Policy. pdf

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The cooperation with GIZ FAIR Forward includes an AI Policy Maker network with Ministries of ICT and regulatory authorities from our African countries and India, to exchange knowledge and skills and AI policy experiences.⁴⁹⁹¹ The FAIR Forward project also supports the formulation of ethical guidelines for the use of AI, under the responsibility of Rwanda Utilities Regulatory Authority (RURA). The guidelines aim to support AI AI developers in Rwanda on risk management to protect against harms and threats of these systems.

Other institutions contributing to the development of human-centric AI initiatives are: The Center for the Fourth Industrial Revolution C4IR Rwanda, as responsible for the formulation of policy frameworks "to maximize the social benefits and minimize the risks of advanced science and technology, 4992 and the Centre of Excellence in the areas of Digitalization and AI (CoE), for R&D investment and building human capacity and preparation for transition into future of work. 4993 Rwanda has also been engaging internationally in AI policymaking. On September 22, 2024, Rwanda and Singapore launched the AI Playbook for Small States, providing strategic guidance on AI adoption and governance to address small nations' unique challenges in implementing AI policies. 4994

Al Safety Summit

In November 2023, Rwanda participated in the first AI Safety Summit and endorsed the Bletchley Declaration.⁴⁹⁹⁵ Rwanda thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible."

⁴⁹⁹¹ Digital Transformation Center Rwanda [DigiCenter], *How Rwanda's AI Policy helps to shape the evolving AI ecosystem* (Oct. 11, 2021), https://digicenter.rw/how-rwandas-ai-policy-helps-to-shape-the-evolving-ai-ecosystem/

⁴⁹⁹² OECD AI Policy Observatory, *AI in Rwanda, C4IR Rwanda* (2022), https://oecd.ai/en/dashboards/countries/Rwanda

⁴⁹⁹³ OECD AI Policy Observatory, *AI in Rwanda, Centre of Excellence in the Areas of Digitalization and AI* (2021), https://oecd.ai/en/dashboards/countries/Rwanda

⁴⁹⁹⁴ Ministry Of ICT And Innovation (MINICT), Rwanda, and Infocomm Media Development Authority (Imda), Singapore, *AI Playbook for Small States* (Sep. 22, 2024), https://www.minict.gov.rw/index.php?eID=dumpFile&t=f&f=107417&token=6fe9f09b32c0749 00f09dd3f1095a8eed2551075

⁴⁹⁹⁵ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, *Prime Minister's Office, The Bletchley Declaration by Countries Attending the AI Safety Summit* (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

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The successor of the AI safety summit was the AI Seoul summit that was co-hosted by the Republic of Korea and the United Kingdom in Seoul, South Korea, in May 2024. 4996 While Rwanda was a participant, 4997 they did not sign the Seoul Declaration for Safe, Innovative and Inclusive AI that was signed by ten participants of the summit. The declaration is a statement of intent toward international cooperation on AI safety science. 4998 The next edition of the summit took place in France in February 2025.

Public Participation

Rwanda has yet to develop a systematic process for public consultation on matters of AI policy. The Ministry of ICT and Innovation (MINICT), in partnership with Rwanda Utilities and Regulatory Authority, the Rwanda Information Society Authority, engaged relevant stakeholders from the public and private sectors and civil society in the development of the AI policy 2023 of Rwanda. 4999 The first workshop in September 2020 had the participation of civil society, private sector leaders, academics, and government representatives, focused on identifying and prioritizing AI opportunities, risks, and socio-ethical implications. A Second Collective Intelligence Workshop took place in 2021 (online due to COVID-19) to discuss seven categories of AI policy. 5000 However, there are no recent reports of the outcomes of the 2nd session or information about new public consultation since then.

In 2024, the National Cyber Security Authority and GIZ Rwanda hosted a workshop for stakeholders in the data governance ecosystem to brainstorm collaboration opportunities in data protection and privacy. The workshop identified areas of collaboration in skills development, awareness creation and the

⁴⁹⁹⁶ Republic of Korea and the United Kingdom, *AI Seoul Summit* (May 21–22, 2024), https://aiseoulsummit.kr/aiss/

⁴⁹⁹⁷ Department for Science, Innovation & Technology, Government of UK, *AI Seoul Summit: Participants List (Governments and Organisations)* (May 21–22, 2024), https://www.gov.uk/government/publications/ai-seoul-summit-programme/ai-seoul-summit-participants-list-governments-and-organisations

⁴⁹⁹⁸ Department for Science, Innovation & Technology, Government of UK, Seoul Declaration for Safe, Innovative and Inclusive AI by Participants Attending the Leaders' Session: AI Seoul Summit (May 21, 2024), https://www.gov.uk/government/publications/seoul-declaration-for-safe-innovative-and-inclusive-ai-by-participants-attending-the-leaders-session-ai-seoul-summit-21-may-2024
⁴⁹⁹⁹ Republic of Rwanda, National AI Policy (Apr. 20, 2023),

https://rura.rw/fileadmin/Documents/ICT/Laws/Rwanda national Artificial intelligence Policy.pdf

⁵⁰⁰⁰ The Future Society, *Rwanda's National AI Policy: Stakeholder Workshop* (Feb. 25, 2021), https://thefuturesociety.org/rwandas-national-ai-policy-stakeholder-workshop/

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use of artificial intelligence to advance data protection and Privacy knowledge in Rwanda. 5001

Rwanda has been absent from other consultative meetings, like the APET African Union High-Level Panel on Emerging Technologies (APET) in 2022. These sessions with representatives of African nations focused on the review of policy implementation frameworks governing AI and demystification of the concept of AI in Africa⁵⁰⁰².

Data Protection

In 2019 Rwanda signed⁵⁰⁰³ and ratified the African Union Convention on Cyber Security and Personal Data Protection (Malabo Convention).⁵⁰⁰⁴ In June of that same year Rwanda adopted the Child Online Protection Policy (the COP Policy" designed to mitigate against risks and harms and to deliver a framework that meets children's needs and fulfills their rights. This enactment makes Rwanda one of the first countries to adopt such protections.⁵⁰⁰⁵ The country had also been part of an initiative of UNICEF that aligned to policy guidance of AI for children.⁵⁰⁰⁶ The African Union (AU), of which Rwanda is a part, approved the African Union Child Online Safety and Empowerment Policy in May 2024.⁵⁰⁰⁷ The Policy establishes key principles such as children's right to safety, privacy, and online participation, and covers the full range of children's rights as set out in

⁵⁰⁰¹ Data Protection Office, Government of Rwanda, *NCSA and GIZ Host Stakeholder Meeting on Data Protection and Privacy* (May 31, 2024), https://dpo.gov.rw/articles/dpo-giz-meeting.html

AFRICAN_UNION_CONVENTION_ON_CYBER_SECURITY_AND_PERSONAL_DATA_P
ROTECTION.pdf

https://rura.rw/fileadmin/Documents/ICT/Laws/Rwanda_Child_Online_Protection_Policy.pdf
5006 UNICEF, Policy Guidance on AI for Children: Pilot Testing and Case Studies,
https://www.unicef.org/innocenti/projects/ai-for-children/pilot-testing-policy-guidance-ai-children

African Union Child Online Safety and Empowerment Policy Feb 2024.pdf

⁵⁰⁰² AUDA-NEPAD, *The African Union Artificial Intelligence Continental Strategy for Africa*, (May 30, 2022), https://www.nepad.org/news/african-union-artificial-intelligence-continental-strategy-africa

⁵⁰⁰³ African Union, List of Countries which have signed, ratified/acceded to the African Union Convention on Cyber Security and Personal Data Protection (Mar. 25, 2022). https://au.int/sites/default/files/treaties/29560-sl-

⁵⁰⁰⁴ African Union, *African Union Convention on Cybersecurity (Malabo Convention)* (Jun. 27, 2014), https://dig.watch/resource/african-union-convention-on-cyber-security-and-personal-data-protection-african-union

⁵⁰⁰⁵ Republic of Rwanda, Ministry of ICT & Innovation, *Rwanda Child Online Protection Policy*, (Jun. 2019),

⁵⁰⁰⁷ African Union (AU), *The African Union Child Online Safety and Empowerment Policy* (Feb. 14–15, 2024), https://au.int/sites/default/files/documents/43798-doc-

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the Convention on the Rights of the Child adopted by the UN in 2021, and reinforced in 2023. 5008

In 2021, pursuant to the Malabo Convention, the Ministry of Justice published Law No. 058/2021 of 13/10/2021 Relating to the Protection of Personal Data and Privacy. ⁵⁰⁰⁹ The Law established principles of lawfulness, fairness and transparency, purpose limitation, and accuracy, requiring personal data protection impact assessments. Article 3 of the Privacy Law establishes privacy as a "fundamental right." ⁵⁰¹⁰

While the legislation did not establish an independent data protection agency, there were provisions for a supervisory authority, defined as a public authority in charge of cyber security. The National Cyber Security Authority (NCSA) was established in 2017, under Law No. 26/2017⁵⁰¹¹ but was only operational in 2020.⁵⁰¹² In 2018, the Law No. 60/2018 addressed prevention and punishment of cybercrimes⁵⁰¹³.

Following the GDPR, the Privacy Law seeks to safeguard fundamental rights to privacy by regulating the processing of data and providing the individual with rights over their data.⁵⁰¹⁴ The law establishes systems of accountability and clear obligations for those who control the processing of personal data. According to One Trust, "The Bill is relatively comprehensive and would introduce obligations related to data subject rights, data processing notifications, pseudonymization, sensitive data, data transfers, and data breach notifications."⁵⁰¹⁵

⁵⁰⁰⁸ UN General Assembly, *Promotion and Protection of the Rights of Children* (Nov. 8, 2024), https://documents.un.org/doc/undoc/ltd/n23/342/80/pdf/n2334280.pdf

⁵⁰⁰⁹ Republic of Rwanda, *Law No. 058/2021 of 13/10/2021 Relating to the Protection of Personal Data and Privacy*, Official Gazette (Oct. 15, 2021) https://www.risa.gov.rw/data-protection-and-privacy-law

National Cyber Security Authority, *Rwanda Passes New Law Protecting Personal Data* (Oct. 21, 2021), https://cyber.gov.rw/updates/article/rwanda-passes-new-law-protecting-personal-data-1/

⁵⁰¹¹ Republic of Rwanda, *Law No. 26/2017 of 31 May 2017 which establishes NCSA*, Official Gazette No. 31/05/21 (May 31, 2017),

 $[\]underline{\text{https://cyber.gov.rw/index.php?eID=dumpFile\&t=f\&f=193\&token=388512d958cb10ce563a7d2}}\\ 629169b38bdcdafdf$

⁵⁰¹² National Cyber Security Authority, *About*, (n.d.) <u>https://cyber.gov.rw/about/</u>

⁵⁰¹³ National Cyber Security Authority, Cyber Crimes Law, (n.d.),

 $[\]frac{https://cyber.gov.rw/index.php?eID=dumpFile\&t=f\&f=70\&token=8a1cd43626bfcc2b99fba277a}{ca01e6f2aaa1788}$

⁵⁰¹⁴ Julius Bizimungu, *Rwanda moves to tighten data protection, privacy*, The New Times (Nov.

^{6, 2020),} https://www.newtimes.co.rw/news/rwanda-moves-tighten-data-protection-privacy

⁵⁰¹⁵ One Trust Data Guidance, Rwanda (Oct. 29, 2020),

https://www.dataguidance.com/jurisdiction/rwanda

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On March 31, 2022, the National Cyber Security Authority launched the Data Protection Office (DPO). The role of the DPO is to generate awareness of the Data Protection and Privacy Law and lead activities to ensure the law is followed. Those activities include registering processors and controllers, conducting audits, conducting investigations, and refining best practices to uphold the law. The office is also tasked with ongoing learning and research to keep pace with developments and advancements in the data protection ecosystem of control.

The DPO began an important national awareness campaign to help citizens understand the data protection and privacy afforded to them by the new Data Protection Law. The campaign covered basic data literacy topics (e.g., terms and definitions), risk mitigation topics (e.g., misinformation, helping seniors stay safe online, children's data protections), and a series of topics on individual data rights (e.g., portability, rectification, erasure). The office has developed several partnerships to expand the reach of its messaging within schools, public transportation areas, and local townships. The first Data Privacy Day took place on January 28, 2023⁵⁰¹⁷ and Safer Internet Day on February 7, 2023. ⁵⁰¹⁸The theme of the Safer Internet Day 2024, taking place across different schools in Rwanda over 3 weeks, was 'Promoting personal accountability for a constructive Internet atmosphere. ⁵⁵⁰¹⁹

On October 25, 2024, The East African Community (EAC) approved the EAC Data Governance Policy Framework, aimed at promoting common standards for data protection, privacy, and security, laying a robust foundation for data protection and data sharing in the region. ⁵⁰²⁰

Despite these initiatives, Rwanda has not sponsored any of the Global Privacy Assembly (GPA) resolutions and declarations. The DPO had not been established at the time the Declaration on Ethics and Data Protection in Artificial

⁵⁰¹⁷ Data Protection Office, *Rwanda's Data Protection Office Observes Its First Data Privacy Week* (Feb. 2, 2023), https://cyber.gov.rw/updates/article/rwandas-data-protection-office-observes-its-first-data-privacy-week-2/

Elias Hakizimana, *Promoting Responsible Internet Usage: ISOC Rwanda Celebrates Safer Internet Day 2024* (Feb. 6, 2024), https://rwandainspirer.com/promoting-responsible-internet-usage-isoc-rwanda-celebrates-safer-internet-day-2024/

⁵⁰¹⁶ Republic of Rwanda, National Cyber Security Authority, *NCSA officially launches the Data Protection Office* (Mar. 31, 2022), https://cyber.gov.rw/updates/article/ncsa-officially-launches-its-data-protection-office-2/

Elias Hakizimana, Safer Internet Day 2023. Parents Urged to Educate Children about Safe and Positive Use of Technology, The Rwanda Inspirer (Feb 7, 2023), https://rwandainspirer.com/safer-internet-day-2023-parents-urged-to-educate-children-about-safe-and-positive-use-of-technology/

⁵⁰²⁰ East African Community (EAC), EAC Set to Advance Data Governance and Protection with Development of a Regional Policy Framework (Oct. 25, 2024), https://www.eac.int/press-releases/3195-eac-set-to-advance-data-governance-and-protection-with-development-of-a-regional-policy-framework

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Intelligence (2018)⁵⁰²¹ and the Resolution on Accountability in the Development and Use of Artificial Intelligence (2020)⁵⁰²² were passed. The DPO was functional in March 2022, when the GPA 2022 Declaration on Facial Recognition Technology⁵⁰²³ was issued, but it did not endorse it. Neither did it cosponsor the 2023 GPA Resolution on Generative AI.⁵⁰²⁴

Algorithmic Transparency

Rwanda does not yet have a dedicated AI oversight agency. However, Rwanda's National AI Policy of 2023 emphasizes algorithmic transparency by building regulatory capacity, establishing ethical guidelines, and creating roles dedicated to responsible AI. Key initiatives mentioned include "launching an annual participatory consultation forum to update the guidelines and create a network of AI Ethics Officers across government institutions to champion them." Additionally, the policy includes the recommendation to establish a Responsible AI Office (RAI Office) during the first year of this policy, housed within the Ministry of ICT & Innovation (MINICT). These measures aim to build public trust and accountability in Rwanda's AI ecosystem. However, neither the RAI office nor the public consultation has materialized yet as of November 2024, despite more than one year having passed since the legislation of the policy. In the meantime, algorithmic transparency is partially enforced by Rwanda's Data Protection and Privacy Office (DPO), which oversees the lawful, fair, and transparent processing of personal data, as mandated by national data protection laws.

⁵⁰²¹ International Conference of Data Protection & Privacy Commissioners, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922_ICDPPC-40th_AI-Declaration_ADOPTED.pdf

⁵⁰²² Global Privacy Assembly (GPA), *Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence*, (Oct 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN.pdf

Global Privacy Assembly (GPA), Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology (Oct 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁵⁰²⁴ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

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Human Rights

Freedom House scores Rwanda as "Not Free" with a score of 23/100 in 2023 and 2024,⁵⁰²⁵ with a steady yet slight increase from 2021 and 2022. The Ibrahim Index of African Governance scores Rwanda's 2023 record on Participation, Rights, and Inclusion at 42.5 out of 100, which is lower than the African average of 48.7 out of 100. For overall governance, Rwanda scores 58.7 out of 100, which places the country 14 out of 54 African countries.⁵⁰²⁶

After the genocide of 1994, Rwanda had to rebuild its infrastructure and relations from the ground up. A unity and reconciliation process was followed by a combination of traditional systems of justice and international tribunals. The National Commission for Human Rights was created in 1999 as an independent institution responsible for the promotion and protection of human rights in Rwanda. The European Union concluded in its 2023 human rights and democracy report that "The human rights and democracy situation in Rwanda remained challenging. and that "Freedom of expression remained limited: charges for inciting insurrection, spreading rumours or false information, genocide minimization, and others, stifled public dissent or criticism." In 2023, restrictions on freedom of expression and individual rights in Rwanda persisted, with specific incidents such as imprisonment, torture, and suspicious deaths of journalists or commentators who do not align with the government's narrative.

Ahead of the 2021 UN Universal Periodic Review of Rwanda, the government announced National Action Plan for Human Rights (NHRAP) 2017–2020, formulated through a participatory process. This is the first of its kind in Rwanda and builds on extensive work by the Rwandan government to create an inclusive society where all are valued and have equal opportunities. The government commits that the Universal Declaration of Human Rights should guide all future programs and policies in all sectors and all phases of the

https://freedomhouse.org/country/rwanda/freedom-world/2024

https://assets.iiag.online/2024/profiles/2024-IIAG-profile-rw.pdf

https://en.unesco.org/courier/2019-2/rwandan-miracle

https://freedomhouse.org/country/rwanda/freedom-world/2024

⁵⁰²⁵ Freedom House, Freedom in the World 2024: Rwanda (2024),

⁵⁰²⁶ Ibrahim Index of African Governance, Governance Profile: Rwanda (2024),

⁵⁰²⁷ Alphonse Nkusi, *The Rwandan Miracle*, UNESCO Courier (Apr. 4, 2019),

⁵⁰²⁸ Republic of Rwanda Ministry of Justice, *The National Human Rights Action Plan of Rwanda* 2017–2020 (2017),

https://www.humanrights.dk/files/media/document/Rwanda%20NHRAP%202017-2020.pdf ⁵⁰²⁹ European Union, *EU Annual Report on Human Rights and Democracy in the World: 2023 Country Updates*, p. 314 (May 14, 2024),

https://www.eeas.europa.eu/sites/default/files/documents/2024/2023%20EU%20country%20updates%20on%20human%20rights%20and%20democracy 2.pdf

⁵⁰³⁰ Freedom House, Freedom in the World 2024: Rwanda (2024),

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programming process including monitoring and evaluation. The Rwandan judiciary is not completely independent from the executive because top judicial officials are appointed by the president and confirmed by the Senate,⁵⁰³¹ which is currently dominated by the governing party. However, the judiciary must function in an independent manner and enjoys administrative and financial independence.

Smart Cities

Established in 2000 and revised in 2012, the aim of Rwanda Vision 2020 was to "transform Rwanda from an agrarian economy to a knowledge-based society by 2020." Under this vision, Smart Rwanda Master Plan had three goals: economic transformation, job creation, and accountable governance. In 2015, Rwanda adopted a National Urbanization Policy to demonstrate how urban development can drive economic transformation. One of the focuses is to "promote quality of life, mitigation of disaster risks, social inclusion and cultural preservation" through "digital service points for rural settlements, smart urban agriculture projects, sensor-based environmental data, and smart and green building labs. ⁵⁰³² The policy requires public engagement and open data as building blocks. The Rwanda smart city model is centered around 3 main pillars, 9 strategic building blocks, and 27 action initiatives. The three pillars are smart governance and planning; smart and efficient services and utilities; and localized innovation for social and economic development.

Kigali Innovation City (KIC) is the government's flagship program to create a hi-tech ecosystem, modeling itself on the southeast Asian city-state of Singapore. The City of Innovation is to be built as part of Africa50. It is a 62-hectare development located in Kigali's special economic zone (SEZ). The main goal is to create an innovative business hub in the heart of Africa that will include four first-rate universities, innovative agriculture, healthcare, technology, financial services, biotech firms, and both commercial and residential space. The Government of Rwanda, Africa50, and the Arab Bank for Economic Development in Africa officially broke ground on the construction of the pioneering smart city project in September 2024.

https://unhabitat.org/sites/default/files/documents/2019-05/rwanda_smart_city-master_plan.pdf Borgen Project, *Big Plans for Rwandan Infrastructure* (Oct. 6, 2019),

https://borgenproject.org/big-plans-for-rwandan-infrastructure/

Parliament, *Approving the Appointment of Officials* (2025), https://www.parliament.gov.rw/approval-of-high-officials

⁵⁰³² UN Habitat, Smart City Rwanda Master Plan (May 2019),

⁵⁰³⁴ Rwanda Development Board, *The Government of Rwanda, Africa50 and BADEA break ground on the construction of Kigali Innovation City* (Sept. 11, 2024), https://rdb.rw/the-government-of-rwanda-africa50-and-badea-break-ground-on-the-construction-of-kigali-innovation-city/#

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The Smart City Masterplan was developed in 2017, with the participation of various stakeholders in Rwanda, including regulatory bodies, local authorities, academia, civil society, and the private sector. The development was aligned with the Smart Africa Alliance Smart Sustainable Cities Blueprint for Africa. 5035

Biometric Identification

Rwanda used biometric identification for its census in 2007 to unify all identity information under a single authority, the National Identification Agency (NIDA), and a unique National Identity Number (NIN). This number is now used for health, education, telecom, banking, electoral lists, social protection programs, and border crossings. Rwanda's authorities also proposed to create a countrywide DNA database to crack down on crime, raising concerns that the data could be misused by the government and violate international human rights laws. Rwandan regulations require mandatory SIM card registration and a limit of three cards per national ID per operator. Service providers are required to maintain databases and share information with law enforcement if necessary.

In a country that has bitter memories of genocide along ethnic identity lines, the right to data privacy becomes a crucial issue. The national social protection program, Ubudehe, database, was created in 2001⁵⁰³⁸to classify wealth and identify the poorest households using community assessments. The database is interlinked with the national ID number. The lack of transparency on who makes the determination of wealth category and how this impacts an individual's access to opportunities and resources and the extent of stigmatization remains questionable.

A study by the World Health Organization (WHO) on the use of digital technologies to identify vulnerable populations, included Rwanda's CBHI (Community-based health insurance scheme) as a case study. ⁵⁰³⁹ WHO concluded

 $\frac{\text{https://www.id4africa.com/2019_event/presentations/PS1/5-Josephine-Mukesha-NIDA-Rwanda.pdf}$

⁵⁰³⁷ Julius Bizimungu and Kelly Rwamapera, *Rwanda Proposes DNA Database for all Citizens*, The New Times (Mar. 20, 2019), https://www.newtimes.co.rw/article/165024/News/rwanda-proposes-dna-database-for-all-citizens

⁵⁰³⁸ Republic of Rwanda Ministry of Health & World Health Organization, *Rwanda's Performance in Addressing Social Determinants of Health and Intersectoral Action* (2018), https://www.afro.who.int/sites/default/files/2018-

03/Rwanda s Performance in Addressing Social Determinants of Health and%20intersecto ral%20action%20final%20Report.pdf

⁵⁰³⁹ World Health Organization WHO, The use of digital technologies to support the identification of poor and vulnerable populations groups for health coverage schemes. Insights

⁵⁰³⁵ UN Habitat, Smart City Rwanda Master Plan (May 2019),

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that the use of a sophisticated data infrastructure (3MS system) to connect the Ubudehe system to the IREMBO-Rwanda online portal resulted in ease of tracking payments to households, cost savings, and fraud control. In a contrasting study, Algorithm Watch analyzed the Ubudehe case as a prime example of Rwanda's 'centralized, unified and biometric repository of the population." The process of collection, analysis, and interpretation and the source of decision-makers of such categorization lack transparency.

Environmental Impact of AI

The G20 Engagement Groups issued the São Luis Declaration, a joint declaration for ethical, sustainable, and inclusive Artificial Intelligence.⁵⁰⁴¹ With Rwanda's president leading the African Union delegation to the 2025 G20, seated in South Africa, the G20 could take action to promote action to curb AI's environmental impact and develop AI solutions to mitigate harms.⁵⁰⁴²

Lethal Autonomous Weapons

In 2019 Rwanda partnered with the World Economic Forum⁵⁰⁴³ to draft a framework for governing drones at scale and foster an ecosystem of unmanned aircraft systems. This decision followed the successful partnership with a startup, Zipline, to deliver blood, vaccines, and other medical supplies to rural hospitals in Rwanda, the country decided to regulate the use of drones. The Rwandan government was the first in the world creating a performance-based regulation focused on safety standards for all drones.⁵⁰⁴⁴

This partnership also resulted in The Advanced Drone Operations Toolkit which provides a modular approach for governments to enable societally

from Cambodia, India and Rwanda (Dec 20, 2022), https://www.who.int/publications/i/item/978924006399

https://www.who.int/publications/i/item/9789240063990
5040 Algorithm Watch, *Identity-Management and Citizen Scoring in Ghana, Rwanda, Tunisia*,

Uganda, Zimbabwe and China (Oct. 21, 2019), https://algorithmwatch.org/en/wp-content/uploads/2019/10/Identity-management-and-citizen-scoring-in-Ghana-Rwanda-Tunesia-Uganda-Zimbabwe-and-China-report-by-AlgorithmWatch-2019.pdf

⁵⁰⁴¹ Engagement Groups of the G20 Brazil, *São Luís Declaration: Artificial Intelligence*, p. 3 (Sept. 10, 2024), https://www.t20brasil.org/en/news/82/sao-luis-declaration-a-joint-statement-from-engagement-groups-to-the-g20-states-on-artificial-intelligence

⁵⁰⁴² African Union, *African Union Delegation Attends 1st G20 Foreign Ministers' Meeting under South Africa's G20 Presidency* (Feb. 23, 2025), https://au.int/en/pressreleases/20250223/african-union-delegation-attends-1st-g20-foreign-ministers-meeting-under

⁵⁰⁴³World Economic Forum, *Advanced Drone Operations Toolkit: Accelerating the Drone Revolution* (Feb. 26, 2019) https://www.weforum.org/reports/advanced-drone-operations-toolkit-accelerating-the-drone-revolution

⁵⁰⁴⁴ A. Russo and H. Wolf, *What the world can learn from Rwanda's approach to drones*, World Economic Forum (Jan.16, 2019) https://www.weforum.org/agenda/2019/01/what-the-world-can-learn-from-rwandas-approach-to-drones/

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important and safe drone projects.⁵⁰⁴⁵ The country is looking to use these technologies to promote agricultural resilience and food security in Rwanda. It has not called for a prohibition on fully autonomous weapons.⁵⁰⁴⁶

Rwanda participated in the REAIM international summit hosted by the Netherlands in February 2023. At the end of the Summit, Rwanda, together with other countries, agreed on a joint call for action on the responsible development, deployment and use of artificial intelligence in the military domain. ⁵⁰⁴⁷ In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." States also "stress the importance of a holistic, inclusive and comprehensive approach in addressing the possible impacts, opportunities and challenges of the use of AI in the military domain and the need for all stakeholders, including states, private sector, civil society and academia, to collaborate and exchange information on responsible AI in the military domain."⁵⁰⁴⁸

In December 2023, Rwanda voted in support of UN General Assembly Resolution 78/241 on lethal autonomous weapons systems. ⁵⁰⁴⁹ The Resolution stressed the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems" and mandated the UN Secretary-General to prepare a report, reflecting the views of member and observer states on autonomous weapons systems and ways to address the related challenges and concerns they raise from humanitarian, legal, security, technological and ethical perspectives and on the role of humans in the use of force.

Rwanda is not a state party to the Convention on Certain Conventional Weapons, and it has not yet declared its position on the negotiation of a legally binding instrument on autonomous weapons systems. Rwanda is a member of the African Group in the United Nations, which supports the negotiation of a legally binding instrument on autonomous weapons.

content/uploads/2018/11/KRC CountryViews13Nov2018.pdf

⁵⁰⁴⁵World Economic Forum, *Advanced Drone Operations Toolkit: Accelerating the Drone Revolution* (Feb. 26, 2019), https://www.weforum.org/reports/advanced-drone-operations-toolkit-accelerating-the-drone-revolution

⁵⁰⁴⁶ Campaign to Stop Killer Robots, *Country Views on Killer Robots* (Nov. 13, 2018), https://www.stopkillerrobots.org/wp-

⁵⁰⁴⁷ Government of Netherlands, *Call to Action on Responsible Use of AI in the Military Domain*, Press Release (Feb.16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action

⁵⁰⁴⁸ Responsible AI in the Military Domain Summit, *REAIM Call to Action* (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action UN General Assembly, *Resolution 78/241: Lethal Autonomous Weapons Systems* (Dec. 22, 2023), https://documents.un.org/doc/undoc/gen/n23/431/11/pdf/n2343111.pdf

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The AU addressed the issue of lethal weapons by stressing the urgent need for stringent regulations and oversight to prevent their proliferation, particularly in conflict-prone regions. While we underscored the devastating impact of such weapons on civilian populations and the necessity for comprehensive disarmament initiatives. Emphasizing the role of international cooperation, we must advocate for collaborative efforts to strengthen legal frameworks and promote alternative security measures, thereby fostering a safer environment and enhancing regional stability. ⁵⁰⁵⁰

OECD / G20 AI Principles

Rwanda applied in 2018 to be part of OECD and was accepted. Finally in 2024, Rwanda was admitted a member of the Organization for Economic Cooperation and Development (OECD) Development Center as its 55th member during the OECD Forum that took place in Paris, France.⁵⁰⁵¹

Rwanda continues to refine its AI policies and frameworks, reinforcing its commitment to sustainable development and collaboration with international bodies. Rwanda engages actively with G20 discussions, contributing to the development of global AI principles that emphasize transparency, accountability, and inclusivity. The OECD AI Observatory reports the progress of the collaborative work of the Rwanda Ministry of ICT and Innovation (MINICT), and the Rwanda Utilities Regulatory Agency (RURA), The Future Society, and GIZ FAIR Forward. Society According to the Observatory, the national AI policy framework is set to address three OECD AI principles: (1) Investing in AI R&D, (2) Fostering a digital ecosystem for AI, and (3) Providing an enabling policy environment for AI.

Council of Europe AI Treaty

The first legally binding global AI treaty protecting human rights, democracy, and the rule of law was developed in the Council of Europe with the participation of all member states, observer states, and a number of non-member

⁵⁰⁵⁰ African Union, *Remarks by Dr. Alhaji Sarjoh Bah, Director of Conflict Management Directorate in the Political Affairs, Peace and Security Department, to the Workshop on Autonomous Weapons System: An ECOWAS Perspective* (Apr. 17, 2024), https://au.int/en/speeches/20240417/remarks-dr-alhaji-sarjoh-bah-director-conflict-management-directorate-political

5051 Celia Becker, *Rwanda Has Been Admitted as a Member of the OECD Development Centre*, ENSAfrica (Jun. 4, 2019), https://www.ensafrica.com/news/detail/1400/rwanda-has-been-admitted-as-a-member-of-the-

⁵⁰⁵² OECD, National AI Policy: Stakeholders Workshops (2021),

https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faipo.oecd.org%2F2021-data-policyInitiatives-27391

⁵⁰⁵³ OECD AI Policy Observatory, *AI Policies in Rwanda* (2025), https://oecd.ai/en/dashboards/countries/Rwanda

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states.⁵⁰⁵⁴ The Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law opened for all countries to sign and ratify on September 5, 2024. Rwanda has not signed the international AI treaty.⁵⁰⁵⁵

UNESCO Recommendation on AI Ethics

Rwanda is a member state of UNESCO since November 1962⁵⁰⁵⁶ and is one of the 193 countries endorsing the Recommendation on the Ethics of AI. ⁵⁰⁵⁷ According to UNESCO's Artificial Intelligence Needs Assessment Survey, Rwanda has ongoing initiatives to guide the development of AI at national level. ⁵⁰⁵⁸ Rwanda is one of 24 countries in Africa that have requested support in the development of policies on AI and one of 21 countries that have requested UNESCO for help in setting standards. ⁵⁰⁵⁹ The UNESCO report highlights Rwanda's policies and centers of excellence on AI as policy initiatives completed as of 2022. Strategies, legislation, and ethical guidelines are yet to be implemented.

Rwanda is currently completing the UNESCO Readiness Assessment Methodology (RAM),⁵⁰⁶⁰ a tool to support the effective implementation of the Recommendation.⁵⁰⁶¹ The RAM helps countries and UNESCO identify and address any institutional and regulatory gaps.⁵⁰⁶²

The UNESCO Recommendation on the Ethics of AI, adopted by all 193 UNESCO Member States, formed the basis of a national workshop convened by UNESCO and Rwanda, and which focused on the implementation of the

⁵⁰⁶⁰ UNESCO Global AI Ethics and governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

 $\underline{https://unesdoc.unesco.org/ark:/48223/pf0000387369}$

⁵⁰⁵⁴ Council of Europe, *The Framework Convention on Artificial Intelligence* (2025), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

⁵⁰⁵⁵ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 11, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

⁵⁰⁵⁶ UNESCO, Rwanda. Interactive Map (2023). https://en.unesco.org/countries/rwanda

⁵⁰⁵⁷ UNESCO, *UNESCO Member States Adopt the First Ever Global Agreement on the Ethics of Artificial Intelligence* (Apr. 21, 2022), https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence

⁵⁰⁵⁸ UNESCO, *Artificial Intelligence Needs Assessment Survey in Africa* (2021), https://unesdoc.unesco.org/ark:/48223/pf0000375322

⁵⁰⁵⁹ Ibid

⁵⁰⁶¹ UNESCO, *Implementation of the Recommendation on the Ethics of Artificial Intelligence*, General Conference, 42nd session (Nov. 2, 2023),

⁵⁰⁶² UNESCO Global AI Ethics and Governance Observatory, *Readiness Assessment Methodology* (2023), https://www.unesco.org/ethics-ai/en/ram

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Recommendation in Rwanda. The 11 Policy Areas of the Recommendation, such as ethical governance, data policy, gender, education and research, and environment and ecosystems, feed into the risk assessment and ethical applications that Rwanda has been pioneering in Africa.

Evaluation

Rwanda's Vision 2050, the African Union Digital Transformation Strategy, and the SmartAfrica Blueprint set the framework for the formulation of a national AI strategy. The draft strategy achieved in cooperation with the MINICT, FAIR Forward AI for All and The Future Society set the intent of the country in aligning with the UNESCO Recommendation on the Ethics of AI. An independent AI oversight mechanism could also be a positive step in addressing AI-powered surveillance practices.

Rwanda is positioning itself as a key player in the global discourse on artificial intelligence. By voting in support of UN Resolution 78/241, Rwanda has demonstrated its commitment to addressing the challenges posed by ethical considerations and responsible usage. Its recent admission to the OECD Development Center signifies a strengthened commitment to aligning with global AI principles, enhancing its capacity for ethical governance and sustainable development.

Rwanda's collaboration with UNESCO to implement AI ethics; and its participation in G20 discussions on ethical AI further illustrate its proactive stance in shaping policies that prioritize transparency and inclusivity. Hosting a high-level AI summit and launching an AI playbook with Singapore highlight Rwanda's leadership in fostering regional cooperation and addressing the skills gap in ICT by updating their National Talent Policy.

Overall, these developments reflect Rwanda's strategic efforts to harness technology for social and economic progress while advocating for ethical frameworks and international collaboration.

Saudi Arabia

In 2024, the Kingdom of Saudi Arabia's Personal Data Protection Law and related Implementing Regulation took effect. Restricted political and civil liberties remain a concern exacerbated by AI-power surveillance.

⁵⁰⁶³ UNESCO, Supporting Rwanda's Bold Steps towards Responsible and Ethical AI (Nov. 2023), https://www.unesco.org/en/articles/supporting-rwandas-bold-steps-towards-responsible-and-ethical-ai

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National AI Strategy

The Kingdom of Saudi Arabia (KSA)'s AI initiatives are led by the Saudi Data and AI Authority (SDAIA), which reports directly to the Prime Minister and consists of members chosen by the Prime Minister. 5064 A Royal Decree established the SDAIA in 2019, 5065 and its governance by a Board of Directors chaired by the Deputy Prime Minister. The SDAIA has the aim of fostering "the digital ecosystem while also supporting the suite of values-based G20 AI Principles." 5066

The SDAIA is to lead in the national trend for data and artificial intelligence to elevate the Kingdom to leadership among data-driven economies. 5067 "Data is the single most important driver of our growth and reform and we have a clear roadmap for transforming KSA into a leading AI and data-driven economy," said Dr. Abdullah bin Sharaf Al Ghamdi, president of SDAIA. 5068

The SDAIA oversees three organizations: the National Data Management Office (NDMO), National Information Center (NIC), and National Center for AI (NCAI). The NDMO is responsible for data regulation, which includes standardization and regulation of artificial intelligence and compliance. The NIC oversees the operation of government data infrastructure and government analytics. The implementation of the national AI strategy is the main responsibility of the NCAI. This includes facilitating capacity-building, AI innovation, and awareness of AI such as through expanding education on AI. 5069

The SDAIA developed the National Strategy for Data and Artificial Intelligence (NSDAI), approved by the Saudi High Commissioner on July 7, 2020⁵⁰⁷⁰ and published in August 2020.⁵⁰⁷¹ The National Strategy aims to advance

https://goingdigital.oecd.org/dimensions

Saudi Gazette, King Salman Issues Royal Decrees, Including Setting Up of Industry and Resources Ministry (Aug. 30, 2019), https://saudigazette.com.sa/article/575953
 Arab News, King Salman Issues Royal Decrees, Including Creation of Industry and

Resources Ministry (Aug. 30, 2019), https://www.arabnews.com/node/1547546/saudi-arabia
5066 G20 Digital Economy Task Force, Saudia Arabia 2020, Examples of National AI Policies, p. 6 (2020), https://www.mcit.gov.sa/sites/default/files/examples-of-ai-national-policies.pdf
5067 SDAIA, National Strategy for Data and AI,

https://sdaia.gov.sa/en/SDAIA/SdaiaStrategies/Pages/NationalStrategyForDataAndAI.aspx; SDAIA, Strategy Narrative, Brochure (Arabic) (2020),

https://sdaia.gov.sa/ar/SDAIA/SdaiaStrategies/Documents/BrochureNSDAISummit.pdf 5068 Gulf News, *Saudi Arabia Approves Policy on Artificial Intelligence, Expects SR500b Windfall by 2030* (Aug. 10, 2020), https://gulfnews.com/business/saudi-arabia-approves-policy-on-artificial-intelligence-expects-sr500b-windfall-by-2030-1.1597032000775

⁵⁰⁶⁹ OECD Going Digital Toolkit, *Policy Dimensions* (2020),

⁵⁰⁷⁰ SDAIA, National Strategy for Data and AI,

https://sdaia.gov.sa/en/SDAIA/SdaiaStrategies/Pages/NationalStrategyForDataAndAI.aspx 5071 Carrington Malin, *Saudi National Strategy for Data and AI Approved* (Aug. 2020), https://www.sme10x.com/technology/saudi-national-strategy-for-data-and-ai-approved

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the KSA Vision 2030.⁵⁰⁷² The AI Strategy, also called ASPIRE, includes a roadmap with a "a multi-phased approach focused on addressing the national priorities by 2025, building foundations for competitive advantage in key niche areas by 2030, and becoming one of the leading economies utilizing and exporting Data & AI after 2030."⁵⁰⁷³

The strategy supports national priorities by addressing the urgent needs to enable the transformation of the Kingdom in accordance with the priorities of Vision 2030.⁵⁰⁷⁴ By 2025, the strategy will focus on building specialized capabilities as the foundation for competitive advantage by specializing in specific areas.⁵⁰⁷⁵ And by 2030, the strategy will be directed at developing entrepreneurial competition by competing at the international level and joining the leading economies that benefit from data and artificial intelligence.

The AI Strategy has 6 pillars: 5076

- 1. Ambition: Position KSA as the global hub where the best of Data & AI is made a reality, to be amongst the top 15 nations in development and application of AI by 2030.
- 2. Skills: Transform KSA's workforce with a steady local supply of Data & AI-empowered talents. Train and host more than 20,000 data and AI specialists and experts by 2030.
- 3. Policies & Regulations: Enact the most welcoming legislation for Data & AI businesses and talents. Partner with leading AI nations, international organizations and private sector.
- 4. Investment: Attract efficient, stable funding for qualified Data & AI investment opportunities, of over US\$20B in data and AI.
- 5. Research & Innovation: Empower top Data & AI institutions to spearhead innovation and impact creation
- 6. Ecosystem: Stimulate Data & AI adoption with the most collaborative, and forward-thinking ecosystem, of more than 300 active data and AI start-ups, world-class regulatory sandboxes for the development and deployment of AI powered technology

https://sdaia.gov.sa/en/SDAIA/SdaiaStrategies/Pages/NationalStrategyForDataAndAI.aspx; SDAIA, Strategy Narrative, Brochure (Arabic) (2020),

https://sdaia.gov.sa/ar/SDAIA/SdaiaStrategies/Documents/BrochureNSDAISummit.pdf 5074 Ibid

⁵⁰⁷² Government of Saudi Arabia, *Vision 2030* (2020), https://vision2030.gov.sa/en; Catherine Jewell, *Saudi Arabia Embraces AI-Driven Innovation* (Sept. 2018), https://www.wipo.int/wipo magazine/en/2018/05/article 0002.html

⁵⁰⁷³ SDAIA, National Strategy for Data and AI,

⁵⁰⁷⁵ Ibid.

⁵⁰⁷⁶ Access Partnership, *Introducing Saudi Arabia's National Strategy for Data and AI* (Oct 22, 2022), https://accesspartnership.com/introducing-saudi-arabias-national-strategy-for-data-and-ai/

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The goals focus on fostering an enabling business and regulatory environment, including education schemes that promote the development of a workforce that fits the industry's new needs. Major educational reforms aim to foster the development of digital skills for jobs in emerging technology including AI.⁵⁰⁷⁷

As part of the National Strategy, the Kingdom aimed at the creation of a framework to promote and support the ethical development of Data & AI research and solutions. The framework includes guidelines for the development of data protection and privacy standards."⁵⁰⁷⁸ The NDMO worked on the development of policies and regulations related to data privacy and freedom of information, with Open Data platforms as a priority topic. The regulatory framework includes specifications on data collection, classification, sharing, open data policy, and freedom of information. ⁵⁰⁷⁹

KSA's Deputy Minister of Technology Industry and Digital Capacities Dr. Ahmed Al-Theneyan emphasized the importance of regulation in the Kingdom's AI Strategy. This includes education plans that promote the development of a workforce that fits the industry's new needs. The government is undertaking major educational reform to foster the development of digital skills for jobs in emerging technology including AI. ⁵⁰⁸⁰

Minister of Education Yousef bin Abdullah Al-Benyan and Saudi Data and SDAIA President Abdullah bin Sharaf Alghamdi launched the "One Million Saudi in AI" initiative in September 2024. ⁵⁰⁸¹ The national initiative will train one million Saudi's to "understand AI, its uses, ethics, and to train on the skills and tools necessary to integrate AI into business and daily life effectively and safely."

The SDAIA website provides information about the Kingdom's roadmap for AI,⁵⁰⁸² current activities, achievements, and general information about the authority and its work.⁵⁰⁸³ Further, the SDAIA provides a digitized version of the

https://sdaia.gov.sa/en/SDAIA/SdaiaStrategies/Pages/NationalStrategyForDataAndAI.aspx; SDAIA, Strategy Narrative, Brochure (Arabic) (2020),

https://sdaia.gov.sa/ar/SDAIA/SdaiaStrategies/Documents/BrochureNSDAISummit.pdf 5079 Ibid

⁵⁰⁷⁷ Catherine Early, *Saudi Arabia signs off on Artificial Intelligence policy* (Aug. 2020), https://www.globalgovernmentforum.com/saudi-arabia-signs-off-on-artificial-intelligence-policy/

⁵⁰⁷⁸ SDAIA, National Strategy for Data and AI,

⁵⁰⁸⁰ Catherine Early, *Saudi Arabia signs off on Artificial Intelligence policy* (Aug. 2020), https://www.globalgovernmentforum.com/saudi-arabia-signs-off-on-artificial-intelligence-policy/

⁵⁰⁸¹ Saudi Press Agency, *Saudi Arabia Launches SAMAI Initiative to Empower 1 Million Citizens in AI* (Sept. 13, 2024), https://www.spa.gov.sa/en/N2170857

⁵⁰⁸² SDAIA, Artificial Intelligence (Feb. 18, 2025),

 $[\]underline{https://sdaia.gov.sa/ar/SDAIA/about/Pages/AboutAI.aspx}$

⁵⁰⁸³ SDAIA, *Home* (Feb. 18, 2025), https://sdaia.gov.sa/

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strategy report.⁵⁰⁸⁴ The Vision 2030 Strategy was developed by the Council of Ministers.⁵⁰⁸⁵ The Vision 2030 website sets out broad policy objectives.⁵⁰⁸⁶ There are indicators and targets for every Theme as well as information on the respective initiatives. Vision 2030, however, encompasses many different objectives, AI is only one of many.

Public Participation

The Saudi AI initiatives are led by the Saudi Data and AI Authority, which reports directly to the Prime Minister and consists of members chosen by the Prime Minister. 5087

In the most recent UN e-Government Survey of 2024,⁵⁰⁸⁸ Saudi Arabia ranked 6th out of 193 in the VHEGDI group in the E-Government Development Index (EGDI) and 2nd in the GCC. The UN report highlighted the e-participation initiatives at the national and local level and the integration of these programs through the Balady portal. The Balady (Arabic for 'My country') includes information on e-participation functions, including e-consultation, e-information, and e-decision making. The interactive platform includes options for "your voice is heard," "self-evaluation," and "your decision." ⁵⁰⁸⁹

The Bertelsmann Foundation country report 2024,⁵⁰⁹⁰ ranked Saudi Arabia 84th of 137 countries in the governance index, with low scores in Stability of Democratic Institutions and Political Participation. The report indicates that public debate about political issues is minimal.

The SDAIA announced in August 2022 that it had launched a consultation and was seeking public comments on its project entitled Principles of Ethics of Artificial Intelligence. ⁵⁰⁹¹ In particular, SDAIA explained that AI ethics principles have been developed with the aim to enhance data governance and AI to reduce

https://sdaia.gov.sa/en/SDAIA/SdaiaStrategies/Pages/NationalStrategyForDataAndAI.aspx; SDAIA, Strategy Narrative, Brochure (Arabic) (2020),

https://sdaia.gov.sa/ar/SDAIA/SdaiaStrategies/Documents/BrochureNSDAISummit.pdf

https://vision2030.gov.sa/en/explore/programs

⁵⁰⁸⁴ SDAIA, National Strategy for Data and AI,

Vision2030, About Saudi Vision 2030 (2025), https://vision2030.gov.sa/ar/overview

⁵⁰⁸⁶ Kingdom of Saudi Arabia, Vision 2030, Visual Realization Programs,

⁵⁰⁸⁷ Saudi Gazette, *King Salman issues royal decrees, including setting up of industry and resources ministry* (Aug. 2019), https://saudigazette.com.sa/article/575953

⁵⁰⁸⁸ United Nations, *E-Government Survey 2024, Accelerating Digital Transformation for Sustainable Development* (Sept. 2024), https://publicadministration.un.org/egovkb/en-us/

⁵⁰⁸⁹ Government of Saudi Arabia, *Balady Portal* (2023), https://balady.gov.sa/

⁵⁰⁹⁰ BertelsmannStiftung Foundation, *BTI Transformation Index: Saudi Arabia Country Report* 2024 (2024), https://bti-project.org/en/reports/country-report/SAU

⁵⁰⁹¹ Saudi Public Consultation Platform, *Principles of Ethics for Artificial Intelligence* (Aug. 15, 2022),

https://istitlaa.ncc.gov.sa/ar/Transportation/NDMO/AIEthicsPrinciples/Pages/default.aspx#

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the negative effects of AI systems and their potential threats. The survey ended two weeks later. Public comments are visible on the website and results and decisions can be downloaded (in Arabic).5092

The KSA Communications, Space, and Technology Commission (CITC) sought public comment on the Digital Content Platform Regulations Document in 2021. According to the Commission, "The initiative is aimed to regulate, govern, activate, and motivate digital content platforms to expand and grow. In addition to engage the private sector, empower entrepreneurs as well as attract investments and protect users of digital content platforms."5093 The document remains available on the website, but no comments or responses were published.

Data Protection

The KSA Personal Data Protection Law (PDPL) was created by Royal Decree M/19 of September 2021 and Cabinet Resolution No. 98 of September 2021. Following public consultation on proposed amendments in November 2022, the Saudi Arabia Council of Ministers adopted the amendments to the PDPL in March 2023.⁵⁰⁹⁴ The amendments sought to assimilate further the PDPL definitions, concepts, and requirements to exemplary privacy laws such as the GDPR. The amendments introduced concepts such as personal data, controllers, and processors and added rights such as data portability and a requirement to maintain a record of processing activities.

The Implementing Regulation of the Personal Data Protection Law entered into effect along with the PDPL in September 2024. The Implementing Regulation outlines key data subject rights such as the right to be informed of the purpose of data collection and the right to access, rectify, and delete personal data or withdraw consent. Furthermore, the regulation outlines the legal basis for personal data collection and processing outlining the controllers' obligations."

The PDPL aims "to protect individuals' personal data privacy and regulate organizations' collection, processing, disclosure, or retention of personal data."5096 Modeled after the EU's General Data Protection Regulation (GDPR), the PDPL

https://www.citc.gov.sa/en/new/publicConsultation/Pages/144304.aspx

https://sdaia.gov.sa/en/SDAIA/about/Documents/Personal%20Data%20English%20V2-23April2023-%20Reviewed-.pdf

⁵⁰⁹² Ibid

⁵⁰⁹³ KSA Communications and Information Technology Commission, CITC Publishes a Public Consultation on Digital Content Platform Regulations Document.

⁵⁰⁹⁴ SDAIA, Personal Data Protection Law (Mar. 27, 2023),

⁵⁰⁹⁵ SDAIA, The Implementing Regulation of the Personal Data Protection Law (Sept. 2024), https://sdaia.gov.sa/en/SDAIA/about/Documents/ImplementingRegulation.pdf

⁵⁰⁹⁶ Bureau of Experts at the Council of Ministers, *Personal Data Protection System* (Sept. 24, 2021), https://laws.boe.gov.sa/BoeLaws/Laws/LawDetails/b7cfae89-828e-4994-b167adaa00e37188/1

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aims to prevent the misuse of personal data and specifically implements principles such as "purpose limitation and data minimization, controller obligations, including registration and maintenance of data processing records, data subject rights, and penalties for breach of provisions." ⁵⁰⁹⁷

The law grew from efforts by SDAIA to align the Kingdom with other countries in the region and with international standards as part of the Vision 2030. 5098 Individuals now have the "right to be informed of the legal basis and purpose for the collection and processing of their personal data. Personal data cannot be collected or processed without the Data Subject's express consent." Data subjects will also have the "right to access personal data in possession of the Data Controller, including the right to correct, delete, or update personal data, destroy unnecessary data, and obtain a copy of the data in a clear format." 5099

Soon after the PDPL took effect, the SDAIA published the Personal Data Destruction, Anonymization, and Pseudonymization Guideline, ⁵¹⁰⁰ which provides a framework to help entities comply with the requirements for data destruction, anonymization, and pseudonymization.

The Kingdom issued the E-Commerce Law of 2019, which focuses on increased transparency and consumer protection to enhance trust in online transactions and includes provisions for the protection of personal data of customers. The Law sets obligations to service providers to protect the personal data of customers in their possession or under their control. The KSA E-Commerce Law prohibits service providers from using customers' personal data for "unauthorized or impermissible" purposes and disclosing personal data to third parties without the customer's consent. 5102

⁵⁰⁹⁷ Data Guidance, *Saudi Arabia* (2021), https://www.dataguidance.com/jurisdiction/saudi-arabia

⁵⁰⁹⁸ Bureau of Experts at the Council of Ministers, *Personal Data Protection System* (Sept. 24, 2021), https://laws.boe.gov.sa/BoeLaws/Laws/LawDetails/b7cfae89-828e-4994-b167-adaa00e37188/1

⁵⁰⁹⁹ SDAIA, Personal Data Protection Law (Mar. 27, 2023),

 $[\]frac{https://sdaia.gov.sa/en/SDAIA/about/Documents/Personal\%20Data\%20English\%20V2-23April2023-\%20Reviewed-.pdf$

⁵¹⁰⁰ SDAIA, Personal Data Destruction, Anonymization and Pseudonymization Guideline (Aug. 2024).

 $[\]underline{\text{https://sdaia.gov.sa/Documents/PersonalDataDestructionAnonymizationAndEncryptionGuidelin}} \\ \underline{\text{e.pdf}}$

⁵¹⁰¹ National Center for Documents and Archives, *E-Commerce System for the Year 1440 AH* (Jul. 10, 2019), https://ncar.gov.sa/document-

details/eyJpdiI6IllVa0paYjdaZGttQUYya3lVemRCdkE9PSIsInZhbHVlIjoibnpZTkVpdzZSU2U 0bUJockhZUHBjdz09IiwibWFjIjoiOTlmYTc1ZDRmN2M4ZjlmZDMxYWRlZDYyMzg3ZDM 0MjcNWQUZTM0ZjA5NGI1ZTZiODgzNGM0NTg1OTFlMSIsInRhZyI6IiJ9

⁵¹⁰² Ibid, Article 5

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The SDAIA Open Data Strategy 2022–2024 aimed to "Provide high-value and re-usable Open Data for the nation to increase transparency and foster innovation through collaboration, enabling a data-driven economy." The SDAIA identified 4 strategic objectives to deliver on this mission:

- Empowering governance and regulatory clarity
- Enabling economic growth
- Prioritizing and publishing accessible, quality, and demanded datasets
- Creating impact through awareness, innovation, and international and local partnerships. 5103

The SDAIA was welcomed as a new Observer to the Global Privacy Assembly (GPA) in 2021 until 2025.⁵¹⁰⁴ The Authority did not endorse the GPA 2018 Declaration on Ethics and Data Protection,⁵¹⁰⁵ 2020 Resolution on Accountability in the Development and Use of AI,⁵¹⁰⁶ 2022 Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology,⁵¹⁰⁷ or 2023 GPA Resolution on Generative AI.⁵¹⁰⁸

Algorithmic Transparency

The PDPL Implementing Regulation⁵¹⁰⁹ that entered into force in September 2024 introduced provisions and mechanisms that enhance transparency and ensure accountability in the use of automated processing and algorithms. It ensures that data subjects are aware of, and consent to, such processing.

⁵¹⁰⁴ Global Privacy Assembly, List of Observers (2023),

https://globalprivacyassembly.org/participation-in-the-assembly/list-of-observers/

https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922_ICDPPC-40th_AIDeclaration_ADOPTED.pdf

 $\underline{content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-\underline{AI-EN.pdf}$

Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition technology (Oct 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-

and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁵¹⁰⁸ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁵¹⁰⁹ SDAIA, *The Implementing Regulation of the Personal Data Protection Law* (Sept. 2024), https://sdaia.gov.sa/en/SDAIA/about/Documents/ImplementingRegulation.pdf

⁵¹⁰³ SDAIA, *Open Data Strategy 2022–2024* (2021), https://open.data.gov.sa/odp-public/static/en/assets/Open_Data_Strategy_2022_2024_En.pdf

⁵¹⁰⁵ International Conference of Data Protection & Privacy Commissioners, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018),

⁵¹⁰⁶ Global Privacy Assembly, *Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct 2020), <a href="https://globalprivacyassembly.org/wp-content/uploads/2020/11/GPA Resolution on Accountability in the Development and Use of Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Use of Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Use of Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Use of Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Use of Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Use of Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Use of Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Use of Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Use of Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Use of Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Use of Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Use of Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Use of Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Use of Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Content/uploads/2020/11/GPA Resolution on Accountability in the Development and Conte

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The regulation requires that when decisions are "made based entirely on automated processing of personal data," explicit consent must be obtained from the data subject.⁵¹¹⁰ Another article requires controllers to conduct an impact assessment when processing involves "making decisions based on the automated processing of personal data."⁵¹¹¹ The impact assessments include identifying potential risks and impacts on the privacy and rights of data subjects. Controllers must also clarify "whether decisions will be made based entirely on automated processing of personal data."⁵¹¹²

Prior to the PDPL regulation, KSA public entities showed examples of adopting a culture of personal data protection. For example, the Saudi Tourism Authority in its website privacy statement explicitly informs users that no automated decision, including profiling is carried out, and informs of the obligation to notify users "how [they] use automated decision making and/or profiling—when and why."⁵¹¹³

Human Rights Watch conducted a global investigation of EdTech products that were endorsed by 49 governments for children's online education during the COVID-19 pandemic.⁵¹¹⁴ KSA was one of the analyzed countries. KSA was notably one of the nine governments that "directly built and offered eleven learning apps that may collect AAID [Advertising ID] from children. In doing so, these governments granted themselves the ability to track an estimated 41.1 million students and teachers purely for advertising and monetization."

KSA's educational App iEN included third-party tools like Google Crashlytics and Firebase Analytics, which have the technical capability to collect and process users' data and access the Android Advertising ID and camera on users' Android devices. On a positive note, the KSA educational website was one of only 12 websites of the 124 analyzed that did not collect and transmit data about children through third-party trackers, preserving their privacy.

Digital Government

Saudi Arabia is recognized by the 2022 World Bank's GovTech Maturity Index as one of the 69 economies classified under Group A for their high level of digital government transformation.⁵¹¹⁵ Group A represents countries that have "high

⁵¹¹¹ Ibid, Article 25(1)(c)

https://www.sta.gov.sa/en/privacy-policy

⁵¹¹⁰ Ibid, Article 11(2)(c)

⁵¹¹² Ibid, Article 4(5)(c)

⁵¹¹³ Saudi Tourism Authority, *Privacy Policy* (Updated Sept. 15, 2024),

https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rights-violations-governments

⁵¹¹⁵ World Bank Group, *Global Program on GovTech & Public Sector, GovTech Maturity Index of 2022* (Oct. 2022), https://www.worldbank.org/en/programs/govtech/gtmi

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levels of maturity in their GovTech ecosystems by implementing innovative solutions and good practices across the four focus areas: Core Government Systems, Public Service Delivery, Digital Citizen Engagement, and GovTech Enablers." KSA is a standout performer in the Middle East and North Africa (MENA) region.

The report highlights Group A's robust digital infrastructure ensuring most public services are accessible online through user-friendly portals for its residents. The ranking underscores transparency initiatives to enhance government accountability by making public data accessible and maintaining government platforms that provide the opportunity for citizens to participate in policymaking and give feedback on public services. Finally, the index points out that Group A countries have comprehensive data protection and privacy laws.

The Kingdom initiated in 2020 a national data bank to consolidate more than 80 government datasets, the equivalent to 30 percent of the government's digital assets. It is also planning to build one of the largest clouds in the region by merging 83 data centers owned by more than 40 government bodies. 5116

In 2017 KSA granted the robot, Sophia, citizenship. This is a first worldwide and was met with mixed reactions. CNBC said, "Sophia has been touted as the future of AI, but it may be more of a social experiment masquerading as a PR stunt." Bloomberg noted that "Migrant laborers can't become citizens; android Sophia can." 5118

Global AI Summits

The Global AI Summit, held in October 2020, is described as the "world's premier platform for dialogue that brings together stakeholders from the public sector, academia, and private sector, to shape the future of Artificial Intelligence (AI)." Speakers from across sectors explored the themes of AI for the Good of Humanity, AI for Good, and AI for All. 5120

The President of SDAIA emphasized the importance of working together internationally to ensure the sustainable development of AI⁵¹²¹ "to accelerate AI

⁵¹¹⁶ Vishal Chawla, *How Saudi Arabia Is Looking to Develop & Integrate Artificial Intelligence in Its Economy*, Analytics India Magazine (Aug. 23, 2020), https://analyticsindiamag.com/how-saudi-arabia-is-looking-to-develop-integrate-artificial-intelligence-in-its-economy/

⁵¹¹⁷ Jaden Urbi and Sigalos MacKenzie, *The Complicated Truth about Sophia the Robot—An Almost Human Robot or a PR Stunt*, CNBC (Jun. 5, 2018),

 $[\]frac{https://www.cnbc.com/2018/06/05/hanson-robotics-sophia-the-robot-pr-stunt-artificial-intelligence.html}{}$

⁵¹¹⁸ Tracy Alloway, *Saudi Arabia Gives Citizenship to a Robot*, Bloomberg (Oct. 2017), https://www.bloomberg.com/news/articles/2017-10-26/saudi-arabia-gives-citizenship-to-a-robot-claims-global-first#xj4y7vzkg

⁵¹¹⁹ Global AI Summit, *About Us* (2020), https://www.theglobalaisummit.com/#about-us

⁵¹²⁰ Global AI Summit, *Program* (2020), https://globalaisummit.org/en/Pages/Program.aspx

⁵¹²¹ Global AI Summit, *AI for the Good of Humanity* (Oct. 21, 2020) (livestream), https://www.youtube.com/watch?v=uOGYQlhmb 8

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for sustainable development in low and middle-income countries and to enable the sharing of AI best practices globally to ensure a more inclusive future powered by AI where no one is left behind."

The 2nd Global AI Summit was held in September 2022 under the theme Artificial Intelligence for the Good of Humanity.⁵¹²² The Summit examined eight pillars: smart cities, capacity building, healthcare, transportation, energy, culture, environment, and economic mobility. More than 40 memoranda of understanding, declarations, and partnerships were signed between the public and private sectors towards investing in AI technologies, underlining the Kingdom's aspirations to become a global AI hub as part of its Vision 2030 development program.

During the summit, the State Members of the Digital Cooperation Organization (DCO)⁵¹²³ adopted the Riyadh AI Call for Action Declaration (RAICA). The declaration was signed by all members of DCO including Bahrain, Cyprus, Djibouti, Kuwait, Morocco, Nigeria, Oman, Pakistan, Jordan, Rwanda, and Saudi Arabia. ⁵¹²⁴ The declaration promotes the use of AI technology to benefit transnational and transcontinental communities, advancing the DCO's commitment to identify and address present, emerging, and future humanitarian issues. The declaration highlights seven key pillars:

- 1. Closing the digital divide
- 2. Empowering underprivileged communities
- 3. Promoting digital development
- 4. Ensuring fairness and non-discrimination
- 5. Driving AI innovation
- 6. Combating climate change through AI
- 7. Engaging in international collaboration and cooperation.

The International Telecommunication Union (ITU) signed a new agreement with SDAIA, this time to formulate a Global AI Readiness Framework for key socio-economic domains, such as health and smart mobility. The agreement aims to establish best practices for AI regulatory frameworks and institutional reforms, allowing a variety of tools and activities to explore national AI best practices and countries' readiness.

Google Cloud and SDAIA also launched the Elevate global program, which aims to reduce the gender gap in the technological sector, especially within AI. The program provides a four-month training program to women in tech and

⁵¹²² Access Partnership, *Saudi Arabia's Global AI Summit: Points of Interest for the Industry* (Oct. 5, 2022), https://accesspartnership.com/saudi-arabias-global-ai-summit-points-of-interest-for-the-industry/

⁵¹²³ Digital Cooperation Organization, *Home* (Mar. 17, 2023). https://dco.org/ 5124 WIRED, *The Key Wins of Saudi Arabia's Global AI Summit* (Sep 27, 2021), https://wired.me/technology/saudi-arabia-global-ai-summit/

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science, empowering them to pursue growing job opportunities in the fields of cloud architecture, data engineering, machine learning engineering, and AI.

SDAIA announced the decision to join the World Bank's Digital Development Partnership (DDP) to help developing countries leverage digital innovations to tackle some of their most challenging issues. By joining the DDP, Riyadh aims to contribute to the overall digital development agenda, ensuring sustainable development for less privileged countries.

Al Safety Summit

In November 2023, Saudi Arabia participated in the first AI Safety Summit and endorsed the Bletchley Declaration.⁵¹²⁵ Saudi Arabia thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible."

The second AI Safety Summit took place in Seoul in May 2024 and Saudi Arabia was represented by the SDAIA President. Saudi Arabia signed the Ministerial Statement, which highlighted the need to enhance inclusivity alongside AI safety and innovation. S127

Biometric Identification

Digital identity initiatives are on the agenda of the Kingdom. In 2021, Saudi Telecom Company (STC) signed an MoU with Thales on ample cooperation that encompassed Smart Cities, SIMs, IoT, and 5G Satellites.⁵¹²⁸ The Ministry of Interior of KSA announced the introduction of a biometric passport with advanced

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https://aiseoulsummit.kr/program/?mod=document&uid=9

⁵¹²⁵ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, *Prime Minister's Office, The Bletchley Declaration by Countries Attending the AI Safety Summit*, (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

⁵¹²⁶ AI Seoul Summit, Ministers' Session Action to Strengthen AI Safety/Approach for Sustainability and Resilience (May 22, 2024),

⁵¹²⁷ UK Department for Science, Innovation & Technology, *Policy Paper: Seoul Ministerial Statement for Advancing AI Safety, Innovation and Inclusivity: AI Seoul Summit 2024* (May 22, 2024), <a href="https://www.gov.uk/government/publications/seoul-ministerial-statement-for-advancing-ai-safety-innovation-and-inclusivity-ai-seoul-summit-2024/seoul-ministerial-statement-for-advancing-ai-safety-innovation-and-inclusivity-ai-seoul-summit-2024/seoul-ministerial-statement-for-advancing-ai-safety-innovation-and-inclusivity-ai-seoul-summit-2024/seoul-ministerial-statement-for-advancing-ai-safety-innovation-and-inclusivity-ai-seoul-summit-2024/seoul-ministerial-statement-for-advancing-ai-safety-innovation-and-inclusivity-ai-seoul-summit-2024/seoul-ministerial-statement-for-advancing-ai-safety-innovation-and-inclusivity-ai-seoul-summit-2024/seoul-ministerial-statement-for-advancing-ai-safety-innovation-and-inclusivity-ai-seoul-summit-2024/seoul-ministerial-statement-for-advancing-ai-safety-innovation-and-inclusivity-ai-seoul-summit-2024/seoul-ministerial-statement-for-advancing-ai-safety-innovation-and-inclusivity-ai-seoul-summit-2024/seoul-ministerial-statement-for-advancing-ai-safety-innovation-and-inclusivity-ai-seoul-summit-2024/seoul-ministerial-statement-for-advancing-ai-safety-innovation-and-inclusivity-ai-seoul-summit-2024/seoul-ministerial-statement-for-advancing-ai-safety-innovation-and-inclusivity-ai-seoul-summit-2024/seoul-ministerial-statement-for-advancing-ai-safety-innovation-and-inclusivity-ai-seoul-summit-2024/seoul-ministerial-statement-for-advancing-ai-safety-innovation-ai-safety-innovati

⁵¹²⁸ Frank Hersey, *Thales Signs MoU to Develop Digital Identity, Smart Cities in Saudi Arabia*, (Dec. 10, 2021), https://www.biometricupdate.com/202112/thales-signs-mou-to-develop-digital-identity-smart-cities-in-saudi-arabia

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securities, including an electronic processor chip with biometric information for authentication. 5129

The Jawazat in 2021 released a Digital ID (Muqeem- Iqama) for Expats, within the new electronic application ABsher Individuals. Carrying the Iqama card was compulsory for ex-pats with fines for not adhering. However, later in the year, the Jawazat clarified that Expats could use the alternate plastic Muqeem version as well.⁵¹³⁰ The Muqeem card is under the Ministry of Interior in cooperation with the National Information Center.

Mass Surveillance

The Kingdom of Saudi Arabia was among the countries studied by the Carnegie Endowment for Peace in 2019 on the use of AI technology for mass surveillance. According to the research, the Saudi government cooperates with several global technology firms to solidify digital infrastructure: Huawei to set up Safe cities, Google with cloud servers, BAE with mass surveillance systems, NEC with facial recognition technology, and Amazon and Alibaba with cloud computing centers within the smart city project. U.S. and Chinese technology firms also included Briefcam, Gatekeeper, Hikvision, Hugslock, and IBM, according to the study. State Project.

Saudi Arabia's Makkah Region Development Authority (MRDA) implemented a crowd-control system to protect pilgrims during Hajj and increase security and safety. The system includes a wristband with digital ID information, special healthcare requirements, and location via GPS as well as surveillance cameras to monitor the holy sites in real-time. The General Security and SDAIA collaborated to implement artificial intelligence technologies at the Command and Control Center of the Hajj security forces in Makkah and the holy sites in 2024. 5133

During the fight against COVID-19, the SDAIA launched two apps: the Tawakkalna app⁵¹³⁴ to manage movement permits for government and private sector employees and Tabaud to notify citizens when they came in contact with

⁵¹³⁰ Saudi Gazzette, *Saudi Jawazat: It is not compulsory to carry digital Iqama* (Mar. 11, 2021), https://www.zawya.com/en/legal/saudi-jawazat-it-is-not-compulsory-to-carry-digital-iqama-m8kk04no

⁵¹²⁹ Ayang Macdonald, *Saudi Arabia plans imminent rollout of biometric passport, UAE hits 2M digital IDs,* (Oct. 26, 2021), https://www.biometricupdate.com/202110/saudi-arabia-plans-imminent-rollout-of-biometric-passport-uae-hits-2m-digital-ids

⁵¹³¹ Carnegie Endowment for International Peace. *The Global Expansion of AI Surveillance* (Sept. 2019). https://carnegieendowment.org/files/WP-Feldstein-AISurveillance_final1.pdf
⁵¹³² Ibid

⁵¹³³ SDAIA, SDAIA Harnesses Smart Solutions to Serve the Visitors of the Two Holy Mosques, Providing Technological Support to Saudi Ports through Qualified National Cadres (Jun. 15, 2024), https://sdaia.gov.sa/en/MediaCenter/News/Pages/NewsDetails.aspx?NewsID=286
⁵¹³⁴ Tawakkalna, Welcome to Tawakkalna, https://ta.sdaia.gov.sa/index-en.html

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someone who was infected with the virus. MIT Technology Review reported that Tabaud is transparent, voluntary, and minimizes data collection.⁵¹³⁵

Smart Cities

The Kingdom initiated a smart city project called Neom. Neom "is an international project that will be led, populated and funded by people from all over the world." Neom will be a "semi-autonomous region with its own government and laws" in northwest Saudi Arabia on the Red Sea and home to one million people by 2030. 5136 Neom is envisioned to become a region that "redefines the concept of urban development and what cities of the future will look like," built on five principles: sustainability, community, technology, nature, and livability. 5137

During the third edition of the Global AI Summit, the SDAIA signed a partnership with NEOM to support the NEOM Project in developing talented human resources in innovations, encouraging creators, and building national and international capacities regarding AI in decision-making, AI adaptive inspection, and machine-executable legislation.⁵¹³⁸

The NEOM project aligns with plans announced in 2022 to build 200 smart cities. The plan will involve the Ministry of Municipal and Rural Affairs and Housing, SDAIA, and the Royal Commission for Riyadh City.⁵¹³⁹

Environmental Impact of AI

Principle 4 in the AI Ethics Principles states "AI systems should neither cause nor accelerate harm or otherwise adversely affect human beings but rather contribute to empowering and complementing social and environmental progress while addressing associated social and environmental ills." 5140

The Kingdom of Saudi Arabia forged agreements and partnerships to support projects that would apply AI technology to improve environmental conditions at the Global AI Summit in 2022. For example, SDAIA and IBM signed

 $\underline{\text{https://www.technologyreview.com/2020/05/07/1000961/launching-mittr-covid-tracing-w20tracker/}$

content/uploads/2017/11/NEOM_FAQS_ENGLISH.pdf

https://globalaisummit.org/en/News/Pages/NewsDetails.aspx?NewsId=79

⁵¹³⁵ MIT Technology Review, COVID Tracing Tracker (May 7, 2020),

⁵¹³⁶ NEOM, FAQ, https://neomsaudicity.net/wp-

⁵¹³⁷ NEOM, *The Line*, https://www.neom.com/en-us/regions/theline

⁵¹³⁸ Global AI Summit, SDAIA Launches the Second Edition of NEOM Challenge in Partnership with NEOM during the Global AI Summit (Sept. 11, 2024),

⁵¹³⁹ German-Saudi Arabian Liaison Office for Economic Affairs, *Delegation: Smart City Solutions* (Mar. 2024), https://saudiarabien.ahk.de/en/events/event-details/delegation-smart-cities-in-saudi-arabien

⁵¹⁴⁰ SDAIA, *AI Ethics Principles*, Version 1.0, p. 19 (Sept. 2023), https://sdaia.gov.sa/en/SDAIA/about/Documents/ai-principles.pdf

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a strategic agreement to drive the adoption of AI across the Kingdom's carbon capture and industrial domains. Riyadh has also committed to achieving net zero emissions by 2060 and supporting multinational action to cut emissions.⁵¹⁴¹

SDAIA also initiated a partnership with Google Cloud, Climate Engine, and the Ministry of Environment, Water and Agriculture (MEWA) to launch the Earth Observation and Science Program. The program will apply observation technology and AI to develop sustainability solutions.

Lethal Autonomous Weapons

KSA is not a signatory of the Joint Statement on Lethal Autonomous Weapons of 2022^{5142} and has not acceded to the Convention. The country does, however, support the negotiation of a legally binding instrument on autonomous weapons systems. Saudi Arabia is a High Contracting Party to the Convention on Certain Conventional Weapons (CCW)⁵¹⁴³ and has participated in meetings of the Group of Governmental Experts (GGE) on Lethal Autonomous Weapons since $2014.^{5144}$

Saudi Arabia is a member of two groups that support the negotiation of a legally binding instrument on autonomous weapons systems: The Arab Group within the United Nations and the Non-Aligned Movement (NAM). The NAM issued a statement during the 2020 UN General Assembly on the "urgent need to pursue a legally-binding [sic] instrument on LAWS." The Kingdom has not issued any individual statement in this regard.

Saudi Arabia was a signatory⁵¹⁴⁶ to the Call for Action at REAIM (Responsible AI in the Military Domain) on February 2023 in The Hague.⁵¹⁴⁷

⁵¹⁴² CCW, Joint Statement on Lethal Autonomous Weapons Systems First Committee, 77th United Nations General Assembly, Conventional Weapons. (Oct. 21, 2022), https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm en.pdf

5145 18th Summit of the Heads of State and Government of the Non-Aligned Movement, *Final Document*, p. 99, point 338 (Oct. 26, 2019), https://unidir.org/files/2020-10/2019 NAM%20Summit%20final%20doc.pdf

⁵¹⁴¹ Wired, *The Key Wins of Saudi Arabia's Global AI Summit* (Sept. 27, 2022), https://wired.me/technology/saudi-arabia-global-ai-summit/

⁵¹⁴³ United Nations Office for Disarmament Affairs. *High Contracting Parties and Signatories CCW* (Jun. 25, 2024), https://www.un.org/disarmament/the-convention-on-certain-conventional-weapons/high-contracting-parties-and-signatories-ccw/

⁵¹⁴⁴ Automated Research, *State Positions: Saudi Arabia* (2023), https://automatedresearch.org/news/state_position/saudi-arabia/

⁵¹⁴⁶ Government of Netherlands, *REAIM 2023 Endorsing Countries* (Feb. 15–16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-endorsing-countries for the foliation of Netherlands. *Call to Action on Responsible Use of AI in the Military Domain* (Feb 16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action

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Human Rights

Freedom House rated Saudi Arabia as "Not Free" with a score of 8/100,⁵¹⁴⁸ based on low marks on civil liberties and political rights. Freedom House reports, "Saudi Arabia's absolute monarchy restricts almost all political rights and civil liberties. No officials at the national level are elected. The regime relies on pervasive surveillance, the criminalization of dissent, appeals to sectarianism and ethnicity, and public spending supported by oil revenues to maintain power." Internet freedoms in Saudi Arabia remained highly restricted, despite the plans of the authority to digitize and expand internet connectivity across the country, as well as to regulate the online sphere.⁵¹⁴⁹

Saudi Arabia is a member of the United Nations and hence is bound to commit to uphold human rights standards, including those laid out in the Universal Declaration of Human Rights (UDHR).⁵¹⁵⁰ Saudi Arabia was one of the eight countries⁵¹⁵¹ and sole abstainer on the Declaration among Muslim nations, stating that it violated Sharia law.⁵¹⁵² The Kingdom is not a Party to the International Convention on Civil and Political Rights (ICCPR) and has not acceded to or ratified the International Covenant on Economic, Social, and Cultural Rights (ICSECR).⁵¹⁵³

The Kingdom of Saudi Arabia served as one of the 47 members of the Human Rights Council,⁵¹⁵⁴ a position that the country lost in 2020, amid the reports of human rights violations.⁵¹⁵⁵ The monitoring of KSA human rights activities and reports are under the OHCHR Regional Office of the Middle East

https://freedomhouse.org/country/saudi-arabia/freedom-world/2024

https://freedomhouse.org/country/saudi-arabia/freedom-net/2024

https://www.hrw.org/reports/1997/saudi/Saudi-07.htm

5153 Ibid

⁵¹⁴⁸ Freedom House, *Freedom in the World 2024: Saudi Arabia* (2024),

⁵¹⁴⁹ Freedom House. Freedom on the Net 2024: Saudi Arabia (2024),

⁵¹⁵⁰ Human Right Watch, International Human Rights Standards,

⁵¹⁵¹ NPR, *Boundlessly Idealistic, Universal Declaration of Human Rights Ss Still Resisted* (Dec 10, 2018), https://www.npr.org/2018/12/10/675210421/its-human-rights-day-however-its-not-universally-accepted

⁵¹⁵² Human Rights Watch, *Saudi Arabia: Human Rights Developments*, https://www.hrw.org/reports/1992/WR92/MEW2-02.htm

⁵¹⁵⁴ OHCHR, *Membership of the Human Rights Council* (2023), https://www.ohchr.org/en/hr-bodies/hrc/membership

⁵¹⁵⁵ Natasha Turak, *Saudi Arabia Loses Vote to Stay on UN Human Rights Council; China, Russia and Cuba Win Sats*, CNBC (Oct. 14, 2020), https://www.cnbc.com/2020/10/14/saudi-arabia-loses-vote-for-un-human-rights-council-seat-china-russia-win.html; Freedom Forward, *Boycotting the Saudi G20: Our Successes* (Nov. 16, 2020),

https://freedomforward.org/2020/11/16/boycotting-the-saudi-g20-our-successes/

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and North Africa (MENA) created in 2002.⁵¹⁵⁶ The Human Rights Commission in KSA was founded in 2005 with "full independence in the exercise of its tasks for which it was established and stipulated in its organization." The Commission states that it "aims to protect and promote human rights in accordance with international human rights in all fields, raising awareness of them and contributing to ensuring that this is implemented in light of the provisions of Islamic Sharia."⁵¹⁵⁷

OECD / G20 AI Principles

The Kingdom of Saudi Arabia is a member of the G20 and endorsed the G20 AI Guidelines, which align with the OECD Principles. The country has demonstrated efforts for the implementation of the Principles through submission of reports to the OECD AI Observatory about implementation, including the National Data and AI Strategy, National Centre of AI, Personal Data Protection Law, Saudi Data and AI Authority. The OECD also makes note of KSA's National Center for AI (NCAI) and highlights SDAIA's work toward trustworthy AI in health.

In 2020, Saudi Arabia hosted the Meeting of the G20 Digital Economy Ministers in Riyadh, where AI policy was a focal point of discussion. The KSA Digital Economy Task Force released a new report on the implementation of AI cases that mapped to the OECD AI Principles during this meeting.⁵¹⁶⁰ The key agenda set by the Saudi government comprised: "Empowering People, by creating the conditions in which all people—especially women and youth—can live, work and thrive"; "Safeguarding the Planet, by fostering collective efforts to protect our global commons"; and "Shaping New Frontiers, by adopting long-term and bold strategies to share benefits of innovation and technological advancement."⁵¹⁶¹

The G20 Leaders Declaration read: "We will continue to promote multistakeholder discussions to advance innovation and a human-centered approach to Artificial Intelligence (AI), taking note of the Examples of National Policies to Advance the G20 AI Principles. We welcome both the G20 Smart Mobility

https://www.ohchr.org/en/countries/saudi-arabia

https://www.hrc.gov.sa/website/about-us

https://oecd.ai/en/dashboards/countries/SaudiArabia

⁵¹⁵⁶ OHCHR, Countries & Territories: Saudi Arabia (2023),

⁵¹⁵⁷ Kingdom of Saudi Arabia, Human Rights Commission,

⁵¹⁵⁸ OECD AI Policy Observatory, AI in Saudi Arabia (2025),

⁵¹⁵⁹ G20 Digital Economy Task Force, *Examples of National AI Policies* (2020), https://www.mcit.gov.sa/sites/default/files/examples-of-ai-national-policies.pdf
⁵¹⁶⁰ Ibid

⁵¹⁶¹ SDG Knowledge Hub, *G20 Digital Economy Ministers Meeting* (Jul. 22–23, 2020), https://sdg.iisd.org/events/g20-digital-economy-ministers-meeting/; G20, 2020—Riyadh, Home, https://g20.org/summit-and-logos/2020-riyadh/

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Practices, as a contribution to the well-being and resilience of smart cities and communities, and the G20 Roadmap toward a Common Framework for Measuring the Digital Economy."5162

Council of Europe Al Treaty

The Kingdom of Saudi Arabia has not signed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law.⁵¹⁶³

UNESCO Recommendation on Al Ethics

As a UNESCO member-State since 1946,⁵¹⁶⁴ Saudi Arabia was one of 193 that endorsed the UNESCO Recommendation on AI Ethics in November 2021. Experts from the SDAIA contributed to the initial draft of the UNESCO Recommendation.

Saudi Arabia is a member of the Groups of Friends of UNESCO, created in February 2022 as an open initiative to support the implementation of the recommendations and to exchange good practices. UNESCO published Implementation of the Recommendation on Ethics of AI ⁵¹⁶⁵ proposed by the Group of Friends—Cook Islands, Kuwait (chair of the Group of Friends), Liberia, Libya, Morocco, Netherlands, Oman, Saudi Arabia, and Togo—in October 2022.

The KSA launched the AI Ethics Principles during the 2nd World Summit on AI in Riyadh. The SDAIA designed the principles as a practical guide to incorporating AI ethics throughout the AI system development life cycle.⁵¹⁶⁶ The release of these principles demonstrates the commitment of KSA to the implementation of the UNESCO recommendations. Saudi Arabia and the Arab States are part of UNESCO activities in the region to achieve a unified view of Artificial intelligence.⁵¹⁶⁷

Countries are expected to carry out the UNESCO Readiness Assessment Methodology (RAM), a tool developed to assess a country's preparedness for the ethical and responsible development and implementation of Artificial Intelligence,

⁵¹⁶² G20, G20 Riyadh Summit, *Leaders Declaration* (Nov. 21-22, 2020), https://g20.org/wp-content/uploads/2024/10/G20-2020 ArabiaSaudita Declaracao-de-Lideres-1.pdf

⁵¹⁶³ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Feb. 10, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

⁵¹⁶⁴ UNESCO, *Member States: Saudi Arabia* (2023), https://www.unesco.org/en/countries/sa ⁵¹⁶⁵ UNESCO. *Implementation of the Recommendation on Ethics of AI* (Oct 2022), https://unesdoc.unesco.org/ark:/48223/pf0000382931

⁵¹⁶⁶ Public Consultation Platform, AI Ethics Principles (May. 29, 2024),

https://istitlaa.ncc.gov.sa/ar/Transportation/NDMO/AIEthicsPrinciples/Pages/default.aspx# 5167 UNESCO, *Towards a Common Artificial Intelligence Strategy for Arab States: Digital Inclusion Week 2021* (Dec 11, 2021), https://www.unesco.org/en/articles/towards-common-artificial-intelligence-strategy-arab-states-digital-inclusion-week-2021

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as part of their implementation of the Recommendation.⁵¹⁶⁸ At the Global AI Summit (GAIN), SDAIA launched the initiative to advance the State of AI in Saudi Arabia, developed through RAM.⁵¹⁶⁹ The RAM noted that 100% of the population uses the internet but talent gaps exacerbated by women's limited access to STEM education reveal a need to develop the ecosystem further. Government funding in education and startups is one possible means to develop the system.⁵¹⁷⁰

Evaluation

Saudi Arabia has emerged as an influential leader among the G20 countries, the Arab region, and a powerful AI economic force globally. As a member of the Digital Cooperation Organization (DCO), the Kingdom achieved the endorsement of the RAICA Call for Action at the Global AI Summit in 2022 held by SDAIA. The SDAIA also published SDAIA AI Ethics Principles in September 2023.

The publication of the National Data and AI Strategy, the AI Ethics Principles, and the readily available documentation about related policies and strategies for AI show a positive intent of the country to involve constituents in this process. The Kingdom is keen to achieve its national vision and strategies related to adopting artificial intelligence technologies, encouraging research, development and innovation, raising awareness, and promoting economic growth to achieve the desired prosperity and development.

Areas of opportunity exist in the endorsement of international agreements related to Data Protection. The enactment of the new Personal Data Protection Law and Regulations addresses the rights related to automated decision-making; however, algorithmic transparency laws can be expanded. While Saudi Arabia was accepted as an Observer member of the Global Privacy Assembly, the absence of endorsement of the Global Privacy Assembly (GPA) resolutions remains an area of attention.

Senegal

In 2024, Senegal completed public consultation on a Digital Strategy 2025–2025 and endorsed the African Union Continental AI Strategy and African Digital Compact. The country continued to engage with UNESCO in

https://www.unesco.org/ethics-ai/en/ram

https://globalaisummit.org/Documents/StateofAIinSaudiArabia.pdf

⁵¹⁶⁸ UNESCO, Readiness Assessment Methodology (RAM) (Aug. 17, 2023),

⁵¹⁶⁹ Global AI Summit, State of AI in Saudi Arabia (Sept. 20, 2024),

⁵¹⁷⁰ UNESCO Global AI Ethics and Governance Observatory, *Saudi Arabia* (2024), https://www.unesco.org/ethics-ai/en/saudiarabia

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implementing the Recommendation on AI Ethics and endorsed the GPAI New Delhi Declaration to support an integrated partnership with the OECD.

National AI Strategy

The Senegalese Ministry of Communication, Telecommunications and the Digital Economy (MCTEN) launched the National Strategy for Artificial Intelligence in 2023. The strategy intends to promote digital innovation while focusing on responsible, ethical and trustworthy AI by creating an intellectual breeding ground conducive to innovation and to initiating a new entrepreneurial dynamic. The strategy focuses on regional solidarity in developing the Artificial Intelligence ecosystem and in the continuity of the collective intelligence process. 5171

According to the Ministry of Communication, Telecommunications and the Digital Economy (MCTEN), Senegal's National Strategy focuses on four objectives, one of which is to ensure that artificial intelligence in Senegal is responsible, ethical, trustworthy and respectful of sovereign prerogatives, thereby increasing complete confidence in the use of artificial intelligence.

The strategy seeks to transform the country through artificial intelligence by leveraging the technology in pursuit of developmental objectives built on the United Nations Sustainable Development Goals (SDGs), thereby elevating Senegal as a leader in AI in Africa. The Strategy aims to strengthen and multiply data science skills (SD) and AI, particularly young women, by directing training towards the SDGs of inclusiveness, environmental and ethical responsibility, and digital entrepreneurship, thereby upholding the growth of Human Capital in Senegal. The Strategy addresses the following areas:

- 1. Talent and education
- 2. Quantitative Human Capital
- 3. Data Science

4. Socio-economic development

5. Research & Development and Innovation

The President of Senegal, Macky Sall, on X announced the finalization of the National Strategy on Artificial Intelligence in Senegal, which is focused on ethics and trust and aims to develop 90,000 data scientists in Artificial Intelligence by 2028 and to strengthen digital sovereignty. An ethical approach to Artificial Intelligence forms an important part of Senegal's National AI Strategy, although the detail has yet to be elaborated. This strategy builds on the new Digital Strategy

5171 Senegalese Government, Ministry of Communications, Telecommunication and Digital Economy, *National AI Strategy (Summary)*, AI4D (Oct. 2023), https://ai4d.ai/wp-

content/uploads/2023/10/reesumee-strateegie-nationale-ia-senegal.pdf

⁵¹⁷² Melody Musoni, *Envisioning Africa's AI Governance Landscape in 2024*, ECDPM (Jan. 24, 2024), https://ecdpm.org/work/envisioning-africas-ai-governance-landscape-2024

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2025–2035⁵¹⁷³ and the existing National Data Strategy, National Cybersecurity Strategy along with other recent policies under the Emerging Senegal Plan. ⁵¹⁷⁴

As a member of the African Union (AU), Senegal is committed to advancing the formulation and implementation of human-centered AI policies, in alignment with the goals of the AU Digital Transformation Strategy⁵¹⁷⁵ and the Continental Data Policy Framework. Senegal was among the more than 130 African ICT and Communications Ministers and experts that endorsed the African Union Continental AI Strategy and African Digital Compact in July 2024.⁵¹⁷⁶ The Continental AI Strategy was later endorsed by the AU Executive Council during its 45th Ordinary Session. The strategy represents Africa's unified commitment to ethical and responsible AI practices.⁵¹⁷⁷

Public Participation

The National AI Strategy of Senegal identified a collaborative effort, led by the Ministry of Communication, Telecommunications, and the Digital Economy (MCTEN) with the participation of the entire digital ecosystem of Senegal. It drew on the collective expertise of Team Europe, via the implementing agencies of the AU-EU Digital for Development (D4D) Hub—led by Expertise France, alongside GIZ and Enabel.

The strategy was developed through exchange frameworks, workshops and collaborations with a strong representation of the Senegalese digital ecosystem, including potential AI service providers, consumers, educational institutions, financing entities and the government. Such a union of minds and resources, as seen with the Senegal tandem and Team Europe, illustrates that a shared vision and collaborative efforts reveal strategic and disruptive success stories. In an inclusive approach, the strategy underwent a series of review phases between June

https://au.int/sites/default/files/documents/44004-doc-EN-

Continental AI Strategy July 2024.pdf

⁵¹⁷³ Ministry of Communications, Telecommunication and Digital Economy, *Launch of the Senegal Digital Strategy* 2025–2035 (Jul. 26, 2024), https://www.adie.sn/lancement-strategie-2025-2035

⁵¹⁷⁴ UNESCO Global AI Ethics and Governance Observatory, *Senegal* (2024), https://www.unesco.org/ethics-ai/en/senegal

⁵¹⁷⁵ African Union, *The Digital Transformation Strategy for Africa (2020–2030)* (May 18, 2020), https://au.int/en/documents/20200518/digital-transformation-strategy-africa-2020-2030

⁵¹⁷⁶ African Union Information and Communication Directorate, African Ministers Adopt Landmark Continental Artificial Intelligence Strategy, African Digital Compact to Drive Africa's Development and Inclusive Growth (Jun. 13, 2024),

https://au.int/sites/default/files/pressreleases/43871-pr-Ministerial PR - STC-CICT1.pdf African Union, Continental AI Strategy (Jul. 2024),

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and July 2023, where it was shared with a diverse audience to gather feedback from across the ecosystem. 5178

During summer 2024, leaders in the digital sector and ordinary citizens were invited to submit proposals for the Senegal Digital Strategy 2025-2035. Minister Alioune Sall expressed the inclusive nature of the public consultation: "Senegal must build its digital future with the active participation of all stakeholders." The consultation gained around 700 contributions addressing strategic issues such as digital sovereignty, public services, and Senegal as a subregional hub and digital economy. 5179

Data Protection

The 2008 Act Concerning Personal Data Protection⁵¹⁸⁰ protects individuals against the violation of their privacy by the processing of personal data that identifies them directly or indirectly. The Personal Data Protection Act designates the Commission for the Protection of Personal Data (CDP) as the Independent Administrative Authority responsible for verifying the legality and security of the collection and processing of Senegalese personal data.

The legal framework for personal data in Senegal is built on human rights conventions; the constitution;⁵¹⁸¹ and laws governing personal data protection, the penal code, criminal procedure, electronic transactions, telecommunications, cybercrime, and cryptology.⁵¹⁸²

Senegal has also ratified the African Union Convention on Cyber Security and Protection of Personal Data known as the Malabo Convention adopted by the General Assembly of the African Union, 5183 Council of Europe Convention

⁵¹⁷⁸ D4DHub, Senegal Unveils New AI Strategy: A Collaborative Effort with the Europe Team (Sept. 13, 2023), https://d4dhub.eu/news/le-senegal-devoile-sa-nouvelle-strategie-ia-un-effort-collaboratif-avec-lequipe-europe

⁵¹⁷⁹ Le Tech Observateur, Closing of the Public Consultation for the Senegal Digital Strategy 2025–2035: A Step towards a Digital Inclusive Transformation (Aug. 14, 2024), https://letechobservateur.sn/cloture-de-la-consultation-publique-pour-la-strategie-numerique-du-senegal-2025-2035-un-pas-vers-une-transformation-digitaleinclusive/

⁵¹⁸⁰ CDP, Decree No. 2008–721 of 30 June 2008 Implementing Law No. 2008–12 of 25 January 2008 on the Protection of Personal Data (Jun. 30, 2008), https://www.cdp.sn/content/journal-officiel-décret-n°-2008-721-du-30-juin-2008-portant-application-de-la-loi-n°-2008-12

⁵¹⁸¹ Constitute Project, Senegal's Constitution of 2001 with Amendments through 2016, Article 13 (2016), https://www.constituteproject.org/constitution/Senegal_2016#s96

⁵¹⁸² CDP, Legislative Texts, https://www.cdp.sn/textes-legislatifs

⁵¹⁸³ AU, *African Union Convention on Cyber Security and Personal Data Protection: Status List* (May 11, 2020), https://au.int/en/treaties/african-union-convention-cyber-security-and-personal-data-protection

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108,⁵¹⁸⁴ Council of Europe Convention 185,⁵¹⁸⁵ and Council of Europe Additional Protocol to Convention 108 (Treaty No. 181).⁵¹⁸⁶ Senegal has signed the Economic Community of West Africa (ECOWAS) Supplementary Act on Personal Data Protection.⁵¹⁸⁷

The 2008 Act Concerning Personal Data Protection applies to natural persons, legal persons, and public entities. It also applies to foreign entities but excludes foreign entities that only transit personal data through the country. 5188

The establishment of the CDP, known as the *Commission des Données Personnelles*, marked a significant step in Senegal's efforts to safeguard individuals' personal data. The CDP's website stands out for its high accessibility and informative content, including regular reports on the commission's activities and valuable resources for citizens seeking to assert their rights under the law. For instance, the CDP publishes opinions issued, complaints received, and cases investigated.

During the second quarter of 2024, the CDP processed thirty (30) files, including fifteen (15) declarations, twelve (12) requests for authorization, and three (3) re-registered files. Additionally, the CDP decided to suspend the decisions in three (3) cases and prohibited the implementation of one (1) processing operation. ⁵¹⁸⁹

In early 2020, the government initiated the Personal Data Protection Bill of 2019 for public comment. This initiative was part of a broader strategy outlined in the Digital Senegal 2016–2025 Strategic Plan, aimed at modernizing the legal and institutional framework of the technology and telecommunications sector by

https://www.coe.int/en/web/cybercrime/parties-observers

⁵¹⁸⁶Council of Europe, *Chart of Signatures and Ratifications of Treaty 181* (Jan. 23, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=181 ⁵¹⁸⁷ State Watch, *Supplementary Act A/SA*. 1/01/10 on Personal Data Protection within ECOWA

⁵¹⁸⁴ Council of Europe, *Senegal Becomes the 50th State to Accede to the Data Protection Convention* (Aug. 25, 2016), <a href="https://www.coe.int/en/web/data-protection/newsroom/-/asset_publisher/7oll6Oj8pbV8/content/senegal-becomes-the-50th-state-to-accede-to-the-data-protection-convention-convention-108-

⁵¹⁸⁵ Council of Europe, Parties to the Budapest Convention (2025),

⁵¹⁸⁷ State Watch, Supplementary Act A/SA. 1/01/10 on Personal Data Protection within ECOWAS (Feb. 16, 2010), https://www.statewatch.org/media/documents/news/2013/mar/ecowas-dp-act.pdf 5188 CDP, Decree No. 2008–721 of 30 June 2008 Implementing Law No. 2008–12 of 25 January 2008 on the Protection of Personal Data, Articles 2, 3, 4 (Jun. 30, 2008), https://www.edp.org/content/iournal_official_docret_ps/2008_721_du/20_ivip_2008_portent

 $[\]frac{https://www.cdp.sn/content/journal-officiel-décret-n^{\circ}-2008-721-du-30-juin-2008-portant-application-de-la-loi-n^{\circ}-2008-12}{application-de-la-loi-n^{\circ}-2008-12}$

⁵¹⁸⁹ CDP, *Quarterly Notice N°02-2024 of the Personal Data Protection Commission of Senegal* (Jul. 18, 2024), https://www.cdp.sn/content/avis-trimestriel-n%C2%B002-2024-de-la-commission-de-protection-des-donnees-personnelles-du

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2025. 5190 However, there appears to have been little progress on advancing the Bill since its publication.⁵¹⁹¹

Senegal also has a Data Strategy with the vision of "Making data an engine of socio-economic growth, inclusiveness, innovation and international openness, by 2028 in Senegal."5192

Senegal's CDP is a member of the Global Privacy Assembly (GPA).⁵¹⁹³ However, Senegal did not sponsor the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence, 5194 2020 GPA Resolution on AI Accountability, 5195 2022 GPA Resolution on Facial Recognition Technology, 5196 or 2023 GPA Resolution on Generative AI.5197

Algorithmic Transparency

Although the fourth objective of the AI Strategy is to ensure that AI in Senegal is responsible, ethical, trustworthy and respectful of sovereign prerogatives, Senegal has not developed specific regulations on algorithmic transparency. However, Senegal is a signatory to the Convention 108+ (Convention for Protecting Individuals with the Processing of Personal Data), 5198 which includes a broad provision regarding algorithm transparency with

⁵¹⁹² Digital Global, Recap: Launch of the Senegalese Data Strategy (Jul. 25, 2023), https://www.bmz-digital.global/en/event/launch-der-senegalesischen-datenstrategie/ 5193 Global Privacy Assembly, List of Accredited Members (2023),

https://globalprivacyassembly.org/participation-in-the-assembly/list-of-accredited-members/ ⁵¹⁹⁴ Global Privacy Assembly, Declaration on Ethics and Data Protection in Artificial

Intelligence (Oct. 23, 2018), https://globalprivacyassembly.org/wpcontent/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

5195 Global Privacy Assembly, Resolution on Accountability in the Development and Use of Artificial Intelligence (Oct. 2020), https://globalprivacyassembly.org/wpcontent/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-

Use-of-AI-EN-1.pdf

⁵¹⁹⁶ Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate *Use of Personal Information in Facial Recognition Technology* (Oct. 2022). https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principlesand-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁵¹⁹⁷ Global Privacy Assembly, Resolution on Generative Artificial Intelligence Systems (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁵¹⁹⁸ Council of Europe, Senegal Becomes the 50th State to Accede to the Data Protection Convention (Aug. 25, 2016), https://www.coe.int/en/web/data-protection/newsroom/-/asset publisher/7oll6Oj8pbV8/content/senegal-becomes-the-50th-state-to-accede-to-the-dataprotection-convention-convention-108-

⁵¹⁹⁰ Thomas Robertson, Senegal to Review Data Protection Law (Jan. 14, 2020), https://cipesa.org/2020/01/senegal-to-review-data-protection-law/ ⁵¹⁹¹ Ibid

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requirements that users know when they are subjected to automated decisions and have access to the factors in the decision and the means to contest them.⁵¹⁹⁹

The Senegalese Constitution stipulates that international law holds precedence over domestic law within the country. As a result, international instruments are inherently integrated into the domestic legal framework of Senegal. This constitutional provision underscores the commitment of Senegal to adhere to its obligations under international agreements and treaties.

Facial Recognition

Senegal's Data Protection Commission rejected a company's application to use facial recognition for monitoring employees, citing significant privacy risks. This decision was accompanied by a directive limiting the use of biometric data in the workplace, thereby highlighting the authority's stance on safeguarding data subjects. ⁵²⁰¹ By refusing authorization to data controllers to operate a biometric facial recognition system to control attendance time and access within a company, the CDP reaffirmed its desire to protect the individual rights of employees in their workplace, in accordance with its mandate.

Biometric Data

The European Union Trust Fund (EUTF)'s support program, starting from 2017 and involving a €28 million biometric identity system in Senegal, has raised concerns. The system aims to simplify identity verification by creating a national biometric identity file as part of a universal civil status information system. The project has sparked debate over the necessity of biometric solutions, which could serve as a basis for widespread surveillance despite the availability of simpler alternatives. The implication is that once an asylum seeker or migrant enters European borders, or is detected by European immigration enforcement, their biometric data will be collected. This data would be matched with information in the African systems to expedite returning the individual to their country of origin. ⁵²⁰²

Disclosures revealed the European Union's financial involvement in developing extensive biometric identification systems in West Africa, including

⁵¹⁹⁹ Council of Europe, *Convention for the Protection of Individuals with Regard to Automatic Processing of Personal Data*, Articles 8 and 9 (1981), https://rm.coe.int/1680078b37

⁵²⁰⁰ Constitute Project, Senegal's Constitution of 2001 with Amendments through 2016, Article 98 (2016), https://www.constituteproject.org/constitution/Senegal 2016#s474

⁵²⁰¹ CDP, Quarterly Notice N°01-2023 of the Personal Data Protection Commission of Senegal (CDP) (Apr. 6, 2023), https://www.cdp.sn/content/avis-trimestriel-n%C2%B001-2023-de-la-commission-de-protection-des-donnees-personnelles-du-0

⁵²⁰² EU, Emergency Trust Fund for Africa, Support Program for the Strengthening of the Civil Status Information System and the Creation of a National Biometric Identity File (2023), https://trust-fund-for-africa.europa.eu/our-programmes/programme-dappui-au-renforcement-du-systeme-dinformation-de-letat-civil-et-la-creation-dun-fichier en

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Senegal. This initiative, aimed at managing migration and facilitating deportations, is supported by the EU Trust Fund for Africa. Civipol, a company with connections to the French state and major arms manufacturers, has secured significant contracts in this effort. The project raises concerns over privacy, human rights, and the allocation of aid resources.

Environmental Impact of AI

Senegal's efforts regarding the environmental impact of AI have centered on applying AI to promote sustainable development in other sectors rather than the environmental costs of AI systems.

According to the Constitution, natural resources are owned by Senegalese people. As Senegal prepared to extract oil from its first field in 2024, the Prime Minister announced plans to implement AI to monitor the quantity of oil extracted, secure protection, and prevent environmental risks. This AI application is intended as part of the government efforts to ensure "a just transition that would promote sustainable and inclusive development in socio-economic and environmental terms." ⁵²⁰³

The Senegalese Government joined the German development agency (GIZ) initiatives FAIR Forward and Data Economy projects GIZ's initiatives in fighting against climate change with a sustainable development commitment. At an October 2024 co-creation workshop in Dakar, Data and Artificial Intelligence for the Climate, the group implemented two use AI cases—a climate data platform and the High Carbon Stock approach—and developed a roadmap for future action. 5204

The UNDP Regional Bureau for Africa led the inauguration of the Innov space of Accelerator Lab (AccLab) in Senegal, which supports start-ups developing tech solutions to development issues such as climate change and access to health. One start-up, TOLPI technologies, uses satellite images and AI to promote precision agriculture with consulting for plant maintenance. The digitization of datasheets allows farmers to reduce water waste by 80%, calculate more precise fertilizer applications, and maximize yields by optimizing planting and harvesting dates.

⁵²⁰³ Senegalese Government, *Council of Ministers of June 12, 2024*, News (Jun. 12, 2024), https://primature.sn/publications/actualites/conseil-des-ministres-du-12-juin-2024

Le Tech Observateur, Exploiting Data and AI for Climate Action: Senegal at the Forefront of Sustainable Transition (Oct. 21, 2024), https://letechobservateur.sn/exploiter-les-donnees-et-lia-pour-laction-climatique-le-senegal-en-tete-de-la-transition-durable/

⁵²⁰⁵ UNDP Senegal, *Accelerate Community Development through Digital Solutions* (May 26, 2023), https://www.undp.org/fr/senegal/actualites/accelerer-le-developpement-communautaire-travers-les-solutions-digitales

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Lethal Autonomous Weapons

Senegal is not a signatory of the 2022 Joint Statement on Lethal Autonomous Weapons. 5206 However, Senegal voted in favor of UN resolution L.56 on autonomous weapons systems, 5207 along with 163 other states. 5208 The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems" and mandated the UN Secretary-General to prepare a report analyzing members' views on ways to address the challenges and concerns of autonomous weapon systems from humanitarian, legal, security, technological, and ethical perspectives. Senegal then sent four representatives to the 2023 meeting of High-Contracting Parties to the Convention on Certain Conventional Weapons (CCW) organized in Geneva. 5209

Senegal participated in a REAIM regional workshop organized in Nairobi (Kenya), in partnership with the Centre for Humanitarian Dialogue (HD Centre) and the National Defence University-Kenya. The meeting aimed at enhancing "regional understanding and engagement on the military application of AI" in the run-up to the second REAIM Summit. Participating countries exchanged information on their national approaches, policies and practices pertaining to responsible application of AI in the military domain.

Senegal then participated in the second REAIM Summit organized in Seoul, Korea, and endorsed the REAIM Blueprint for Action.⁵²¹¹ Among the key provisions are the acknowledgement that AI applications in the military domain

 $\underline{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcS\underline{nnAm_en.pdf}$

⁵²⁰⁶ United Nations General Assembly, *Joint Statement on Lethal Autonomous Weapons Systems First Committee, 77th United Nations General Assembly Thematic Debate — Conventional Weapons* (Oct. 21, 2022),

⁵²⁰⁷ United Nations, First Committee of General Assembly, *First Committee Approves New Resolution on Lethal Autonomous Weapons, as Speaker Warns "An Algorithm Must Not Be in Full Control of Decisions Involving Killing"* (Nov. 1, 2023), https://press.un.org/en/2023/gadis3731.doc.htm

⁵²⁰⁸ Stop Killer Robots, *164 States Voted against the Machine at the UN General Assembly* (Nov. 1, 2023), https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

⁵²⁰⁹ CCW, Meeting of the High Contracting Parties to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects (Dec. 19, 2023), https://docslibrary.unoda.org/Convention on Certain Conventional Weapons -

Meeting of High Contracting Parties (2023)/CCW-MSP-2023-INF.1.pdf

⁵²¹⁰ REAIM, REAIM Regional Workshop Held in Africa (Aug. 5, 2024),

 $[\]frac{https://www.reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=127\&shareBbsMng}{No=10254\&shareMenuId=11570\&shareTabMenuId=11542}$

⁵²¹¹ REAIM, *REAIM Blueprint for Action* (Sept. 11, 2024),

https://reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163&shareBbsMngNo=10264&shareMenuId=11613&shareTabMenuId=

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should be ethical and human-centric, as well as the commitment to "engaging in further discussions and to promoting dialogues on developing measures to ensure responsible AI in the military domain at the national, regional and international level, including through international normative frameworks."

Human Rights

Freedom House rates Senegal as "Partly Free" with an overall score of 67/100.⁵²¹² The Freedom House report notes that different political parties have peacefully transferred power in Senegal since 2000, making the country one of Africa's most stable electoral democracies. Nevertheless, in recent years, the opposition's competitiveness has decreased due to politically driven indictments of opposition figures and even modifications to election legislation. Internet access blocks and disruptions, ⁵²¹³ which have been clearly in violation of Article 8 of Senegal's constitution and individual rights, have occurred and continue to do so. Mobile Internet access cut by the government and banned marches remain critical challenges to freedom of expression. ⁵²¹⁵

Strategic orientation No. 6: Actions by specific objective in the AI strategy proposes sorting various AI systems according to the risks to rights that they may pose for people or society. This classification necessitates close cooperation with AI technical specialists. Senegal launched its own Initiative for the Development of Artificial Intelligence (IDIA) to improve and strengthen the use of AI in the region, in compliance with African Commission on Human and Peoples' Rights (ACHPR) Resolution 473. Senegalese experts warn of "digital colonization" in Africa if foreign companies continue to feed on African data without involving local actors.

⁵²¹² Freedom House, *Freedom in the World 2024: Senegal* (2024), https://freedomhouse.org/country/senegal/freedom-world/2024

⁵²¹³ Ibid, Civil Liberties

⁵²¹⁴ Dione N., *Senegal Cuts Internet Again amid Widening Crackdown on Dissent*, Reuters (Feb. 13, 2024), https://www.reuters.com/world/africa/ahead-planned-march-over-vote-delay-senegal-suspends-internet-access-2024-02-13/

⁵²¹⁵ Paradigm Initiative, *Londa Digital Rights and Inclusion in Africa Report 2022* (Apr. 2023), https://paradigmhq.org/wp-content/uploads/2023/06/Senegal-Londa-2022.pdf
⁵²¹⁶ Senegalese Government, Ministry of Communications, Telecommunication and Digital Economy, *National AI Strategy (Summary)*, AI4D (Oct. 2023), https://ai4d.ai/wp-content/uploads/2023/10/reesumee-strategie-nationale-ia-senegal.pdf

⁵²¹⁷ ACHPR, Resolution on the Need to Undertake a Study on Human and Peoples' Rights and Artificial Intelligence (AI), Robotics and Other New and Emerging Technologies in Africa — ACHPR/Res. 473 (EXT.OS/XXXI) 2021 (Mar. 10, 2021), https://achpr.au.int/en/adopted-resolutions/473-resolution-need-undertake-study-human-and-peoples-rights-and-art

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OECD / G20 AI Principles

Senegal has not officially endorsed the OECD AI principles or G20 AI Guidelines in those bodies. However, Senegal is a member of Global Partnership on AI (GPAI), which partners with OECD to realize its mission for "the responsible development and use of artificial intelligence, grounded in human rights, inclusion, diversity, innovation and economic growth."⁵²¹⁸ The 2024 New Delhi GPAI Declaration reaffirms GPAI's "collective commitment to the OECD Recommendation on Artificial Intelligence" and announces an "integrated partnership with the OECD bringing together all current OECD members and GPAI countries on equal footing."⁵²¹⁹ Supporting the OECD principles is now a condition of membership to the GPAI.⁵²²⁰

The Summary of Senegal's AI Strategy issued by the Republic of Senegal in 2023 does not explicitly reference the OECD AI Principles or the G20 AI Guidelines. Nonetheless, the document underscores Senegal's commitment to formulating an AI strategy that is ethical, responsible, and in harmony with international standards. This indicates an acknowledgment of the significance of adhering to universally accepted principles for the development and application of AI.⁵²²¹

Council of Europe Al Treaty

Senegal has not endorsed the Council of Europe AI Treaty, the first legally binding international AI treaty, which opened for signature on September 5, 2024, to both EU and non-EU members. The Treaty sets out a legal framework that aims at ensuring the respect of human rights, the rule of law, and democratic legal standards in the use of AI systems.

UNESCO Recommendations on AI Ethics

As a UNESCO member state, Senegal is bound by the UNESCO Recommendation on the Ethics of Artificial Intelligence, which was unanimously adopted by all 193 Member States in 2021.⁵²²³ This adherence underscores

⁵²¹⁸ GPAI, Members, Community (2024), https://gpai.ai/community/

⁵²¹⁹ GPAI, *2024 New Delhi GPAI Declaration* (Jul. 3, 2024), https://gpai.ai/gpai-new-delhi-declaration-2024.pdf

⁵²²⁰ OECD, Global Partnership on Artificial Intelligence (Dec. 2024),

https://www.oecd.org/en/about/programmes/global-partnership-on-artificial-intelligence.html
5221 Senegalese Government, Ministry of Communications, Telecommunication and Digital Economy, *National AI Strategy (Summary)*, AI4D (Oct. 2023), https://ai4d.ai/wp-content/uploads/2023/10/reesumee-strateegie-nationale-ia-senegal.pdf

⁵²²² Council of Europe, *Chart of Signatures and Ratifications of the Treaty 225* (Jan. 24, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225 UNESCO, *UNESCO Member States Adopt First Ever Global Agreement on the Ethics of Artificial Intelligence* (Nov. 25, 2021),

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Senegal's commitment to upholding ethical standards in the development and application of AI.

The experts charged with developing Senegal's national AI Strategy are the same who engaged actively with UNESCO to complete the Readiness Assessment Methodology (RAM).⁵²²⁴ Senegal was among the first countries to complete the RAM, a tool to evaluate the country's AI maturity level and ethical considerations.⁵²²⁵ This involvement demonstrates Senegal's dedication to aligning its national AI strategy with the UNESCO Recommendation on the Ethics of Artificial Intelligence.

Senegal hosted and participated in an African sub-regional seminar organized by UNESCO to share knowledge about AI challenges and competencies needed in education. 5226 UNESCO foresees in-country support on the development of national or local digital and AI competency frameworks following the seminar. The seminar built on various resources, including the UNESCO 2021 report on AI and Education: Guidance for Policy-Makers and the UNESCO 2023 report on Guidance for Generative AI in Education and Research. Hosting the seminar demonstrates Senegal's commitment to advance the Education and Research Policy Area of the UNESCO Recommendation. 5227

Evaluation

Senegal has developed a robust national strategy for AI. It has also made efforts to promote public participation in the development of its national AI strategy. Senegal has established a comprehensive law for data protection that promotes algorithmic transparency. Senegal has supported the OECD / G20 AI Principles as a GPAI member but has not endorsed the AI Treaty. Senegal engaged with the UNESCO Recommendation on AI Ethics by participating in relevant workshops and RAM organized by UNESCO in accordance with the National AI Strategy. Senegal has a good record on human rights, though there is room for improvement regarding individual freedom of expression. Updates to ministry websites or reorganizations have limited some access to official documents since mid-2024, though earlier access suggests these limitations may be temporary.

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https://webarchive.unesco.org/web/20230715005831/https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence

https://www.unesco.org/ethics-ai/en/senegal

⁵²²⁴ UNESCO Global AI Ethics and Governance Observatory, *Senegal* (2025),

⁵²²⁵ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

⁵²²⁶ UNESCO, Sub-Regional Seminar for Francophone and Lusophone Countries in Africa on Digital and AI Competencies (Oct. 29, 2024), https://www.unesco.org/en/articles/sub-regional-seminar-francophone-and-lusophone-countries-africa-digital-and-ai-competencies

⁵²²⁷ UNESCO, *Recommendation on the Ethics of Artificial Intelligence*, pp. 33–35 (2021), https://unesdoc.unesco.org/ark:/48223/pf0000381137

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Serbia

In 2024, Serbia designated a Working Group for a Draft Law on Artificial Intelligence and continued to finalize a refreshed National AI Strategy for 2024— 2030 after public consultation and debate. Serbia began its term as Chair of the GPAI and hosted the GPAI 2024 Summit in Belgrade. Serbia participated in the Council of Europe Framework Convention on AI but has not yet endorsed the treaty.

National AI Strategy

The Government of the Republic of Serbia; Ministry of Education, Science and Technological Development; and Office for Information Technologies and eGovernment adopted a National Strategy for the Development of Artificial Intelligence (AI) for 2020–2025 in December 2019 and an Action Plan to enact the strategy in June 2020.⁵²²⁸ The Government of Serbia is currently finalizing a refreshed National AI Strategy for the period of 2024–2030. 5229

The national strategy set the foundation for the country's ambitious plan to leverage AI for national development. The strategy, based on Serbia's Planning System Law⁵²³⁰ and the decision to create a Workgroup for AI Strategy, describes a detailed plan for using AI. In alignment with the European AI Initiative, Serbia's Strategy ensures conformity with EU policies and standards, positioning the country for closer integration into the European Research Area. This legal and strategic framework underscores Serbia's commitment to AI, both regionally and within the wider European context.

The strategy aims to harness AI for economic growth, public service improvement, scientific advancement, and skill development for future jobs, and for the advancement of the Sustainable Development Goals. It aligns with the European AI Initiative and is structured to ensure the safe and ethical development of AI in Serbia. However, the strategy's recognition of European principles remains non-binding. Serbia has not yet established enforcement mechanisms against discrimination from machine learning. In the context of alignment with the EU AI Act, Serbia has not adopted a framework that would categorize high-risk AI applications or limit their use.

The strategy includes the objectives:

⁵²²⁸ The Government of Serbia, Strategy for the Development of Artificial Intelligence in the Republic of Serbia for the Period 2020–2025 (2019), https://www.srbija.gov.rs/tekst/en/149169 ⁵²²⁹ Government of Serbia, Serbia's AI Ecosystem (Mar. 8, 2024),

https://www.ai.gov.rs/extfile/sr/1164/Serbias-AI-Landsca-Presentation.pdf

⁵²³⁰ UN Law and Environment Program, Law on Planning System of the Republic of Serbia (Apr. 19, 2018), https://leap.unep.org/en/countries/rs/national-legislation/law-planning-systemrepublic-serbia

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- Education Development: Education is a key factor in the development of AI in Serbia. Tailoring education to modern society and economy needs, is influenced by AI advancement. This involves enhancing primary and high school curriculums, establishing minimal AI standards in basic studies of computer science, developing postgraduate AI programs, professional training through short courses, and promoting greater university collaboration for AI studies.
- Science and Innovation: Increasing support for AI researchers, offering special support for AI research in innovative fields, establishing scientific-industry-public sector cooperation, and founding an AI Institute.
- Economic Development: Supporting AI startups and SMEs, raising investment levels in AI development, establishing multi-sector AI solutions in public interest areas, and introducing a "regulatory sandbox" for AI-based solutions.
- Public Sector Improvement: Establishing an AI Council, opening and reusing public sector data, developing private sector data reuse mechanisms, establishing shared AI infrastructure, and improving public services through AI.
- Ethical and Safe AI Application: Ensuring personal data protection, preventing discrimination in AI implementation, and adhering to international ethical standards.

The strategy also recognizes the importance of adapting legal frameworks, opening data access, developing infrastructure, and addressing societal implications. It underscores the need for continuous monitoring and adaptation to leverage AI for societal benefit while mitigating potential risks.

The Strategy aligns with the European Artificial Intelligence Initiative, ⁵²³¹ which outlines the European Commission's AI policy. Given Serbia's status as a candidate for EU membership and its participation in the European Union Framework Program for Research and Innovation, it aims to ensure compliance with EU standards. This effort facilitates full integration into the European Research Area and fosters closer cooperation with the EU.

The Research and Development Institute for Artificial Intelligence of Serbia was established in 2021 as one of the key steps in the Action Plan for the Implementation of the AI Strategy. The institute's vision is to foster the development of creative leaders in the field of artificial intelligence, as well as to establish Serbia as a global center of excellence in scientific research and technology transfer related to machine learning and artificial intelligence. The Institute promotes the fields essential for the creation of artificial intelligence, such

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⁵²³¹ European Union, EUR-Lex, *Communication from the Commission: Artificial Intelligence for Europe, COM/2018/237 final* (2018), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2018%3A237%3AFIN

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as mathematics, computer science, biology, and linguistics, to modernize Serbia's economy and educational system.⁵²³²

For continuous evaluation and oversight to track progress against the strategic goals, regular reviews are conducted to assess the effectiveness of the various measures implemented under the strategy, such as advancements in AI education, research, economic development, public sector integration, and adherence to ethical standards. This process not only facilitates accountability but also allows for adaptive responses to emerging challenges and opportunities in the rapidly evolving field of AI. By employing such a systematic monitoring approach, the strategy aims to maintain alignment with its objectives, ensuring that Serbia's advancements in AI are coherent, sustainable, and aligned with the nation's broader economic and social goals.

In 2022, the Office for IT and eGovernment was assigned as a special organization to perform state administration tasks related to the development and implementation of standards and measures in the introduction of information and communication technologies in state administration bodies and Government services. The Office's charge includes monitoring and measuring the implementation of AI policy.⁵²³³

The Center for Security of the ICT System in Republic Bodies (CERT of Republic Bodies) was established within the Office for Information Technologies and eGovernment, in accordance with the Law on Information Security. The Office for Information Technologies is a body in charge of designing, developing, establishing, maintaining, and improving the unique information and communication network of eGovernment. The main task of the CERT of Republic Bodies is to provide information security of ICT infrastructure, Office services and the unique information and communication network of eGovernment. This includes effective response and resolution of incidents when they occur, preventive activities to minimize the number of possible incidents and raising of awareness of state authorities on ICT security. 5234

The National Platform for AI was established in 2021 to advance and implement AI in public administration, academic research, and Serbia's broader industry, as well as to support startups in product development. This initiative

5233 Ministry of Science, Technological Development and Innovation of the Republic of Serbia, *About Us*, https://nitra.gov.rs/en/ministarstvo/o-nama

⁵²³² Institute for Artificial Intelligence Research and Development of Serbia, *About the Institute*, https://ivi.ac.rs/en/about-us/

⁵²³⁴ The Office for Information Technologies, *CERT Digitizing Public Administration*, https://www.ite.gov.rs/tekst/en/27/cert.php

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aligns with the objectives and actions outlined in Serbia's AI Development Strategy for 2020–2025. 5235

Guidelines and Policies for Reliable and Responsible AI

The Serbian government adopted Ethics Guidelines for the Development, Implementation and Use of Reliable and Responsible AI⁵²³⁶ in 2023 to harmonize Serbia's legislative framework with the European Union. The Guidelines largely rely on UNESCO's Recommendation on the Ethics of AI adopted in 2021, to which Serbian representatives contributed. The objective is to implement a preventive mechanism that ensures the responsible evolution of this technology, along with methods to verify that systems based on machine learning comply with the highest ethical and security standards.⁵²³⁷ To date, these guidelines are not legally binding.

Serbia established the Council for Artificial Intelligence in 2024 to align and coordinate activities for implementation of the AI national strategy implementation. The Council will work as an independent advisory body to draft new laws for the development and application of AI in Serbia. This body comprises private sector experts, academics, and government representatives. 5238

The Working Group for the upcoming Draft Law on Artificial Intelligence of the Republic of Serbia held its first meeting in 2024. Representatives from numerous state bodies, scientific and professional industries, law, and other economic entities began discussions to identify key problems, ideate adequate solutions, and set clear guidelines for effectively managing the preparation of the draft law. The Working Group expects to present the Draft Law at the end of the first quarter of 2025. 5239

5235 Government of Serbia, *National Platform for Artificial Intelligence Launched* (Dec. 6, 2021), https://www.srbija.gov.rs/vest/en/182080/national-platform-for-artificial-intelligence-

launched.php
5236 National AI Platform, *Adopted Ethical Guidelines for Safe and Reliable Use of AI* (March 24, 2023), https://www.ai.gov.rs/vest/en/423/adopted-ethical-guidelines-for-safe-and-reliable-use-of-

<u>ai.php</u>
⁵²³⁷ Government of the Republic of Serbia, *Ethical Guidelines for Development, Use of Artificial Intelligence Adopted* (March 23, 2023), https://www.srbija.gov.rs/vest/en/203799/ethical-guidelines-for-development-use-of-artificial-intelligence-adopted.php

⁵²³⁸ National AI Platform, *Serbia Accelerates AI Advancement: Council for Artificial Intelligence Established*, News (Jul. 31, 2024), https://www.ai.gov.rs/vest/en/1056/serbia-accelerates-ai-advancement-council-for-artificial-intelligence-established.php

⁵²³⁹ Government of Serbia, *The First Meeting of the Working Group for Developing the Draft Law on Artificial Intelligence of the Republic of Serbia Was Held* (Jun. 3, 2024) https://www.ai.gov.rs/vest/sr/1110/odrzan-prvi-sastanak-radne-grupe-za-izradu-nacrta-zakona-o-vestackoj-inteligenciji-republike-srbije.php

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International Partnerships and Collaborations on AI Strategy

Serbia was represented at the World Economic Forum's AI Governance Summit in November 2023 and joined the AI Governance Alliance (AIGA). Joining the AIGA grants Serbia access to collective expertise to address the complexities of AI governance while emphasizing sustainability, resilience, and safety in AI applications. ⁵²⁴⁰

Serbia's Ministry of Information and Telecommunications and the Institute for Artificial Intelligence Research and Development signed a Memorandum of Understanding (MoU) with the United Arab Emirates Advanced Technology Research Council (ATRC) in early 2024. This landmark collaboration aims to leverage the technical expertise of ATRC and its subsidiaries for the integration of AI into Serbia's technological infrastructure. Under the terms of the MoU, Serbia will support the adoption of ATRC's Falcon large language models (LLM) and explore avenues of collaboration with ATRC around Falcon-powered solutions. Furthermore, both entities will work together to encourage organizations from Serbia to join the Falcon Foundation and contribute to the success of open-source Falcon models. 5241

Regulatory Sandboxes

In analyzing Serbia's position in the Flexibility of Regulatory Framework and Adaptation to the Digital Business sector, as measured by the Global Competitiveness Index, Serbia is ranked 68th, achieving a score of 3.6 out of 7.⁵²⁴²

The deployment and development of AI technologies raise significant regulatory challenges, especially in the domains of misuse prevention and data privacy protection. Crafting a regulatory approach that effectively balances the need for personal data protection with the imperative to foster innovation in AI is a complex endeavor.

In addressing these challenges, the Serbian government has introduced a regulatory sandbox aimed at AI technologies. This framework is intended to provide a controlled environment in which businesses can experiment with novel AI products and services under a regime that allows for certain exemptions from

⁵²⁴⁰ World Economic Forum, *Serbia at AI Governance Summit* (Nov. 16, 2023), https://c4ir.rs/en/serbia-at-ai-governance-summit/

https://www.atrc.gov.ae/news/serbia-signs-uaes-atrc-encourage-use-falcon-ai-models-wgs-2024#:~:text=Dubai%2DUnited%20Arab%20Emirates%3A%2014,Research%20and%20Development%20of%20Serbiahttps://www.atrc.gov.ae/news/serbia-signs-uaes-atrc-encourage-use-falcon-ai-models-wgs-2024

https://www.media.srbija.gov.rs/medsrp/dokumenti/strategy_artificial_intelligence.pdf

⁵²⁴¹ Abu-Dabi Advanced Technology Research Council, Serbia Signs with UAE's ATRC to Encourage Use of Falcon AI Models at WGS 2024 (Feb. 14, 2024),

⁵²⁴² Government of Serbia, Strategy for the Development of Artificial Intelligence in the Republic of Serbia for the Period 2020–2025 (2019),

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full regulatory compliance. 5243 This approach facilitates the exploration and advancement of AI solutions, mitigating the immediate impact of regulatory barriers.⁵²⁴⁴

Public Participation

The public was invited to a series of debates to discuss the Draft Strategy for the Development of Artificial Intelligence in Serbia for 2020–2025 through the end of December 2029. During this period, three panel discussions were organized for public participation. Throughout the public debate phase, 12 written submissions containing proposals and suggestions were received via contact and email addresses. Many of these contributions were incorporated into the final document.5245

In the process of drafting the Ethical Guidelines for Developing, Applying, and Using Reliable and Responsible Artificial Intelligence, the Ministry of Science, Technological Development and Innovation organized two public forums on consecutive days. At these events, 21 participants provided recommendations and feedback.5246

A consultative process was conducted during the implementation of the e-Government Development Programme for 2020–2022 and while planning for the 2023–2025 programming period. During the implementation of the ex-post impact assessment of the e-Government Development Programme 2020–2022, primary data were collected through semi-structured interviews involving 51 persons from 32 institutions.

The programming process and the preparation of the Action Plan for 2023– 2025 lasted six months in 2022. After the publication of the program on the e-Consultation portal, a public debate was held on the portal. The e-Government

⁵²⁴⁴ The United Nations Development Programme, Serbia Prepares for the AI Revolution (Apr. 28, 2023), https://www.undp.org/serbia/blog/serbia-prepares-ai-revolution

⁵²⁴⁵ The Government of Serbia, Strategy for the Development of Artificial Intelligence in the Republic of Serbia for the period 2020-2025 (2019), https://www.srbija.gov.rs/tekst/en/149169 5246 National AI Platform, Public Discussions Were Held in Belgrade and Novi Sad in Conjunction with the Preparation of the Ethical Guidelines for the Development, Application, and Use of Reliable and Responsible Artificial Intelligence (Dec. 12, 2022), https://www.ai.gov.rs/vest/en/380/public-discussions-were-held-in-belgrade-and-novi-sad-inconjunction-with-the-preparation-of-the-ethical-guidelines-for-the-development-application-anduse-of-reliable-and-responsible-artificial-intelligence.php

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development Programme⁵²⁴⁷ and Action Plan for 2023–2025⁵²⁴⁸ were adopted in April 2023.

The Ministry of Science, Technological Development, and Innovation hosted a public debate for Serbia's Draft Strategy for the Development of Artificial Intelligence (2024–2030) with an extended deadline in July 2024 and allowed comments and suggestions through the e-Consultation portal. A third public event was held in the National Assembly, providing citizens and professionals an opportunity to share their feedback on the draft strategy.⁵²⁴⁹

Data Protection

Serbia's Law on Personal Data Protection (LPDP) aims for a comprehensive approach to data protection and aligns with some exceptions to the European General Data Protection Regulation (GDPR). ⁵²⁵⁰ The Commissioner for Information of Public Importance and Personal Data Protection is the authority responsible for enforcing the data protection and raising public awareness about data rights and data-protection requirements. ⁵²⁵¹

The country's existing legal frameworks cover various laws that address AI-related data-protection issues.

- The Serbian Constitution provides for the protection of privacy and personal data.
- The LPDP outlines the procedures for the processing and protection of personal data.

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11/SWD 2023 695 Serbia.pdf

⁵²⁴⁷ Ministry of Public Administration and Local Self-Government, *E-Government Development Programme of the Republic of Serbia for 2023-2025 Action Plan for Its Implementation* (Dec. 2022),

SEAxUeDDQIHf7pDDIQFnoECBcQAQ&url=https%3A%2F%2Fmduls.gov.rs%2Fwpcontent%2Fuploads%2FProgram-razvoja-elektronske-uprave-23-25-u-RS-ENG-

FINAL.docx%3Fscript%3Dlat&usg=AOvVaw1QNtekO02CUJjSxozd3Zv-&opi=89978449

5248 European Commission Staff Working Document, *Serbia 2023 Report* (8 November, 2023)

https://neighbourhood-enlargement.ec.europa.eu/system/files/2023-

⁵²⁴⁹ Ministry of Science, Technological Development, and Innovation, *Extension of the Public Debate Period on the Draft Strategy for the Development of Artificial Intelligence in the Republic of Serbia for the Period 2024-2030*, The Government of the Republic of Serbia (July 5, 2024) https://www.ai.gov.rs/vest/en/1020/extension-of-the-public-debate-period-on-the-draft-strategy-for-the-development-of-artificial-intelligence-in-the-republic-of-serbia-for-the-period-2024-2030.php

⁵²⁵⁰ Government of Serbia, *Law on Personal Data Protection* (2018), https://www.poverenik.rs/en/...

⁵²⁵¹ Commission for Information of Public Importance and Personal Data Protection, *About Us*, https://www.poverenik.rs/en/o-nama/authority.html

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• The Law on Electronic Communications and the Law on Electronic Signatures have provisions that could apply to AI technologies.

Provisions of the LPDP mirror the GDPR in almost all aspects, including regulations around the territorial application of the LPDP, legal basis for data processing, privacy by design, data subject rights, security of processing and personal data breach, data protection impact assessments and officers, and the transfer of personal data. However, the transition to full implementation encountered challenges, including delays attributed to potential ambiguities in interpretation and a nine-month window between the law's adoption and enforcement. This timeline left many local entities, aside from international companies already adhering to GDPR, unprepared for the LPDP's requirements.

Inconsistencies between the LPDP and other Serbian personal data processing laws persist, undermining harmonized legal practice. The lesser penalties stipulated by the LPDP, in comparison to GDPR's more substantial fines, have insufficiently incentivized compliance among Serbian and multinational firms. Despite these challenges, a portion of companies have achieved or are actively working toward LPDP compliance, though most public authorities lag behind.

Serbia unveiled the Personal Data Protection Strategy for 2023–2030 in 2023 to address the rapidly evolving technological landscape and its implications on data protection 5252. This strategy outlines a comprehensive approach to enhance the legal framework, aiming for alignment with the GDPR. Key objectives include revising the LPDP to match GDPR standards fully, improving enforcement mechanisms, and increasing public awareness and education on data protection. Authorities ultimately aim to secure an adequacy decision from the European Commission to facilitate smoother data exchanges. The strategy also emphasizes the need for more precise regulations on new technologies such as AI, ensuring that Serbia's legal infrastructure keeps pace with technological advancements.

Serbia's Commissioner for Information of Public Importance and Personal Data Protection is a member of the Global Privacy Assembly (GPA).⁵²⁵³ However, Serbia did not sponsor the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence,⁵²⁵⁴ 2020 GPA Resolution on AI Accountability,⁵²⁵⁵ 2022

5253 Global Privacy Assembly, List of Accredited Members (2023),

⁵²⁵² Government of Serbia, *Personal Data strategy* (Aug. 29, 2019), https://www.poverenik.rs/en/news/4041

https://globalprivacyassembly.org/participation-in-the-assembly/list-of-accredited-members/

⁵²⁵⁴ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-

content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

⁵²⁵⁵ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-

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GPA Resolution on Facial Recognition Technology, 5256 or 2023 GPA Resolution on Generative AI. 5257

Algorithmic Transparency

Serbia has engaged with international frameworks concerning AI by ratifying treaties such as the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (Convention 108)⁵²⁵⁸ and acknowledging the principles of the General Data Protection Regulation (GDPR). These treaties offer a foundation for creating AI regulations that aim to safeguard the rights and freedoms of individuals. However, Serbia has no national legislation guaranteeing a right to algorithmic transparency and contestability.

AI in Public Administration

The cross-sectoral Strategy for the Development of the Information Society and Information Security in the Republic of Serbia from 2021 to 2026 aims to foster an information society and e-government that meet the needs of citizens and businesses while also improving information security for citizens, public administration, and businesses. The strategy frames the further development of information security as a precondition for the complete digitalization of the society. 5259

The Office for IT and eGovernment established the "Smart Serbia," platform in 2021 for the secure collection and processing of data from various public sources. The platform uses AI technology to deliver services and to provide the most advanced e-services for citizens and the state. 5260

 $\frac{content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf$

⁵²⁵⁶ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁵²⁵⁷ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁵²⁵⁸ Council of Europe, *Serbia Ratifies Convention 108*+ (May 27, 2020), https://www.coe.int/en/web/data-protection/-/serbia-ratifies-convention-108-

⁵²⁵⁹ Government of Serbia, , *Strategy for the Development of Information Society and Security in the Republic of Serbia for the Period from 2021 to 2026*, Geneva Internet Platform (digwatch) (Aug. 2021), https://dig.watch/resource/strategy-for-the-development-of-information-society-and-security-in-the-republic-of-serbia-for-the-period-from-2021-to-2026

⁵²⁶⁰ Government of Serbia, "Smart Serbia" Platform Presented in State Data Centre in Kragujevac (Jun. 10, 2021), https://www.srbija.gov.rs/vest/en/173991/smart-serbia-platform-presented-in-state-data-centre-in-kragujevac.php

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The Social Card Bill implemented in March 2022 requires a centralized electronic record of the social and economic status of individuals and their relatives. Personal data of those who receive some form of financial social assistance is collected and processed to assess their overall economic situation and redistribute the state budget. The system processes more than 130 different types of data on individuals, automatically collecting them from other registers handled by public authorities, such as the Tax Administration or Ministry of Interior.

The Social Card produces automated decisions. Once the Social Card algorithm processes the assessment of the individual case, it sends an alert to the local office managing the person's file. The officials have a window of time to verify the validity of the decision, but these offices are widely and severely understaffed, meaning the decisions may never undergo human review. The citizens only have 15 days to appeal the decision.

The Social Card system collects and processes extensive amounts of data, creating an invasive digital surveillance system that targets some of the most marginalized people in Serbian society. The system is not accessible to the public, even after NGOs made several attempts to access the algorithm, its source code, or at least its logic. Research data from UNHCR partner A11 shows that the number of people receiving social assistance fell from 211,266 to 189,036, a decrease of 10.5%, in the first six months the system operated.⁵²⁶²

Facial Recognition and Mass Surveillance

Although Serbian law prohibits the use of facial recognition technology for public surveillance, ⁵²⁶³ the Serbian government has been determined to introduce a legal framework for the use of facial recognition technology in the country. ⁵²⁶⁴ The decision to implement facial recognition technology, primarily

⁵²⁶¹ Government of Serbia, Government Passes Social Card Bill (Jan. 2021), https://www.srbija.gov.rs/vest/en/166629/government-passes-social-card-bill.php ⁵²⁶² Initiative for Economic and Social Rights, (*Anti*)Social Cards (Oct. 14, 2022), https://www.a11initiative.org/en/antisocial-cards/

⁵²⁶³ Chris Burt, Serbian Data Protection Authority Criticizes Alleged Facial Recognition Forensics Plan (Apr. 12, 2022), https://www.biometricupdate.com/202204/serbian-data-protection-authority-criticizes-alleged-facial-recognition-forensics-plan

⁵²⁶⁴ Radovan Balać, *Withdrawal of the Draft Law on Internal Affairs in Serbia: The Prime Minister's Gambit* (Dec. 31, 2022), https://europeanwesternbalkans.com/2022/12/31/withdrawal-of-the-draft-law-on-internal-affairs-in-serbia-the-prime-ministers-gambit/

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supplied by the Chinese tech-giant Huawei, ⁵²⁶⁵ sparked controversy. ⁵²⁶⁶ Initially justified by authorities as a means to enhance public safety and deter crime, the lack of transparency regarding the technology's deployment and data handling raised concerns among civil society and international society. Human rights activists and civil society fear potential abuses by the government and have strongly resisted the full implementation of facial recognition technology. ⁵²⁶⁷ The international response, particularly from the EU and the US, has emphasized concerns over potential misuse of the technology and its implications for democratic values. ⁵²⁶⁸ However, the effectiveness of these responses remains limited, with Serbia continuing its collaboration with China in various sectors, including surveillance technology, amid geopolitical considerations and economic incentives.

BIRN Serbia (Balkan Investigative Reporting Network) released a report in June 2024, on the digital surveillance in Serbia and its impact on human rights. BIRN reported that Serbia has installed over 8,000 Chinese-style surveillance cameras and that the State seeks to use spyware against civil society representatives and investigative journalists. 5269

Autonomous Vehicles

Serbia's Regulation on the Conditions for Autonomous Driving came into effect in December 2023. The Regulation details the conditions under which autonomous driving is allowed and the procedure for issuing permits for testing autonomous vehicles. This regulation aligns with the latest amendments to the Law on Traffic Safety and Roads and will provide a clear and predictable

⁵²⁶⁵ Mondo Internazionale, Facial Recognition Technology in Serbia: The Most Controversial Aspect of the Sino-Serbian Cooperation (2023), https://mondointernazionale.org/focus-allegati/facial-recognition-technology-in-serbia-the-most-controversial-aspect-of-the-sino-serbian-cooperation

⁵²⁶⁶ Prague Security Studies Institute, *The Sum of All Fears* — *Chinese AI Surveillance in Serbia* (Dec. 2020), https://www.pssi.cz/publications/36-the-sum-of-all-fears-chinese-ai-surveillance-in-serbia

⁵²⁶⁷ SHARE Foundation, *Total Surveillance Law Proposed in Serbia* (Sept. 22, 2021) https://edri.org/our-work/total-surveillance-law-proposed-in-serbia/

⁵²⁶⁸ Majda Ruge and Stefan Vladisalvljev, *Serbia's 5G Deal with Washington: The Art of Muddling Through*, European Council on Foreign Relations (Sept. 22, 2020), https://ecfr.eu/article/commentary_serbias_5g_deal_with_washington_the_art_of_muddling_through/

⁵²⁶⁹ BIRN Serbia, *Digital Surveillance in Serbia: A Threat to Human Rights?* (Jun. 2024), https://balkaninsight.com/wp-content/uploads/2024/06/Digital-surveillance-in-Serbia.pdf

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procedure for individuals and institutions wishing to test vehicles with automated driving systems in real traffic conditions.⁵²⁷⁰

Environmental Impact of AI

The Serbian 2020–2025 National Strategy for AI mentions the importance of assessing the environmental impact of the development and use of AI systems. However, no framework for proposed regulation to promote sustainability or mitigate environmental harm has been established. While there is little discourse about the environmental costs of AI systems, Serbia has used AI to study climate change and help clean up the rivers in recent years. Serbia has used AI to study climate change and help clean up the rivers in recent years.

Lethal Autonomous Weapons

Serbia convened at the Group of Governmental Experts (GGE) meeting under the auspices of the Convention on Conventional Weapons (CCW) to deliberate on lethal autonomous weapons systems (LAWS) in May 2023. The meeting highlighted the urgent need to develop new international legislation to ensure meaningful human oversight over weapons systems and the application of force.

Serbia's involvement underscores the country's active role internationally to address the implications of emerging military technologies. Serbia contributes to the global discourse on integrating international humanitarian law (IHL) with the deployment of LAWS.

Serbia voted in favor of UNGA's Resolution 78/241 on Lethal Autonomous Weapons Systems,⁵²⁷⁴ which called for urgent global action to confront the challenges posed by autonomous weapons systems. The resolution directed the Secretary General to compile a report outlining member and observer states' views on the humanitarian, legal, and ethical issues these weapons raise, along with the role humans should play in the use of force. Serbia's submission to

satellite-images-help-make-our-rivers-free-waste

⁵²⁷⁰ Government of Serbia, The National AI Platform, *New Steps in the Development of the Legal Framework for Autonomous Driving* (Dec. 12, 2023), https://www.ai.gov.rs/vest/en/644/new-steps-in-the-development-of-the-legal-framework-for-autonomous-driving.php

⁵²⁷¹ Government of Serbia, *Strategy for the Development of Artificial Intelligence in the Republic of Serbia for the Period 2020-2025* (December 2019) https://www.srbija.gov.rs/tekst/en/149169
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⁵²⁷³ Convention on Conventional Weapons, Report on Activities of the Convention on Conventional Weapons Group of Governmental Experts Meeting on Lethal Autonomous Weapons Systems (Jun. 28, 2018), https://www.stopkillerrobots.org/wp-content/uploads/2018/06/KRC_ReportCCWX_Apr2018_UPLOADED.pdf

⁵²⁷⁴ Automated Decision Research, Serbia,

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the UN Secretary-General pursuant to Resolution 78/241 highlighted the country's shared concern over the development of lethal autonomous weapons systems. Serbia shared the opinion that these systems should be prohibited, or restricted in production, and then their use monitored. The submission also expressed serious concern over such systems' destructive potential and negative impact on peace and regional and global security. 5275

Human Rights

Serbia ratified the Universal Declaration of Human Rights and 16 of the 18 UN human rights treaties. The UN Human Rights Council (UNHRC) conducts a Universal Periodic Review to assess each member state's human rights record. Serbia's latest review took place in 2023, marking the country's fourth evaluation. The UNHRC issued recommendations aimed at bolstering the protection of human rights 227 and subsequently asked Serbia to provide updates on the implementation of recommendations related to hate crimes, freedom of expression and journalist safety, and participation in public affairs by March 29, 2027. 2278

On the human rights index from Our World in Data, Serbia scored 0.79 on a 0–1 scale, where 1 represents the best possible score. Freedom House categorizes Serbia as "partly free" assigning a score of 57 out of 100, down from 60 in 2023. The Freedom House report cited threats against journalists and editorial and political pressure as well as increased broader surveillance among concerns undermining freedom of expression along with other political and civil liberties.

https://documents.un.org/doc/undoc/gen/n24/154/32/pdf/n2415432.pdf

observations-fourth-periodic-report-serbia

https://freedomhouse.org/country/serbia/freedom-world/2024

⁵²⁷⁵ United Nations General Assembly, *Lethal Autonomous Weapons Systems: Report of the Secretary-General* (Jul. 1, 2024),

⁵²⁷⁶ UN Human Rights Office of the High Commissioner, *Status of Ratification Interactive Dashboard* (2024), https://indicators.ohchr.org

⁵²⁷⁷ United Nations Human Rights Council, *National Report Submitted Pursuant to Human Rights Council Resolutions 5/1 and 16/21* (May 12, 2023), https://www.ohchr.org/en/hr-bodies/upr/rs-index

⁵²⁷⁸ Human Rights Committee, *Concluding Observations on Serbia's Fourth Periodic Report*, United Nations Human Rights Office of High Commissioner (May 3, 2024), <a href="https://www.ohchr.org/en/documents/concluding-observations/ccprcsrbco4-co

⁵²⁷⁹ Our World in Data, *Human rights index* (2022), https://ourworldindata.org/grapher/human-rights-index-vdem

⁵²⁸⁰ Freedom House, Freedom in the Word (2024),

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The U.S. Department of State Country Report on Human Rights Practices for 2021⁵²⁸¹ and 2022⁵²⁸² highlighted significant concerns in Serbia, including severe limitations on free expression and the press, with instances of unjust prosecutions of journalists. The reports also noted human rights violations against individuals with disabilities and members of the LGBTQI+ community.

OECD / G20 AI Principles

Serbia is not included among the OECD member countries nor among the six non-member nations that have endorsed the OECD AI principles. Additionally, Serbia is not counted among the G20 nations. Although Serbia has not explicitly endorsed the OECD / G20 AI, its national strategy echoes some of the key OECD AI principles. The OECD AI principles addressed in the National AI Strategy include "inclusive growth, sustainable development and well-being, human-centered values and fairness, transparency and explainability, accountability, investing in AI R&D, fostering a digital ecosystem for AI, providing an enabling policy environment for AI, building human capacity and preparing for labor market transition, and international co-operation for trustworthy AI."⁵²⁸³

Serbia has further committed to the OECD AI Principles as a member of the Global Partnership for Artificial Intelligence (GPAI), which formalized an integrated partnership with the OECD in 2024. Serbia will serve as a GPAI chair for 3 years beginning in 2024, a position that presents a significant opportunity to attract AI-related investments and reaffirms Serbia's commitment to investing in science, technology, and education. Serbia's Ministry of Science, Technological Development and Innovation hosted the GPAI Summit from December 3-4, 2024 in Belgrade. The summit, which was also supported by the OECD, brought together more that 100 experts and 1200 attendees "with the aim

⁵²⁸¹ U.S. Department of State, *Country Reports on Human Rights Practices: Serbia* (2021), https://www.state.gov/reports/2021-country-reports-on-human-rights-practices/serbia

⁵²⁸² U.S. Department of State, *Country Reports on Human Rights Practices: Serbia* (2022), https://www.state.gov/reports/2022-country-reports-on-human-rights-practices/serbia

⁵²⁸³ OECD, Strategy for the Development of AI in the Republic of Serbia for the Period 2020–2025 (May 24, 2023), https://oecd.ai/en/wonk/documents/serbia-strategy-for-the-development-of-ai-in-the-republic-of-serbia-2020-2025

⁵²⁸⁴ OECD, Global Partnership on Artificial Intelligence (2024),

https://www.oecd.org/en/about/programmes/global-partnership-on-artificial-intelligence.html ⁵²⁸⁵ Government of Serbia, *Serbia's Role Important in Global Partnership for Artificial Intelligence* (Aug. 30, 2024), https://www.srbija.gov.rs/ve

⁵²⁸⁶ Government of Serbia, *Belgrade to Host Global Partnership on Artificial Intelligence Summit in December* (Nov. 5, 2024), https://www.srbija.gov.rs/vest/en/236059/belgrade-to-host-global-partnership-on-artificial-intelligence-summit-in-december.php

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of guiding the responsible and human-centric development and use of this technology."5287

Council of Europe AI Treaty

The Council of Europe Framework Convention on AI outlines a comprehensive approach to AI regulation, focused on human dignity, autonomy, and equality. Serbia participated in the drafting of the Convention as Council member but has not signed the convention. ⁵²⁸⁸ As a Council of Europe member, the country is subject to the Convention. ⁵²⁸⁹

UNESCO Recommendation on AI Ethics

Since 2000, the Republic of Serbia has been a UNESCO member state, and all 193 member states have ratified the UNESCO Recommendation on the Ethics of AI. In March 2023, the Serbian government approved the Ethics Guidelines for the Development, Implementation and Use of Reliable and Responsible AI (Guidelines). The Guidelines draw heavily from UNESCO's Recommendation on the Ethics of AI, which Serbian representatives actively participated in creating, to set ethical standards for all AI systems and applications, including fairness, transparency, accountability, and fostering international collaboration and cooperation. Moreover, the Guidelines can be considered a progression towards aligning Serbia's legal structure with the European Union's Proposal for an AI Regulation introduced two years earlier.

Serbia and ten other countries participated in piloting UNESCO's Global Index on Responsible AI in 2023. This Global Index is a new comprehensive measurement tool that tracks countries' commitments and capacities to building responsible AI ecosystems. This initiative serves as a mechanism to monitor the implementation of UNESCO's Recommendation on the Ethics of AI, especially at a national level, in a way that extends beyond the existence of legal frameworks and delves into the complexity of implementation by assessing the actions of government and relevant activities of non-state actors.

⁵²⁸⁷ OECD, *Global Partnership on Artificial Intelligence Summit 2024*, Events (Dec. 2024), https://www.oecd-events.org/summit-gpaiserbia2024/en

⁵²⁸⁸ CoE Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Jan. 24, 2025), https://www.coe.int/en/web/conventions/full-List?module=signatures-by-treaty&treatynum=225 ⁵²⁸⁹ Andrea Radonjanin, Marija Vlajkovic, et al., *Artificial Intelligence 2024 Serbia*, 6.2 International Standard-Setting Bodies (2024), https://practiceguides.chambers.com/practiceguides/artificial-intelligence-2024/serbia

⁵²⁹⁰ National AI Platform, *Adopted Ethical Guidelines for Safe and Reliable Use of AI* (Mar. 24, 2023), https://www.ai.gov.rs/vest/en/423/adopted-ethical-guidelines-for-safe-and-reliable-use-of-ai.php

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The overlap demonstrates a shared commitment to promoting responsible and ethical AI practices, ensuring that AI technologies benefit society while upholding fundamental human values.

Serbia has not begun the UNESCO Readiness Assessment Methodology (RAM), a vital tool to assist Member States in implementing the Recommendation on the Ethics of AI.⁵²⁹¹

Evaluation

The National AI Strategy of the Republic of Serbia embarked on a proactive approach to the regulation of the development, implementation, and use of AI within its borders. The national strategy sets a foundation for ensuring values of transparency, human rights, safety, and trust in AI systems. By aligning its national strategy on AI with EU standards and drawing from international guidelines, the UNESCO Recommendation on the Ethics of AI in particular, Serbia demonstrates a commitment to fostering responsible AI that benefits society while mitigating associated risks. Significant gaps between endorsement and implementation of key international principles such as those outlined by the OECD, Universal Declaration of Human Rights, national strategy, and Ethical AI Guidelines persist. However, the Draft Law in preparation offers hope that the country will development the enforcement mechanisms and legal framework necessary to operationalize the principles of accountability, fairness, rule of law, fundamental rights, and transparency in the National AI Strategy.

Serbia signed the Universal Declaration of Human Rights, but human rights violations reported in credible sources raise concerns, especially around media freedom, civil rights, and freedom of expression. The government's use of facial recognition technology for mass surveillance and reliance on automated decisions without meaningful human oversight to determine social assistance deepen these concerns.

Singapore

In 2024, Singapore's Personal Data Protection Commission issued voluntary guidelines on using personal data in AI recommendation and decision systems and Parliament approved a bill to prohibit using Generative AI for disinformation or misinformation in elections. Singapore also furthered international engagement on AI Safety at summits and through bilateral agreements.

⁵²⁹¹ UNESCO Global AI Ethics and Governance Observatory, *Global Hub, Country Profiles* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

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National AI Strategy

Singapore launched its first National AI Strategy in 2019, with the objective for Singapore to "be a leader in developing and deploying scalable, impactful AI solutions, in key sectors of high value and relevant to its citizens and businesses," by 2030.5292 An updated Strategy (NAIS 2.0) was launched in 2023 to address new challenges and uplift Singapore's collective economic and social potential over the next three to five years. 5293 Both strategies are part of Singapore's Smart Nation plan, which aims to make Singapore a Smart Nation, "A nation where people live meaningful and fulfilled lives, enabled seamlessly by technology, offering exciting opportunities for all."5294

NAIS 2.0 outlines Singapore's ambition and commitment to building a trusted and responsible AI ecosystem, driving innovation and growth through AI, and empowering people and businesses to understand and engage with AI.5295 In summary, Singapore's strategy is:

- To orchestrate Industry, Government, and public research performers around meaningful use cases and problem statements to transform Singapore's economy and society, steering efforts toward developing select peaks of excellence that can deliver outsized impact to Singapore and the lives of Singaporeans.
- To attract more top-tier researchers and engineers to work with and from Singapore, grow the pool of tech workforce charged with scaling novel AI solutions, and nurture a confident AI user base of enterprises and workers.
- To avail compute and data for AI innovation, provide a trusted environment where people can engage with AI with confidence and contribute to international AI developments. 5296

In terms of ethics, NAIS 2.0 says that Singapore advocates for the responsible and ethical use of AI. Singapore established an Advisory Council on

⁵²⁹² Smart Nation Singapore, National Artificial Intelligence Strategy: Advancing Our Smart Nation Journey, p. 6 (2019), https://file.go.gov.sg/nais2019.pdf

⁵²⁹³ Smart Nation Singapore, National Artificial Intelligence Strategy 2 to Uplift Singapore's Social and Economic Potential (Dec. 4, 2023), https://www.smartnation.gov.sg/media-hub/pressreleases/04122023/

⁵²⁹⁴ Smart Nation Singapore, Our Smart Nation Vision (Feb. 19, 2025), https://www.smartnation.gov.sg/vision/

⁵²⁹⁵ Smart Nation Singapore, National Artificial Intelligence Strategy 2 to Uplift Singapore's Social and Economic Potential (Dec. 4, 2023), https://www.smartnation.gov.sg/media-hub/pressreleases/04122023/

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the Ethical Use of AI and Data in 2018,⁵²⁹⁷ one year before releasing the first National AI Strategy. The Council is chaired by the former Attorney-General of Singapore V.K. Rajah SC and includes "representatives from technology companies, users of AI, and those who can provide consumers' and societal perspectives."5298 The Minister for Communications and Information announced the first-term representatives of the Advisory Council at the AI Singapore's 1st Year Anniversary Event in 2018. 5299

The Council advises the Government on issues arising from the commercial deployment of AI that may require policy or regulatory attention and industry on the responsible development and deployment of AI.5300 The Council also assists the Government in developing voluntary codes of practice to guide corporate decision-makers, monitoring consumers' acceptance of such data use, and making recommendations on ethical and legal issues that may require policy or regulatory changes. The Advisory Council members for 2022-2025 include representatives and executives from Google Research, Salesforce, Microsoft, IBM, and OECD among other prominent organizations. 5301

Al Governance Regulation

Singapore appears to be taking a sectoral approach toward AI governance regulation, with regulatory agencies adopting soft-law approaches to issue nonbinding guidelines and recommendations. 5302 NAIS 2.0 says that it will establish a common platform for regulatory agencies to coordinate on AI developments in their sectors and share best practices in governing AI.

The Infocomm Media Development Authority (IMDA) and Personal Data Protection Commission (PDPC) have been the most active in respect of AI

⁵²⁹⁷ Personal Data Protection Commission, Singapore's Approach to AI Governance, Advisory Council on the Ethical use of AI and Data (Nov. 3, 2023), https://www.pdpc.gov.sg/help-andresources/2020/01/model-ai-governance-framework

⁵²⁹⁸ Infocomm Media Development Authority, Speech by Mr. S. Iswaran, Minister for Communications and Information at the Innovfest Unbound 2018, Advisory Council on the Ethical Use of AI and Data (Jun. 5, 2018), https://www.imda.gov.sg/resources/press-releasesfactsheets-and-speeches/speeches/2018/innovfest-unbound-2018

⁵²⁹⁹ Infocomm Media Development Authority, Speech by Mr. S. Iswaran, Minister for Communications and Information, at AI Singapore's 1st Year Anniversary Event (Aug. 30, 2018), https://www.imda.gov.sg/resources/press-releases-factsheets-andspeeches/speeches/2018/ai-singapore-1st-year-anniversary-event

⁵³⁰⁰ Smart Nation Singapore, National Artificial Intelligence Strategy: Advancing Our Smart Nation Journey, p. 64 (2019), https://file.go.gov.sg/nais2019.pdf

⁵³⁰¹ Personal Data Protection Commission, Singapore's Approach to AI Governance, Advisory Council on the Ethical use of AI and Data (Nov. 3, 2023), https://www.pdpc.gov.sg/help-andresources/2020/01/model-ai-governance-framework#AIDataAC

⁵³⁰² Darren Grayson Chng & Joe Jones, Global AI Governance Law and Policy: Singapore, IAPP (Feb. 2024), https://iapp.org/resources/article/global-ai-governance-singapore/

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governance regulation. ⁵³⁰³ In 2019, the PDPC released the Model AI Governance Framework at the World Economic Forum. ⁵³⁰⁴ The Model Framework was the first in Asia to provide details and readily implementable guidance to private sector organizations to address key ethical and governance issues when deploying AI solutions. In the foreword to the second edition of the Framework, in 2020, then-Minister for Communications and Information S. Iswaran, noted that "The Model Framework's unique contribution to the global discourse on AI ethics lies in translating ethical principles into practical recommendations that organisations could readily adopt to deploy AI responsibly. [...] This edition incorporates the experiences of organisations that have adopted AI, and feedback from our participation in leading international platforms, such as the European Commission's High-Level Expert Group and the OECD Expert Group on AI. Such input has enabled us to provide clearer and effective guidance for organisations to implement AI responsibly." ⁵⁵³⁰⁵

The Model Framework is based on two guiding principles that "promote trust in AI and understanding of the use of AI technologies":

- 1. "Organizations using AI in decision-making should ensure that the decision-making process is explainable, transparent and fair"
- 2. "AI solutions should be human-centric" in the sense that "the protection of the interests of human beings, including their well-being and safety, should be the primary considerations in the design, development and deployment of AI."5306

These principles are operationalized through recommendations grouped into four clusters:

- 1. "Internal governance structures and measures", including defining roles, responsibilities, and staff training for oversight to ensure the ethical deployment of AI and monitoring and managing risks⁵³⁰⁷
- 2. "Determining the level of human involvement in AI-augmented decision-making," beginning with clarity on the objective of using AI, considering the approach to oversight, and weighing risks and harm of using AI for decision-making⁵³⁰⁸
- 3. "Operations management" provides a generalized AI model development process beginning with data preparation and promoting explainability,

organisation/ai/sgmodelaigovframework2.pdf

⁵³⁰³ Ibid

⁵³⁰⁴ IMDA and PDPC Singapore, *Model AI Governance Framework, 2nd Edition* (2020), https://www.pdpc.gov.sg/-/media/files/pdpc/pdf-files/resource-for-

⁵³⁰⁵ Ibid, p. 8

⁵³⁰⁶ Ibid, p. 15

⁵³⁰⁷ Ibid, pp. 22–27

⁵³⁰⁸ Ibid, pp. 28–34

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repeatability, robustness, tuning, traceability, reproducibility, and auditability to minimize bias and manage risks in algorithms and models⁵³⁰⁹

4. "Stakeholder interaction and communication" consists of meaningful transparency to consumers, options to opt out (including by default), usability, and communication channels⁵³¹⁰

The IMDA and the PDPC, in partnership with the World Economic Forum Centre for the Fourth Industrial Revolution, released an Implementation and Self-Assessment Guide for Organisations (ISAGO) in January 2020. The ISAGO complements the Model Framework by allowing organizations to assess the alignment of their AI governance practices with the Model Framework, while providing industry examples and practices.⁵³¹¹

The Singapore Computer Society (SCS), supported by IMDA, launched the AI Ethics and Governance Body of Knowledge (AI E&G BoK). The AI E&G BoK is expected to "guide the development of curricula on AI ethics and governance and form the basis of future training and certification for professionals." The document underlines that "accountability, transparency, explainability, and audibility must become the hallmark of all AI solutions" and that "ethical guidelines should not be an afterthought but integrated as part of standards and expectations from the onset of any AI-related effort."5312

Minister for Communications and Information Josephine Teo, announced the launch of AI Verify at the World Economic Forum's Annual Meeting in Davos in 2022. AI Verify is a voluntary AI Governance Testing Framework and Toolkit "for companies who want to demonstrate responsible AI in an objective and verifiable manner." AI Verify aims to build trust in AI through transparency. Singapore hopes to achieve three objectives: enable trust-building between businesses and their stakeholders; facilitate interoperability of AI governance

⁵³¹⁰ Ibid, pp. 53–62

⁵³⁰⁹ Ibid, pp. 35–52

⁵³¹¹ IMDA and PDPC Singapore, Companion to the Model AI Governance Framework – Implementation and Self-Assessment Guide for Organizations (Jan. 2020), https://www.pdpc.gov.sg/-/media/Files/PDPC/PDF-Files/Resource-for-Organisation/AI/SGIsago.pdf

⁵³¹² Singapore Computer Society, Artificial Intelligence Ethics & Governance Body of Knowledge (2020), https://www.scs.org.sg/bok/ai-ethics

⁵³¹³ Yeong Zee Kin, *Singapore's A.I. Verify Builds Trust through Transparency*, OECD AI Policy Observatory (Aug. 16, 2022), https://oecd.ai/en/wonk/singapore-ai-verify

From the Transparency; Invites Companies to Pilot and Contribute to International Standards Development (May 25, 2022), https://www.imda.gov.sg/Content-and-News/Press-Releases-and-Speeches/Press-Releases/2022/Singapore-launches-worlds-first-AI-testing-framework-and-toolkit-to-promote-transparency-Invites-companies-to-pilot-and-contribute-to-international-standards-development

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frameworks; and contribute to the development of international AI standards. Singapore participates in defining AI standards as a member of ISO/IECJTC1/SC42 on artificial intelligence. Sale

The Pilot Testing Framework and Toolkit does not define ethical standards and validates AI system developer's/owner's claims about the approach, use, and verified performance of their AI systems. It does not guarantee that any AI system tested will be free from risks or biases or is completely safe.

Minister Teo announced the launch of the AI Verify Foundation (AIVF) in June 2023 at the ATxAI conference in Singapore. The AIVF seeks to "harness the collective power and contributions of the global open source community to develop AI testing tools for the responsible use of AI." ⁵³¹⁷

The IMDA and AI Verify Foundation unveiled the "first of its kind" Generative AI Evaluation Sandbox in October 2023. The sandbox is intended to aid model developers, app developers, and third-party testers. Companies such as Google, Microsoft, Anthropic, IBM, Deloitte, and EY joined the sandbox.

In January 2024, the IMDA issued for public consultation a draft Model AI Governance Framework for Generative AI⁵³¹⁹ (MGF-Gen AI) developed with the AIVF. The MGF-Gen AI identifies nine dimensions to support a comprehensive and trusted AI ecosystem: accountability, data, trusted development and deployment, incident reporting, testing and assurance, security, content provenance, safety and aligning research & development, and AI for public good. The Framework received endorsements for its holistic approach to concerns arising from generative AI systems and was finalized in May 2024. ⁵³²⁰

https://www.iso.org/committee/6794475.html?view=participation

⁵³¹⁵ Yeong Zee Kin, *Singapore's A.I. Verify Builds Trust through Transparency*, OECD AI Policy Observatory (Aug. 16, 2022), https://oecd.ai/en/wonk/singapore-ai-verify

⁵³¹⁶ ISO/IEC JTC1/SC42, Artificial Intelligence, Participation,

⁵³¹⁷ Infocomm Media Development Authority, Singapore Launches AI Verify Foundation to Shape the Future of International AI Standards through Collaboration (Jun. 7, 2023), https://www.imda.gov.sg/resources/press-releases-factsheets-and-speeches/press-releases/2023/singapore-launches-ai-verify-foundation-to-shape-the-future-of-international-ai-standards-through-collaboration

⁵³¹⁸ Infocomm Media Development Authority, *First of Its Kind Generative AI Evaluation Sandbox for Trusted AI by AI Verify Foundation and IMDA* (Oct. 31, 2023), https://www.imda.gov.sg/resources/press-releases-factsheets-and-speeches/press-releases/2023/generative-ai-evaluation-sandbox

⁵³¹⁹ Infocomm Media Development Authority, *Singapore Proposes Framework to Foster Trusted Generative AI Development* (Jan. 16, 2024), https://www.imda.gov.sg/resources/press-releases-factsheets-and-speeches/press-releases/2024/public-consult-model-ai-governance-framework-genai

⁵³²⁰ Infocomm Media Development Authority, *Model AI Governance Framework (Gen AI) and AI Governance Playbook for Digital Forum of Small States (Digital FOSS)* (May 30, 2024),

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In February 2024, IMDA and Enterprise Singapore launched the Gen AI Sandbox for small and medium-sized enterprises (SMEs), to enable local SMEs greater access to Gen AI. Singapore also launched an open-source tool designed to address the security and safety challenges experienced in the use of LLMs. The tool facilitates the evaluation of these applications throughout their lifecycle and stages of use. Singapore launched to enable local SMEs

The Cyber Security Agency of Singapore (CSA) developed Guidelines on Securing AI Systems in 2024 to help system owners adopt a proactive approach to secure AI throughout the lifecycle. The CSA focused on traditional cybersecurity risks and AI-specific threats. The CSA also published a practical guide that provides specific security measures and industry-prescribed best practices as a companion to the securing AI systems. S324

The PDPC published the Advisory Guidelines on use of Personal Data in AI Recommendation and Decision Systems in March 2024. The Guidelines aim to provide (1) certainty by clarifying how the Personal Data Protection Act (PDPA) applies when organizations use personal data to develop and train AI systems and (2) assurance to consumers by setting out baseline guidance and best practices for organizations on how to be transparent about whether and how their AI systems use personal data to make recommendations, predictions, or decisions.

In the financial services sector, in 2018, the Monetary Authority of Singapore (MAS) and the financial industry co-created a set of principles to guide the responsible use of AI, focusing on Fairness, Ethics, Accountability, and

 $\underline{https://www.imda.gov.sg/resources/press-releases-factsheets-and-speeches/factsheets/2024/genai-and-digital-foss-ai-governance-playbook}$

⁵³²¹ Infocomm Media Development Authority, *Singapore's First Generative AI Sandbox to Familiarise and Help SMEs Get Head Start in Capturing New AI Opportunities* (Feb. 7, 2024), https://www.imda.gov.sg/resources/press-releases-factsheets-and-speeches/press-releases/2024/sg-first-genai-sandbox-for-smes

⁵³²³ Cyber Security Agency of Singapore, *Guidelines and Companion Guide on Securing AI Systems* (Oct. 15, 2024), https://www.csa.gov.sg/Tips-Resource/publications/2024/guidelines-on-securing-ai

5324 Cyber Security Agency of Singapore, *Companion Guide on Securing AI Systems* (Oct. 2024), https://www.csa.gov.sg/docs/default-source/publications/2024/companion-guide-on-securing-ai-systems 2024-10-15.pdf?sfvrsn=cfadadf0 1

⁵³²² Infocomm Media Development Authority, Singapore Launches Project Moonshot – A Generative Artificial Intelligence Testing Toolkit to Address LLM Safety and Security Challenges (May 31, 2024), https://www.imda.gov.sg/resources/press-releases-factsheets-and-speeches/press-releases/2024/sg-launches-project-moonshot

Fersonal Data Protection Commission, *Advisory Guidelines on Use of Personal Data in AI Recommendation and Decision Systems Now Available* (Mar. 2024), https://www.pdpc.gov.sg/news-and-events/announcements/2024/03/advisory-guidelines-on-use-of-personal-data-in-ai-recommendation-and-decision-systems-now-available

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Transparency (FEAT).⁵³²⁶ The principles established a standard across the financial sector in Singapore. Subsequently in November 2019, the MAS announced that it had partnered the financial industry to create a framework for the responsible use of AI and Data Analytics (AIDA), known as Veritas. 5327 Veritas aims to provide financial institutions with a verifiable way to incorporate the FEAT principles into their AIDA solutions, and will comprise open source tools that can be applied to different business lines. 5328 The FEAT principles and Veritas are part of Singapore's National AI Strategy. 5329

In the health sector, in October 2021, the Ministry of Health (MOH) published the Artificial Intelligence in Healthcare Guidelines (AIHGle), which it co-developed together with the Health Sciences Authority (HSA) and the Integrated Health Information Systems (IHiS), now known as Synapxe. AIHGle aims to share good practices with AI developers (e.g., manufacturers, companies) and AI implementors (e.g., healthcare institutions: hospitals, clinics, laboratories), and complements the existing HSA regulatory requirements of AI Medical Devices. 5330

Public Participation

"The formation of the Advisory Council [on the Ethical Use of AI and Data] is one of three structured, interlinked initiatives to support the engagement of stakeholders to collaboratively develop a trusted and vibrant AI ecosystem and position Singapore as a leading hub for AI."5331 The Council assists the IMDA in engaging stakeholders on issues that support the development of AI governance capabilities and frameworks, including engaging ethics boards of commercial enterprises on ethical and related issues arising from private sector use of AI and data, consumer representatives on consumer expectations and acceptance of the

⁵³²⁶ Monetary Authority of Singapore, *Principles to Promote Fairness*, *Ethics, Accountability* and Transparency (FEAT) in the Use of Artificial Intelligence and Data Analytics in Singapore's Financial Sector (2018)

https://www.mas.gov.sg/~/media/MAS/News%20and%20Publications/Monographs%20and%20I nformation%20Papers/FEAT%20Principles%20Final.pdf

⁵³²⁷ Monetary Authority of Singapore, MAS Partners Financial Industry to Create Framework for Responsible Use of AI (Nov. 13, 2019), https://www.mas.gov.sg/news/media $releases/2019/mas-partners-financia \underline{l-industry-to-create-framework-for-responsible-use-of-ai}$ ⁵³²⁸ Ibid

⁵³²⁹ Ibid

⁵³³⁰ Ministry of Health, Emerging Regulatory Policy Issues: Artificial Intelligence (Feb. 6, 2025), https://www.moh.gov.sg/licensing-and-regulation/artificial-intelligence-in-healthcare

⁵³³¹ Infocomm Media Development Authority, Speech by Mr. S. Iswaran, Minister for Communications and Information, at AI Singapore's 1st Year Anniversary Event (Aug. 30, 2018), https://www.imda.gov.sg/resources/press-releases-factsheets-andspeeches/speeches/2018/ai-singapore-1st-year-anniversary-event

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use of AI, and members of the private capital community on the need to incorporate ethical considerations in their investment decisions into businesses which develop or adopt AI. 5332

Public consultations were also held for the initial version of Singapore's Model AI Governance Framework⁵³³³, AI Verify, the draft Model AI Governance Framework for Generative AI, and the Advisory Guidelines on use of Personal Data in AI Recommendation and Decision Systems.

ISAGO and its Compendium of Use Cases were developed in close consultation with the industry, with contributions from over 60 organizations, as well as input from the Council.⁵³³⁴ Likewise, more than 30 authors from the public and private sectors contributed to the AI E&G BoK, which contains 25 case studies/use-cases.⁵³³⁵

The Smart Nation and Digital Government Office (SNDGO), under the Prime Minister's Office (PMO), publicizes information about key Smart Nation projects and government digital transformation on its website.⁵³³⁶ The website includes a page with information for companies, researchers, and others to "be part our AI journey."⁵³³⁷

Data Protection

The Personal Data Protection Act (PDPA) was enacted in 2012. It entered into force in stages, with the main data protection rules coming into force in July

https://www.smartnation.gov.sg/initiatives/digital-government-services/

⁵³³⁷ Smart Nation Singapore, Be Part of Our AI Journey,

https://www.smartnation.gov.sg/nais/contribute/

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⁵³³² Infocomm Media Development Authority, *Speech by Mr. S. Iswaran, Minister for Communications and Information, at AI Singapore's 1st Year Anniversary Event* (Aug. 30, 2018), https://www.imda.gov.sg/resources/press-releases-factsheets-and-speeches/2018/ai-singapore-1st-year-anniversary-event

⁵³³³ Personal Data Protection Commission, *A Proposed Model AI Governance Framework for Public Consultation* (Jan. 23, 2019), https://www.pdpc.gov.sg/news-and-events/announcements/2019/01/a-proposed-model-ai-governance-framework-for-public-consultation

⁵³³⁴ Ministry of Communications and Information, *MCI Response to PQ on the Work of the Advisory Council on the Ethical Use of AI and Data*, Ministry of Digital Development and Information (Feb. 3, 2020), https://www.mddi.gov.sg/media-centre/parliamentary-questions/mci-response-to-pq-on-the-advisory-council-use-of-ai-and-data/; Infocomm Media Development Authority, *Singapore and World Economic Forum Driving AI Adoption and Innovation* (Jan. 22, 2020), https://www.scs.org.sg/bok/ai-ethics?document=about

⁵³³⁶ Smart Nation Singapore, Digital Government Services,

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2012. A suite of amendments to the PDPA was passed in November 2020. They started taking effect in phases from February 2021.

The PDPA governs the collection, use, disclosure, and care of personal data in Singapore. It provides a baseline standard of protection for personal data. Singapore is sectoral laws and regulations such as the Banking Act and Insurance Act. The PDPA recognizes both the right of individuals to protect their personal data and the need of organizations to collect, use, or disclose personal data for "legitimate and reasonable purposes." The law aims to strengthen Singapore's position as a trusted hub for businesses by regulating the flow of personal data among organizations.

The PDPA applies to private sector organizations.⁵³⁴¹ Data management in the public sector is governed by the Public Sector (Governance) Act and the Government Instruction Manual on Infocomm Technology & Smart Systems Management.⁵³⁴²

The Personal Data Protection Commission was established in January 2013 to administer and enforce the PDPA.⁵³⁴³ The PDPC is currently part of the IMDA.⁵³⁴⁴ The functions of the Commission include administering and enforcing the PDPA, providing information to individuals, businesses, and data-protection professionals about their rights and obligations, and representing the Government internationally on matters relating to data protection.

In its 2018 "Discussion Paper on Artificial Intelligence (AI) and Personal Data—Fostering Responsible Development and Adoption of AI", the PDPC noted that "[t]he benefits and risks of AI have been the subject of great public debate. On the one hand, AI has the ability to boost productivity, transform businesses, grow the economy and enhance people's lives. On the other hand, AI may displace jobs and pose ethical challenges such as social profiling." The PDPC

⁵³⁴¹ Ministry of Digital Development and Information, *Government's Personal Data Protection Laws and Policies* (Feb. 21, 2025), <a href="https://www.mddi.gov.sg/gov-personal-data-protection-laws-and-policies/gov-personal-data-protection-gov-personal-data-protection-gov-personal-data-protection-gov-personal-data-protection-gov-personal-data-protection-gov-personal-data-protection-gov-personal-data-protection-gov-personal-data-protection-gov-personal-data-protection-gov-personal-data-protection-gov-personal-data-protection-gov-personal-data-protection-gov-personal-data-protection-gov-personal-data-protection-gov-personal-data-protection-gov-personal-data-protection-gov-personal-data-protection-gov-personal-data-protection-gov-personal-data-protection-gov-personal-data-personal-

⁵³³⁸ Personal Data Protection Commission, *PDPA Overview* (Nov. 3, 2023), https://www.pdpc.gov.sg/Overview-of-PDPA/The-Legislation/Personal-Data-Protection-Act ⁵³³⁹ Ibid

⁵³⁴⁰ Ibid

⁵³⁴² Ibid

⁵³⁴³ Personal Data Protection Commission, *PDPA Overview* (Nov. 3, 2023), https://www.pdpc.gov.sg/Overview-of-PDPA/The-Legislation/Personal-Data-Protection-Act https://www.imda.gov.sg/about-imda/data-protection/personal-data-protection

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recommended for AI systems to be human-centric, and for decisions to be made by or with the assistance of AI should be explainable, transparent, and fair. 5345

Singapore shares publicly available datasets⁵³⁴⁶ from 70 public agencies, API libraries, and resources for application developers using these data sets. On the commercial side, the IMDA introduced a Trusted Data Sharing Framework⁵³⁴⁷ as a guide to establishing safeguards and baseline "common data sharing language" and a systematic approach to understanding the broad considerations for establishing trusted data sharing partnerships. A Data Regulatory Sandbox⁵³⁴⁸ is offered to businesses to pilot innovative use of data in a safe environment, in consultation with the IMDA and the PDPC. The IMDA also provides a Data Protection Trustmark (DPTM), a voluntary enterprise-wide certification for organizations to demonstrate accountable data protection practices.⁵³⁴⁹

The PDPC is not a member of the Global Privacy Assembly (GPA), but IMDA and the PDPC have previously participated in the GPA as non-members. ⁵³⁵⁰ Singapore did not endorse the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence, ⁵³⁵¹ the 2020 GPA Resolution on AI

Organisation/AI/Discussion-Paper-on-AI-and-PD---050618.pdf

https://www.imda.gov.sg/programme-listing/data-protection-trustmark-certification Global Privacy Assembly, *List of Observers* (2023),

https://globalprivacyassembly.org/participation-in-the-assembly/list-of-observers/
5351 Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

⁵³⁴⁵ Personal Data Protection Commission, *Discussion Paper on Artificial Intelligence (AI) and Personal Data—Fostering Responsible Development and Adoption of AI* (Jun. 5, 2018), https://www.pdpc.gov.sg/-/media/Files/PDPC/PDF-Files/Resource-for-

⁵³⁴⁶ Smart Nation Singapore, *Resources for Developers, Data Resources & APIs* (Feb. 21, 2025), https://www.smartnation.gov.sg/resources/for-developers/

⁵³⁴⁷ IMDA and PDPC, Trusted Data Sharing Framework (2019)

 $[\]frac{https://www.imda.gov.sg/-/media/Imda/Files/Programme/AI-Data-Innovation/Trusted-Data-Sharing-Framework.pdf}{}$

⁵³⁴⁸ IMDA, *Data Regulatory Sandbox* (Aug. 3, 2023), https://www.imda.gov.sg/how-we-can-help/data-innovation/data-regulatory-sandbox

⁵³⁴⁹ IMDA, Data Protection Trustmark Certification (May 17, 2024),

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Accountability, 5352 the 2022 GPA Resolution on Facial Recognition Technology, 5353 and the 2023 GPA resolution on Generative AI Systems. 5354

Algorithmic Transparency

Singapore does not have a legally binding guarantee of algorithmic transparency. Singapore released advisory guidelines on the use of personal data in AI recommendation and decision systems, setting out accepted AI data practices in March 2024. The guidelines encourage service providers to adopt standards of record maintenance, data mapping, and labelling. The guidelines clarify when organizations can use personal data to develop and deploy machine learning models, emphasizing meaningful consent and identifying particular exceptions. Organizations must also communicate the "policies about safeguards and practices they put in place to ensure that AI systems are trustworthy." However, the document specifies "These Guidelines are advisory in nature, are not legally binding on the Commission or on any other party, and do not constitute legal advice" and do not modify any laws such as the PDPA. 5357

AI-Assisted Surveillance

Statutes in Singapore deal with aspects of privacy, but there is no discrete right to privacy protected under Singapore's Constitution. 5358 Singapore has not

⁵³⁵² Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

⁵³⁵³ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

Global Privacy Assembly, *Resolution on Generative AI Systems* (Oct 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁵³⁵⁵ Singapore's Personal Data Protection Commission, *Advisory Guidelines on Use of Personal Data in AI Recommendation and Decision Systems* (Mar.1, 2024), https://www.pdpc.gov.sg/-/media/files/pdpc/pdf-files/advisory-guidelines/advisory-guidelines-on-the-use-of-personal-data-in-ai-recommendation-and-decision-systems.pdf

⁵³⁵⁶ Ibid, p. 3

⁵³⁵⁷ Ibid, p. 4

⁵³⁵⁸ Bellingham v Reed [2021] SGHC 125 at [72]. See also Privacy International, *Universal Periodic Review, Stakeholder Report: 24th Session, Singapore, The Right to Privacy in Singapore* (2015), https://privacyinternational.org/sites/default/files/2017-2016.

^{12/}Singapore UPR PI submission FINAL.pdf

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ratified the International Covenant on Civil and Political Rights, 5359 which protects against arbitrary or unlawful interference with privacy, family, home, or correspondence. Government agencies are not permitted to access data held by the private sector except where the access has been authorized by law or by a court order. 5360 If a person believes that their personal data has been accessed unlawfully by any government agency, they can apply to the court for a judicial review of the agency's decisions or actions. 5361 The court may make a Mandatory Order obliging the government agency to exercise its duties, perform specific acts, or consider exercising a discretionary power as required by law; or a Prohibiting Order, an injunctive order directed at a prospective act or decision that would be unlawful; or a Quashing Order that quashes or sets aside illegal decisions or acts. 5362

The Public Order Act⁵³⁶³ definition of assembly and its requirements for a permit for such assembly has recently extended to online conferences. The government's use of online surveillance tools and power to act without the need for legal authorization is a matter of concern regarding citizens' ability to exercise their rights of freedom of speech, expression, and assembly.

Singapore launched SingPass in 2003. The National Digital Identity initiative⁵³⁶⁴ is a personal authentication system that allows users to access various Government services. It is a move to digitalize all transactions in public and private spaces and share data. The app offers users an option to use a 6-digit passcode or options for biometrics such as fingerprint or face recognition.

Singapore introduced TraceTogether, 5365 a COVID-19 contact tracing application in 2020, advising users that data would "never be accessed unless the user tests positive" for the virus. In January 2021, the Minister of State for Home Affairs clarified that under the Criminal Procedure Code, the Singapore Police Force can order anyone to produce data for the purpose of a criminal investigation,

5362 Ibid

⁵³⁵⁹ UN Human Rights Council, *Universal Periodic Review – Singapore, Outcome of the Review,* Second Cycle (2015), https://sso.agc.gov.sg/Acts-Supp/18-2019/Published/20190625?DocDate=20190625

⁵³⁶⁰ See for example section 20 of the Criminal Procedure Code 2010

⁵³⁶¹ Attorney-General's Chambers, Media Fact Sheet: Judicial Review Proceedings (May 31, 2012), https://www.agc.gov.sg/docs/default-source/newsroom-doucments/mediareleases/2012/mediafactsheetonjudicialreviewproceedings 31may2012.pdf

⁵³⁶³ Singapore Statutes Online, Public Order Act 2009, 2020 Revised Edition (Dec. 31, 2021), https://sso.agc.gov.sg/act/poa2009

⁵³⁶⁴ GovTech Singapore, *Digital Identity* (Feb. 21, 2025), https://www.tech.gov.sg/our-digitalgovernment-efforts/digital-identity/

⁵³⁶⁵ Alicia Wee and Mark Findlay, AI and Data Use: Surveillance Technology and Community Disquiet in the Age of COVID-19, SMU Centre for AI & Data Governance Research Paper No 2020/10 (Nov. 17, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3715993

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including TraceTogether data.⁵³⁶⁶ The COVID-19 (Temporary Measures) (Amendment) Bill, which restricted the use of personal contact tracing data in criminal investigations to only serious crimes such as murder and terrorism, was passed in Parliament in February 2021.⁵³⁶⁷

According to the Singapore government, TraceTogether's technical design precludes its use as a surveillance tool. The Singapore government has explained that the data is always stored in a device in an encrypted form and is automatically deleted after 25 days. Data is only extracted when the person tests positive for COVID-19 and upon request by the health authorities to upload the data for contact-tracing purposes. The Singapore government has explained that the data is always stored in a device in an encrypted form and is automatically deleted after 25 days.

The Ministry of Health announced in February 2023 that the use of contact tracing systems including TraceTogether were being stepped down due to COVID-19 measures being eased.⁵³⁷¹ As of February 1, 2024, the government deleted all COVID-19 contact-tracing data collected through the TraceTogether and SafeEntry programs, except one set of data related to a murder case.⁵³⁷²

Facial Recognition

In August 2021, the Minister of State for Home Affairs advised that Singapore aims to have more than 200,000 police cameras by 2030, more than doubling current use. 5373 Police started trialing patrol robots for surveillance, to

Mission-to-the-UN/2021/09/Letter-SR-Right-to-Privacy-Umej-Bhatia-14-Sep-2021

⁵³⁷⁰ Ibid

⁵³⁶⁶ Smart Nation Singapore, *Clarification on the Usage of TraceTogether Data* (Jan. 5, 2021), https://www.smartnation.gov.sg/media-hub/parliament/20210105/; Tham Yuen-C, *Police Can Use TraceTogether Data for Criminal Investigations* (Jan. 5, 2021),

 $[\]underline{\text{https://www.straitstimes.com/singapore/politics/police-can-use-tracetogether-data-for-criminal-investigations-0}$

⁵³⁶⁷ Kenny Chee, *Bill Limiting Police Use of TraceTogether Data to Serious Crimes Passed*, The Straits Times, (Feb. 2, 2021), https://www.straitstimes.com/singapore/politics/bill-limiting-use-of-tracetogether-for-serious-crimes-passed-with-govt-assurances

Figure 157 Serious erints passed with gove assurances 5368 Ministry of Foreign Affairs Singapore, Singapore's Reply to the Letter from Special Rapporteur on the Right to Privacy Professor Joseph Cannataci on the Thematic Report on the Management of Pandemics with the Respect to the Right to Privacy (Sept. 14, 2021), https://www.mfa.gov.sg/Overseas-Mission/Geneva-UN/Speeches-and-Statements--Permanent-

⁵³⁶⁹ Ibid

⁵³⁷¹ The Straits Times, *TraceTogether Users Can Uninstall App, Return Tokens at CCs from Feb 13* (Feb. 9, 2023), https://www.straitstimes.com/singapore/health/tracetogether-safeentry-to-be-stepped-down-data-deleted

⁵³⁷² Smart Nation Singapore, *Discontinuation of TraceTogether and SafeEntry* (Feb. 5, 2024), https://www.smartnation.gov.sg/media-hub/press-releases/20240105/

⁵³⁷³ Reuters, *Singapore to Double Police Cameras to More Than 200,000 over Next Decade* (Aug. 4, 2021), https://www.reuters.com/world/asia-pacific/singapore-double-police-cameras-more-than-200000-over-next-decade-2021-08-04/

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detect "undesirable social behaviors" and displaying messages to educate the public on proper behavior the following month. 5374

In May 2022, the PDPC issued the Guide on Responsible Use of Biometric Data in Security Applications to help organizations such as Management Corporation Strata Title (MCST), building/premise owners, and security services companies, to ensure the responsible use of security cameras and biometric recognition systems to safeguard individuals' biometric data where it is collected, used or disclosed.⁵³⁷⁵

Singapore utilizes ABBSS (Automated Biometrics & Behavioral Screening Suite) at immigration and border checkpoints. The system is a network of cameras with facial-recognition capabilities that can also be deployed as a bodyworn cameras for officers. The system is used both to build a biometrics database of travelers and detect travelers wanted for various offenses.⁵³⁷⁶

By 2025, Singapore plans to establish a fully automated immigration clearance system for all travelers, including first-time social visitors. 5377 The plans include AI for retinal and face-recognition procedures, which could potentially remove the need for passports. Singapore passed the Immigration (Amendment) Bill in September 2023, authorizing the disclosure of passenger information to airport operators to facilitate end-to-end biometric clearance. 5378

Online Disinformation

The Protection from Online Falsehoods and Manipulation Act⁵³⁷⁹ was introduced in 2019. Its aim is "to prevent the electronic communication in Singapore of false statements of fact, to suppress support for and counteract the

⁵³⁷⁴ Reuters, Singapore Trials Patrol Robots to Deter Bad Social Behavior (Sept. 6, 2021), https://www.reuters.com/technology/singapore-trials-patrol-robots-deter-bad-social-behaviour-2021-09-06/; Agence France Press, "Dystopian world": Singapore Patrol Robots Stoke Fears of Surveillance State (Oct. 6, 2021), https://www.theguardian.com/world/2021/oct/06/dystopianworld-singapore-patrol-robots-stoke-fears-of-surveillance-state

⁵³⁷⁵ PDPC, Guide on the Responsible Use of Biometric Data in Security Applications (May 2022), https://www.pdpc.gov.sg/help-and-resources/2022/05/guide-on-the-responsible-use-ofbiometric-data-in-security-applications

⁵³⁷⁶ Cara Wong, Facial Recognition, Biometrics Tech at More Checkpoints: ICA, The Strait Times (Nov. 13, 2018), https://www.straitstimes.com/singapore/facial-recognition-biometricstech-at-more-checkpoints-ica

⁵³⁷⁷ Yip Wai Yee, All Immigration Checkpoints to Have Fingerprint and Face Scans by 2025 as Part of Singapore's AI Push, The Straits Times (Nov. 15, 2019),

https://www.straitstimes.com/singapore/fingerprint-and-face-scans-at-all-immigrationcheckpoints-by-2025-as-part-of-singapores-ai

⁵³⁷⁸ Singapore Statutes Online, *Immigration (Amendment) Act 2023, No. 31 of 2023*, (Oct. 20, 2023), https://sso.agc.gov.sg/Acts-Supp/31-2023/Publish ed/20231030?DocDate=20231030 5379 Singapore Statutes Online, Protection from Online Falsehoods and Manipulation Act 2019 https://sso.agc.gov.sg/Acts-Supp/18-2019/Published/20190625?DocDate=20190625

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effects of such communication, to safeguard against the use of online accounts for such communication and for information manipulation, to enable measures to be taken to enhance transparency of online political advertisements, and for related matters."5380 The law applies to digital content that is accessible in Singapore, whether it is an online post, text, or chat message by a person or a bot. The law does not clearly define what is meant by "falsehood" and gives power to any government minister to declare that information posted online is "false" and instruct the correction or removal of such content if they think it is in the public interest to remove it.11 A person found guilty of the offense can be fined or imprisoned.

In October 2021, Singapore Parliament passed the Foreign Interference (Countermeasures) Bill (FICA). 5381 "The legislation provides measures to prevent, detect and disrupt foreign interference in our domestic politics conducted through (i) hostile information campaigns (HICs) and (ii) the use of local proxies." Among the tools and tactics used by these "hostile foreign actors" "to interfere in domestic political discourse, incite social tensions and undermine our sovereignty," the act mentions: "Using bots on social media platforms or taking out advertisements to artificially boost the reach of these messages," "Using inauthentic accounts and bots in combination to engineer an artificial sense that there is strong public support or opposition to a certain position or sentiment," "Inciting other users to 'troll,' harass or intimidate a particular target."5382

The Bill was adopted after a 10-hour debate and concerns were raised over the lack of public consultation.⁵³⁸³ Under the new law, the Minister for Home Affairs is granted powers to issue directions to the Internet and social media service providers and website operators to provide user information, block content, and remove applications. Authorities can also require politically significant persons to declare foreign affiliations. Recipients of directions or declarations may apply to the Minister for Home Affairs to vary or cancel the direction or declaration. If their application is refused, they may appeal to an

⁵³⁸⁰ Ibid., Introductory section.

⁵³⁸¹ https://www.mha.gov.sg/mediaroom/press-releases/hic-provisions-of-the-foreigninterference-countermeasures-act-to-take-effect-from-7-july-2022/

⁵³⁸² Ministry of Hime Affairs, HIC Provisions of the Foreign Interference (Countermeasures) Act to Take Effect from 7 July 2022 (July 6, 2022), https://www.mha.gov.sg/mediaroom/pressreleases/hic-provisions-of-the-foreign-interference-countermeasures-act-to-take-effect-from-7iuly-2022/

⁵³⁸³ Vanessa Lim, Ang Hwee Min, and Jalelah Abu Baker, Parliament passes Bill to deal with foreign interference after 10-hour debate, Channel News Asia (CAN) (Oct. 5, 2021), https://www.channelnewsasia.com/singapore/fica-parliament-singapore-foreign-interferencecountermeasures-bill-2221236

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independent Reviewing Tribunal chaired by a sitting Supreme Court Judge to overrule the Minister. 5384

The Ministry of Digital Development and Information in Singapore, in October 2024, introduced the Election (Integrity of Online Advertising) (Amendment Bill) to address the use of generative AI in elections. The bill, which received legislative consideration, seeks to protect election integrity in Singapore by regulating digitally manipulated online election advertising, particularly audio-fakes and Al-generated images of untrue and misrepresented events. The bill is set to tackle disinformation in election content while preserving normal online discourse by excluding private chats and entertainment content. The Prime Minister issued a notification that the Elections (Integrity of Online Advertising) (Amendment) Act 2024 would commence in January 2025. 5387

Harmful Content

The Ministry of Communications and Information tabled the Online Safety (Miscellaneous Amendments) Bill for its first reading in Parliament in October 2022. The Parliament passed the Online Safety Bill in November 2022⁵³⁸⁸ and the Act came into effect on February 1, 2023.⁵³⁸⁹

The aim of the Act is to enhance the safety of online users, particularly children, and to curb the spread of harmful content on Online Communication Services accessible to users in Singapore. 5390 The Act covers online

⁵³⁸⁴ Ministry of Home Affairs, Introduction to Foreign Interference (Countermeasures) Act (FICA), https://www.mha.gov.sg/fica

 $\underline{\text{https://www.mddi.gov.sg/opening-speech-by-minister-josephine-teo-at-the-second-reading-of-the-eliona-bill/}$

5386 Singapore Parliament, *Elections (Integrity of Online Advertising Amendment Bill)* (Sept. 9, 2024), https://www.parliament.gov.sg/docs/default-source/bills-introduced/elections-(integrity-of-online-advertising)-(amendment)-bill-29-2024.pdf?sfvrsn=2a3f5708

⁵³⁸⁷ Leo Yip, Permanent Secretary, Prime Minister's Office, No. S 47, Elections (Integrity of Online Advertising) (Amendment) Act 2024 (Commencement) Notification 2025 (Jan. 16, 2025), https://sso.agc.gov.sg/SL/S47-2025?DocDate=20250120

⁵³⁸⁸ Singapore Parliament, *Bills Introduced: Online Safety (Miscellaneous Amendments) Bill* (Nov. 9, 2022), https://www.parliament.gov.sg/docs/default-source/default-document-library/online-safety-(miscellaneous-amendments)-bill-28-2022.pdf

⁵³⁸⁹ Ministry of Digital Development and Information, Online Safety (Miscellaneous Amendments) Act Takes Effect on 1 February 2023 (Jan. 31, 2023),

 $\underline{https://www.mddi.gov.sg/media-centre/press-releases/online-safety-act-takes-effect-on-1-\underline{february-2023}}$

⁵³⁹⁰ Ministry of Digital Development and Information, *First Reading of Online Safety (Miscellaneous Amendments) Bill* (Oct. 3, 2022), https://www.mddi.gov.sg/media-centre/press-releases/first-reading-of-online-safety-bill/

⁵³⁸⁵ Ministry of Digital Development and Information, *Opening Speech by Minister Josephine Teo at the Second Reading of the ELIONA Bill* (Oct. 15, 2024)

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communication services "generated by a machine." Harmful content includes sexual content, violent content, suicide and self-harm content; cyberbullying content; content endangering public health; and content facilitating vice and organized crime. Designated providers of such Online Communication Services will have to comply with Codes of Practice issued by the IMDA. The IMDA issued the Code of Practice for Online Safety in July 2023, meant to enhance online safety and "curb the spread of harmful content" with "additional protection for children." The Online Safety Code establishes processes for managing harmful content, provides tools for users, applies age-based policies, and puts forth a plan for annual online safety reporting. The first annual report is expected to be published on IMDA's website in 2024. Sages

The Online Criminal Harms Act (OCHA) was passed in July 2023 and came into effect on February 1, 2024. The OCHA enables the Singapore government to deal more effectively with online activities that are criminal in nature, for example scams and online child sexual exploitation. 5395

Environmental Impact of AI

Singapore launched a Green Data Centre (DC) Roadmap that charts a sustainable pathway for the continued growth of DCs in Singapore in May 2024. ⁵³⁹⁶ To support ambitions for the digital economy, where macro-trends such as increased use of AI, autonomous and robotic systems, and immersive virtual interactions are expected to propel demand for compute resources, the Roadmap aims to provide at

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https://www.parliament.gov.sg/docs/default-source/default-document-library/online-safety-(miscellaneous-amendments)-bill-28-2022.pdf

⁵³⁹¹ Singapore Parliament, *Online Safety (Miscellaneous Amendments) Bill, 2D (2), Meaning of "Provider" of Online Communication Service* (Nov. 9, 2022), https://www.parliament.gov.sg/docs/default-source/default-document-library/online-safety-

⁵³⁹² Ministry of Digital Development and Information, *First Reading of Online Safety* (*Miscellaneous Amendments*) *Bill* (Oct. 3, 2022), https://www.mddi.gov.sg/media-centre/press-releases/first-reading-of-online-safety-bill/

⁵³⁹³ Infocom Media Development Authority, *Code of Practice for Online Safety* (Jul. 18, 2023) https://www.imda.gov.sg/-/media/imda/files/regulations-and-licensing/regulations/codes-of-practice/codes-of-practice-media/code-of-practice-for-online-safety.pdf

⁵³⁹⁴ Ministry of Home Affairs, Commencement of the Online Criminal Harms Act (OCHA) on 1 February 2024 (Jan. 30, 2024), https://www.mha.gov.sg/mediaroom/press-releases/commencement-of-the-online-criminal-harms-act-ocha-on-1-february-2024/

⁵³⁹⁵ Ministry of Home Affairs, *Introduction of the Online Criminal Harms Bill* (May 8, 2023), https://www.mha.gov.sg/mediaroom/press-releases/introduction-of-the-online-criminal-harms-bill/

⁵³⁹⁶ Infocomm Media Development Authority, *Driving a Greener Digital Future: Singapore's Green Data Centre Roadmap* (2024), https://www.imda.gov.sg/-/media/imda/files/how-we-canhelp/green-dc-roadmap/green-dc-roadmap.pdf

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least 300 megawatts (MW) of additional capacity in the near term, with much more through green energy deployments.⁵³⁹⁷

The Roadmap outlines IMDA's plans to partner the industry to continue enhancing sustainability for DCs on two fronts:⁵³⁹⁸

- 1. Improving Energy Efficiency at Hardware and Software Levels by uplifting energy efficiency of all DCs in Singapore at the facility level, as well as by deploying energy-efficient IT equipment and optimizing operation of servers.
- 2. Accelerating DCs' Use of Green Energy by industry to deliver low-carbon energy sources.

Singapore hosted the Green Software Foundation Global Summit, a premier international initiative dedicated to reducing the carbon footprint of software development, in October 2024. Participants at the Summit discussed topics such as the role of government and industry in powering sustainable AI, how to make AI greener with open-source innovation, and the introduction of the Sustainable AI Innovation Centre (SAIIC) to drive sustainable practices in AI development. 5399

Lethal Autonomous Weapons

The Dutch Government organized the first global Summit on Responsible Artificial Intelligence in the Military Domain (REAIM) in The Hague in February 2023. Singapore endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023. 5400

Singapore co-hosted the Responsible AI in the Military Domain (REAIM) Regional Consultations for Asia in February 2024.⁵⁴⁰¹ Singapore endorsed the outcome document, the Blueprint for Action, of the REAIM 2024 Summit in

⁵³⁹⁷ Infocomm Media Development Authority, Charting Green Growth Pathways at Scale for Data Centres in Singapore (May 30, 2024), https://www.imda.gov.sg/resources/press-releasesfactsheets-and-speeches/factsheets/2024/charting-green-growth-for-data-centres-in-sg ⁵³⁹⁸ Ibid

⁵³⁹⁹ Infocomm Media Development Authority, *Green Software Foundation Global Summit 2024:* Singapore Edition (Oct. 9, 2024), https://www.imda.gov.sg/activities/activities-catalogue/gsfglobal-summit-2024-sg-edition

⁵⁴⁰⁰ US Department of State, Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy, endorsing States as of Feb. 12, 2024, https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligenceand-autonomy/

⁵⁴⁰¹ United Nations, Singapore's National Submission on The Topic of Lethal Autonomous Weapon Systems https://docs-library.unoda.org/General Assembly First Committee -Seventy-Ninth session (2024)/78-241-Singapore-EN.pdf.pdf

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Korea in September 2024.⁵⁴⁰² Endorsing signals Singapore's commitment to implementing the principles defined at the 2023 summit for action.⁵⁴⁰³

At the 78th UN General Assembly First Committee in 2023, Chile voted in favor⁵⁴⁰⁴ of resolution L.56⁵⁴⁰⁵ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems.

Singapore submitted its statement on the topic of lethal autonomous weapons systems as part of the 79th session of the UN General Assembly's First Committee in September 2024. In the submission, Singapore notes that its accession as a High Contracting Party to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects (CCW) in March 2024 underscores the commitment to the continued codification and progressive development of the rules of international law applicable in armed conflict. Singapore also reiterated support for the two-tier approach agreed in the GGE in 2023

In the report, Singapore shared the country's approach to the responsible development and use of AI in the military realm with details about the national principles on responsible military AI announced in 2021, after "several years of extensive consultations with defence technologists, military planners, international law experts, and policy professionals." The principles define four key areas of concern related to AI in the military domain:

a. "Responsible—First, the risk of emergent AI behavior must be addressed. AI systems must have well-defined intended uses, and both developers and users are responsible for the outcomes of AI systems.

https://www.reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163&shareBbsMngNo=10264&shareMenuId=11613&shareTabMenuId=

⁵⁴⁰² REAIM, Blueprint for Action (Sept. 11, 2024),

⁵⁴⁰³ MinDef, *Dr. Ng: Singapore Endorses REAIM Blueprint for Action* (Sept. 10, 2024), https://www.mindef.gov.sg/news-and-events/latest-releases/10sep24 nr

⁵⁴⁰⁴ Isabelle Jones, *164 States Vote against the Machine at the UN General Assembly*, Stop Killer Robots (Nov. 1, 2023), https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

⁵⁴⁰⁵ UN General Assembly, *Lethal Autonomous Weapons Systems, Resolution L56* (Oct. 12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

⁵⁴⁰⁶ United Nations Office of Disarmament Affairs, *Singapore's National Submission on the Topic of Lethal Autonomous Weapon Systems* (2024), https://docs-

<u>library.unoda.org/General_Assembly_First_Committee_-Seventy-Ninth_session_(2024)/78-241-Singapore-EN.pdf</u>

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- b. Reliable—Second, the risk of errors or inaccuracies in an AI system's output must be addressed. AI systems should be tested and assured to a level appropriate for their intended use. They should be designed to minimize unintended bias and produce consistent outputs.
- c. Robust—Third, the risks from the exploitation of AI by malicious actors must be addressed. AI systems should be designed with cyber and adversarial AI threats in mind. In order to address the 'black box effect,' their development process should be well-documented to support explainability.
- d. Safe—Fourth, we must focus on the risk of AI failure in safety-critical contexts. AI systems should be safe to use, not only in terms of the deployed platforms, but also the surrounding assets and personnel."⁵⁴⁰⁷

Human Rights

Singapore has endorsed the Universal Declaration of Human Rights. Singapore was party to four of the core human rights treaties as of 2021, arguing that "rights and a society's approach to them evolve over time as they change." The UN Human Rights Council Working Group consistently recommends that Singapore ratifies all international human rights treaties such as the International Covenant on Civil and Political Rights and the Optional Protocol to the Convention on the Elimination of All Forms of Discrimination against Women. 5409

Singapore has an Inter-Ministerial Committee on Human Rights but no national human rights institution. The Minister for Home Affairs K Shanmugam said in Parliament in March 2021 that "regardless of which community, what your social, religious or sexual beliefs are, everyone will be protected here." He said that action could be taken under the Maintenance of Religious Harmony Act to use religion to urge violence against any person or group, adding "LGBTQ persons, non-LGBTQ persons, we are all equal." 5411

The parliament voted to repeal a decades-old law criminalizing same-sex sexual relations in November 2022. However, lawmakers also voted to amend the constitution to preempt any changes to the legal definition of marriage as

⁵⁴⁰⁷ Ibid, pp. 2–3

⁵⁴⁰⁸ Human Rights Council, Working Group on the Universal Periodic Review, *National Report Submitted in Accordance with Paragraph 5 of the Annex to Human Rights Council Resolution 16/21, Singapore*, H. Human Rights treaties, p. 19 (Feb. 11, 2021), https://docs.un.org/en/A/HRC/WG.6/38/SGP/1

⁵⁴⁰⁹ Human Rights Council, *Report of the Working Group on the Universal Periodic Review, Singapore*, A/HRC/48/16, pp. 8–9 (Jul. 22, 2021), https://docs.un.org/en/A/HRC/48/16
⁵⁴¹⁰ Desmond Ang, https://www.mha.gov.sg/home-team-news/story/detail/mha-cos-2021-integrity-secularism-and-protections-under-the-law/5411 [bid

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exclusively between a man and a woman.⁵⁴¹² Apart from decriminalization, there are no legal protections against discrimination based on sexual orientation or gender identity.⁵⁴¹³

Singapore improved its Freedom House Score by 1 point from the previous year with a 2024 score of 48 out of 100, which continues to define Singapore as "partly free." 5414 In the context of political rights (electoral process, political pluralism and participation, functioning of government) Singapore scores 19 out of 40. When it comes to civil liberties (freedom of expression and belief, associational and organizational rights, rule of law, personal autonomy and individual rights) it reaches 29 out of 60. Singapore's "partly free" status was attributed primarily to State restrictions on the electoral process, civil liberties, and associational and organizational rights. According to Freedom House, "Singapore's parliamentary political system has been dominated by the ruling People's Action Party (PAP) and the family of current prime minister Lee Hsien Loong since 1959. The electoral and legal framework that the PAP has constructed allows for some political pluralism, but it constrains the growth of opposition parties and limits freedoms of expression, assembly, and association."5415

Al Safety Summit

Singapore participated in the AI Safety Summit organized by the UK at Bletchley Park in November 2023⁵⁴¹⁶ and signed the Bletchley Declaration, an international agreement on developing human-centric, trustworthy, safe, and responsible AI.5417 Singapore participated in the AI Seoul Summit, co-organized by the Republic of Korea (ROK) and the UK in May 2024. This meeting was a

⁵⁴¹² Freedom House, Freedom in the World 2023: Singapore (2023), https://freedomhouse.org/country/singapore/freed om-world/2023

⁵⁴¹³ Human Rights Watch, World Report 2020: Singapore (2020), https://www.hrw.org/worldreport/2020/country-chapters/singapore

⁵⁴¹⁴ Freedom House, Freedom in the World 2024: Singapore (2024), https://freedomhouse.org/country/singapore/freedom-world/2024

⁵⁴¹⁵ Ibid

⁵⁴¹⁶ Ministry of Foreign Affairs, *Prime Minister Lee Hsien Loong's Participation in the AI Safety* Summit, 2 November 2023 (Nov. 2, 2023), https://www.mfa.gov.sg/Newsroom/Press-Statements-Transcripts-and-Photos/2023/11/20231102---PM-AI-Summit

⁵⁴¹⁷ United Kingdom Department for Science, Innovation & Technology, *The Bletchley* Declaration by Countries Attending the AI Safety Summit (Nov. 1–2, 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchleydeclaration/the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

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continuation of the U.K.'s AI Safety Summit that builds upon the Bletchley Summit's commitment to AI safety. 5418

As part of the AI Seoul Safety Summit, Singapore was one of the 10 nations to launch the first international network of AI Safety Institutes to boost cooperation on AI.⁵⁴¹⁹ Singapore designated the Digital Trust Centre as the country's AI Safety Institute (AISI), which will work with other countries' AI Safety Institutes to collectively address AI safety research. Singapore is already in discussions with the U.S. and U.K. AISIs to explore collaborations in AI safety, particularly around Generative AI (GenAI) evaluations. The designation of the Singapore AISI is an extension of ongoing efforts, such as expanding AI Verify to test for GenAI safety, and working with like-minded international partners to exchange insights and best practices in AI safety.⁵⁴²⁰

Other International Cooperation on AI

NAIS 2.0 says that Singapore is committed to being a serious and reliable international partner on AI, and that Singapore will continue to contribute to international AI developments by anchoring key bilateral relationships with selected partners from government and industry, demonstrating alignment with key international fora and supporting worthwhile platforms, sharing Singapore's experience, and curating meaningful partnerships for capacity building.

During the inaugural Critical and Emerging Technologies (CET) Dialogue held in Washington, DC, in 2023, Singapore announced the development of an interoperability framework or "crosswalk"⁵⁴²¹ between the U.S. Artificial Intelligence Risk Management Framework (RMF 1.0) developed by the National Institute of Standards and Technology (NIST) and Singapore's AI Verify framework.⁵⁴²² The establishment of a bilateral AI Governance Group and further research and technical collaboration in AI were also announced, focusing on

⁵⁴¹⁸ Ministry of Foreign Affairs, *Prime Minister Lawrence Wong's Participation in the Artificial Intelligence Seoul Summit* (May 21, 2024), https://www.mfa.gov.sg/Newsroom/Press-Statements-Transcripts-and-Photos/2024/05/Artificial-Intelligence-Seoul-Summit

⁵⁴¹⁹ Government of the United Kingdom, Global Leaders Agree to Launch First International Network of AI Safety Institutes to Boost Cooperation of [sic] AI (May 21, 2024), https://www.gov.uk/government/news/global-leaders-agree-to-launch-first-international-network-of-ai-safety-institutes-to-boost-understanding-of-ai

⁵⁴²⁰ Infocomm Media Development Authority, *Digital Trust Centre Designated as Singapore's AI Safety Institute* (May 22, 2024), <u>imda-factsheet--digital-trust-centre-designated-as-spore-ai-safety-institute-22-may-2024.pdf</u>

AI Verify Foundation, Crosswalk, AI RMF (1.0) and AI Verify (2023),
 https://aiverifyfoundation.sg/downloads/AI RMF and AI Verify Crosswalk.pdf
 Ministry of Digital Development and Information, Singapore and the US to Deepen Cooperation in AI (Oct. 13, 2023), https://www.mddi.gov.sg/media-centre/press-releases/singapore-and-the-us-to-deepen-cooperation-in-ai/

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advancing "safe, trustworthy, and responsible AI innovation" as well as "safety and security including testing, validation, and certification."

Singapore is a contributing member of the Association of Southeast Asian Nations (ASEAN). During the 4th ASEAN Digital Ministers' Meeting (ADGMIN) in February 2024, the group issued the ASEAN Guide on AI Governance and Ethics, which seeks to establish common principles for trustworthy AI and suggests bests practices for how to implement trustworthy AI in the region. ⁵⁴²³

During the inaugural Singapore-China Digital Policy Dialogue (DPD) in June 2024, Singapore and China announced interest to foster bilateral discussions in enhancing mutual understanding of approaches to AI governance. Under the reporting of the work group for Artificial Intelligence Governance, both parties agreed to promote mutual learning across the private sector and research institutions in AI governance and to enhance mutual understanding of governance frameworks. 5424

Singapore has formed bilateral and multilateral treaties with other economies, called Digital Economy Agreements (DEAs), which establish digital trade rules and digital economy collaborations. Singapore has signed DEAs with Chile, New Zealand, Korea, Australia, and the UK. Some of these DEAS contain AI modules promoting the adoption of ethical governance frameworks for AI and, where appropriate, the alignment of governance and regulatory frameworks. For example, the Korea-Singapore Digital Partnership Agreement (KSDPA) contains a module requiring both countries to promote the adoption of AI governance and ethics frameworks that support the trusted, safe, and responsible use of AI-based technologies. Singapore Digital Partnership Agreement

The Statement of Intent (SOI) Singapore's Ministry of Defence (MinDef) and the United States Department of Defense signed regarding Data, Analytics and Artificial Intelligence Cooperation in July 2024 offers an example of bilateral

⁵⁴²³ Association of Southeast Asian Nations, *ASEAN Guide on AI Governance and Ethics* (Feb. 2024), https://asean.org/book/asean-guide-on-ai-governance-and-ethics/

⁵⁴²⁴ Ministry of Digital Development and Information, *Singapore and China Advance Cooperation at Inaugural Singapore China Digital Policy Dialogue* (Jun. 27, 2024), https://www.mddi.gov.sg/singapore-and-china-advance-cooperation-at-inaugural-singapore-china-digital-policy-dialogue

⁵⁴²⁵ Ministry of Trade and Industry, *Digital Economy Agreements* (Feb. 21, 2025), https://www.mti.gov.sg/Trade/Digital-Economy-Agreements

⁵⁴²⁶ Darren Grayson Chng & Joe Jones, *Global AI Governance Law and Policy: Singapore*, IAPP (Feb. 2024), https://iapp.org/resources/article/global-ai-governance-singapore

⁵⁴²⁷ Infocomm Media Development Authority, *The Korea-Singapore Digital Partnership Agreement Enters Into Force* (Jan. 13, 2023), https://www.imda.gov.sg/resources/press-releases-factsheets-and-speeches/press-releases/2023/the-korea-singapore-digital-partnership-agreement-enters-into-force

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agreements in defense. Under this SOI, both nations identified key areas of collaboration, such as quality data, the responsible development and use of AI, and talent management. The SOI is deemed as an important opportunity to deepen collaborative efforts, strengthen interoperability, and promote values-based global leadership on responsible AI in defense. 5428

Singapore and the United Kingdom signed a new Memorandum of Cooperation (MoC) to enhance the safety and reliability of AI technologies in its development and use in November 2024. The MoC builds upon the longstanding digital partnership between Singapore and the UK and aims to pave the way for greater public trust in AI advancements. ⁵⁴²⁹ This latest agreement aligns with the commitments made by the two countries at the AI Safety Summit held in the UK in November 2023, and the objectives of the international network of AI Safety Institutes to align their work on research, standards and testing. This agreement also builds on the Memorandum of Understanding on Emerging Technologies signed by both countries in June 2023, which included commitments to explore cooperation on AI. ⁵⁴³⁰

Singapore launched the AI Playbook for Small States in September 2024.⁵⁴³¹ Developed in collaboration with Rwanda's Ministry of ICT and Innovation, the Playbook outlines key issues and considerations for policymakers in the development, use, and governance of AI, from the perspective of small states to enable countries to achieve the UN Sustainable Development Goals (SDGs). An anthology of best practices from different Forum of Small States (FOSS) members and stakeholders complements the issues and considerations.⁵⁴³²

OECD / G20 AI Principles

Singapore is not a member of the OECD or the G20 but endorses the OECD AI Principles through membership in the Global Partnership on AI (GPAI). The OECD noted several significant examples of positive AI practices in

⁵⁴²⁸ U.S. Department of Defense, *United States and Singapore Sign SOI to Strengthen Data, Analytics and Artificial Intelligence Cooperation* (Jul. 15, 2024),

 $[\]frac{https://www.defense.gov/News/Releases/Release/Article/3839100/united-states-and-singapore-sign-soi-to-strengthen-data-analytics-and-artificia/$

⁵⁴²⁹ Ministry of Digital Development and Information, *New Singapore UK Agreement to Strengthen Global AI Safety and Governance* (Nov. 6, 2024), https://www.mddi.gov.sg/new-singapore-uk-agreement-to-strengthen-global-ai-safety-and-governance/

⁵⁴³¹ Infocomm Media Development Authority, *AI Playbook for Small States* (Sept. 22, 2024), https://www.imda.gov.sg/-/media/imda/files/news-and-events/media-room/media-releases/2024/09/ai-playbook-for-small-states/imda-ai-playbook-for-small-states.pdf

⁵⁴³² Infocomm Media Development Authority, *Digital Forum of Small States* (Sept. 22, 2024), https://www.imda.gov.sg/about-imda/international-relations/digital-forum-of-small-states

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Singapore.⁵⁴³³ For example, the Advisory Council on the Ethical Use of AI and Data, and the AI Governance Framework, which incorporates all the OECD AI Principles.

Singapore is a founding member of the GPAI.⁵⁴³⁴ The Centre for AI & Data Governance in Singapore was established to develop international thought leadership and advance scholarship and discourse on legal, ethical, regulatory, and policy issues arising from the use of AI and data and inform the implementation of the G20 AI Principles.

Council of Europe AI Treaty

Singapore is not a member state of the Council of Europe and has not signed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law.⁵⁴³⁵

UNESCO Recommendation on AI Ethics

Singapore was one of the 193 member states that adopted the UNESCO Recommendation on the Ethics of Artificial Intelligence at the General Conference in November 2021. Since the adoption, Singapore has yet to make official announcements concerning the implementation of the UNESCO Recommendation on the Ethics of AI, such as initiating the Readiness Assessment Methodology (RAM).

Evaluation

Singapore is one of the leaders in providing guidance for the ethical development of AI, providing regulatory sandboxes for testing responsible practices, and developing risk-based governance frameworks. The country has focused on the voluntary adoption of these methods for both public and private use cases and has not passed legislation to regulate artificial intelligence. Singapore's data protection agency has significant responsibilities for data protection and a growing role in AI policy. Questions do remain about independent oversight of government AI systems.

⁵⁴³³ OECD G20 Digital Economy Task Force, Saudi Arabia 2020, *Examples of AI National Policies* (2020), https://www.mcit.gov.sa/sites/default/files/examples-of-ai-national-policies.pdf Global Partnership on Artificial Intelligence, *Community* (2024), https://gpai.ai/community/5435 Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Nov. 12, 2024) https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

⁵⁴³⁶ UNESCO, *UNESCO Member States Adopt the First Ever Global Agreement on the Ethics of Artificial Intelligence* (Nov. 25, 2021), https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence

⁵⁴³⁷ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

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Singapore has embarked on extensive international efforts to collaborate with countries bilaterally and multilaterally, and has contributed to many international events, summits, and conferences to build thought leadership and demonstrate its alignment as an advanced, responsible, and leading nation on AI. While Singapore has adopted the UNESCO Recommendation on the Ethics of AI, it has yet to make public announcements concerning the implementation of the UNESCO Recommendation.

Concerns exist regarding the use of AI technologies for surveillance purposes. In recent years, the Singapore Parliament enacted laws to regulate online content due to risks associated with harmful content and disinformation. The extent of the power conferred to public authorities for monitoring this content is concerning given the lack of independence and proper oversight or accountability, aside from judicial review.

Slovenia

In 2024, Slovenia co-sponsored the UN Resolution on Safe, Reliable, and Trustworthy AI and contributed to negotiations of the Council of Europe AI Convention. Slovenia is party to the CoE Convention as an EU Member State but has not signed independently.

National AI Strategy

In May 2021, the Slovenian Government adopted the National program promoting the deployment of AI in the Republic of Slovenia by 2025 (NpAI). The NpAI lays out a detailed workplan for social and economic development, which includes specific indicators, guidance on measuring progress, and instruments for implementation and financing. The NpAI is part of the Slovenian Development Strategy 2030, which takes into account the digital transformation of society. The fourth industrial revolution, which is characterised by the digital economy and the development of sensors, robotics and artificial intelligence, is creating new models of business, work and jobs, which demands

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⁵⁴³⁸ Government of the Republic of Slovenia, *National Programme for the Promotion of the Development and Use of Artificial Intelligence in the Republic of Slovenia until 2025*, pp. 2–3 [Slovenian] (May 27, 2021) https://www.gov.si/assets/ministrstva/MJU/DID/NpUI-SI-2025.docx [Slovenia, *Digitalisation of Society*, https://www.gov.si/en/topics/digitalisation-of-society/

⁵⁴⁴⁰ Government of the Republic of Slovenia, *Slovenian Development Strategy 2030* (Dec. 7, 2017), https://www.gov.si/assets/vladne-sluzbe/SVRK/Strategija-razvoja-Slovenije-2030/Slovenian-Development-Strategy-2030.pdf

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the development of new knowledge and skills and adaptation in numerous areas of economy, society and the environment."⁵⁴⁴¹

The overarching strategy document for the development of the information society is the Digital Slovenia Strategy. "The strategy envisages actions aimed at eliminating the greatest development gaps in order to accelerate the digital transformation in all areas, increase the competitiveness of the country and the ICT industry, achieve the digitalisation of society, develop and build the digital infrastructure, improve cybersecurity, and promote the development of an inclusive information society." The objectives of the NpAI include the establishment of efficient support to research and deployment of artificial intelligence by enhanced and systematic networking of relevant stakeholders; the strengthening of technological and industrial capabilities in the field of artificial intelligence; answering to socio-economic changes such as changes in the labor market and education system; providing an appropriate ethical and legal framework and increasing citizens' trust in AI. 5443

The Digital Slovenia Strategy is in the process of being renewed. The 2030 Strategy is expected to focus on digital inclusion, digital public services, smart digital transformation to achieve Society 5.0 (data, artificial intelligence, etc.). "In addition, the strategy will also cover related content, such as a supportive environment, digital rights, better regulation, innovation, and a proposal for a Slovenian governance model for this area." ⁵⁴⁴⁴

In her speech at the 2022 Ministerial Council of the Global Partnership on AI, the Minister Stojmenova Duh stated, "In Slovenia, we believe in human rights and a responsible approach to the development, deployment and use of artificial intelligence." With the NpAI, Slovenia commits to high quality, transparent and ethical AI in which citizens have confidence. The National Programme mentions that a legal and ethical framework will be established in cooperation with European partners, based on existing European guidelines governing the ethical and legal aspects of the development and use of AI. It will be based on the universal values of the European Union and on human rights and fundamental

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⁵⁴⁴¹ Ibid, p. 10

⁵⁴⁴² Republic of Slovenia, *Digitalisation of society*, https://www.gov.si/en/topics/digitalisation-of-society/

⁵⁴⁴³ OECD AI Policy Observatory, *AI in Slovenia, Slovenia's National Programme on AI* (2025), https://oecd.ai/en/dashboards/countries/Slovenia

⁵⁴⁴⁴ Republic of Slovenia, *Digitalisation of Society*, https://www.gov.si/en/topics/digitalisation-of-society/

⁵⁴⁴⁵ Office of the Government of the Republic of Slovenia for Digital Transformation, *Minister Dr Stojmenova Duh stresses the importance of responsible regulation of artificial intelligence in Tokyo* (Nov. 30, 2022), https://www.gov.si/en/news/2022-11-30-minister-dr-stojmenova-duh-stresses-the-importance-of-responsible-regulation-of-artificial-intelligence-in-tokyo/

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freedoms, with an emphasis on privacy, dignity, the right to a fair trial, the protection of consumer rights and non-discrimination. The National Programme also refers to the principles of human action and control, technical robustness and security, privacy and data management, transparency, diversity, fairness, social and environmental well-being, and accountability.

The NpAI was elaborated following Slovenia's commitment to work with other EU Member States "on the most important issues raised by Artificial Intelligence, from ensuring Europe's competitiveness in the research and deployment of AI, to dealing with social, economic, ethical and legal questions." Slovenia signed the 2018 EU Declaration on Cooperation on Artificial Intelligence. The NpAI is also consistent with the European Coordinated Plan on Artificial Intelligence 2021 which operationalizes the Declaration. The NpAI objectives are supported in part by various EU funding programs such as the Horizon Europe programme for research and innovation, the Digital Europe Programme, the Connecting Europe Facility for digital infrastructure, the Recovery and Resilience Facility and the Structural funds. The NpAI also articulates specific support for Slovenian firms and institutions that develop standards in the field of AI and promotes collaboration with national, EU and international standardization organizations. 5449

Public Participation

Led by an inter-ministerial working group, the national program was the result of a series of multi-disciplinary consultations with national experts and industrial representatives through the ICT Association of Slovenia⁵⁴⁵⁰ of the Chamber of Commerce and Industry of Slovenia, ⁵⁴⁵¹ researchers and practitioners in the field of AI through the Slovenian Artificial Intelligence Society, ⁵⁴⁵² and stakeholders of the Strategic Research and Innovation Partnerships on Smart

 $\underline{https://digital\text{-strategy.ec.europa.eu/en/news/eu-member-states-sign-cooperate-artificial-\underline{intelligence}}$

⁵⁴⁴⁶ European Commission, EU Member States sign up to Cooperate on Artificial Intelligence (Apr. 10, 2018),

⁵⁴⁴⁷ European Commission, *Coordinated Plan on Artificial Intelligence 2021*, https://digital-strategy.ec.europa.eu/en/policies/plan-ai

⁵⁴⁴⁸ European Commission, *The Digital Europe Programme*, https://digital-strategy.ec.europa.eu/en/activities/digital-programme

Government of the Republic of Slovenia, *Slovenian Development Strategy 2030* (Dec. 7, 2017), https://www.gov.si/assets/vladne-sluzbe/SVRK/Strategija-razvoja-Slovenije-2030/Slovenian-Development-Strategy-2030.pdf

⁵⁴⁵⁰ ICT Association of Slovenia, https://www.gzs.si/en_zit

⁵⁴⁵¹ The Chamber of Commerce and Industry of Slovenia, https://eng.gzs.si/vsebina/About-Us

⁵⁴⁵² Slovenian Artificial Intelligence Society, https://slais.ijs.si/

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Cities,⁵⁴⁵³ Factories of the Future,⁵⁴⁵⁴ and civil society through the Slovenian Digital Coalition.⁵⁴⁵⁵ The Ministry of Public Administration prepared the first draft, which was released soliciting public comments in August 2020.⁵⁴⁵⁶

EU Digital Services Act

As an EU member state, Slovenia shall apply the EU Digital Services Act (DSA).⁵⁴⁵⁷ The DSA regulates online intermediaries and platforms. Its main objective is to prevent illegal and harmful activities online and the spread of disinformation. Bodies within the Ministry of Digital Transformation oversee the Digital Services Act in Slovenia.⁵⁴⁵⁸

EU AI Act

In the second half of 2021, Slovenia assumed the Presidency of the Council of the EU. 5459 In July 2021, discussing about the EU AI Act, the Minister of Justice, Marjan Dikaucic "said that the existing rules cannot provide answers to all the challenges brought by artificial intelligence, which is why it is necessary to take further steps in the creation of a legal framework." After the first debate on the European Parliament's proposed AI Act, the Slovenian Digital Minister Boštjan Koritnik affirmed that the EU AI act should "serve as a model across the

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⁵⁴⁵³ Strategic Development and Innovation Partnerships Smart Cities, *About the Partnership* https://pmis.ijs.si/o-partnerstvu/

⁵⁴⁵⁴ Strategic Research and Innovation Partnerships for Factories of the Future, https://www.effra.eu/jozef-stefan-institute-srip-strategic-research-innovation-partnership. 5455 Slovenian Digital Coalition, https://www.digitalna.si/en

⁵⁴⁵⁶ European Commission, Knowledge for Policy, *AI Watch, Slovenia AI Strategy Report*, https://ai-watch.ec.europa.eu/countries/slovenia/slovenia-ai-strategy-report en

⁵⁴⁵⁷ EUR-Lex, Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act), (Oct. 21, 2022), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022R2065

⁵⁴⁵⁸ Republic of Slovenia, *About the Ministry of Digital Transformation* (Feb. 12, 2025), https://www.gov.si/drzavni-organi/ministrstva/ministrstvo-za-digitalno-preobrazbo/o-ministrstvu/

⁵⁴⁵⁹ Slovenian Presidency of the Council of the European Union, 1 July–31 December 2021, https://www.gov.si/assets/vlada/Projekti/PSEU2021/The-programme-of-the-Slovenian-Presidency-of-the-Council-of-the-European-Union.pdf

⁵⁴⁶⁰ Republic of Slovenia, *At the virtual conference held by the Ministry of Justice on the regulation of artificial intelligence, ethics and fundamental rights* (Aug. 21, 2021), https://www.gov.si/en/news/2021-07-21-at-the-virtual-conference-held-by-the-ministry-of-justice-on-the-regulation-of-artificial-intelligence-ethics-and-fundamental-rights/

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globe, in the same vein as the general data protection regulation, GDPR, in the area of protection of personal data."5461

The AI Act grants a right to lodge a complaint with a market surveillance authority to any natural or legal person having grounds to consider that the AI Act has been infringed. There is no restriction regarding the standing of a complainant, with the idea that signaling a violation of the AI Act is in the interest of society.

The EU AI Act establishes a complex and layered governance structure involving multiple entities, such as notifying and notified bodies, conformity assessment bodies, an AI Board, an AI Office, national competent authorities, and market surveillance authorities. By and large, national market surveillance authorities are primarily responsible for the implementation and enforcement of the provisions of the regulation concerning high risks AI systems, with some coordination among national market surveillance authorities and monitoring by the European Commission. The Commission, including the European AI Office⁵⁴⁶² established in February 2024, has exclusive powers to supervise and enforce the obligations of providers of general-purpose AI models.

The EU Act gives national market surveillance authorities the power to enforce the rules with regard to high-risk systems, investigate complaints, and impose sanctions for non-compliance.

National public authorities or bodies have the power to request and access any documentation created or maintained under the EU AI Act in accessible language and format when access to that documentation is necessary for effectively fulfilling their mandate within the limits of their jurisdiction. As of yet, Slovenia has announced that the Ministry of Digital Transformation will be in charge of implementing the EU AI Act. However, Slovenia has not yet clearly identified market surveillance or competent authorities. 5463

Data Protection

The protection of personal data is guaranteed by the Slovenian Constitution. 5464 Article 38 of the Constitution ensures purpose limitation and

⁵⁴⁶¹ Euronews, EU's artificial intelligence law should serve as 'model across the globe' (Oct. 14, 2021), https://www.euronews.com/2021/10/14/eu-s-artificial-intelligence-law-should-serve-asmodel-across-the-globe

⁵⁴⁶² European Commission, European AI Office (Feb. 18. 2025), https://digitalstrategy.ec.europa.eu/en/policies/ai-office

⁵⁴⁶³ Ministry of Digital Transformation, Slovenia Active in Implementing the Artificial Intelligence Act (Sept. 12, 2024), https://www.gov.si/novice/2024-09-12-slovenija-aktivna-priimplementaciji-akta-o-umetni-inteligenci/

Republika Slovenija, Constitution (1991), https://www.us-rs.si/en/legal-basis/constitution

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includes the right of access to the collected personal data and the right to judicial protection. 5465

Since Slovenia is an EU Member State, the General Data Protection Regulation (GDPR)⁵⁴⁶⁶ is directly applicable in Slovenia and to Slovenians. The aim of the GDPR is to "strengthen individuals' fundamental rights in the digital age and facilitate business by clarifying rules for companies and public bodies in the digital single market. A single law will also do away with the current fragmentation in different national systems and unnecessary administrative burdens."⁵⁴⁶⁷ The GDPR entered into force on 24 May 2016 and applies since 25 May 2018. In July 2022, the European Commission sent a reasoned opinion to Slovenia for failing to implement important obligations under the GDPR, as well as for not making it possible for the Slovenian Information Commissioner to use all the corrective powers under the GDPR. ⁵⁴⁶⁸

In December 2022, Slovenia adopted a new Personal Data Protection Act (PDPA), adapting the national legislation to the GDPR. The new legislation entered into force in January 2023 and replaces the 2004 Data Protection Act. Under the PDPA, the Slovenian Information Commissioner has the authority to impose fines pursuant to the GDPR. The PDPA also introduces rules on the age limit for a child's consent (15 years old), use of CCTV, and biometric data as well as an obligation to maintain processing logs. 5469

Regarding the activities of law enforcement authorities, Slovenia transposed the EU Data Protection Law Enforcement Directive (LED).⁵⁴⁷⁰ "The

 $\frac{https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection_en$

proceedings/infringement_decisions/index.cfm?lang_code=EN&typeOfSearch=false&active_only=0&noncom=0&r_dossier=INFR%282021%292269&decision_date_from=&decision_date_to=&title=GDPR&submit=Search

5469 Official Gazette, *Slovenian Data Protection Act* [Slovenian] (Dec. 27, 2022), https://www.uradni-list.si/glasilo-uradni-list-rs/vsebina/2022-01-4187?sop=2022-01-4187; WolfTheiss, *Slovenia's New Data Protection Act – fines, traceability logs and much more* (Jan. 3, 2023), https://www.wolftheiss.com/insights/slovenias-new-data-protection-act/

⁵⁴⁷⁰ EUR-Lex, Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such

⁵⁴⁶⁵ GDPRhub, *Data Protection in Slovenia*, https://gdprhub.eu/Data Protection in Slovenia
5466 EUR-Lex, Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, https://eur-lex.europa.eu/EN/legal-content/summary/general-data-protection-regulation-gdpr.html

⁵⁴⁶⁷ European Commission, Legal Framework of EU Data Protection,

⁵⁴⁶⁸ European Commission, *Infringement Decisions*, https://ec.europa.eu/atwork/applying-eu-law/infringements-

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directive protects citizens' fundamental right to data protection whenever personal data is used by criminal law enforcement authorities for law enforcement purposes. It will in particular ensure that the personal data of victims, witnesses, and suspects of crime are duly protected and will facilitate cross-border cooperation in the fight against crime and terrorism."⁵⁴⁷¹ The LED provides for the prohibition of any decision based solely on automated processing, unless it is provided by law, and of profiling that results in discrimination.⁵⁴⁷² The LED also requires for Member States, including Slovenia, to enable data subjects to exercise their rights via national data protection authorities.⁵⁴⁷³

The EU Charter of Fundamental Rights more generally provides that EU citizens have the right to protection of their personal data. Article 8 of the Charter states that: "Everyone has the right to the protection of personal data concerning him or her. Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law."

Slovenia is also a member of the Council of Europe. It signed and ratified⁵⁴⁷⁴ the Council of Europe's Convention 108+ for the protection of individuals with regard to the processing of personal data.⁵⁴⁷⁵

The Slovenian Human Rights Ombudsman (since 2002) and the Information Commissioner (since 2007) are both members of the Global Privacy Assembly. However, they have not endorsed the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence,⁵⁴⁷⁶ the 2020 GPA Resolution on AI

 $\underline{\text{https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection} \ en$

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data, and repealing Council Framework Decision 2008/977/JHA, National transposition – Slovenia, https://eur-lex.europa.eu/legal-content/EN/NIM/?uri=CELEX:32016L0680
5471 European Commission, Legal Framework of EU Data Protection,

⁵⁴⁷² Article 11 (1) and (2) of the LED, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

⁵⁴⁷³ Article 17 of the LED

⁵⁴⁷⁴ Council of Europe, *Chart of Signatures and Ratifications of Treaty 223* (Feb. 23, 2024), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=223 https://www.coe.int/en/web/convention=223 https://www.coe.int/en/web/data-protection/convention=223 https://www.coe.int/en/web/data-protection=223 https://www.coe.int/en/web/data-protection=223 <a href="

⁵⁴⁷⁶ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

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Accountability, 5477 the 2022 GPA Resolution on Facial Recognition Technology 5478 or the 2023 GPA Resolution on Generative AI. 5479

Algorithmic Transparency

Slovenia is subject to the GDPR. Slovenians have a general right to obtain access to information about automated decision-making and to the factors and logic of an algorithm.⁵⁴⁸⁰ Furthermore, in June 2023, Slovenia ratified Convention 108+, which also provides for algorithmic transparency.⁵⁴⁸¹

The 2020 Recommendation of the Council of Europe Committee of Ministers on human rights impacts of algorithm systems⁵⁴⁸² specifically emphasizes requirements on transparency, accountability and effective remedies. The Recommendation provides that "Transparency levels should be as high as possible and proportionate to the severity of adverse human rights impacts, including ethics labels or seals for algorithmic systems to enable users to navigate between systems."⁵⁴⁸³ The Recommendation also clarifies requirements for contestability, requiring that "Affected individuals and groups should be afforded effective means to contest relevant determinations and decisions," including "an opportunity to be heard, a thorough review of the decision and the possibility to obtain a non-automated decision."⁵⁴⁸⁴

⁵⁴⁷⁷ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

⁵⁴⁷⁸ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁵⁴⁷⁹ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁵⁴⁸⁰ See Recital 63 and Article 22 of the GDPR

⁵⁴⁸¹ Council of Europe, *Slovenia – 26th State to Ratify Convention 108+* (Jun. 20, 2023), https://www.coe.int/en/web/data-protection/-/slovenia-26th-state-to-ratify-convention-108-1

⁵⁴⁸² Council of Europe Committee of Ministers, *Recommendation CM/Rec(2020)1 of the Committee of Ministers to Member States on the Human Rights Impacts of Algorithmic Systems* (Apr. 8, 2020), https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154
⁵⁴⁸³ Ibid

⁵⁴⁸⁴ Ibid

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Facial Recognition

A report by the Greens/EFA of the European Parliament,⁵⁴⁸⁵ revealed that Slovenia uses facial recognition technologies for "ex-post identification" in its criminal investigations.⁵⁴⁸⁶ In Slovenia, the use of facial recognition technology by the police was legalized five years after they started using it.⁵⁴⁸⁷ The Slovenian police confirmed to the Slovenian Information Commissioner that they had used Face Trace (a facial recognition software⁵⁴⁸⁸) back in 2014.⁵⁴⁸⁹ The Commissioner's office raised the issue several times in the years 2015–2019.⁵⁴⁹⁰

Subsequent to the enactment of the 2017 Police Tasks and Powers Act, which permits the use of biometric and facial recognition tools by law enforcement authorities, 5491 the Human Rights Ombudsman and the Information Commissioner brought a formal complaint against the Act before the constitutional court of Slovenia. The complaint mentioned the excessive data gathering powers granted to the police through the use of drones and automated systems to recognize license plates, the uncontrolled use of passenger name records at airports, and the lack of sufficient protection for citizens with no criminal record. However, the complaint did not include the use of facial recognition by law enforcement authorities. The reasoning of the Slovenian Human Rights Ombudsman for the

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⁵⁴⁸⁵ Report for the Greens/EFA in the European Parliament, *Biometric & Behavioural Mass Surveillance in EU Member States* (Oct. 2021), http://extranet.greens-efa.eu/public/media/file/1/7297

⁵⁴⁸⁶ Luca Bertuzzi, Euractiv, Facial recognition technologies already used in 11 EU countries and counting, report says (Oct. 26, 2021), https://www.euractiv.com/section/data-protection/news/facial-recognition-technologies-already-used-in-11-eu-countries-and-counting-report-says/

⁵⁴⁸⁷ Lenart J. Kučić, Algorithm Watch, *Automating Society Report 2020: Slovenia* (Oct. 2020), https://automatingsociety.algorithmwatch.org/report2020/slovenia/

⁵⁴⁸⁸ Katherine Quezada, *Law Enforcement AI in the Spotlight as EDPB Cast Doubt on Legality of Facial Recognition Tech* (Jul. 20, 2020), https://www.law.kuleuven.be/citip/blog/law-enforcement-ai-in-the-spotlight-as-edpb-cast-doubt-on-legality-of-facial-recognition-tech/

⁵⁴⁸⁹ Human Rights Ombudsman Republic of Slovenia, *Annual Report of the Human Rights Ombudsman of The Republic of Slovenia 2019*, pp. 146–147 (Jun. 30, 2020), https://www.varuh-rs.si/fileadmin/user-upload/pdf/lp/LP-2019/Annual Report 2019.pdf

⁵⁴⁹⁰ Algorithm Watch, *Slovenian police acquires automated tools first, legalizes them later* (Jul. 7, 2020) https://algorithmwatch.org/en/slovenia-police-face-recognition/

⁵⁴⁹¹ Official Gazette, *Police Tasks and Powers Act 2017 (ZNPPol-A)* [Slovenian only] (Feb. 27, 2017), https://www.uradni-list.si/glasilo-uradni-list-rs/vsebina?urlurid=2017462

⁵⁴⁹² Human Rights Ombudsman Republic of Slovenia, *Annual Report of the Human Rights Ombudsman of The Republic of Slovenia 2019*, pp. 146–147 (Jun. 30, 2020), https://www.varuh-rs.si/fileadmin/user_upload/pdf/lp/LP_2019/Annual_Report_2019.pdf

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exclusion of facial recognition from the complaint was that this was an exceptional measure which would not justify recourse to the constitutional court. 5494

In 2021, the Information Commissioner announced the completion of its investigation regarding the police's use of the Face Trace system. 5495 The investigation concluded that even though Face Trace is a biometric data processing-based system, it does not yield identification. Accordingly, the Information Commissioner deemed the use of Face Trace in compliance with data protection law.

As a consequence, the 2017 Police Tasks and Powers Act is still in force and the Slovenian police still uses facial recognition systems in the framework of their activities.

The Slovenian Information Commissioner is a member of the European Data Protection Board (EDPB), in charge of issuing recommendations and best practices in order to ensure that the Member States apply the LED consistently."5496

Environmental Impact of Al

Slovenia co-sponsored the UN General Assembly landmark resolution on Artificial Intelligence (AI) Systems for Sustainable Development in March 2024.5497 The resolution calls for global cooperation in the development and use of AI, ensuring that it benefits society while addressing risks. 5498 It emphasizes the importance of ethics, human rights, and sustainable development, particularly in areas like climate action, healthcare, and education. The resolution calls to establish international norms and principles for responsible AI governance, ensuring that AI technologies are deployed for

⁵⁴⁹⁴ Ibid

⁵⁴⁹⁵ OneTrust Data Guidance, Slovenia: Commissioner's investigation into Face Trace Police system finds no privacy violations (Apr. 16, 2021),

https://www.dataguidance.com/news/slovenia-commissioners-investigation-face-trace-police; Republic of Slovenia, Press release, The Police Face Trace System Is Based on Biometric Processing of Personal Data, But It Does Not Enable Identification [Slovenian only] (Apr. 14, 2021), https://www.ip-rs.si/novice/policijski-sistem-face-trace-sicer-temelji-na-biometričniobdelavi-osebnih-podatkov-a-ne-omogoča-identifikacije

⁵⁴⁹⁶ Communication from the Commission to the European Parliament and the Council, *First* report on application and functioning of the Data Protection Law Enforcement Directive (EU) 2016/680 (LED) (Jul. 25, 2022), https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=CELEX%3A52022DC0364&qid=1658824345764#footnote136

⁵⁴⁹⁷ UN General Assembly, Seizing the Opportunities of Safe, Secure and Trustworthy Artificial Intelligence Systems for Sustainable Development (Mar. 11, 2024), https://documents.un.org/doc/undoc/ltd/n24/065/92/pdf/n2406592.pdf

⁵⁴⁹⁸ United Nation News, General Assembly Adopts Landmark Resolution on Artificial Intelligence (Mar. 21, 2024), https://news.un.org/en/story/2024/03/1147831

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public good, inclusive growth, and to help achieve the UN Sustainable Development Goals (SDGs).

The EU and member states, including Slovenia, issued a joint statement following the UN Resolution emphasizing the critical role of AI in advancing sustainable development, with a particular focus on environmental protection and climate action.⁵⁴⁹⁹

Lethal Autonomous Weapons

According to Human Rights Watch, Slovenia has expressed its concerns with regard to "the growth of new weapon technologies" and stressed the "necessity for human control over all autonomous weapons". However, Slovenia has not commented on calls to ban fully autonomous weapons. 5500

In October 2022, Slovenia was one of the 70 states which endorsed a joint statement on autonomous weapons systems at the United Nations General Assembly. The statement called for the recognition of the dangers of autonomous weapons systems, acknowledged the need for human oversight and accountability, and emphasized the importance of an international framework of rules and constraints. In this joint statement, States declared that they "are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law ("IHL"), including through maintaining human responsibility and accountability in the use of force."

In February 2023, Slovenia participated in the international summit on the responsible application of artificial intelligence in the military domain. At the end of the Summit, Slovenia endorsed a joint call for action on the responsible development, deployment and use of artificial intelligence in the military

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⁵⁴⁹⁹ Delegation of the European Union to the United Nations in New York, *Joint Statement* on the Proposed UNGA Resolution on Artificial Intelligence Systems for Sustainable Development (Mar. 15, 2024), https://www.eeas.europa.eu/delegations/un-new-york/joint-statement-proposed-unga-resolution-artificial-intelligence-systems-sustainable-development en?s=63

⁵⁵⁰⁰ Human Rights Watch, Stopping Killer Robots Country Positions on Banning Fully Autonomous Weapons and Retaining Human Control (2020)

 $[\]underline{\text{https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and}$

⁵⁵⁰¹ Stop Killer Robots, 70 states deliver joint statement on autonomous weapons systems at UN General Assembly (2022), https://www.stopkillerrobots.org/news/70-states-deliver-joint-statement-on-autonomous-weapons-systems-at-un-general-assembly/

⁵⁵⁰² United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

 $[\]underline{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm\ en.pdf}$

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domain.⁵⁵⁰³ In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." They also "affirm that data for AI systems should be collected, used, shared, archived and deleted, as applicable, in ways that are consistent with international law, as well as relevant national, regional and international legal frameworks and data standards. Adequate data protection and data quality governance mechanisms should be established and ensured from the early design phase onwards, including in obtaining and using AI training data." States also "stress the importance of a holistic, inclusive and comprehensive approach in addressing the possible impacts, opportunities and challenges of the use of AI in the military domain and the need for all stakeholders, including states, private sector, civil society and academia, to collaborate and exchange information on responsible AI in the military domain."⁵⁵⁰⁴

Slovenia also endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023. 5505

South Korea hosted the second REAIM Summit in 2024. Slovenia endorsed the outcome document, Blueprint for Action, expressing a commitment to implement the principles of the first REAIM summit with an international treaty and national action. ⁵⁵⁰⁶

At the 78th UN General Assembly First Committee in 2023, Slovenia voted in favor⁵⁵⁰⁷ of resolution L.56⁵⁵⁰⁸ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states

 $\frac{https://www.reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163\&shareBbsMngNo=10264\&shareMenuId=11613\&shareTabMenuId=$

⁵⁵⁰³ Government of Netherlands, *Call to action on responsible use of AI in the military domain* (Feb.16, 2023) Press Release, https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action

https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action State, Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy, endorsing States as of Feb. 12, 2024, https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

⁵⁵⁰⁶ REAIM2024, Blueprint for Action (Sept. 11, 2024),

⁵⁵⁰⁷ Stop Killer Robots, *164 states vote against the machine at the UN General Assembly*, https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

⁵⁵⁰⁸ UN General Assembly, *Lethal Autonomous Weapons*, *Resolution L56* (Oct. 12, 2023), https://reachingcriticalwill.org/images/documents/Disarmament-

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on autonomous weapons systems. The report should analyze ways to address the challenges and concerns autonomous weapon systems raise from humanitarian, legal, security, technological and ethical perspectives and reflect on the role of humans in the use of force.

Human Rights

According to Freedom House, Slovenia receives high scores for Political Rights and Civil Liberties for a combined score of 96/100 in 2024. The report notes that the government "generally operates with openness and transparency." Slovenia is a signatory to major human rights treaties. 5510

In a 2020 Recommendation to member States on the human rights impacts of algorithmic systems, the Council of Europe Committee of Ministers advised that "member States must ensure that any design, development and ongoing deployment of algorithmic systems occur in compliance with human rights and fundamental freedoms, which are universal, indivisible, inter-dependent and interrelated, with a view to amplifying positive effects and preventing or minimising possible adverse effects" 5511 as part of their compliance with the Council of Europe Convention for the Protection of Human Rights and Fundamental Freedoms..

OECD / G20 AI Principles

Slovenia is a member of the OECD and has endorsed the OECD AI Principles.⁵⁵¹² The Slovenian AI National Program expressly refers to the OECD AI Principles on Artificial Intelligence, which promote artificial intelligence that is innovative and trustworthy and respects human rights and democratic values.⁵⁵¹³

https://freedomhouse.org/country/slovenia/freedom-world/2024

 $^{^{5509}}$ Freedom House, Freedom in the World 2024: Slovenia (2024),

⁵⁵¹⁰ Office of the United Nations High Commissioner for Human Rights, *Treaty Ratification Status for Slovenia* (Feb. 23, 2025),

 $[\]underline{https://tbinternet.ohchr.org/_layouts/15/TreatyBodyExternal/Treaty.aspx?CountryID=159\&Lang=\underline{EN}$

⁵⁵¹¹ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020),

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

⁵⁵¹² OECD AI Policy Observatory, *OECD AI principles Overview, Countries Adhering to the OECD AI Principles* (2025), https://oecd.ai/en/ai-principles
⁵⁵¹³ NpAI, p. 9.

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The OECD has mentioned Slovenia's Digital Coalition and AI4Slovenia as an example of national AI polices that are shaping an enabling environment for AI.⁵⁵¹⁴ Slovenia is also a founding member of the Global Partnership on AI.⁵⁵¹⁵

The Government of the Republic of Slovenia adopted the Strategy for the Cooperation of the Republic of Slovenia with the OECD until the end of 2025. The aim of the Strategy is to use benchmarking and good practices from OECD Member countries to support domestic reform processes to achieve the digital and green transformation and realize Slovenia's development potential. With the Strategy, "Slovenia pursues the objective of digital transformation based on the protection of human rights and fundamental freedoms, paying attention to gender equality and respect for the rights of older persons, and responding effectively to demographic changes. Slovenia will continue to strengthen its role in the regulation and ethical use of artificial intelligence. It continues to support the work of the OECD Artificial Intelligence Observatory based on the signed Memorandum of Cooperation. It will participate in the OECD Trust Survey and work with OECD experts to develop a sustainable public administration strategy to 2030 and to implement the digital transformation of the public administration."5516

Council of Europe AI Treaty

Slovenia contributed as a Council of Europe and EU Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of Law. The Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law was adopted in Strasbourg during the annual ministerial meeting of the Council of Europe's Committee of Ministers, which brings together the Ministers for Foreign Affairs of the 46 Council of Europe member states.⁵⁵¹⁷

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⁵⁵¹⁴ OECD, State of Implementation of the OECD AI Principles: Insights from National AI Policies (June 2021), https://www.caidp.org/app/download/8328376363/OECD-AIpolicies-2021.pdf

⁵⁵¹⁵ GPAI, Community, https://gpai.ai/community/

for the Cooperation of the Republic of Slovenia adopts the Strategy for the Cooperation of the Republic of Slovenia with the Organisation for Economic Cooperation and Development (Jan. 19, 2023), https://www.gov.si/en/news/2023-01-19-the-government-of-the-republic-of-slovenia-adopts-the-organisation-for-economic-co-operation-and-development-oed/

⁵⁵¹⁷ Council of Europe, *Council of Europe Adopts First International Treaty on Artificial Intelligence* (May 17, 2024), https://www.coe.int/en/web/portal/-/council-of-europe-adopts-first-international-treaty-on-artificial-intelligence

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Slovenia is party to the Convention as an EU Member State. However, Slovenia has not signed this first legally binding international AI treaty. 5518

UNESCO Recommendation on AI Ethics

As a UNESCO member state, Slovenia has endorsed the UNESCO Recommendation on the Ethics of AI.⁵⁵¹⁹

In March 2021, Borut Pahor, President of the Republic of Slovenia, and Audrey Azoulay, Director-General of UNESCO, inaugurated the International Research Centre on Artificial Intelligence (IRCAI), as a Category 2 center under the auspices of UNESCO in Ljubljana, Slovenia. The IRCAI is designed to be a communication platform for the collection and dissemination of good practices and case studies on the use and deployment of AI in society. The IRCAI focuses on advancing research on the use of AI to achieve the UN Sustainable Development Goals. The core research functions of the Centre will be guided by its four international scientific committees on: AI and Climate; AI and Education that will focus on AI algorithms that can make Open Educational Resources more accessible and easier to use; AI and Assistive Technologies that will highlight the potential of using AI technologies to assist persons with disabilities; and AI and Healthcare that will focus on the use of AI in vaccine development processes.

In February 2024, Slovenia hosted the Global Forum on the Ethics of AI. The Global Forum was organized by the Ministry of Digital Transformation under the patronage of UNESCO. Hosting demonstrated Slovenia's clear commitment to the implementation of the UNESCO Recommendation and to human-centric

⁵⁵¹⁸ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Nov. 6, 2024), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

⁵⁵¹⁹ UNESCO, *Ethics of Artificial Intelligence: The Recommendation* (2025), https://www.unesco.org/en/artificial-intelligence/recommendation-ethics

UNESCO, UNESCO Director-General and President of Slovenia inaugurate first research centre on artificial intelligence (Apr. 6, 2021), https://www.unesco.org/en/articles/unesco-director-general-and-president-slovenia-inaugurate-first-research-centre-artificial

⁵⁵²¹ Vincent Van Roy et al., *AI Watch—National Strategies on Artificial Intelligence: A European Perspective*, EUR 30745 EN, JRC Publications Repository, JRC122684 (Jun. 22, 2021), https://publications.jrc.ec.europa.eu/repository/handle/JRC12

⁵⁵²² International Research Center on Artificial Intelligence (IRCAI) Launch Report (Apr. 2021), https://ircai.org/wp-content/uploads/2021/05/IRCAI_Launch2021_Report.pdf
5523 Ibid

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AI.5524Slovenia's preparation of the UNESCO Readiness Assessment Methodology, currently in progress, is another indication. 5525

Evaluation

In recent years, Slovenia has had a significant influence over the development of AI policy in Europe due to its Presidency of the Council of the European Union during the second half of 2021, its AI collaboration with UNESCO, and its work in support of the Council of Europe AI expert group, the CAHAI.⁵⁵²⁶ While the national AI strategy and other technology-related workplans pledge to implement a legislative and regulatory regime that also protects fundamental rights, Slovenia has been slower than most of its European counterparts in updating its data protection regime. The entry into force in January 2023 of the new Data Protection Act, and with it the possibility for the Slovenian Information Commissioner to impose fines provided for the GDPR is a positive step. With the adoption of the EU AI Act, Slovenia shall designate a national supervisory mechanism which, it is to be hoped, will be independent, and will take the protection of human rights seriously. Concerns remain regarding surveillance practices, especially by law enforcement authorities. Slovenia has actively contributed to the development of international norms and regulatory frameworks that align with EU values of sustainability, fairness, and human rights.

South Africa

In 2024, South Africa engaged in a consultation process on a National AI Plan that solidified into a National AI Policy Framework. South Africa also adopted the African Union Continental Artificial Intelligence Strategy and deepened cooperation with UNESCO to implement the Recommendation on AI Ethics.

⁵⁵²⁴ Republic of Slovenia, Slovenia Hosts the Global Forum on the Ethics of Artificial Intelligence (Feb. 9, 2024), https://www.gov.si/en/news/2024-02-09-slovenia-hosts-the-globalforum-on-the-ethics-of-artificial-intelligence/

⁵⁵²⁵ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

⁵⁵²⁶ Council of Europe, CAHAI – Ad hoc Committee on Artificial Intelligence, https://www.coe.int/en/web/artificial-intelligence/cahai

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National AI Strategy

South Africa initially included AI as "the bedrock of the Fourth Industrial Revolution (4IR)" and incorporated AI in the framework of an integrated Fourth Industrial Revolution (4IR) strategy.

The 4IR Presidential Commission established in 2019 released a diagnostic report in January 2020, which "sets out a vision for chartering the way forward for South Africa in the Fourth Industrial Revolution." The 4IR Commission worked from a diagnostic report to align a national 4IR strategy to South Africa's vision for development, one "premised on resolving the nation's historical scars, expressed as the "triple scourge": Poverty, Unemployment and Inequality." The 4IR Commission thus "adopted an amended definition of the 4IR that ensures a human-centric approach." The quest of the Commission is thus related to two key questions: South Africa's economic competitiveness and the wellbeing of her people." South Africa's economic competitiveness and the wellbeing of her people."

The 4IR Commission is "a lever, activated by the State, to provide leadership for all society in understanding and navigating what will be a fundamentally altered future [...] The role of the 4IR Commission is thus to clearly articulate the role of the State as well as all institutional actors and citizens in their capacity as equal protagonists in the story of our future."⁵⁵³²

The 4IR Commission conducted a comparative analysis of some national strategies that address "the nature and implication of the 4IR for their societies." Most of these strategies focus on AI. On this basis, the 4IR Commission identified 8 Dimensions of Strategy: Preparation Through Experimentation, Regulation & Ethics, Human Capital Development, Global

https://www.ellipsis.co.za/wp-content/uploads/2020/10/201023-Report-of-the-Presidential-Commission-on-the-Fourth-Industrial-Revolution.pdf

⁵⁵²⁷ L. Mpedi, Tinyiko Maluleke, Tshilidzi Marwala and Khumbudzo Ntshavheni, *South Africa's New National Artificial Intelligence Institute Can Help Transform Our Economy* (Dec. 5, 2022), https://www.uj.ac.za/news/south-africas-new-national-artificial-intelligence-institute-can-help-transform-our-economy/

⁵⁵²⁸ The Presidency of the Republic of South Africa, *Diagnostic Report of the Presidential Commission on the 4th Industrial Revolution*, p. xi (Oct. 23, 2020), https://www.ellipsis.co.za/wp-content/uploads/2020/10/201023-Report-of-the-Presidential

⁵⁵²⁹ Ibid, p. 14

⁵⁵³⁰ Ibid, p. 20

⁵⁵³¹ Ibid, p. 14

⁵⁵³² The Presidency of the Republic of South Africa, *Diagnostic Report of the Presidential Commission on the 4th Industrial Revolution* (Oct. 23, 2020), https://www.ellipsis.co.za/wp-content/uploads/2020/10/201023-Report-of-the-Presidential-Commission-on-the-Fourth-Industrial-Revolution.pdf

⁵⁵³³ Ibid, p. 22

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Leadership, Technological Clarity & Commitment, Private Sector Capabilities, and Service Delivery. 5534

As for Ethics & Regulation, the 4IR Commission clarifies that "a focus on Regulation, Ethics, and Cultural aspects of the internet is key, not only to create an enabling policy environment to support private and non-governmental organisations as well as the state but to ensure ethical and transparent use of these new technologies."⁵⁵³⁵

Regarding service delivery, the 4IR Commission notes that "4IR strategies are typically based on and respond to service delivery challenges as well as a social and human development/wellbeing priorities. Particularly with respect to the government, there is a strong emphasis on e-government; using technology to improve mobility around cities and to enhance the quality and deployment of health services." ⁵⁵³⁶

Key implementing projects include "government digitisation" and "clustered proposed programmes" such as a National Integrated Social Protection Information System, Smart ID, use of vernacular languages in technologies, a drone unit in the police; digital court solutions, and digital visa integrated platform force. ⁵⁵³⁷

The 4IR Commission mentions in its diagnostic report that "the State is central to planning and coordination in the 4IR. A high-level interdepartmental multi-stakeholder governance and coordination structure is understood to be the institutional custodian of the 4IR strategy."⁵⁵³⁸ This task is currently being carried out by the Department of Communications and Digital Technologies (DCDT),⁵⁵³⁹ which came into operation on April 1, 2020.⁵⁵⁴⁰

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 $\underline{\text{https://www.ellipsis.co.za/wp-content/uploads/2020/10/201023-Report-of-the-Presidential-Commission-on-the-Fourth-Industrial-Revolution.pdf}$

⁵⁵³⁴ Ibid, p. 25

⁵⁵³⁵ Ibid, p. 26

⁵⁵³⁶ The Presidency of the Republic of South Africa, *Diagnostic Report of the Presidential Commission on the 4th Industrial Revolution* (Oct. 23, 2020), p. 26,

⁵⁵³⁷ Department of Communications & Digital Technologies, *PC4IR Strategic Implementation Plan (PC4IR SIP) National Departments Consultation Presentation* (March 2021), p. 13, https://www.dpme.gov.za/keyfocusareas/Provincial%20Performance%20Publication/Documents/PC4IR%20SIP%20Presentation National%20Departments%20Consultation%202021.pdf
5538 Ibid, p. 26

⁵⁵³⁹ The DCDT was established via the merger of the Department of Communications and the Department of Telecommunications and Postal Services in 2019. See National Government of South Africa, *Department of Communications and Digital Technologies – Overview*, https://nationalgovernment.co.za/units/view/428/department-of-communications-and-digital-technologies-dcdt

⁵⁵⁴⁰ Department of Communications & Digital Technologies, *Annual Report 2021/22*, https://www.dcdt.gov.za/documents/annual-reports/file/236-annual-report-2021-2022.html

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One of the DCDT's key missions was to develop the "PC4IR Strategic Implementations Plans (PC4IR SIP) to realise the recommendations of the 4IR Commission Report."5541 To this end, the 4IR Project Management Office (4IR PMO) was established within the DCDT⁵⁵⁴² in April 2020. The 4IR SIP is currently under consideration by Ministers and needs to be approved by the Cabinet.

The PC4IR SIP is based on three principles that will inform 4IR programs:

- 1. "Human centred: Develop People and Skills for a 4IR ecosystem; Promotion of Human Rights; Cybersecurity (human security, which reinforces human rights); Environmental protection
- 2. Economic focus (Economic development and inclusivity); International competitiveness
- 3. Technological advancement (Technological transformation, invention and innovation); Build sustainable infrastructure"5543

The 4IR SIP is to be aligned with existing key strategic development plans, primarily the National Development Plan and the Medium-Term Strategic Framework 2019–2024,5544 which is the implementation plan and monitoring framework for achieving the National Development Plan 2030 priorities. One of these priorities consists in achieving improved information and communication technologies (ICTs) by 2030.⁵⁵⁴⁵ Part of the strategy is to enhance ICTs through a national e-strategy that places South Africa on the international stage with international governance agencies such as the International Telecommunications Union (ITU) and the World Trade Organization (WTO).⁵⁵⁴⁶ The aim is to bridge the digital divide, boost economic activity, and improve the education, health,

⁵⁵⁴¹ Department of Communications & Digital Technologies, PC4IR Strategic Implementation Plan (PC4IR SIP) National Departments Consultation Presentation (March 2021). https://www.dpme.gov.za/keyfocusareas/Provincial%20Performance%20Publication/Documents/ PC4IR%20SIP%20Presentation National%20Departments%20Consultation%202021.pdf ⁵⁵⁴² Ibid.; see also, Department of Communications & Digital Technologies, *About the 4IR PMO* (2023), https://www.dcdt.gov.za/4ir-pmo.html

⁵⁵⁴³ Department of Communications & Digital Technologies, PC4IR Strategic Implementation Plan (PC4IR SIP) National Departments Consultation Presentation (March 2021), p. 6, https://www.dpme.gov.za/keyfocusareas/Provincial%20Performance%20Publication/Documents/ PC4IR%20SIP%20Presentation National%20Departments%20Consultation%202021.pdf 5544 Department of Planning, Monitoring and Evaluation, Medium Term Strategic Framework 2019-2024 (2020),

https://www.dpme.gov.za/keyfocusareas/outcomesSite/MTSF 2019 2024/2019-2024%20MTSF%20Comprehensive%20Document.pdf

⁵⁵⁴⁵ National Planning Commission (NPC), National Development Plan (2012), https://www.nationalplanningcommission.org.za/National Development Plan ⁵⁵⁴⁶ Ibid, pp. 195–196

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transport, and labor sectors, fostering growth in digital technologies as part of the growth in ICTs. 5547

Key objectives include the establishment of a 4IR Strategic Implementation Coordination Council and of an artificial intelligence institute, as well as the review and amendment of relevant policy and legislation. 5548

Then-DCDT Minister, Khumbudzo Ntshavheni, launched the Artificial Intelligence institute of South Africa and AI hubs at the University of Johannesburg and at the Tshwane University of Technology in November 2022.⁵⁵⁴⁹ The DCDT Minister, together with representatives of these two universities and the incoming United Nations (UN) Under-Secretary General and Rector of the UN University, explained in an opinion article the pivotal role of the AI institute in the 4IR strategy. The AI institute is meant as "an innovation engine for public and private sectors in line with the PC4IR." "The institute will focus on research and development, as well as implementation capabilities in AI" to "develop solutions to South African and African challenges." 5550

"The institute will also deal with arising legal and ethical issues. This is important. Failure to reflect on and provide possible solutions to legal and ethical questions will render the advances in AI capacities and applications meaningless and futile." The AI institute will scientifically "support the development, review and amendment of legislation as envisaged by the PC4IR."5551 In this regard, Letlhokwa George Mpedi, the Vice-Chancellor and Principal of the University of Johannesburg, has been calling for "legislation that specifically speaks to AI."5552

⁵⁵⁴⁷ Ibid, p. 3

⁵⁵⁴⁸ Department of Communications & Digital Technologies, PC4IR Strategic Implementation Plan (PC4IR SIP) National Departments Consultation Presentation (March 2021), p. 4. https://www.dpme.gov.za/keyfocusareas/Provincial%20Performance%20Publication/Documents/ PC4IR%20SIP%20Presentation National%20Departments%20Consultation%20201.pdf

⁵⁵⁴⁹ South African Government, Minister Khumbudzo Ntshavheni launches Artificial Intelligence Institute of South Africa and AI hubs (Nov. 30, 2022), https://www.gov.za/speeches/ministerkhumbudzo-ntshavheni-launches-launch-artificial-intelligence-institute-south

⁵⁵⁵⁰ L. Mpedi, Tinyiko Maluleke, Tshilidzi Marwala and Khumbudzo Ntshavheni, South Africa's new National Artificial Intelligence Institute can help transform our economy (Dec. 5, 2022), https://www.uj.ac.za/news/south-africas-new-national-artificial-intelligence-institute-can-helptransform-our-economy/

⁵⁵⁵¹ Ibid.

⁵⁵⁵² Lethokwa George Mpedi, AI holds promise of great good and great harm – global ethical and legal standards are needed, Daily Maverick (Feb. 22, 2023), https://www.dailymaverick.co.za/opinionista/2023-02-22-ai-holds-promise-of-great-good-andgreat-harm-ethical-legal-standards-needed/

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The DCDT progressed toward this goal in April 2024 with dialogue on the National AI Plan at the National AI Summit. 5553 The plan, conceived of as an AI Strategy, 5554 aims to integrate AI across various sectors, establishing a roadmap for legal and regulatory frameworks to foster innovation and investment in AI technologies.

The National AI Plan, which evolved to a policy framework, 5555 centers policy objectives on overcoming "challenges as historical inequalities, digital divides, and outdated regulatory frameworks" with "regulatory reforms and policies to encourage targeted investments in strategic areas in education and digital infrastructure to ensure equitable access and to maximize AI's transformative potential. By aligning with global AI governance standards and addressing socio-economic disparities, South Africa can leverage AI to drive economic transformation, foster social equity, and enhance its global competitiveness in AI innovation."5556

The Plan/Policy Framework sets out strategic pillars to achieve these objectives:

- 1. Talent/Capacity Development
- 2. Digital Infrastructure
- 3. Research, Development, and Innovation
- 4. Public-Sector Implementation "to enhance government efficiency through AI"
- 5. Ethical AI Guidelines Development "to ensure alignment with human rights principles"
- 6. Privacy and Data Protection
- 7. Safety and Security "to protect citizens and infrastructure"
- 8. Transparency and Explainability "to build public trust in AI"
- 9. Fairness and Mitigating Bias "to ensure equitable AI deployment"
- 10. Human Control of Technology (Human-Centered Approach) "to maintain human oversight over AI"
- 11. Professional Responsibility "to foster responsible AI development and use," including through a Code of Coonduct and ethics training for AI professionals

⁵⁵⁵⁶ Ibid, p. 7

⁵⁵⁵³ Department of Communications and Digital Technologies, *National AI Summit: A Dialogue* on the Proposed National AI Plan, https://www.dcdt.gov.za/topics/495-national-ai-summit.html
https://www.dcdt.gov.za/topics/495-national-ai-summit.html
https://www.trade.gov/national-ai-summit.html
https://www.trade.gov/market-intelligence/south-africa-information-technology-country-launches-draft-national-ai-strategy
https://www.trade.gov/market-intelligence/south-africa-information-technology-country-launches-draft-national-ai-strategy

⁵⁵⁵⁵ Department of Communications and Digital Technology, *South Africa National Artificial Intelligence Policy Framework* (Oct. 25, 2024), https://www.dcdt.gov.za/sa-national-ai-policy-framework.html

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12. Promotion of Cultural and Human Values "to align AI development with societal values." 5557

African Union / Regional AI Strategy

The 4IR strategy also aims for South Africa to contribute to the development of a similar strategy at regional level. The African Union (AU) Commission developed a comprehensive Digital Transformation Strategy for Africa. 5558 Its purpose is to foster an "integrated and inclusive digital society and economy in Africa that improves the quality of life of Africa's citizens," "breaks the digital divide," and ensures "continental ownership with Africa as a producer and not only a consumer in the global economy."5559 The AUC strategy envisions harmonization of policies, legislations, and regulations as key. The strategy also includes the design of "policies based on a human-centred and holistic approach that takes into account the local context and cross-cutting issues relevant to all stages of policy design and implementation. Special attention should be given to minorities and vulnerable groups."5560 The AU Commission also expresses its support for the ratification of the Convention on Cyber Security and Personal Data Protection, also known as the Malabo Convention, 5561 as well as making the Convention "consistent with standards such as the modernized convention 108, the General Data Protection Regulation."5562

When South Africa assumed the position of AU Chairperson for 2020, President Ramaphosa called for the creation of an AI Forum within the African Union to discuss how to address AI "in uniformity."⁵⁵⁶³

⁵⁵⁵⁷ Ibid, pp. 10–11

⁵⁵⁵⁸ In collaboration with the UN Economic Commission for Africa, Smart Africa, AUDA-NEPAD, Regional Economic Communities, African Development Bank, Africa Telecommunications Union, Africa Capacity Building Foundation, International Telecommunication Union and the World Bank. See African Union, *The Digital Transformation Strategy for Africa (2020–2030)*, p. 1, https://au.int/sites/default/files/documents/38507-doc-dts-english.pdf

⁵⁵⁵⁹ Ibid, p. 2

⁵⁵⁶⁰ Ibid, p. 8

⁵⁵⁶¹ Ibid, p. 47

⁵⁵⁶² Ibid

⁵⁵⁶³ Smart Africa, *Artificial Intelligence Blueprint* (2021), p. 11, https://smartafrica.org/wp-content/uploads/2023/11/70029-eng ai-for-africa-blueprint-min.pdf

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In 2021, in line with the objectives of the 4IR SIP,⁵⁵⁶⁴ South Africa led the development of Smart Africa's Artificial Intelligence Blueprint for Africa,⁵⁵⁶⁵ "a precursor for the African continent to become a global player within the digital technology state affairs and a huge contribution to positioning Africa within the 4th Industrial Revolution." The aim is for the AI Blueprint "to set-up the African member states towards developing policies, strategies and plans that would ensure growth and prosperity within the digital revolution space."⁵⁵⁶⁶

A key chapter in the AI Blueprint is dedicated to AI and ethics. The chapter acknowledges "a need to ensure that ethics are integrated into AI systems to minimize structural discrimination and bias that can emerge from biased training data. Repercussions can lead to discrimination and impairment of rights in a myriad of circumstances including housing, medical care, education, and human rights. [...] In designing their national AI Strategy, countries should clearly elaborate the AI ethical framework." ⁵⁵⁶⁷

Ethical frameworks would encourage safe and trustworthy use and development of AI such that "autonomous intelligent systems should be designed in ways that enable their decisions to be explained and humans to be accountable for their use," audits and certification would monitor systems for engineering and ethical compliance according to standards "developed using multi-stakeholder and multilateral approaches," "Life and death decisions should not be delegated to machines. AI systems should be designed taking into account such key concepts as people, the planet, prosperity and peace." After noticing that current AI ethics initiatives have been led by Western efforts, the AI Blueprint emphasizes that "participation from African nations is crucial and should be further encouraged." 5568

In February 2022, the AU Executive Council, requested the AU Commission to pursue the development of a continental AI strategy. The AU High-Level Panel on Emerging Technologies (APET) reiterated the need for a continental AI strategy that "would enable African countries to enhance policymaking and implementation and improve stakeholder engagement on AI-

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⁵⁵⁶⁴ Department of Communications and Digital Technologies, *Progress Update of PC4IR Strategic Implementation Plan* (Feb, 2022), p. 8, https://www.ellipsis.co.za/wp-content/uploads/2022/01/Progress-update-on-PC4IR-Strategic-Implementation-Plan-Feb-2022.pdf

⁵⁵⁶⁵ See South African Government, *Minister Khumbudzo Ntshavheni: Artificial intelligence regulation while encouraging innovation* (Nov. 4, 2021), https://www.gov.za/speeches/minister-khumbudzo-ntshavheni-remarks-artificial-intelligence-ai-regulation-while

⁵⁵⁶⁶ Smart Africa, *Artificial Intelligence Blueprint*, p. 11 (2021), https://smartafrica.org/wpcontent/uploads/2023/11/70029-eng_ai-for-africa-blueprint-min.pdf

⁵⁵⁶⁷ Ibid, pp. 44-45

⁵⁵⁶⁸ Ibid

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related challenges and opportunities" in May 2022.⁵⁵⁶⁹ The APET organized two expert consultative meetings in 2022 and released an "AI for Africa report." ⁵⁵⁷⁰

The African Union endorsed the Continental Artificial Intelligence Strategy in Ghana in July 2024.⁵⁵⁷¹ The strategy underscores the AU's commitment to an Africa-centric, development-focused approach to AI which promotes ethical, equitable and responsible AI development.⁵⁵⁷²

Public Participation

South Africa's Department of Communications and Digital Technologies (DCDT) opened a formal public consultation on the AI policy framework in October 2024. The consultations ran through November 29, 2024. The consultation on the draft framework followed the National AI Government Summit in April 2024, where the DCDT Minister shared the draft Plan with key stakeholders from government and industry. The Summit was part of a "pre-policy process [...] intended to collate the inputs and incorporate them into the draft plan." The plan then went through the Cabinet System before the public consultation. ⁵⁵⁷⁴

After the publication of the PC4IR Report in October 2020, a draft consultative process took place for the 4IR SIP in October–November 2020, followed by stakeholder consultations from February 2021 until July 2021. The PMO finalized its feedback analysis in August 2021 and submitted the final draft of the 4IR SIP in October 2021. 5575 In 2018, South Africa's Department of Cooperative Governance and Traditional Affairs, in partnership with a private

⁵⁵⁶⁹ See Diplo, *Artificial intelligence in Africa: Continental policies and initiatives*, https://www.diplomacy.edu/resource/report-stronger-digital-voices-from-africa/ai-africa-continental-policies/

⁵⁵⁷⁰ AUDA-NEPAD, African Union Development Agency, *The African Union Artificial Intelligence Continental Strategy for Africa* (May 30, 2022),

https://www.nepad.org/news/african-union-artificial-intelligence-continental-strategy-africa frican Union, *Continental Artificial Intelligence Strategy* (Aug. 9, 2024),

https://au.int/en/documents/20240809/continental-artificial-intelligence-strategy

⁵⁵⁷² African Union, *African Union Committed to Developing AI Capabilities in Africa* (Aug. 28, 2024), https://au.int/en/pressreleases/20240828/african-union-committed-developing-ai-capabilities-africa

⁵⁵⁷³ Department of Communications and Digital Technology, *South Africa National Artificial Intelligence Framework* (Oct. 25, 2024), https://www.dcdt.gov.za/sa-national-ai-policy-framework.html

⁵⁵⁷⁴ Department of Communications and Digital Technologies, *National AI Summit*, https://www.dcdt.gov.za/topics/495-national-ai-summit.html

⁵⁵⁷⁵ Department of Communications and Digital Technologies, *Progress Update of PC4IR Strategic Implementation Plan* (Feb., 2022), p. 2, https://www.ellipsis.co.za/wp-content/uploads/2022/01/Progress-update-on-PC4IR-Strategic-Implementation-Plan-Feb-2022.pdf

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company, launched GovChat, an online citizen engagement AI-powered application which promotes accountable local governance⁵⁵⁷⁶ and allows citizens to engage with their local councilors.⁵⁵⁷⁷

Data Protection

The right to privacy is guaranteed under section 14 of the 1996 Constitution of South Africa. South Africa's data protection law, the Protection of Personal Information Act (POPIA) gained Parliament's assent in 2013. However, only after the COVID-19 outbreak and the proliferation of the use of personal data in relation to digital services, did POPIA take effect on July 1, 2020, and became fully enforceable one year later. ⁵⁵⁷⁸ The Cybercrimes Act, which entered into force on December 1, 2021, also enhances personal data protection. The Act criminalizes hacking; unlawful interception, interference or acquisition of data; malicious or harmful communications. ⁵⁵⁷⁹

Not only does the preamble of POPIA recall the constitutional nature of the right to privacy but it mentions that the right to privacy includes "a right to protection against the unlawful collection, retention, dissemination and use of personal information." ⁵⁵⁸⁰

POPIA provides that "a data subject may not be subject to a decision which results in legal consequences for him [...], or which affects him [...] to a substantial degree, which is based solely on the basis of the automated processing of personal information intended to provide a profile of such person including his [...] performance at work, on his [...] credit worthiness, reliability, location, health, personal preferences or conduct." Exceptions to this principle apply based on a law or code of conduct which provides for appropriate measures to safeguard "the legitimate interests of data subjects" or based on an authorization granted by the South African Information Regulator when the public interest is at

⁵⁵⁷⁶ Republic of South Africa, Government Communications, *GovChat*, https://www.salga.org.za/SALGA%20National%20Communicators%20Forum%20Web/Documents/GovChat%20Presentation.pdf

⁵⁵⁷⁷ Human Sciences Research Council, *AI technologies for responsive local government in South Africa* (2019), https://repository.hsrc.ac.za/handle/20.500.11910/15173

⁵⁵⁷⁸ Republic of South Africa, *Protection of Personal Information Act No.4 of 2013* (Nov. 26, 2013), https://www.gov.za/sites/default/files/gcis_document/201409/3706726-11act4of2013protectionofpersonalinforcorrect.pdf

⁵⁵⁷⁹ South African Government Official Information and Services, *Cybercrimes Act 19 of 2020* (Dec. 1, 2021), https://www.gov.za/documents/acts/cybercrimes-act-19-2020-english-afrikaans-01-jun-2021

Republic of South Africa, *Protection of Personal Information Act No.4 of 2013* (Nov. 26, 2013), https://www.gov.za/sites/default/files/gcis_document/201409/3706726-11act4of2013protectionofpersonalinforcorrect.pdf

⁵⁵⁸¹ Ibid

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stake such as the "interests of national security," "the prevention, detection and prosecution of offences," or "important economic and financial interests of a public body" ⁵⁵⁸²

Unless a code of conduct has been issued,⁵⁵⁸³ POPIA requires a responsible party to "obtain prior authorisation from the Information Regulator if that responsible party intends to process any unique identifiers of data subjects (i) for another purpose than intended at collection, and (ii) with the aim of linking the information with information processed by other responsible parties." "Unique identifier" can refer for instance to an identity number or employee number. ⁵⁵⁸⁴

Such is also the case if that responsible party plans to "(b) process information on criminal behaviour or on unlawful or objectionable conduct on behalf of third parties; (c) process information for the purposes of credit reporting; or (d) transfer special personal information [...] or the personal information of children [...] to a third party in a foreign country that does not provide an adequate level of protection for the processing of personal information"⁵⁵⁸⁵

POPIA also established the South African Information Regulator.⁵⁵⁸⁶ The Information Regulator is an independent body responsible for monitoring and enforcing compliance with POPIA by public and private bodies. The Regulator is subject to the law and is accountable to the national assembly.⁵⁵⁸⁷

In October 2022, the Information Regulator, responsible for approving industry codes of conduct,⁵⁵⁸⁸ approved the Banking Association of South Africa's Code of Conduct for the Processing of Personal Information by the Banking Industry.⁵⁵⁸⁹ The Code regulates the use of automated decision-making in "profiling, work performance, credit worthiness, location, health, reliability, personal preferences, or conduct."⁵⁵⁹⁰ The Code requires banks to adopt measures

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5582 Ibid
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⁵⁵⁸³ Ibid

⁵⁵⁸⁴ Ibid

⁵⁵⁸⁵ Republic of South Africa, *Protection of Personal Information Act No.4 of 2013* (Nov. 26, 2013), https://www.gov.za/sites/default/files/gcis_document/201409/3706726-

¹¹act4of2013protectionofpersonalinforcorrect.pdf

⁵⁵⁸⁶ Ibid

⁵⁵⁸⁷ Information Regulator, *About the Regulator*, https://inforegulator.org.za

⁵⁵⁸⁸ Republic of South Africa, *Protection of Personal Information Act No.4 of 2013* (Nov. 26, 2013), https://www.gov.za/sites/default/files/gcis_document/201409/3706726-

¹¹act4of2013protectionofpersonalinforcorrect.pdf

⁵⁵⁸⁹ Information Regulator, Codes of Conduct, Enforcement Notices,

 $[\]underline{https:/\!/inforegulator.org.za/codes-of\text{-}conducts/}$

⁵⁵⁹⁰ Information Regulator, *Notice in terms of Section 62(1) of the Protection of Personal Information Act No. 4 of 2013 (POPIA) Code of Conduct: The Banking Association South Africa (BASA)* (Sept. 27, 2022), p. 20, https://inforegulator.org.za/wp-

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and safeguards for automated decision-making processes, such as identification, lawfulness, transparency, privacy notices/statements, and the ability of users to raise complaints in case of dissatisfaction with the result of an automated decision.⁵⁵⁹¹

The Information Regulator is a member of the Global Privacy Assembly (GPA) since 2017. The Information Regulator has not endorsed the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence, ⁵⁵⁹² the 2020 GPA Resolution on AI Accountability, ⁵⁵⁹³ the 2022 GPA Resolution on Facial Recognition Technology, ⁵⁵⁹⁴ or the 2023 GPA Resolution on Generative AI. ⁵⁵⁹⁵

A specific issue identified in the 2022 AU Data Policy Framework⁵⁵⁹⁶ and pointed out by renowned researchers such as Emma Ruttkamp-Bloem and Christiaan Viljoen in the South African context is the absence of representation of a large part of the South African society in terms of data sets. In a 2022 study, these researchers reported that the digital divide is primarily a data divide fostered by and exacerbating the social divide.⁵⁵⁹⁷ According to Ruttkamp-Bloem and Viljoen, at least 50% of South Africans do not have a digital footprint, resulting in potential bias and discrimination because their experiences are absent from the data.⁵⁵⁹⁸ The practice of data-driven AI in a country like South Africa cannot be

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Technolog.pdf

https://au.int/sites/default/files/documents/42078-doc-AU-DATA-POLICY-FRAMEWORK-ENG1.pdf

⁵⁵⁹¹ Ibid, pp. 20-21

⁵⁵⁹² Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

⁵⁵⁹³ Global Privacy Assembly, Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence (Oct. 2020), <a href="https://globalprivacyassembly.org/wp-content/uploads/2020/10/EINAL_GPA_Pescultion_on_Accountability in the Development and Content/uploads/2020/10/EINAL_GPA_Pescultion_on_Accountability in the Development and Content/uploads/2020/10/EINAL_GPA_Pescultion_on_Accountability in the Development and Use of Artificial Intelligence (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/EINAL_GPA_Pescultion_on_Accountability in the Development and Use of Artificial Intelligence

content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

⁵⁵⁹⁴ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), <a href="https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-on-principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-on-principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-on-principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-on-principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-on-principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-on-principles-and-Expectation-o

⁵⁵⁹⁵ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁵⁵⁹⁶ African Union, AU Data Policy Framework (Feb. 2022),

⁵⁵⁹⁷ Media Institute of Southern Africa, *AI Report on Southern Africa* (2024), https://data.misa.org/en/entity/36jnqkbfz04?page=15

⁵⁵⁹⁸ Catherine Croxton and Nomvula Buthelezi, *SA has a huge 'digital blind spot' and it's holding us all back* (Feb. 4, 2021), https://www.dailymaverick.co.za/article/2021-02-04-sa-has-a-huge-digital-blind-spot-and-its-holding-us-all-back/

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extracted from relations of social power. Thus, policymakers should not underestimate the inherent threat to fairness practices in machine learning both in terms of existing bias in training data and modelling practices and the socially powered situations in which predictions are interpreted and acted upon.

Algorithmic Transparency

According to POPIA, algorithmic transparency is ensured to the extent that "appropriate measures must (a) provide an opportunity for a data subject to make representations about a decision" regarding the sole use of automated decision-making and "(b) require a responsible party to provide a data subject with sufficient information about the underlying logic of the automated processing of the information relating to him or her to enable him or her to make representations in terms of paragraph (a)."5599

The 2022 Code of Conduct for the Processing of Personal Information by the Banking Industry also provides for algorithmic transparency. 5600

South Africa's National AI Policy Framework also includes Transparency and Explainability as one of twelve strategic pillars, which suggests intentions for a guarantee of at least a measure of algorithmic transparency. In addition to educating the public on AI technologies, the framework considers transparency as "The clear and open operation of AI systems, ensuring that their processes, decision-making criteria, and outcomes are understandable and accessible to users and stakeholders, including insights into model functionality, data usage, decision logic, and potential impacts." 5601

EdTech and Tracking Children

Human Rights Watch published a global investigative report on the education technology (EdTech) in May 2022 endorsed by 49 governments, including South Africa, for children's education during the pandemic. Based on technical and policy analysis of 163 EdTech products, Human Rights Watch found that governments' endorsements of the majority of these online learning platforms put at risk or directly violated children's rights.

Some EdTech products, such as Extramarks, apparently exclusively designed for children's use and with an estimated 100,000 users in South Africa, targeted children with behavioral advertising. Extramarks sent children's data to

Republic of South Africa, *Protection of Personal Information Act No.4 of 2013* (Nov. 26, 2013), https://www.gov.za/sites/default/files/gcis_document/201409/3706726-11act4of2013protectionofpersonalinforcorrect.pdf

⁵⁶⁰⁰ Information Regulator, *Codes of Conducts*, https://inforegulator.org.za/codes-of-conducts/
https://inforegulator.org.za/codes-of-conducts/
https://inforegulator.org.za/codes-of-conducts/
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AdTech companies that specialize in behavioral advertising or whose algorithms determine what children see online. According to Human Rights Watch, in line with child data protection principles as well as corporations' human rights responsibilities outlined in the United Nations Guiding Principles on Business and Human Rights, EdTech and AdTech companies should not collect and process children's data for advertising. 5602

Environmental Impact of AI

South Africa passed its first sweeping climate change law in July 2024. ⁵⁶⁰³ The legislation will allow South Africa to meet its emissions reduction commitments under the Paris Climate Change Treaty. The law is a significant move for South Africa, which is one of the top 15 greenhouse gas emitters globally. The emissions reductions targets in the new bill require all industry, including AI and data centers, to limit their emissions by a given amount over a period of time.

Lethal Autonomous Weapons

South Africa is a signatory to the United Nations Convention on Certain Conventional Weapons. At the 2018 Convention on Certain Conventional Weapons (CCW) meeting, South called for a ban on Lethal Autonomous Weapons Systems (LAWS) on behalf of the African Group. At the 2021 CCW meeting, South Africa advocated for the adoption of a legally binding instrument on LAWS: It is high time for further work on LAWS, to move towards concrete negotiations and more active diplomatic efforts. Should the GGE's further work result in the adoption of an instrument on LAWS that is of a political nature only and as a final product, with no prospect of elevating further work to the level of a legally binding instrument, South Africa would regard the process as having been a failure." 5606

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⁵⁶⁰² Human Rights Watch, "How Dare They Peep into My Private Life?": Children's Rights Violations by Governments that Endorsed Online Learning During the COVID-19 Pandemic (May 25, 2022), https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rights-violations-governments

⁵⁶⁰³ Nellie Peyton, *South Africa Passes Its First Sweeping Climate Change Law*, Reuters (Jul. 23, 2024), https://www.reuters.com/world/africa/south-africa-passes-its-first-sweeping-climate-change-law-2024-07-23/

⁵⁶⁰⁴ United Nations, South Africa Signatory to the Convention on Certain Conventional Weapons, <a href="https://geneva-s3.unoda.org/static-unoda-site/pages/templates/the-convention-on-certain-conventional-weapons/high-contracting-parties-and-signatories-ccw/SOUTH_AFRICA_E.pdf
⁵⁶⁰⁵ United Nations, Statement on behalf of the African Group (Aug. 27, 2018), https://unoda-documents-library.s3.amazonaws.com/Convention on Certain Conventional Weapons
Group of Governmental Experts (2018)/2018 GGE%2BLAWS%2B2_6b_Benin_Africa%2B

Group.pdf

⁵⁶⁰⁶ Republic of South Africa, South African Statement to the Sixth Review Conference of the High Contracting Parties to the Convention on Certain Conventional Weapons (Dec. 2021),

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The South African Military Academy launched the Defence Artificial Intelligence Research Unit (DAIRU) to enhance military capabilities, focusing on AI-driven technologies, cyber resilience, and security. Officials highlighted the transformative power of AI and the importance of regulation amidst global digital competition. ⁵⁶⁰⁷

Human Rights

South Africa maintains a score of 79/100 and a status of "Free" according to the Freedom House Freedom in the World 2024 report. 5608

South Africa is a party to the African Charter on Human and Peoples' Rights. In its 2019 Declaration of Principles on Freedom of Expression and Access to Information in Africa, the African Commission on Human and Peoples' Rights (ACHPR) in charge of interpreting the Charter⁵⁶⁰⁹ called on states to ensure that the "development, use and application of AI, algorithms and other similar technologies by internet intermediaries are compatible with international human rights law and standards, and do not infringe on the rights to freedom of expression, access to information and other human rights."⁵⁶¹⁰

In February 2021, the ACHPR adopted Resolution 473 having recognized that emerging technologies such as AI have a bearing on the enjoyment of human rights under the African Charter on Human and Peoples' Rights (the African Charter). The ACHPR called on state parties to the African Charter, South Africa included, to:

https://documents.unoda.org/wp-content/uploads/2022/02/South-Africa-CCW-RevCon-General-Statement-.pdf

https://freedomhouse.org/country/south-africa/freedom-world/2024
5609 See Articles 30 and 45(3) of the African Charter on Human and Peoples' Rights

⁵⁶⁰⁷ Department of Communications & Digital Technologies, *Minister Gungubele Launches the 4th Hub of AIISA: The Defence Artificial Intelligence Research Unit (DAIRU)* (May 2, 2024), https://www.dcdt.gov.za/media-statements-releases/500-minister-gungubele-launches-the-4-th-hub-of-aiisa-the-defence-artificial-intelligence-research-unit-dairu.html

⁵⁶⁰⁸ Freedom House, *Freedom in the World 2024: South Africa* (2024), https://freedomhouse.org/country/south-africa/freedom-world/2024

⁵⁶¹⁰ Diplo, *Artificial intelligence in Africa: Continental policies and initiatives*, https://www.diplomacy.edu/resource/report-stronger-digital-voices-from-africa/ai-africa-continental-policies/

⁵⁶¹¹ African Commission on Human and Peoples' Rights, *Resolution 473 on the need to undertake a Study on human and peoples' rights and artificial intelligence (AI), robotics and other new and emerging technologies in Africa* (Mar. 10, 2021), https://achpr.au.int/en/adopted-resolutions/473-resolution-need-undertake-study-human-and-peoples-rights-and-art/; University of Pretoria, *Press Statement: Centre for Human Rights welcomes African Commission resolution on emerging technologies*, https://www.chr.up.ac.za/tech4rights-news/2451-press-statement-eentre-for-human-rights-welcomes-african-commission-resolution-on-emerging-technologies; CAIDP, *African Commission on Human and People's Rights Resolution 473 Statement of The Center for AI and Digital Policy (CAIDP)* (Apr. 5, 2021),

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- Ensure that the development and use of AI, robotics and other new and emerging technologies is compatible with the rights and duties in the African Charter and other regional and international human rights instruments, in order to uphold human dignity, privacy, equality, non-discrimination, inclusion, diversity, safety, fairness, transparency, accountability and economic development as underlying principles that guide the development and use of AI, robotics and other new and emerging technologies.
- Ensure transparency in the use of AI technologies, robotics and other new and emerging technologies and that decisions made in the use of AI technologies, robotics and other new and emerging technologies are easily understandable to those affected by such decisions.
- Work towards a comprehensive legal and ethical governance framework for AI technologies, robotics and other new and emerging technologies so as to ensure compliance with the African Charter and other regional treaties.

In September 2022, the Special Rapporteur on Freedom of Expression and Access to Information in Africa, Ourveena Geereesha Topsy-Sonoo, recalled that, with Resolution 473, the Commission, "recognizing the need to better understand the legal, ethical, safety and security opportunities and challenges raised by AI, robotics and other new and emerging technologies in Africa, observed in its Resolution [...] that new and emerging technologies present both opportunities and perils for the promotion and protection of human and peoples' rights in Africa. The Commission further observed that whilst making government services and information digital enhances transparency and accessibility and artificial intelligence allows for a number of benefits in the society, it has to be accompanied by human rights considerations and a bridging of the digital divide." The Special Rapporteur also declared that "State Parties are encouraged to develop domestic legal frameworks regulating AI and e-governance; ensure these technologies are developed and used transparently; and ensure that imported AI and e-governance systems align with the African Charter." 5612

OECD / G20 AI Principles

Although South Africa is not a member of the Organization for Economic Co-operation and Development (OECD), as a member of the G20, the country

https://www.caidp.org/app/download/8308244063/CAIDP-ACHPR-Res473-04052021.pdf?t=1637335261

access-international-day

⁵⁶¹² African Commission on Human and Peoples' Rights, *Press Statement by the Special Rapporteur on Freedom of Expression and Access to Information in Africa, on the Occasion of International Day for Universal Access to Information* (Sept. 28, 2022), https://achpr.au.int/en/news/press-releases/2022-09-28/special-rapporteur-freedom-expression-

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endorsed the G20 AI principles that draw from the 2019 OECD AI Principles. ⁵⁶¹³ The G20 AI principles highlight challenges in the use of AI including privacy, security, ethical issues, new digital divides and the need for AI capacity building. However, the country has not endorsed the OECD Principles updated in May 2024. ⁵⁶¹⁴

As a Key Partner of the OECD, South Africa contributes to the OECD's work in a sustained and comprehensive manner, including public governance. South Africa's presidency of the G20 in 2025 will facilitate this cooperation.

Council of Europe AI Treaty

South Africa has not signed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law. ⁵⁶¹⁶ The Convention is the first legally binding international framework to govern AI, ensuring that AI technologies are aligned with human rights, democratic values, and rule of law standards.

UNESCO Recommendation on AI Ethics

South Africa endorsed the 2021 UNESCO Recommendations on the Ethics of AI.⁵⁶¹⁷ South Africa's Minister of Communications and Digital Technologies Khumbudzo Ntshavheni expressed commitment to regulating AI in an address at the UNESCO-Southern Africa sub-Regional Forum on Artificial Intelligence (SARFAI) which took place in Windhoek, Namibia in 2021. The SARFAI provided a platform for the discussion of the sustainable development-oriented and ethical use of artificial intelligence, as steps for implementation of the UNESCO Recommendation in the region.

South Africa endorsed the resulting 2022 Windhoek Statement on Artificial Intelligence in Southern Africa. ⁵⁶¹⁸ The Windhoek Statement calls for the establishment of a Southern African coordination mechanism for the

⁵⁶¹³ G20 Digital Economy Working Group, G20 DEWG Maceio Ministerial Declaration (Sept.

^{13, 2024), &}lt;a href="https://g7g20-documents.org/database/document/2024-g20-brazil-sherpa-track-digital-economy-ministers-language-g20-dewg-maceio-ministerial-declaration">https://g7g20-documents.org/database/document/2024-g20-brazil-sherpa-track-digital-economy-ministers-language-g20-dewg-maceio-ministerial-declaration

⁵⁶¹⁴ OECD AI Observatory, *OECD AI Principles Overview* (2024), https://oecd.ai/en/ai-principles

⁵⁶¹⁵OECD, South Africa and the OECD, https://www.oecd.org/southafrica/south-africa-and-oecd.htm

⁵⁶¹⁶ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Nov. 15, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

⁵⁶¹⁷ UNESCO, *Recommendation on the Ethics of Artificial Intelligence* (2022), https://unesdoc.unesco.org/ark:/48223/pf0000381137

⁵⁶¹⁸ UNESCO, *Windhoek Statement on Artificial Intelligence in Southern Africa* (Sept. 9, 2022), https://unesdoc.unesco.org/ark:/48223/pf0000383197

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implementation of the UNESCO Recommendation. The proposal is set to be submitted to the 2023 Joint Meeting of SADC Ministers responsible for Education and Training and Science, Technology and Innovation, for discussion and adoption, with a clear action plan, timelines, and a monitoring and evaluation framework. ⁵⁶¹⁹

Complying with the Recommendation is enshrined in the Department of Communications and Digital Technologies' South Africa's Artificial Intelligence (AI) Planning. South Africa's National Artificial Intelligence Policy Framework shares significant similarities with UNESCO's principles on artificial intelligence. Both frameworks emphasize the development of AI technologies based on ethical principles and a human-centered approach, aiming for safe, transparent, and fair AI deployment. Elements such as transparency, accountability, data protection, and bias mitigation in the South African policy align well with UNESCO's values of respecting human rights and ensuring equality in AI use. The framework is crafted with a vision to distribute AI's economic and societal benefits broadly, prioritizing human well-being, much like UNESCO's emphasis on a people-centered approach. Solution

South Africa is currently completing the UNESCO Readiness Assessment Methodology (RAM), a tool to support the effective implementation of the Recommendation. The RAM helps countries and UNESCO identify and address any institutional and regulatory gaps. 5623

Evaluation

South Africa is a leading figure in the development of a human-centered approach at regional and international levels. South Africa has been a key player in the development of Smart Africa's Artificial Intelligence Blueprint for Africa, which calls for ensuring that ethics are integrated into AI systems to minimize structural discrimination and bias. The 2021 AI Blueprint was a first step towards

⁵⁶¹⁹ UNESCO, *Implementation of the Recommendation on the Ethics of Artificial Intelligence* (AI) (Oct. 7, 2022), https://unesdoc.unesco.org/ark:/48223/pf0000382931

⁵⁶²⁰ Department of Communications & Digital Technologies, AI National Government Summit Discussion Document - South Africa's Artificial Intelligence (AI) Planning: Adoption of AI by Government (Oct. 2023),

https://www.dcdt.gov.za/images/phocadownload/AI_Government_Summit/National_AI_Government_Summit_Discussion_Document.pdf

⁵⁶²¹ Department of Communications & Digital Technologies, *SA National AI Policy Framework* (Oct. 25, 2024), https://www.dcdt.gov.za/sa-national-ai-policy-framework/file/338-sa-national-ai-policy-framework.html

⁵⁶²² UNESCO, *Implementation of the Recommendation on the Ethics of Artificial Intelligence* (Nov. 2, 2023), https://unesdoc.unesco.org/ark:/48223/pf0000387369

⁵⁶²³ UNESCO Global AI Ethics and Governance Observatory, *Readiness Assessment Methodology* https://www.unesco.org/ethics-ai/en/ram

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the adoption of a continental AI strategy, which the African Union achieved in 2024. Endorsing the 2022 Windhoek Statement on Artificial Intelligence in Southern Africa, demonstrated South Africa's commitment to take concrete steps to implement the UNESCO Recommendation on the Ethics of AI.

South Africa's collaboration with the UNESCO AI Ethics Centre and the explicit alignment with the Recommendation in the National AI Plan exemplifies how the Recommendation on AI Ethics and inform national policies. The outcome of the RAM currently in progress will provide further guidance. South Africa has not signed the Council of Europe AI Treaty, a significant international framework to align AI applications with human rights, democracy, and rule of law. While South Africa collaborates actively with the OECD in the technology sector, the Council of Europe AI Treaty would present an opportunity to reinforce its commitment to ethical AI governance on a global scale.

South Africa took steps toward a human-centered National AI Strategy and policy framework with the 2020 4IR Strategy and consultations on the 2024 National AI Plan and AI Policy Framework. However, these have yet to be adopted.

South Africa's data protection law addresses automated decision-making and algorithmic transparency among the rights provided for by the legislation. However, the South African Information Regulator has not fully addressed issues pertaining to the use of AI systems. Concerns exist regarding the use of AI for surveillance purposes and its potential impact on the digital divide. There is also an urgent need to tackle structural bias in AI systems rooted in the digital divide and the absence of a digital footprint and representation of a significant part of South African society.

Spain

In 2024, Spain updated the AI Strategy to emphasize transparency, accountability, and security. Spain also formally inaugurated the Spanish Agency for AI Oversight, the body in charge of implementing the EU AI Act. Spain initiated the UNESCO RAM and is party to the Council of Europe AI Treaty as an EU Member State. However, Spain has not signed the treaty independently.

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National AI Strategy

Spain has identified artificial intelligence (AI) as "one of the disciplines most likely to influence the rapid transition to a new society and economy." ⁵⁶²⁴ Spain unveiled the National Strategy for Artificial Intelligence (ENIA) on December 2, 2020. ⁵⁶²⁵ The Spanish government stated it will allocate €600 million for the implementation of the strategy from 2021 to 2023. ⁵⁶²⁶ Spain updated the AI Strategy in 2024. ⁵⁶²⁷ The updates reinforce the ENIA 2020 principles by emphasizing transparency and the trustworthiness of AI systems, promoting cybersecurity framework, enhancing data governance, prioritizing energy efficiency in AI-related infrastructure, and cementing the oversight functions of the Spanish AI Agency (AESIA). ⁵⁶²⁸

The objective of the ENIA is to generate trust in the development of inclusive and sustainable AI that focuses on the needs of the citizens. The ENIA comprises six main goals, including establishing an ethical and normative framework to strengthen the protection of individual and collective rights and to guarantee inclusion and social wellbeing. ⁵⁶²⁹

The ENIA also sets out five measures for a successful ethical and regulatory framework:

- 1. the development of a national seal of quality for AI
- 2. the creation of observatories for ethical and legal evaluation of AI systems
- 3. the development and release of a Digital Rights Charter
- 4. the implementation of a national governance model for ethics in AI through the AI Advisory Council

⁵⁶²⁴ Government of Spain & Ministry of Science, Innovation, and Universities, *Spanish RDI Strategy in Artificial Intelligence* (2019), https://www.ciencia.gob.es/dam/jcr:d78856a6-10c2-4772-a96c-

b52fc0fd3a84/SPANISHRDISTRATEGYINARTIFICIALINTELLIGENCESGT2019.pdf
5625 Government of Spain, *National Artificial Intelligence Strategy*, *ENIA* (Nov. 2, 2020),
https://portal.mineco.gob.es/RecursosArticulo/mineco/ministerio/ficheros/National-Strategy-on-AI.pdf

⁵⁶²⁶ Government of Spain, *Pedro Sánchez presenta la Estrategia Nacional de Inteligencia Artificial con una inversión pública de 600 millones en el periodo 2021–2023* (Dec. 2, 2020), https://www.lamoncloa.gob.es/presidente/actividades/Paginas/2020/021220-sanchezenia.aspx
⁵⁶²⁷ Ministry for Digital Transformation, *2024 Artificial Intelligence Strategy* (May 12, 2024), https://digital.gob.es/dam/en/portalmtdfp/DigitalizacionIA/1_DOSSIER_AI_ENGLISH_15_JUL_IO.pdf

⁵⁶²⁸ Council of Ministers, *The Government of Spain Approves the AI Strategy 2024* (May 14, 2024),

 $\frac{https://www.lamoncloa.gob.es/lang/en/gobierno/councilministers/paginas/2024/20240514-council-press-conference.aspx}{}$

⁵⁶²⁹ Government of Spain, *National Artificial Intelligence Strategy, ENIA*, pp. 72–73 (Nov. 2, 2020), https://portal.mineco.gob.es/RecursosArticulo/mineco/ministerio/ficheros/National-Strategy-on-AI.pdf

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5. and the promotion of multisectoral national and international for a for dialogue, awareness, and participation. 5630

The ENIA is part of several overlapping policy initiatives launched by the Spanish government. The 2025 Digital Agenda enumerates 50 measures for the government to take between 2020 and 2025 across 10 thematic axes to propel the country's digital transformation. The ninth axis is "Data Economy and Artificial Intelligence" and one of the measures contained therein is the accomplishment of the goals set out by the AI Strategy. 5631

The ENIA is also part of the Plan for Recovery, Transformation, and Resilience for the Spanish economy launched in April 2021. The ENIA inscribes itself in the framework of the pact for science and innovation, with the aim to reinforce the National Health System's capacities. 5632 The Plan describes Spain's ambition to become a global leader in AI integration into a digitalized economy. The Plan refers to Spain's aspiration to "humanist digitalization," with the development of AI in a human-centric way, thanks to the elaboration of a Charter of Digital Rights.⁵⁶³³

The ENIA intersects with the Spanish government's 2015 Plan for the Advancement of Language Technologies (HTL). 5634 Within the HTL framework, the Spanish government, in collaboration with the Barcelona Supercomputing Center, created in 2021 the world's first massive Spanish-language AI system, which can generate and analyze texts in Spanish. This is part of Spain's strategic objective to promote the development of AI systems in Spanish and co-official languages, instead of relying on English-language systems. 5635

The ENIA follows from the Spanish Research, Development, and Innovation (RDI) Strategy for AI, published in 2019.⁵⁶³⁶ The RDI Strategy for AI

⁵⁶³⁰ Ibid, p. 70

⁵⁶³¹ Ministry of Economic Affairs and Digital Transformation, 2025 Digital Spain, Digital Transition [Spanish] (2025), https://avance.digital.gob.es/programas-avancedigital/Paginas/espana-digital-2025.aspx

⁵⁶³² Government of Spain, Recovery, Transformation, and Resilience Plan [Spanish] (Apr. 2021), https://www.lamoncloa.gob.es/temas/fondos-recuperacion/Documents/30042021-Plan Recuperacion %20Transformacion %20Resiliencia.pdf

⁵⁶³³ Ibid, p. 23

⁵⁶³⁴ Government of Spain, Ministry of Economic Affairs and Digital Transformation, *Plan for the* Advancement of Human Language Technologies (Oct. 2015),

https://plantl.mineco.gob.es/tecnologias-

lenguaje/PTL/Bibliotecaimpulsotecnologiaslenguaje/Detalle%20del%20Plan/Plan-Impulso-Tecnologias-Lenguaje.pdf

⁵⁶³⁵ Ministry for Digital Transformation, 2024 Artificial Intelligence Strategy (May 12, 2024), https://digital.gob.es/dam/en/portalmtdfp/DigitalizacionIA/1 DOSSIER AI ENGLISH 15 JULIO.pdf ⁵⁶³⁶ Government of Spain, Ministry of Science, Innovation, and Universities, Spanish RDI Strategy in Artificial Intelligence (2019), https://www.ciencia.gob.es/dam/jcr:d78856a6-10c2-

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set out Priorities and Recommendations "to be developed in initiatives and activities defined and financed through the Science, Technology, and Innovation Stares Plans, mobilizing the synergies between the different levels of public administration and through the co-development of the public and private sectors." The Spanish RDI Strategy included plans to create a National AI Strategy, a Spanish AI Observatory, and a strategic framework for the development of AI in compliance with the Spain's "ethical, legal, and social commitments" and the European ecosystem. 5638

The ENIA also has a European dimension. Spain supports the 2018 AI ethical Guidelines of the EU High Level Expert Group. 5639 In this framework, Trustworthy AI "(1) should respect fundamental rights, applicable regulation and core principles and values, ensuring an 'ethical purpose' and (2) should be technically robust and reliable because, even with good intentions, a lack of technological mastery can cause unintentional harm."5640 The Spanish government, along with thirteen other EU Member States, published a position paper on innovative and trustworthy AI in October 2020. 5641 The paper delineates a two-fold vision of AI development in the EU based on (1) promoting innovation while managing risks through a clear framework and (2) establishing trustworthy AI as a competitive advantage. "The main aim must be to create a common framework where trustworthy and human-centric AI goes hand in hand with innovation, economic growth and competitiveness in order to protect our society, maintain our high-quality public service and benefit our citizens and businesses. This can help the EU to protect and empower their citizens, underpin innovation and progress in society and ensure that their values are protected."5642

Artificial Intelligence Advisory Council

The Ministry of Economic Affairs and Digital Transformation established the Artificial Intelligence Advisory Council in July 2020 to analyze, assess, and

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 $\underline{\text{https://www.netherlandsandyou.nl/web/pr-eu-brussels/about-us/our-ideas-for-europe/digital-policy}}$

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⁵⁶³⁷ Ibid, p. 9

⁵⁶³⁸ Ibid, p. 40

⁵⁶³⁹ European Commission, *High-Level Expert Group on Artificial Intelligence* (Oct. 14, 2024), https://digital-strategy.ec.europa.eu/en/policies/expert-group-ai

⁵⁶⁴⁰ European Commission, *Ethics Guidelines for Trustworthy AI* (Apr. 8, 2019), https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai

⁵⁶⁴¹ Denmark, Belgium, the Czech Republic, Finland, France Estonia, Ireland, Latvia, Luxembourg, the Netherlands, Poland, Portugal, Spain and Sweden, *Innovative and Trustworthy AI: Two Sides to the Same Coin*, The Netherlands and You (Oct. 2020),

⁵⁶⁴² Ibid, p. 1

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support the government on matters related to AI. The Advisory Council is intended to provide recommendations to the government on measures for the safe and ethical use of AI. It is composed of Spanish experts in science, economics, education, and other relevant fields responsible for analyzing the implications of AI in = areas such as industry, the future of work, protection of fundamental rights, data management, the fight against discrimination, and the elimination of social disparities. ⁵⁶⁴³

Charter of Digital Rights

The Spanish Government released the Charter of Digital Rights in July 2021. The Spanish Prime Minister Pedro Sanchez declared, "With the publication of the Digital Rights Charter, Spain is moving forwards in the promotion of humanistic digital transformation that seeks to continue placing our country in a position of international leadership in protecting citizens' rights and to actively contribute to the different initiatives and debates that are being developed at European and global levels. This consolidates Spain's leadership in the development of a free, open and inclusive digital society, defining 'fair rules' for common development and coexistence in the new digital reality, and guaranteeing the social nature of technological transformation." 5644

The Charter contains a set of principles and rights to guide future regulatory projects and the development of public policies to guarantee the protection of individual and collective rights in new digital scenarios. The Charter "recognizes the challenges posed by the adaptation of existing rights to the virtual environment, and proposes a frame of reference for their protection in that context." The Charter articulates updates to existing rights enshrined in various legal texts such as the Declaration of Human Rights and the Spanish Constitution. The Charter includes six main categories of rights: (1) rights pertaining to freedom such as the right not to be traced or profiled; (2) equality rights such as the right to equality and non-discrimination in the digital environment; (3) participatory rights in the public sphere; (4) rights related to the working and business environment, including impact assessment in the use of algorithms; (5) rights in

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⁵⁶⁴³ Government of Spain, *El Gobierno constituye el Consejo Asesor de Inteligencia Artificial* (Jul. 20, 2020), https://www.lamoncloa.gob.es/serviciosdeprensa/notasprensa/asuntos-economicos/Paginas/2020/200720-inteligencia.aspx

⁵⁶⁴⁴ La Moncloa, *The Government adopts the Digital Rights Charter to articulate a reference framework to guarantee citizens' rights in the new digital age* (Jul. 14, 2021), https://www.lamoncloa.gob.es/lang/en/gobierno/news/Paginas/2021/20210713 rights-charter.aspx

⁵⁶⁴⁵ Subdirección General para la Sociedad Digital, *Documento para Consulta Pública: Carta de Derechos Digitales* (Nov. 18, 2020),

https://portal.mineco.gob.es/RecursosArticulo/mineco/ministerio/participacion_publica/audiencia/ficheros/SEDIACartaDerechosDigitales.pdf

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specific settings such as AI; and (6) guarantees such as the right to administrative and judicial protection in the digital environment. The Charter provides that AI should ensure a people-centered approach and the right to non-discrimination should be guaranteed in the development of AI systems. The Charter also proclaims the inalienable dignity of human beings.

Public Participation

The Spanish Government opened the proposed Digital Rights Charter for public comment in November 2020. 5646 This participatory process generated contributions from experts in the field and advocacy associations, as well as from citizens, together with input from the private sector, service providers, and the public sector with relevant competences. Following this period of public consultation, the final Digital Rights Charter was unveiled in July 2021. 5647

According to a report of the European consumer organization ("BEUC"), 83% of those in Spain think that consumers should be well informed when they deal with an automatic decision system and 80% believe they should have the right to say "no" to automated decision-making. 5648 The BEUC report also found high levels of concern in Spain about the potential failure of AI machines, the privacy of voice assistants, manipulation of consumer decisions, and unfair discrimination. More than half of those from Spain surveyed in the BEUC poll "disagree or strongly disagree that current regulation is adequate to efficiently regulate AI."5649

EU Digital Services Act

As an EU member state, Spain shall apply the EU Digital Services Act (DSA).5650 The DSA regulates online intermediaries and platforms. Its main objective is to prevent illegal and harmful activities online and the spread of disinformation. The DSA requires online intermediaries and platforms to

https://www.lamoncloa.gob.es/presidente/actividades/Documents/2021/140721-

Carta Derechos Digitales RedEs.pdf

⁵⁶⁴⁶ Subdirección General para la Sociedad Digital, Consulta pública para la elaboración de una Carta de Derechos Digitales (Jan. 20, 2021), https://portal.mineco.gob.es/eses/ministerio/participacionpublica/audienciapublica/Paginas/SEDIA Carta Derechos Digitales.a

⁵⁶⁴⁷ Government of Spain, Digital Rights Charter (2021),

⁵⁶⁴⁸ The European Consumer Organisation (BEUC), Artificial Intelligence What Consumers Say: Findings and Policy Recommendations of a Multi-Country Survey of AI (Sept. 2020), https://www.beuc.eu/publications/beuc-x-2020-

⁰⁷⁸ artificial intelligence what consumers say report.pdf

⁵⁶⁴⁹ Ibid, p. 9

⁵⁶⁵⁰ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act), (Oct. 21, 2022), https://eur-lex.europa.eu/legal-

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implement ways to prevent and remove posts containing illegal goods, services, or content while giving users the means to report or flag this type of content. The Act also bans targeted advertising based on a person's sexual orientation, religion, ethnicity, or political beliefs and targeted advertising to minors based on profiling.

The Spanish Data Protection Agency (*Agencia Española de Protección de Datos*, AEPD) enforces the DSA and related mitigation measures such as the 2022 Strengthened Code of Practice on Disinformation.⁵⁶⁵¹ The AEPD took action to fulfill these obligations in May 2024 by ordering a halt to the implementation of Meta's Election Day Information and Voter Information Unit functions and the associated data collection and processing in Spain.⁵⁶⁵² The decision aims to prevent data collection, user profiling, and third-party data transfers, ensuring personal data isn't used by unknown parties for unspecified purposes.

The action also aligns with the Commission's Guidelines under the DSA for the mitigation of systemic risks online for elections. The Guidelines include specific mitigation measures linked to generative AI such as clearly labeling content generated by AI.

EU AI Act

Spain held the Presidency of the Council of the EU during the second part of 2023 and played a key role in securing a compromise between member states and with the European Parliament, regarding in particular general purpose AI. The EU AI Act was approved in 2024 and is now being implementing. The EU AI Act is a risk-based market regulation, which supports the objective of

⁵⁶⁵¹ European Commission, *The 2022 Code of Practice on Disinformation* (Feb. 13, 2025), https://digital-strategy.ec.europa.eu/en/policies/code-practice-disinformation

⁵⁶⁵² AEPD, *The Agency Orders a Precautionary Measure that Prevents Meta from Implementing the Electoral Functionalities that it Plans to Launch in Spain*, Press Releases (May 31, 2024), https://www.aepd.es/en/press-and-communication/press-releases/the-agency-orders-precautionary-measure-prevents-meta

⁵⁶⁵³ European Commission, Commission Publishes Guidelines under the DSA for the Mitigation of Systemic Risks Online for Elections (Mar. 25, 2024), https://ec.europa.eu/commission/presscorner/detail/en/IP 24 1707

Luca Bertuzzi, *AI Act: Spanish Presidency Makes Last Mediation Attempt on Foundation Models* (Nov. 29, 2023), https://www.euractiv.com/section/artificial-intelligence/news/ai-act-spanish-presidency-makes-last-mediation-attempt-on-foundation-models/

⁵⁶⁵⁵ European Parliament, Artificial Intelligence Act, European Parliament legislative resolution of 13 March 2024 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts (COM(2021)0206 – C9-0146/2021 – 2021/0106(COD)), P9 TA(2024)0138,

https://www.europarl.europa.eu/RegData/seance_pleniere/textes_adoptes/definitif/2024/03-13/0138/P9_TA(2024)0138_EN.pdf

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promoting a human-centric approach to AI and making the EU a global leader in the development of secure, trustworthy and ethical AI.

The EU Act gives designated national market surveillance authorities the power to enforce the rules on high-risk systems, investigate complaints, and impose sanctions for non-compliance. The penalties can be very high. "National public authorities or bodies which supervise or enforce the respect of obligations under Union law protecting fundamental rights in relation to the use of high-risk AI systems referred to in Annex III" are also involved in implementation and enforcement. This is not the case when GPAI models are concerned. National public authorities or bodies have the power to request and access any documentation created or maintained under the EU AI Act in accessible language and format when access to that documentation is necessary for effectively fulfilling their mandate within the limits of their jurisdiction.

Spain created the Spanish Agency for Artificial Intelligence Oversight (*Agencia Española de Supervisión de la Inteligencia Artificial*, AESIA) as a regulator to enforce the EU AI Act in August 2023. The AESIA is the first dedicated AI oversight agency in the European Union.

Al Oversight

The Spanish Data Protection Agency (AEPD) was the main national supervisory authority in Spain until the inauguration of the National Agency for AI Oversight (AESIA). The AESIA inaugurated offices in A Coruña⁵⁶⁵⁷ and named a director in June 2024. AESIA Director Ignasi Belda is charged with staffing the agency and developing a plan of action.⁵⁶⁵⁸ The director coordinates work between the AESIA and other bodies such as the AEPD. While the AEPD ensures compliance with the GDPR and contributed to debates on AI oversight, the AESIA is charged with compliance with the EU AI Act.

The Law 22/2021 of December 28, 2021 provides for the creation of the Spanish Agency for the Supervision of Artificial Intelligence (AESIA).⁵⁶⁵⁹ The Spanish Law provides for AESIA to act in an independent, transparent, objective, and impartial manner. The Agency shall carry out measures aimed at minimizing significant risks to people's safety, health, and fundamental rights that may arise

Espana Digital, National Agency for Artificial Intelligence Oversight [Spanish], https://espanadigital.gob.es/en/lines-action/national-agency-artificial-intelligence-oversight
España Digital, Inauguration of the AESIA Took Place (Jun. 19, 2024), https://espanadigital.gob.es/en/actualidad/realizado-el-evento-inaugural-de-la-aesia
España Digital, Ignasi Belda Designated Director of the AESIA (Jun. 12, 2024), https://espanadigital.gob.es/en/actualidad/designado-ignasi-belda-como-director-de-la-aesia
España Digital, Ignasi Belda Designated Director of the AESIA (Jun. 12, 2024), https://espanadigital.gob.es/en/actualidad/designado-ignasi-belda-como-director-de-la-aesia
España Digital, Ignasi Belda Designated Director of the AESIA (Jun. 12, 2024), https://espanadigital.gob.es/en/actualidad/designado-ignasi-belda-como-director-de-la-aesia
España Digital, Ignasi Belda Designated Director of the Law 22/2021, of December 28, of the General State Budget for the year 2022, https://www.boe.es/buscar/act.php?id=BOE-A-2021-21653

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from the use of AI systems. AESIA will have the capacity to act on its own, in coordination with other competent authorities, and in support to private entities. 5660

AESIA is to be attached to the Secretary of State for Digitalization and Artificial Intelligence. The Agency will benefit from full organic and functional independence from the public administrations. It will be endowed with public legal personality, its own assets, autonomy in its management and administrative powers. While the AESIA is expected to start working in Autumn 2023, with a budget of 5 million euros and a staff of 40 employees, details of its plans and powers are still being discussed between Ministries.

The Ministry of Economic Affairs and Digital Transformation, leading this project, has announced that the AESIA will include a "regulatory sandbox" open for companies that wish to test the compliance of their AI systems with the new rules on AI and more particularly those of the proposed EU AI Act. "The Government of Spain will deploy an AI Sandbox to put the proposed requirements for high-risk AI systems into practice. [...]The Spanish AI Sandbox will provide practical experience through applying the various features of the [EU AI Act] proposal to specific AI projects (e.g. requirements, conformity assessments and certain post-market activities) and making guidelines, toolkits and good-practice materials accessible to all. Such actions are expected to be useful for the development of harmonised European standards and the other preparatory work at national and EU level." The Ministry has issued a public tender "for the procurement of services that develop impact assessments of AI, a national AI certificate and research studies on the use of controlled experimentation activities to test AI systems." Should be a serviced to be useful for the development of services that develop impact assessments of AI, a national AI certificate and research studies on the use of controlled experimentation activities

Data Protection

Since Spain is an EU Member State, the GDPR⁵⁶⁶⁴ is directly applicable in Spain and to Spaniards. The aim of the GDPR is to "strengthen individuals' fundamental rights in the digital age and facilitate business by clarifying rules for

⁵⁶⁶⁰ Ibid, (2)

⁵⁶⁶¹ Ibid, (4)

⁵⁶⁶² European Commission, *Launch event for the Spanish Regulatory Sandbox on Artificial Intelligence* (Jun. 27, 2022), https://digital-strategy.ec.europa.eu/en/events/launch-event-spanish-regulatory-sandbox-artificial-intelligence

⁵⁶⁶³ Spanish Government, Platform de contratacion del sector publico,

https://contrataciondelestado.es/

⁵⁶⁶⁴ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, https://eur-lex.europa.eu/EN/legal-content/summary/general-data-protection-regulation-gdpr.html

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companies and public bodies in the digital single market."⁵⁶⁶⁵ The GDPR entered into force on May 24, 2016 and applies since May 25, 2018. The Spanish Parliament approved the Spanish Fundamental Law on Data Protection and Digital Rights (NLOPD), which supplements the GDPR, in December 2018. In progressive developments during 2024, the Spanish Data Protection Agency adopted a technical note on LIINE4DU 1.0, a new Privacy & Data Protection Threat Modelling Framework. The proposal focuses "on protecting rights and freedoms and regulatory compliance in accordance with GDPR principles." ⁵⁶⁶⁶

After some delays, Spain transposed the EU Data Protection Law Enforcement Directive (LED)⁵⁶⁶⁷ through the Spanish Act on Data Protection in the Area of Police and Criminal Justice.⁵⁶⁶⁸ The LED "protects citizens' fundamental right to data protection whenever personal data is used by criminal law enforcement authorities for law enforcement purposes. It will in particular ensure that the personal data of victims, witnesses, and suspects of crime are duly protected and will facilitate cross-border cooperation in the fight against crime and terrorism."⁵⁶⁶⁹ The LED also prohibits any decision based solely on automated processing, unless it is provided by law, and of profiling that results in discrimination.⁵⁶⁷⁰ Given the "serious risks to individual rights and freedoms" posed by the processing of personal data and biometric data in facial recognition technology, the European Data Protection Board of which the Spanish Data Protection Agency is a part stresses that such tools should be used only "if

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⁵⁶⁶⁵ European Commission, *Legal Framework of EU Data Protection*, https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection en

⁵⁶⁶⁶AEPD, *Technical Note: An Introduction to Liine4du 1.0: A New Privacy & Data Protection Threat Modelling Framework* (Oct. 2024), https://www.aepd.es/guides/technical-note-introduction-to-liine4du-1-0.pdf

⁵⁶⁶⁷ Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

⁵⁶⁶⁸ Organic Law 7/2021 (May 26, 2021), https://www.boe.es/diario_boe/txt.php?id=BOE-A-2021-8806

⁵⁶⁶⁹ European Commission, *Legal Framework of EU Data Protection*, https://commission.europa.eu/law/law-topic/data-protection/legal-framework-eu-data-protection_en

⁵⁶⁷⁰ Article 11 (1) and (2) of the LED, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

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necessary and proportionate, as laid down in the Charter of Fundamental Rights" and in strict compliance with the LED.⁵⁶⁷¹

The EU Charter of Fundamental Rights more generally provides that EU citizens have the right to protection of their personal data. Article 8 of the Charter states that: "Everyone has the right to the protection of personal data concerning him or her. Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law."

Spain is also a member of the Council of Europe and ratified the Council of Europe's Convention 108+ for the protection of individuals with regard to the processing of personal data.

The AEPD has also endorsed the Ibero-American Network for the Protection of Personal Data (RIPD) standards and guidelines and committed to integrated the principles of legitimation, lawfulness, loyalty, transparency, purpose, proportionality, quality, responsibility, safety and confidentiality in national policies. ⁵⁶⁷² The 16 data protection authorities representing 12 countries initiated a coordinated action on ChatGPT, developed by OpenAI, in May 2023 on the basis that it may entail risks for the rights and freedoms of users in relation to the processing of their personal data because of the potential for "responses with cultural, racial or gender biases, as well as false ones." ⁵⁶⁷³

Despite being a member of the Global Privacy Assembly (GPA) since 2002, the AEPD has not endorsed the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence;⁵⁶⁷⁴ the 2020 GPA Resolution on AI Accountability;⁵⁶⁷⁵ the 2022 GPA Resolution on Facial Recognition

⁵⁶⁷¹ European Data Protection Board, *EDPB adopts Guidelines on calculation of fines & Guidelines on the use of facial recognition technology in the area of law enforcement*, Press release (May 16, 2022), https://edpb.europa.eu/news/news/2022/edpb-adopts-guidelines-calculation-fines-guidelines-use-facial-recognition en

⁵⁶⁷² Ibero-American Network for the Protection of Personal Data (RIPD), *Standards for Personal Data Protection for Ibero-American States* (2017),

https://www.redipd.org/sites/default/files/2022-04/standars-for-personal-data.pdf

⁵⁶⁷³ Ibero-American Network for the Protection of Personal Data (RIPD), Authorities from the Ibero-American Network for the Protection of Personal Initiate a Coordinated Action against the ChatGPT Service [Spanish] (May 8, 2023), https://www.redipd.org/noticias/autoridades-red-iberoamericana-de-proteccion-de-datos-personales-inician-accion-chatgpt

⁵⁶⁷⁴ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

⁵⁶⁷⁵ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-use-of-AI-EN-1.pdf

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Technology,⁵⁶⁷⁶ or the 2023 GPA Resolution on Generative AI.⁵⁶⁷⁷ The regional data protection agencies of Catalonia (since 2004), the Basque Country (since 2005), and Andalusia (since 2022) are also GPA members.⁵⁶⁷⁸

Algorithmic Transparency

Spain is subject to the GDPR and Convention 108+. Spaniards have a general right to know when they are subjected to automated decisions and obtain access to information about decisions that affect them and to the factors and logic of an algorithm. They also have a right to contest decisions. The 2024 AI Strategy cements this protection via Initiative 8.2 by charging the Spanish AI Agency (AESIA) to ensure transparent and trustworthy AI. 5680

The 2020 Recommendation of the Council of Europe Committee of Ministers on human rights impacts of algorithm systems⁵⁶⁸¹ specifically emphasizes requirements on transparency, accountability, and effective remedies. With regard to transparency, the Recommendation provides that "States should establish appropriate levels of transparency with regard to the public procurement, use, design and basic processing criteria and methods of algorithmic systems implemented by and for them, or by private sector actors." ⁵⁶⁸²

The AEPD has published a detailed guide on "GDPR compliance of processings that embed AI" That clarifies transparency and explainaibility

⁵⁶⁷⁶ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁵⁶⁷⁷ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁵⁶⁷⁸ Global Privacy Assembly, List of Accredited Members,

https://globalprivacyassembly.org/participation-in-the-assembly/list-of-accredited-members/
⁵⁶⁷⁹ See Recital 63 and Article 22 of the GDPR. Article 9 c) of the Convention 108+ as well as Recital 77, *Explanatory Report, Convention 108*+, p. 24, https://rm.coe.int/convention-108-convention-for-the-protection-of-individuals-with-regar/16808b36f1

⁵⁶⁸⁰ Ministry for Digital Transformation, 2024 Artificial Intelligence Strategy (May 12, 2024), https://digital.gob.es/dam/en/portalmtdfp/DigitalizacionIA/1_DOSSIER_AI_ENGLISH_15_JUL_IO.pdf

⁵⁶⁸¹ Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems (Apr. 8, 2020),

 $[\]underline{\text{https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154}}_{\text{5682 Ibid}}$

⁵⁶⁸³ Spanish Data Protection Agency, *GDPR Compliance of Processings that Embed Artificial Intelligence: An Introduction* (Feb. 2020), https://www.aepd.es/es/documento/adecuacion-rgpd-ia-en.pdf

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obligations. In this guide, the AEPD explains that "complying with this obligation by making a technical reference to the algorithm implementation may be obscure, confuse or excessive and leading to information fatigue. However, sufficient information must be provided to understand the behaviour of the relevant processing." The AEPD provides many examples of the information that "must be provided" to understand the behavior of the relevant processing, with regard for example the relative importance or weight of each data category in the decision making, the quality of training data and the type of patterns used, and any reference to audits, "especially on the possible deviation of inference results, as well as certification or certifications performed on the AI system." The AEDP also published audit requirements for personal data processing activities involving AI in January 2021 and a reference map of personal data processing incorporating AI in November 2022.

The Ministry of Employment and Social Security contributed to the clarification with practical guideline on corporate obligations in the workplace. The guide complements the update of the workers' statute with specific guidelines for employers' use of automated-decision systems. ⁵⁶⁸⁸

The Charter of Digital Rights strengthens principles of Algorithmic Transparency. The Charter protects citizens against discrimination from decisions based on algorithms and maintains that "transparency, auditability, explicability and traceability" will be ensured. People have the right not to be the subject of a decision based solely on automated decision-making, thus recognizing the right to "request human supervision and intervention and challenge automated or algorithmic decisions." The Charter recognizes that citizens must be explicitly informed when they are talking to an artificial intelligence system and that assistance by a human being must be guaranteed if the person concerned requests it. 5689

https://www.lamoncloa.gob.es/presidente/actividades/Documents/2021/140721-

Carta Derechos Digitales RedEs.pdf; [English]

⁵⁶⁸⁴ Ibid, p. 23

⁵⁶⁸⁵ Ibid

⁵⁶⁸⁶ Spanish Data Protection Authority, *Mapa De Referencia Tratamiento De Datos Personales Que Incorporan Inteligencia Artificial (AI)* (Nov. 2022), https://www.aepd.es/media/guias-en/requisitos-auditorias-tratamientos-incluyan-ia-en.pdf

⁵⁶⁸⁷ Spanish Data Protection Authority, *Audit Requirements for Personal Data Processing Activities involving AI* (Jan. 2021), https://www.aepd.es/es/documento/tratamientos-inteligencia-artificial-en.pdf

⁵⁶⁸⁸ Spanish Ministry of Employment and Social Security, *Algorithmic Information in the Workplace* (May 2022),

https://www.mites.gob.es/ficheros/ministerio/inicio_destacados/Guia_Algoritmos_EN.pdf
⁵⁶⁸⁹ Government of Spain, *Digital Rights Charter* [Spanish] (2021),

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In July 2022, a new Law on equal treatment and non-discrimination entered into force. Article 23 of this Law establishes rules on AI and automated decision-making mechanisms, creating special obligations for public administration entities in relation to the AI algorithms they use for decisionmaking.⁵⁶⁹⁰ This Law establish that, within the framework of the ENIA and the Charter of Digital Rights in Spain, public administrations shall favor algorithms that take into account "criteria of minimization of bias, transparency and accountability, whenever technically feasible." Such mechanisms shall "include their design and training data, and will address their potential discriminatory impact," through impact evaluations to determine potential discriminatory bias. "Public administrations, within the framework of their competencies in the field of algorithms involved in decision-making processes, shall prioritize transparency in the design and implementation and the interpretability of the decisions adopted by them." Additionally, public administrations and companies "shall promote the use of an artificial intelligence that is ethical, reliable and respectful of fundamental rights, following especially the recommendations of the European Union in this regard.". A quality seal for algorithms is also to be created. 5691

Use of AI in Public Administration

As a member of the Latin American Centre for Development Administration (CLAD), Spain approved the Ibero American Charter on Artificial Intelligence in Civil Service in November 2023. The guiding principles include: human autonomy; transparency, traceability and explainability; accountability, liability and auditability; security and technical robustness; reliability, accuracy, and reproducibility; confidence, proportionality, and prevention of damage; privacy and protection of personal data; data quality and safety; fairness, inclusiveness, and non-discrimination; human-centering, public value, and social responsibility; and sustainability and environmental protection.

The Charter calls on member states to create policies and laws to require the assessment of the impact of AI systems on human rights and freedoms and the registration of algorithms to "anticipate risks, prevent undesirable effects and ensure its proper implementation." The Charter also proposes a risk

https://portal.mineco.gob.es/RecursosArticulo/mineco/ministerio/participacion_publica/audiencia/ficheros/Charter%20of%20Digital%20Rights.pdf

⁵⁶⁹⁰ Law 15/2022, of July 12, 2002, on equal treatment and non-discrimination,

https://www.boe.es/buscar/pdf/2022/BOE-A-2022-11589-consolidado.pdf

⁵⁶⁹¹ Ibid., Article 23 of the Law 15/2022, of July 12, 2002

⁵⁶⁹² Latin American Centre for Development Administration (CLAD), *Ibero American Charter on Artificial Intelligence in Civil Service* (Nov. 2023), https://clad.org/wp-content/uploads/2024/03/CIIA-EN-03-2024.pdf

⁵⁶⁹³ Ibid, p. 10

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classification mechanism similar to the EU AI Act that would require guardrails for middle-risk uses and prohibitions against high-risk applications. Prohibited uses go even beyond the EU AI Act to include facial recognition systems; systems aimed at behavior and cognitive manipulation of specific individuals or vulnerable groups (children or the elderly); and social ranking systems based on certain personality traits, individual behaviors, socio-demographic features or economic status.⁵⁶⁹⁴

The Minister of the Presidency, Justice, and Relations with the Parliament, Félix Bolaños announced an AI tool in 2024 that will make it easier for citizens to understand court decisions. An announcement about the tool highlights that it will contribute to the "materialization of the right to clear and comprehensible information, a right recently incorporated into the new Organic Law on the Right of Defence, currently being processed in the Congress of Deputies." 5695

Environmental Impact of AI

The 2024 AI strategy includes initiatives for the creation of environmentally sustainable data centers (DPCs) and the implementation of energy efficiency strategies in AI-related infrastructures. Spain is implementing the EU's Energy Efficiency Directive, requiring data centers over 500 kW to report on energy performance, renewable use, water footprint, and demand. In their initiative 2.2. Planning and management in the installation of DPCs, the Ministry for Digital Transformation and Civil Service looks at key primary objectives including Incentivizing the installation of sustainable data centers, encouraging investment in key infrastructure, and fostering sustainability and efficiency. Data centers above 1 MW must also adopt waste heat recovery strategies.⁵⁶⁹⁶

Lethal Autonomous Weapons

Spain has responded to the threat of Lethal Autonomous Weapons Systems (LAWS) by affirming that the Spanish military does not have and will not develop such technology and emphasizing the need for meaningful human control for weapons systems to be compliant with international humanitarian law. Spain has consented as well to the 11 Principles on LAWS launched by France in 2019. 5697

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⁵⁶⁹⁴ Ibid, p. 21

⁵⁶⁹⁵ Espana Digital, Félix Bolaños Announces an Al Tool (Oct. 2, 2024),

https://espanadigital.gob.es/actualidad/felix-bolanos-anuncia-una-herramienta-de-ia-que-facilitara-la-ciudadania-la-comprension

⁵⁶⁹⁶ Ministry for Digital Transformation, 2024 Artificial Intelligence Strategy, p. 20 (May 12, 2024),

 $[\]underline{https://digital.gob.es/dam/en/portalmtdfp/DigitalizacionIA/1_DOSSIER_AI_ENGLISH_15_JUL_IO.pdf}$

⁵⁶⁹⁷ French Ministry for Europe and Foreign Affairs, 11 Principles on Lethal Autonomous Weapons Systems (LAWS) (Sept. 2019), https://www.diplomatie.gouv.fr/en/french-foreign-

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Spain was one of the 70 countries that endorsed a joint statement on autonomous weapons systems at the 2022 United Nations General Assembly. The joint statement urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law, including through maintaining human responsibility and accountability in the use of force." ⁵⁶⁹⁸

Spain also submitted a working paper with Sweden, Finland, France, Germany, the Netherlands and Norway to the 2022 Chair of the Group of Governmental Experts (GGE) on emerging technologies in the area of Lethal Autonomous Weapons Systems. This working paper presents a two-tier approach. Accordingly, States should commit to (1) outlaw fully autonomous lethal weapons systems operating completely outside human control and a responsible chain of command, and (2) regulate other lethal weapons systems featuring autonomy to ensure compliance with the rules and principles of international humanitarian law by preserving human responsibility and accountability through appropriate human control and risk mitigation measures.

Spain participated in the REAIM 2023 international summit on the responsible application of artificial intelligence in the military domain hosted by the Netherlands. At the end of the Summit, Spain endorsed a joint call stressing the "paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." Spain also endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023. Spain also attended the REAIM

 $\frac{policy/united-nations/multilateralism-a-principle-of-action-for-france/alliance-for-multilateralism/article/11-principles-on-lethal-autonomous-weapons-systems-laws$

⁵⁶⁹⁸ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

 $[\]frac{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm_en.pdf}{}$

⁵⁶⁹⁹ CCW, Documents from the 2022 CCW Group of Governmental Experts on lethal autonomous weapon systems, Reaching Critical Will, https://reachingcriticalwill.org/disarmament-fora/ccw

⁵⁷⁰⁰ Government of Netherlands, *Call to Action on Responsible Use of AI in the Military Domain* (Feb. 16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action
⁵⁷⁰¹ US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Nov. 27, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

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2024 Summit in Seoul, South Korea,⁵⁷⁰² and endorsed the resulting Blueprint for Action, which outlines a plan for implementing the REAIM principles.⁵⁷⁰³

At the 78th UN General Assembly First Committee in 2023, Spain voted in favor⁵⁷⁰⁴ of resolution L.56⁵⁷⁰⁵ on autonomous weapons systems, along with 163 other states. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on autonomous weapons systems. Spain submitted comments to the Secretary General reiterating full support for the guiding principles on LAWS established by the GGE in 2019 and for the two-tiered approach.⁵⁷⁰⁶

Human Rights

Spain ranks highly for political rights and civil liberties, with a score of 90/100 and "free" in the Freedom House Freedom in the World report. According to Freedom House, "Spain's parliamentary system features competitive multiparty elections and peaceful transfers of power between rival parties. The rule of law prevails, and civil liberties are generally respected. [...] Restrictive legislation adopted or enforced in recent years poses a threat to otherwise robust freedoms of expression and assembly." 5708

Spain met a new milestone in October 2024 with their election as a member to the UN Human Rights Council. "As an elected member of the Council, Spain assumes the responsibility to contribute to improving the effectiveness of the international protection of human rights. Spain will play an active role in the search for common ground in consultations and negotiations." ⁵⁷⁰⁹

 $\frac{https://www.reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163\&shareBbsMngNo=10264\&shareMenuId=11613\&shareTabMenuId=$

https://reachingcriticalwill.org/images/documents/Disarmament-

fora/1com/1com23/resolutions/L56.pdf

⁵⁷⁰⁶ UN General Assembly, *Lethal Autonomous Weapons Systems: Report of the Secretary-General, A/79/50*, p. 103 (Jul. 1, 2024),

 $\underline{https://documents.un.org/doc/undoc/gen/n24/154/32/pdf/n2415432.pdf}$

https://freedomhouse.org/country/spain/freedom-world/2024

⁵⁷⁰² REAIM 2024, *REAIM Summit 2024*, https://www.reaim2024.kr/reaimeng/index.do

⁵⁷⁰³ REAIM 2024, Blueprint for Action (Sept. 11, 2024),

⁵⁷⁰⁴ Stop Killer Robots, 164 states vote against the machine at the UN General Assembly,

https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

⁵⁷⁰⁵ General Assembly, *Resolution L56: Lethal Autonomous Weapons* (Oct. 12, 2023),

⁵⁷⁰⁷ Freedom House, Freedom in the World 2024: Spain (2024),

⁵⁷⁰⁸ Ibid

⁵⁷⁰⁹ Ministry of Foreign Affairs, European Union and Cooperation, *News: Spain Elected Member of the United Nations Human Rights Council* (Oct. 9, 2024),

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Al Safety Summit

Spain participated in the first AI Safety Summit and endorsed the Bletchley Declaration in November 2023. 5710 Spain thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible."

OECD / G20 AI Principles

Spain endorsed the OECD AI Principles in 2019 as well as the updated principles in 2024.⁵⁷¹¹ Spain explicitly incorporated many of the principles into the ENIA, Digital Rights Charter, ⁵⁷¹² and updated 2024 National AI Strategy ⁵⁷¹³ Spain is also a member of the Global Partnership on AI, a multi-stakeholder initiative which aims to foster international cooperation on AI research and applied activities and which is "built around a shared commitment to the OECD Recommendation on Artificial Intelligence." ⁵⁷¹⁴

Council of Europe AI Treaty

Spain contributed as a Council of Europe and EU Member State⁵⁷¹⁵ in the negotiations of the Council of Europe Framework Convention on AI and Human

https://www.exteriores.gob.es/en/Comunicacion/NotasPrensa/Paginas/2024_NOTAS_P/2024100 9 NOTA062.aspx

https://oecd.ai/en/dashboards/countries/Spain

⁵⁷¹⁰ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, *Prime Minister's Office, The Bletchley Declaration by Countries Attending the AI Safety Summit* (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

⁵⁷¹¹ OECD Legal Instruments, *Reccomendation of the Council on Artificial Intelligence, Adherents* (May 3, 2024), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449#adherents

⁵⁷¹² OECD AI Policy Observatory, AI in Spain (2023),

⁵⁷¹³ Ministry for Digital Transformation, *2024 Artificial Intelligence Strategy* (May 12, 2024), https://digital.gob.es/dam/en/portalmtdfp/DigitalizacionIA/1_DOSSIER_AI_ENGLISH_15_JUL IO.pdf

⁵⁷¹⁴ GPAI, Community (2024), https://gpai.ai/community/

⁵⁷¹⁵ Coucil of Europe, *The Framework Convention on Artificial Intelligence* (Sept. 5, 2024), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

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Rights, Democracy, and the Rule of Law.⁵⁷¹⁶ The European Union has signed this first legally binding international AI treaty, making Spain party to the treaty. However, Spain has not signed as an independent nation.⁵⁷¹⁷

UNESCO Recommendation on AI Ethics

Spain endorsed the UNESCO Recommendations on AI, the first ever global agreement on the ethics of AI. ⁵⁷¹⁸ Spain is in process of completing the UNESCO Readiness Assessment, a tool to support the effective implementation of the UNESCO Recommendation on the Ethics of Artificial Intelligence. ⁵⁷¹⁹ The RAM exercise helps countries and UNESCO identify and address any institutional and regulatory gaps in legal and policy frameworks, technical infrastructure, human capital, and ethical considerations. ⁵⁷²⁰

Evaluation

Spain has developed a strong ethics-focused national AI strategy, created an independent Advisory Council, installed a Director of AESIA to guide implementation of the strategy, introduced an AI Sandbox to test robustness of algorithms in accordance with the AI Act, enacted a Charter for Digital Rights, and has played a key role enabling the EU AI Act. Spain benefits from a strong data protection legal framework with an active data protection agency that has shown it could be active in AI oversight to foster a better protection of citizens' rights. The Government is taking steps to address the environmental impacts of AI use, the challenges of Lethal Autonomous Weapons, and has demonstrated continued alignment with UNESCO's RAM, OECD AI Principles, and the Universal Declaration of Human Rights.

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⁵⁷¹⁶ Council of Europe, *Draft Framework Convention on AI, human rights, democracy and the rule of law* (Mar. 2024),

https://search.coe.int/cm/pages/result_details.aspx?objectid=0900001680aee411

⁵⁷¹⁷ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Feb. 27, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

⁵⁷¹⁸ UNESCO, *UNESCO member states adopt the first ever global agreement on the Ethics of Artificial Intelligence* (Nov. 2021), https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence.

⁵⁷¹⁹ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

⁵⁷²⁰ UNESCO Global AI Ethics and Governance Observatory, *Readiness Assessment Methodology* (2023), https://www.unesco.org/ethics-ai/en/ram

Sweden

In 2024, Sweden's National AI Center updated the National AI Strategy centered on AI adoption and trust, value-creatin, and cross-sector collaboration while aligning with democratic values. The country also appointed authorities to oversee the EU Digital Services Act (DSA). Sweden is party to the Council of Europe AI Treaty through the EU endorsement but has not clarified whether it will apply the treat to the private as well as public sector.

National AI Strategy

Sweden issued the National Approach to Artificial Intelligence in May 2018. The National Approach reflects the government's goal "to make Sweden a leader in harnessing the opportunities that the use of AI can offer, with the aim of strengthening Sweden's welfare and competitiveness."5721 This goal "is closely linked to the digital transformation goal adopted by the Riksdag [Swedish Parliament] and complements the Government's Digital Strategy."5722

Sweden emphasized that a "cross-cutting theme should be sustainable AI, meaning that AI applications should be ethical, safe, secure, reliable and transparent." The Swedish Government acknowledged potential threats from AI and the "the use of AI algorithms," including "challenges related to rule of law procedures and the automation of agency decisions," "risks to both society and individuals," "fundamental needs for privacy," "discrimination, loss of trust," and consequences for the functioning of democracy.

Accountability is not mentioned. The emphasis is on responsible design and use of AI. For example, "it is important that AI systems are carefully designed to prevent them from doing harm. It is therefore important that companies and public institutions collaborate with relevant academics, for example through joint projects or staff exchanges."5723

The Government defines "key conditions for realising the potential of AI as (1) Education and training, (2) Research, (3) Innovation and use, and (4) Framework and infrastructure. Three Ministries—Ministry of Infrastructure, Ministry of Enterprise and Innovation, and Ministry of Education and Research are responsible for AI policies and independent agencies under these Ministries implement these policies.

Under Innovation, the National Approach highlights pilot projects, testbeds and development environments in public and private sectors, efforts to prevent and manage risks, and partnerships and collaborations, especially within

⁵⁷²¹ Government Offices of Sweden, National Approach to Artificial Intelligence, OECD, p. 5 (May 2018),

https://wp.oecd.ai/app/uploads/2021/12/Sweden National Approach to Artificial Intelligence 2018.pdf

⁵⁷²² Ibid

⁵⁷²³ Ibid, p. 7

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the EU, as specific needs "that can "contribute to the use of AI evolving in a safe, secure and responsible manner." Under framework and infrastructure, the Swedish approach highlights "rules, standards, norms, and ethical principles to guide ethical and sustainable AI and the use of AI"; national and international standards and regulations; continual review of digital infrastructure and greater availability of data; and an active role in assisting efforts to promote digitization in the EU.5725

The Swedish Government acknowledged the General Data Protection Regulation (GDPR) as "an important part of the AI framework" because of the strong privacy protection in personal data processing. The National Approach to AI notes that "How different stakeholders are able to implement the GDPR in their respective activities will play a major role in how well Sweden is able to manage both the benefits and risks of AI."

The Swedish National Approach to AI should also be read against the background of a 2020 position paper to the European Commission's White Paper on AI known as a "non-paper." Sweden and 13 other EU member states describe human-centric and trustworthy AI "as a competitive advantage." According to the non-paper, Sweden supports the use of hard law tools for "creating a genuinely single market for AI." Sweden also favors the use of "soft law solutions such as self-regulation, voluntary labelling and other voluntary practices as well as robust standardisation process[es]." As for risks to individuals or to society stemming from the use of AI, Sweden advocates for an evidence-based and "well-calibrated and proportionate approach."

The national center for applied AI, AI Sweden, which was created in 2019 and supported by public- and private-sector funds, launched an adoption-centric AI strategy in March 2024. The new strategy promotes AI adoption aligned with democratic values to leverage AI capabilities, value creation, and cross- sector collaboration. The strategy is premised on the vision that Sweden must "[seize] the opportunity of AI to solve key societal and business challenges for the benefit of a prosperous society characterized by democratic values and high quality of life.

⁵⁷²⁴ Government Offices of Sweden, *National Approach to Artificial Intelligence*, OECD, p. 8 (May 2018),

https://wp.oecd.ai/app/uploads/2021/12/Sweden_National_Approach_to_Artificial_Intelligence_2018.pdf

⁵⁷²⁵ Ibid, p. 10

⁵⁷²⁶ Ibid, p. 10

⁵⁷²⁷ Danish Ministry of Industry, Business and Financial Services, *Innovative and Trustworthy AI: Two Sides of the Same Coin, Position Paper on Behalf of Denmark, Belgium, the Czech Republic, Finland, France, Estonia, Ireland, Latvia, Luxembourg, the Netherlands, Poland, Portugal, Spain, and Sweden* (Aug. 10, 2020), https://www.em.dk/media/15214/non-paper-innovative-and-trustworthy-ai-two-side-of-the-same-coin.pdf

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This is powered by a robust, highly attractive, and ambitious Swedish AI ecosystem that has a positive global impact on people and the planet."5728

Developed under a "strong sense of urgency," the strategy outlines six "fundamental standpoints and perspectives":

- competitiveness, highlighting the role of the private sector in leading AI through a "reinforcement loop" that attracts talent, generates value and increases investments
- speed, emphasizing the need to identify "new ways of working, new incentives, new funding processes, and new ways of collaborating" to keep up with the pace of AI developments
- availability, the need to "prioritize investments driving adoption and valuecreation based on such proprietary data [i.e., data held by companies and organizations]
- bold leadership
- skills and talent, including education, re-/upskilling and the need for crossdisciplinary and context-dependent skills
- collaboration, emphasizing its relevance to "build enough capability and competence" both in the private sector and the Swedish public sector characterized by "high decentralization." 5729

The AI Sweden strategy also provides a framework for benchmarking progress focused on three main areas: 1) enablers, 2) investments, and 3) use and value creation. Metrics to evaluate progress on each of these indicators are suggested. As an indicator of progress, the strategy suggests the country should pursue ranking among the top 10 countries in the Global AI Index. ⁵⁷³⁰

AI Sweden also established a Legal Expert Group, which consists of legal experts from its partners. The Group discusses legal questions related to AI and data and they "collaborate in trying to create, for example, white papers, guidelines and/or common interpretations and solutions for legal issues that could benefit all partners within AI Sweden." In 2021, the Legal Expert Group met numerous times and discussed matters such as the practical use of applied AI, the concept of Federated Learning, questions regarding anonymization and pseudonymization, the EU Proposal for an AI Act, intellectual property rights, and standardized agreements for sharing data. AI Sweden and the Legal Expert Group also initiated a collaboration with the Swedish Authority for Privacy Protection

⁵⁷²⁸ AI Sweden, An AI Strategy for Sweden (Mar. 2024), https://strategy.ai.se/

⁵⁷²⁹ Ibid

⁵⁷³⁰ Ibid

⁵⁷³¹ AI Sweden, *Legal Expert Group*, https://www.ai.se/en/legal-expert-group

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(IMY). Future discussions will concentrate on using AI in a legal context, such as using natural language processing (NLP) as a tool in legal work. ⁵⁷³²

In this regard, AI Sweden collected data and initiated training to develop a large generative pre-trained model (GPT) to perform on Nordic languages.⁵⁷³³ The model, GPT-SW3, is an open-source generative language model that will be publicly available for individuals and organizations. The ambition is to ultimately develop a model family available for download to be modified, fine-tuned, researched, and commercialized.

Similar projects are also being developed, most notably, the Swedish multimodal AI model and the EU-funded TrustLLM project, which aims to develop European "trustworthy, sustainable and democratized" large language models (LLMs), and runs until October 2026.⁵⁷³⁴

The Swedish Government announced the appointment of the AI Commission in December 2023. The AI Commission is charged with ensuring Sweden's competitiveness in the AI field and that the country "takes advantage of the opportunities while managing the risks in order to realize the full potential of AI."5735 The AI Commission will "analyze the conditions for, among other things, higher education to be sufficient to meet tomorrow's needs in AI use and AI development; identify how Sweden can act to promote a competitive and secure AI within the EU and globally; propose how Sweden can attract venture capital and facilitate innovation for strengthening the competitiveness of AI; propose how public administration can be streamlined by using AI; and analyze how the use of AI can affect and promote Sweden's security and counteract undue influence on democracy."5736

The government assigned the AI Commission with producing a report to "identify needs for and submit proposals that promote competitive, safe and ethical AI development and AI use in Sweden; identify priority international efforts and submit proposals for how Sweden can act proactively and coordinated in the development of international policies and regulations for AI; analyze and describe

⁵⁷³² AI Sweden, *Update from AI Sweden's Legal Expert Group* (Jan. 17, 2022), https://www.ai.se/en/news/update-ai-swedens-legal-expert-group

⁵⁷³³ AI Sweden, *Multimodal Language Model*, https://www.ai.se/en/project/multimodal-language-model

⁵⁷³⁴ AI Sweden, *TrustLLM*, https://www.ai.se/en/project/trustllm

⁵⁷³⁵ Government Offices of Sweden, Press Release from the Ministry of Finance, Prime Minister's Office, *The Government Appoints an AI Commission to Strengthen Swedish Competitiveness [Regeringen tillsätter en AI-kommission för att stärka svensk konkurrenskraft]* (Dec. 8, 2023), https://www.regeringen.se/pressmeddelanden/2023/12/regeringen-tillsatter-en-ai-kommission-for-att-starka-svensk-konkurrenskraft/
https://www.regeringen.se/pressmeddelanden/2023/12/regeringen-tillsatter-en-ai-kommission-for-att-starka-svensk-konkurrenskraft/
https://www.regeringen.se/pressmeddelanden/2023/12/regeringen-tillsatter-en-ai-kommission-for-att-starka-svensk-konkurrenskraft/

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how the use of AI can affect and promote Sweden's security and democracy; and if necessary, make legislative proposals." The assignment is due on July 1, 2025.

National AI Legislation

The International Bar Association released an updated report in September 2024 which echoed earlier reports on the status of AI legislation in Sweden: "there are currently no "AI laws" in Sweden. Historically, the legislative approach in Sweden has been to pass technology-agnostic legislation that does not need to be changed with every advance in technology." Thus, "it is of central priority for the Swedish legislature to assess current legislation from an AI perspective and implement necessary changes. Furthermore, support in the interpretation of legislation is required from courts and public authorities. Access to data, information security and robustness, together with the ethical use of AI, are principles of central importance in the future regulatory approach." 5739

EU AI Act

Sweden held the Presidency of the Council of the European Union in the first half of 2023. Ann Christin Linde, Minister for Foreign Affairs of Sweden, while addressing the 77th Session of the General Assembly of the UN in September 2022 stated that Sweden would work to "protect, promote and defend democratic principles, human rights and the rule of law." The EU AI Act a risk-based market regulation which supports the objective of promoting a human-centric approach to AI and making the EU a global leader in the development of secure, trustworthy and ethical AI.

The Swedish Ministry of Finance launched a directive in 2024 to revise and adapt national regulations to ensure that the country adheres to the EU AI Act, to be concluded by the end of September 2025.⁵⁷⁴² The aim is to "submit proposals on how the system for market surveillance, market control, governance and control

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⁵⁷⁴¹ European Parliament, *Artificial Intelligence Act* (Mar. 13, 2024),

 $\frac{https://www.europarl.europa.eu/RegData/seance_pleniere/textes_adoptes/definitif/2024/03-13/0138/P9_TA(2024)0138_EN.pdf$

⁵⁷³⁷ Government Offices of Sweden, Committee Directive from the Ministry of Finance, Strengthened AI Capabilities in Sweden Dir. 2023:164 [Förstärkt AI-förmåga i Sverige] (Dec.8, 2023), https://www.regeringen.se/rattsliga-dokument/kommittedirektiv/2023/12/dir.-2023164 ⁵⁷³⁸ International Bar Association, Guidelines and Regulations to Provide Insights on Public Policies to Ensure Artificial Intelligence's Beneficial Use as a Professional Tool, p. 298 (Sept. 18, 2024), https://www.ibanet.org/PPID/Constituent/Multi-displry Pract/anlbs-ai-report ⁵⁷³⁹ Ibid

⁵⁷⁴⁰ United Nations, Sweden Minister for Foreign Affairs Addresses General Debate, 77th Session (Sept. 24, 2022), https://www.youtube.com/watch?v=c3NRoO1SyEM
5741 Evropeen Populisment Artificial Intelligence Act (Mag. 12, 2024)

⁵⁷⁴² Government Offices of Sweden, Committee Directive from the Ministry of Finance, *Safe and Reliable use of AI [Trygg och tillförlitlig användning av AI] Dir. 2024:83*, (Sept. 23, 2024), https://www.regeringen.se/rattsliga-dokument/kommittedirektiv/2024/09/dir.-202483

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of compliance should be designed; identify other needs for national adaptation resulting from the AI Regulation and propose how such needs are to be met; make the necessary legislative proposals."5743

Nordic-Baltic and Nordic Cooperation on Al

As for the regional landscape, Peter Eriksson, the Swedish Minister for Housing and Digital development, signed the declaration on "AI in the Nordic-Baltic region" establishing a collaborative framework on "developing ethical and transparent guidelines, standards, principles and values to guide when and how AI applications should be used" and "on the objective that infrastructure, hardware, software and data, all of which are central to the use of AI, are based on standards, enabling interoperability, privacy, security, trust, good usability, portability."5744

The ministerial declaration Digital North 2.0⁵⁷⁴⁵ builds on the common priorities of the Nordic-Baltic countries and follows the previous ministerial declaration, Digital North 2017-2020. "In order to promote work with digitalisation, co-ordinate efforts, and follow up on the goals of the declaration, a council of ministers for digitalisation (MR-DIGITAL) was established in 2017. The aim is to promote development in three areas: (1) Increase mobility and integration in the Nordic and Baltic region by building a common area for crossborder digital services; (2) Promote green economic growth and development in the Nordic-Baltic region through data-driven innovation and a fair data economy for efficient sharing and re-use of data; and (3) Promote Nordic-Baltic leadership in the EU/EEA and globally in a sustainable and inclusive digital transformation of our societies."5746

The MR-DIGITAL announced a focus on digital inclusion in November 2021. They committed to implementing measures to make digital services more accessible to all inhabitants in the region and to ensure that those who do not possess the necessary skills get the opportunity to acquire them. 5747

The Nordic and Baltic ministers issued a common statement on the importance of cooperation on digital security in the Nordic-Baltic region in 2022,

⁵⁷⁴³ Ibid

⁵⁷⁴⁴ Nordic and Baltic Ministers of Digitalization, AI in the Nordic-Baltic Region (May 14, 2018), https://www.norden.org/en/declaration/ai-nordic-baltic-region

⁵⁷⁴⁵ Nordic and Baltic Ministers of Digitalization, *Ministerial Declaration Digital North 2.0* (Sept. 29, 2020), https://www.norden.org/en/declaration/ministerial-declaration-digital-north-20 ⁵⁷⁴⁶ Nordic Co-operation, Nordic-Baltic Co-operation on Digitalisation,

https://www.norden.org/en/information/nordic-baltic-co-operation-digitalisation

⁵⁷⁴⁷ Nordic and Baltic Ministers of Digitalization, Common Statement on the Importance of Promoting Digital Inclusion as a Central Part of the Digital Transformation in the Nordic-Baltic Region (Nov. 26, 2021), https://www.norden.org/en/declaration/common-statement-importancepromoting-digital-inclusion-central-part-digital

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following the COVID-19 pandemic and the war in Ukraine. The ministers stressed that this "rapid transformation has challenged everyone to adapt to new, digital ways of doing business, learning and accessing public authorities." The ministers declared that they "have committed to ensuring that our region maintains its position as a leader in digitalisation, and that everyone in the region benefits from digitalisation regardless of age, wealth, education or level of digital skills." The ministers acknowledged that "Robust and secure digital services, safeguarding users' privacy and ensuring that personal data are stored and processed in a trustworthy way, are crucial to the citizens' sustained trust in digital services" and committed "to continue our efforts to make our digital public services human centric and accessible." 5748

As part of its action plan for Vision 2030 (2021–2024), the Nordic Council of Ministers also identified innovation, digital integration, the safe use of artificial intelligence, data development and open data, education and digitalization as key objectives. The Nordic Council of Ministers also emphasizes the involvement of civil society in efforts relating to our vision for 2030 thanks to "a Nordic civil society network and public consultations." ⁵⁷⁵⁰

The Nordic Ethical AI Expert Group from Nordic Innovation—an organization under the Nordic Council of Ministers—launched five recommendations in June 2024 to guide members' development of ethical AI.⁵⁷⁵¹ The recommendations are: "1) Develop a joint Nordic strategy for ethical and responsible AI; 2) Establish a Nordic center for ethical and responsible AI focused on AI innovation; 3) Promote and coordinate large language models (LLMs)s for Nordic languages; 4) Cultivate a skilled workforce and competent society; 5) Enhance transparency in sustainability of AI technology."⁵⁷⁵²

An announcement that preparations are underway for a Nordic AI Center, developed by AI Sweden in collaboration with AI Finland and IKT-Norway, soon

5752 Ibid

⁵⁷⁴⁸ Nordic and Baltic Ministers of Digitalization, *Common Statement on the Importance of Cooperation on Digital Security in the Nordic-Baltic Region* (Sept. 6, 2022), https://www.norden.org/en/declaration/common-statement-importance-cooperation-digital-security-nordic-baltic-region

Nordic Council of Ministers, *The Nordic Region—Towards Being the Most Sustainable and Integrated Region in the World, Action Plan for 2021–2024* (Dec. 14, 2020), https://www.norden.org/en/publication/nordic-region-towards-being-most-sustainable-and-integrated-region-world

⁵⁷⁵⁰ Nordic Council of Ministers, *Guidelines for Involving Civil Society in Work Relating to Our Vision 2030* (Feb. 12, 2021), https://www.norden.org/en/publication/guidelines-involving-civil-society-work-relating-our-vision-2030

⁵⁷⁵¹ Nordic Innovation, *Press Release: Nordic AI Experts Launch Five Recommendations for Ethical AI* (Jun. 16, 2024), <a href="https://www.nordicinnovation.org/news/press-release-nordic-ai-experts-launch-five-recommendations-ethical-ai-experts-launch-five-r

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followed.⁵⁷⁵³ Aligned with the adoption-focus of the AI Sweden strategy, the Nordic AI Center would focus on AI application and development on a Nordic and Baltic level by supporting countries to drive AI adoption, increasing collaboration, building stronger relevance for the region internationally, and serving as a repository for investments in knowledge, technology, and solutions.⁵⁷⁵⁴

Public Participation

As for public participation, the Government states in the National Approach that "For Sweden to reap the benefits of AI, all sectors of society must be involved." According to AlgorithmWatch, however, most of the funding and strategic development takes place in universities and as support for business environments. Nevertheless, AlgorithmWatch also describes the addAI initiative, "a collaboration between experts in academia, government and companies to discuss and explore the impact of smart algorithms and AI on society through the organisation of workshops and participation in public events."

An AI Sustainability Center funded by VINNOVA (Swedish Innovation Agency) has been functional in Stockholm, Sweden since 2018 as "a knowledge-sharing network dedicated to the sustainable and ethical use of AI and data-driven technologies," while assisting organizations to comply with EU regulations. ⁵⁷⁵⁷ The unique composition of the center constitutes a participation of companies, academic institutions, public agencies, and civil society helping organizations to align with ethical AI principles. ⁵⁷⁵⁸

Since 2022, an AI Council has been operational under AI Sweden with participation of members from twelve Swedish municipalities.⁵⁷⁵⁹ The council

https://www.nordicinnovation.org/programs/new-nordics-ai-preparation-project

⁵⁷⁵³ Nordic Innovation, *Press Release: Preparations for a Nordic AI Center Are Underway* (Aug. 30, 2024), https://www.nordicinnovation.org/news/press-release-preparations-nordic-ai-center-are-underway

⁵⁷⁵⁴ Nordic Innovation, New Nordics AI-Preparation Project (2025),

⁵⁷⁵⁵ Government Offices of Sweden, *National Approach to Artificial Intelligence*, p. 5, OECD (May 2018),

https://wp.oecd.ai/app/uploads/2021/12/Sweden_National_Approach_to_Artificial_Intelligence_2018.pdf

⁵⁷⁵⁶ Anne Kuan and Julia Velkovia, *Automating Society: Sweden*, AlgorithmWatch (Jan. 29, 2019), https://algorithmwatch.org/en/automating-society-2019/sweden/

⁵⁷⁵⁷ Mattias Wiggberg, *AI Sustainability Center (AISC)*, KTH Royal Institute of Technology, https://www.kth.se/indek/mt/current-projects/ai-sustainability-center-aisc-1.1073770

⁵⁷⁵⁸ anch.AI, AI Sustainability Center Established in Stockholm (2023),

https://anch.ai/about/press-releases/ai-sustainability-center-established-in-stockholm/

⁵⁷⁵⁹ AI Sweden, *Press Release: New Support for Municipalities and Civil Society to Create Societal Benefits with the Help of AI* (Sept. 19, 2022),

https://via.tt.se/pressmeddelande/3330949/nytt-stod-till-kommuner-och-%20civilsamhalle-ska-skapa-samhallsnytta-med-hjalp-av-ai?publisherId=3236039&lang=sv

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offered a series of recommendations for initiatives aimed at enhancing the ability of Swedish municipalities to utilize AI for the Swedish welfare sector. The council's work is led in collaboration between AI Sweden and the Swedish Association of Local Authorities and Regions (SKR).

The AI council offered five key recommendations in 2023. These five recommendations were to formulate a national AI strategy, create long term funding and collaboration support for municipality-led AI projects, develop standards and shared infrastructure for data management and AI applications, promote a skill development initiative to enhance AI competence in the municipality, and establish AI policies and regulations to support unified legal interpretations across Sweden. The city of Stockholm, in collaboration with AI Sweden and Sigtuna Municipality, is serving as a leading example of municipality-wide digital competency programs to enhance digital skills.

AI Sweden established The Civil Society Forum for Responsible AI in September 2024. The Forum engages civil society to play a key role "in shaping and upholding social values" by collectively developing guidelines and best practices for AI use within the NGO and social sectors. Between the fall of 2024 and the spring of 2025, the group is due to meet six times to share best practices and develop "guidelines that promote sustainability, collaboration, and sound operational principles related to AI."⁵⁷⁶³ This initiative is part of AI Sweden's AI for Impact project funded by Google.org. The project also comprises a hackathon that brings AI experts and civil society organizations together for "developing solutions with lasting social impact."⁵⁷⁶⁴

EU Digital Services Act

As an EU member state, Sweden shall apply the EU Digital Services Act (DSA).⁵⁷⁶⁵ The DSA regulates online intermediaries and platforms to prevent

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⁵⁷⁶⁰ AI Sweden, *AI Council Develops Recommendations for Accelerated AI Development in Swedish Municipalities* (Aug. 24, 2023), https://www.ai.se/en/news/ai-council-develops-recommendations-accelerated-ai-development-swedish-municipalities

⁵⁷⁶¹ Andreas Skog, *The AI Council*, AI Sweden, https://www.ai.se/en/sector-initiatives/municipalities-and-civil-society/ai-council

⁵⁷⁶² Raquel Broman, *Digital Competence Development*, *The City of Stockholm*, AI Sweden, https://www.ai.se/en/project/digital-competence-development-city-stockholm

⁵⁷⁶³ AI Sweden, *New Initiative for Responsible AI within Civil Society* (Sept. 6, 2024), https://www.ai.se/en/news/new-initiative-responsible-ai-within-civil-society

⁵⁷⁶⁴ AI Sweden, *Impact Hack 2025: AI Experts and Civil Society Join Forces for Positive Change* (Oct. 30, 2024), https://www.ai.se/en/news/impact-hack-2025-ai-experts-and-civil-society-join-forces-positive-change

⁵⁷⁶⁵ EUR-Lex, Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and Amending Directive 2000/31/EC

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illegal and harmful activities online, including the spread of disinformation. Online intermediaries and platforms must implement ways to prevent and remove posts containing illegal goods, services, or content while giving users the means to report or flag this type of content. The DSA also bans targeted advertising based on a person's sexual orientation, religion, ethnicity, or political beliefs, as well as targeted advertising to minors based on profiling.

Signatories to the DSA commit to naming national authorities to enforce the DSA and hold companies and platforms accountable. Signatories must also take action to reduce online harms, specifically under the 2022 Strengthened Code of Practice on Disinformation,⁵⁷⁶⁶ which counts as a mitigation measure under the DSA. Under the DSA, Sweden is charged to create conditions for a safe information ecosystem, demonetizing the dissemination of disinformation; ensuring the transparency of political advertising; empowering users; enhancing the cooperation with fact-checkers; and providing researchers with better access to data.

To comply with the DSA, the Swedish government assigned three agencies as competent authorities to supervise providers of intermediary services and enforcement of the DSA regulation in February 2024: Swedish Consumer Agency, the Swedish Media Authority, and the Swedish Post and Telecom Agency (PTS). PTS was also appointed national Digital Services Coordinator for digital services, responsible for supervision and enforcement of the DSA in Sweden. However, the European Commission opened an infringement procedure against Sweden in July 2024 for not yet endowing PTS "with the necessary powers and competences to carry out their tasks, including the imposition of sanctions in cases of noncompliance." PTG The Future of Free Speech issued in May 2024 raised concerns on the effects of content moderation regulations, such as the DSA, on free speech, after determining that most of the content removed from social media

⁽Digital Services Act) (Oct. 21, 2022), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022R2065

⁵⁷⁶⁶ European Commission, *The 2022 Code of Practice on Disinformation* (Feb. 13, 2025), https://digital-strategy.ec.europa.eu/en/policies/code-practice-disinformation

⁵⁷⁶⁷ Government Offices of Sweden, Government Assignment from the Ministry of Finance, Assignment to the Swedish Post and Telecom Agency, the Swedish Consumer Agency and the Swedish Media Authority to Be Competent Authorities and to the Swedish Post and Telecom Agency to Be Coordinator for Digital Services According to the EU Digital Services Regulation, Registry number Fi2024/00301 (Feb. 29, 2024),

https://www.regeringen.se/regeringsuppdrag/2024/02/uppdrag-till-post--och-telestyrelsen-konsumentverket-och-mediemyndigheten-att-vara-behoriga-myndigheter-och-till-post--och-telestyrelsen-att-vara-samordnare-for-digitala-tjanster-enligt-eus-forordning-om-digitala-tjanster/

5768 European Commission, *Digital Services Coordinators* (Feb. 12, 2025), https://digital-post--och-telestyrelsen-att-vara-behoriga-myndigheter-och-till-post--och-telestyrelsen-att-vara-behoriga-myndigheter-och-till-post--och-telestyrelsen-att-vara-behoriga-myndigheter-och-till-post--och-telestyrelsen-att-vara-behoriga-myndigheter-och-till-post--och-telestyrelsen-att-vara-samordnare-for-digitala-tjanster-enligt-eus-forordning-om-digitala-tjanster/

5768 European Commission, *Digital Services Coordinators* (Feb. 12, 2025), <a href="https://digital-post--och-telestyrelsen-att-vara-behoriga-myndigheter-och-till-post--och-telestyrelsen-att-vara-samordnare-for-digitala-tjanster-enligt-eus-forordning-om-digitala-tjanster-enligt-eus-forordning-om-digitala-tjanster-enligt-eus-forordning-om-digitala-tjanster-enligt-eus-forordning-om-digitala-tjanster-enligt-eus-forordning-enligt-eus-forordning-enligt-e

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platforms in Sweden, Germany, and France, was legal. In Sweden, for example, the percentage of legal content removed was nearly 94%. 5769

Data Protection

Since Sweden is an EU Member State, the GDPR ⁵⁷⁷⁰ is directly applicable in Sweden and to Swedes. The aim of the GDPR is to "strengthen individuals' fundamental rights in the digital age and facilitate business by clarifying rules for companies and public bodies in the digital single market. A single law will also do away with the current fragmentation in different national systems and unnecessary administrative burdens."⁵⁷⁷¹

The GDPR entered into force on 24 May 2016 and applies since 25 May 2018. In April 2018, the Swedish parliament adopted the Data Protection Act (DPA), with complementary provisions to the GDPR. The DPA replaced the old Personal Data Act as of the application of GDPR.

The Swedish Patient Data Act for its part enshrines requirements for public and private healthcare providers' personal data processing in relation to healthcare activities, including the obligation to keep medical records.

A committee directive from the Ministry of Finance in October 2024 called for a special investigator to promote alignment with the GDPR. The special investigator has one year to propose amendments, legislation, and regulations in Swedish legal frameworks that will ensure Sweden can fulfill its enforcement and sanctioning obligations under the GDPR. 5772

Regarding the activities of law enforcement authorities, Sweden transposed the EU Data Protection Law Enforcement Directive (LED)⁵⁷⁷³ through

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https://www.regeringen.se/rattsliga-dokument/kommittedirektiv/2024/10/dir.-202497

⁵⁷⁶⁹ The Future of Free Speech, *Preventing "Torrents of Hate" or Stifling Free Expression Online?* (May 28, 2024), https://futurefreespeech.org/preventing-torrents-of-hate-or-stifling-free-expression-online/

⁵⁷⁷⁰ EUR-Lex, Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the Protection of Natural Persons with Regard to the Processing of Personal Data and on the Free Movement of Such Data (Apr. 27, 2016), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32016R0679

⁵⁷⁷¹ European Commission, Legal Framework of EU Data Protection,

https://commission.europa.eu/law/law-topic/data-protection/data-protection-eu_en_5772 Government Offices of Sweden, Committee Directive from the Ministry of Finance, Supplementary Provisions to the EU General Data Protection Regulation, Dir 2024:97 [Kompletterande bestämmelser till EU:s dataförordning] (Oct. 18, 2024),

⁵⁷⁷³ EUR-Lex, Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the Protection of Natural Persons with Regard to the Processing of Personal Data by Competent Authorities for the Purposes of the Prevention, Investigation, Detection or Prosecution of Criminal Offences or the Execution of Criminal Penalties, and on the Free Movement of Such Data, and Repealing Council Framework Decision 2008/977/JHA (Apr. 27, 2016), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A02016L0680-20160504

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the Swedish Criminal Data Act. The Criminal Data Act applies to personal data processing in law enforcement activities such as the Swedish Police Authority and hospitals if someone is sentenced to compulsory psychiatric care. The Swedish Police Data Act supplements the Swedish Criminal Data Act in relation to personal data processing carried out by the Swedish Police Authority, the Swedish Economic Crime Authority, and the Swedish Security Service. The LED "protects citizens' fundamental right to data protection whenever personal data is used by criminal law enforcement authorities for law enforcement purposes. It will in particular ensure that the personal data of victims, witnesses, and suspects of crime are duly protected and will facilitate cross-border cooperation in the fight against crime and terrorism."5774

The LED provides for the prohibition of any decision based solely on automated processing, unless it is provided by law, and prohibits profiling that results in discrimination.⁵⁷⁷⁵ The LED also requires Member States, including Sweden, to enable data subjects to exercise their rights via national data protection authorities. 5776

The Swedish Camera Surveillance Act supplements the GDPR and applies to processing of personal data in connection with camera surveillance. However, the Swedish parliament considered amendments to the Act in late 2024 to allow live camera surveillance and facial recognition technology, even for minors, 5777 to assist in police investigation, in part as a response to a rise in shootings and bombings in 2023.5778

The EU Charter of Fundamental Rights more generally provides that EU citizens have the right to protection of their personal data. Article 8 of the Charter states that: "Everyone has the right to the protection of personal data concerning him or her. Such data must be processed fairly for specified purposes and on the

⁵⁷⁷⁴ European Commission, Legal Framework of EU Data Protection, https://commission.europa.eu/law/law-topic/data-protection/data-protection-eu en 5775 Article 11 (1) and (2) of the LED, https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=celex%3A02016L0680-20160504

⁵⁷⁷⁶ Ibid, Article 17

⁵⁷⁷⁷ US Library of Congress, Sweden: Government Bill to Allow Police Use of Facial Recognition and DNA Genealogy Cleared for Parliament's Consideration (Sept. 12, 2024), https://www.loc.gov/item/global-legal-monitor/2024-10-09/sweden-government-bill-to-allow-

police-use-of-facial-recognition-and-dna-genealogy-cleared-for-parliaments-consideration/ ⁵⁷⁷⁸ Government Offices of Sweden, Press Release from Ministry of Justice, New Video

Surveillance Offensive against Criminal Networks—New and Better Tools for the Swedish Police (Oct. 19, 2023), https://www.government.se/press-releases/2023/10/new-video-surveillanceoffensive-against-criminal-networks--new-and-better-tools-for-the-swedish-police/

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basis of the consent of the person concerned or some other legitimate basis laid down by law."5779

Sweden is a member of the Council of Europe. It signed but has not yet ratified⁵⁷⁸⁰ the Council of Europe's Convention 108+ for the protection of individuals with regard to the processing of personal data.⁵⁷⁸¹

The Swedish Government acknowledged the GDPR as "an important part of the AI framework." Sweden's Authority for Privacy Protection (IMY) is charged "to uphold the protection of personal data, monitoring that they are handled correctly and do not fall into the wrong hands." 5783

The IMY issued its first fine in a case involving facial recognition in 2019. The IMY concluded that a school that conducted a pilot using facial recognition to keep track of students' attendance in school violated the GDPR and imposed a fine on the municipality of approximately 20,000 euros.⁵⁷⁸⁴ The IMY has also held the police accountable for the unlawful use of facial recognition technology, which is detailed further in the facial recognition section.⁵⁷⁸⁵ The IMY has also taken action against private industry, issuing an administrative fine of SEK 35 million against an insurance company Trygg- Hansa (then Moderna Försäkringar) in August 2023.⁵⁷⁸⁶

The IMY will also provide legal guidance and supervision for a decentralized AI pilot project launched in August 2022 in conjunction with

⁵⁷⁷⁹ European Union Agency for Fundamental Rights, *EU Charter of Fundamental Rights, Title II: Freedoms, Article 8—Protection of Personal Data* (Dec. 14, 2007), https://fra.europa.eu/en/eu-charter/article/8-protection-personal-data

⁵⁷⁸⁰ Council of Europe, *Chart of Signatures and Ratifications of Treaty 223* (Feb. 14, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=223

⁵⁷⁸¹ Council of Europe, *Modernised Convention for the Protection of Individuals with Regard to the Processing of Personal Data* (May 18, 2018) https://www.coe.int/en/web/data-protection/convention108-and-protocol

⁵⁷⁸² Government Offices of Sweden, *National Approach to Artificial Intelligence*, p. 10, OECD (May 2018),

https://wp.oecd.ai/app/uploads/2021/12/Sweden_National_Approach_to_Artificial_Intelligence_2018.pdf

⁵⁷⁸³ Swedish Authority for Privacy Protection, Welcome to IMY, https://www.imy.se/en/

⁵⁷⁸⁴ Swedish Authority for Privacy Protection, *Facial Recognition in School Renders Sweden's First GDPR fine* (Aug. 21, 2019), https://www.imy.se/en/about-us/arkiv/nyhetsarkiv/facial-recognition-in-school-renders-swedens-first-gdpr-fine/

European Data Protection Board, *Swedish DPA: Police Unlawfully Used Facial Recognition App* (Feb. 11, 2021), https://edpb.europa.eu/news/national-news/2021/swedish-dpa-police-unlawfully-used-facial-recognition-app en

⁵⁷⁸⁶ European Data Protection Board, *Sweden SA (IMY) Issues Administrative Fine against Insurance Company for Security Deficiencies* (Aug. 28, 2023),

https://www.edpb.europa.eu/news/national-news/2023/sweden-sa-imy-issues-administrative-fine-against-insurance-company-security en

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Sahlgrenska University Hospital, Region Halland, and AI Sweden. The IMY will work with the three organizations on the potential privacy and data protection pitfalls that may arise from using AI.⁵⁷⁸⁷

Cybersecurity is an important aspect of data security that can offer privacy protection. AI Sweden initiated the formation of the AI & Cybersecurity Consortium in October 2024 to mitigate risks associated with cybersecurity attacks by leveraging the earlier cybersecurity projects of Honeypots and LeakPro. The Honeypots are deceptive computer systems designed to simulate real environments, luring attackers into exposing their tools. LeakPro offers a locally run holistic platform to assess information leakages of machine learning models. The Provided Honeypots are deceptive computer systems designed to simulate real environments, luring attackers into exposing their tools.

Despite being a member of the Global Privacy Assembly (GPA) since 2002, the IMY has not endorsed the 2018 Declaration on Ethics and Data Protection in Artificial Intelligence, ⁵⁷⁹¹ 2020 Resolution on AI Accountability, ⁵⁷⁹² 2022 Resolution on Facial Recognition Technology, ⁵⁷⁹³ or 2023 Resolution on Generative AI Systems. ⁵⁷⁸⁴

⁵⁷⁸⁷ IMY, New Working Method Is Being Tested to Provide Innovation Projects with Guidance on Data Protection [Nytt arbetssätt testas för att ge innovationsporjekt vägledning om dataskydd] (Aug. 30, 2022), https://www.imy.se/nyheter/nytt-arbetssatt-testas-for-att-ge-innovationsprojekt-vagledning-om-dataskydd/

⁵⁷⁸⁸ Beatrice Comoli, *AI Sweden Forms an AI & Security Consortium* (Oct. 16, 2024), https://www.ai.se/en/news/ai-sweden-forms-ai-security-consortium

⁵⁷⁸⁹ Robert (Bobby) Bridges, *AI-Powered Honeypots*, AI Sweden, https://www.ai.se/en/project/ai-powered-honeypots

⁵⁷⁹⁰ Johan Östman, *LeakPro: Leakage Profiling and Risk Oversight for Machine Learning Models*, AI Sweden, https://www.ai.se/en/project/leakpro-leakage-profiling-and-risk-oversight-machine-learning-models

⁵⁷⁹¹ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

⁵⁷⁹² Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

⁵⁷⁹³ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁵⁷⁹⁴ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

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Algorithmic Transparency

Sweden is subject to the GDPR which established rights to "meaningful information about the logic involved" as well as about "the significance and the envisaged consequences." The Swedish Data Protection Authority is competent to handle complaints in this regard. However, in 2019, the Equality Ombudsman [Diskriminerings Ombudsmannen, DO] Agneta Broberg warned that the sanctions available under the Swedish Discrimination Act not sufficient to tackle the challenges of AI and discriminatory algorithms. 5797

Following the Trelleborg episode concerning automated decisions by municipalities, the Union for Professionals called for the creation of an algorithm ombudsman: "The Union has, among other things, conducted a survey that shows that the requirement for an Algorithm Ombudsman has broad support among the public—and that transparency and openness are absolutely crucial for there to be trust in algorithms and automation." ⁵⁷⁹⁸ In this regard, a 2020 survey organized by BEUC, the European Consumer Organization, and involving the Swedish Consumer Organization revealed that "more than half of Sweden's consumers feel that artificial intelligence (AI) is used to manipulate them. And over 60 percent wish they could say no to automated decision making." ⁵⁷⁹⁹

AI in Public Administration

Sweden's Agency for Digital Administration (DIGG) recommended in a 2020 report on promoting AI in public administration that the Government establish a center with expertise in AI; develop a platform for collaboration, codevelopment and innovation; develop an AI guide; create legal conditions to facilitate experimental activities; develop vocational and role-specific training in

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https://www.sverigeskonsumenter.se/media/kbgf3wya/beuc-ai.pdf

⁵⁷⁹⁵ EUR-Lex, *Regulation 2016/678, GDPR, Article 22 and Article 13(2)(f)* (Apr. 27, 2016), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32016R0679

⁵⁷⁹⁶ IMY, *The Data Subject's Rights* (Apr. 16, 2021), https://www.imy.se/en/organisations/data-protection/this-applies-accordning-to-gdpr/the-data-subjects-rights/

⁵⁷⁹⁷ Equity Ombudsman, *Protection Against Discrimination Needs to be Reviewed [Skyddet mot diskriminering behöver ses över]* (Feb. 21, 2020), https://www.do.se/om-do/pressrum/aktuellt/aktuellt-under-2020/skyddet-mot-diskriminering-behover-ses-over/

⁵⁷⁹⁸ Academics' Unions SSR, *AI and Algorithms: Our Policy Requirements* (Nov. 24, 2023), https://akademssr.se/post/ai-och-algoritmer-vara-politiska-krav

⁵⁷⁹⁹ Swedish Consumers' Association, *New Survey: Consumers Suspicious of AI* (Sept. 7, 2020), https://www.sverigeskonsumenter.se/nyheter-press/nyheter-och-pressmeddelanden/las-mer-om-undersokningen-har/; BEUC, *Artificial Intelligence: What Consumers Say: Findings and Policy Recommendations of a Multi-Country Survey on AI* (2020),

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AI; and develop a national data strategy for public administrations. DIGG serves as an expert group to facilitate Sweden's digitization, working with public administration "to make the transition a reality, and to the benefit of everyone." The Ministry of Finance assigned DIGG and the Privacy Protection Agency (IMY) to develop Guidelines for the use of Generative AI in Public Administration in August 2024. DIGG published the guidelines along with educational information and webinars about AI on a sub-site from the agency website. S803

DIGG responded to a Ministry of Infrastructure call from 2019 to increase the availability of data by launching Sweden's data portal with new functionality for APIs and establishing principles, guidelines, and recommendations "to increase the public administration's ability to make open data available." Much of this work was based on DIGG's piloted projects with business, academia, and civil society. Since then, Sweden's data portal has become a strategic societal resource for business, society, and the public sector with more than 17,000 data sets being used by 335 different organizations. The portal demonstrates Sweden's ambition to enhance innovation and move Swedish society forward. 5805

The Trellborg Controversy

The automation of government services has been underway in Sweden since the 1970s. By 2019, "more than 80% of all government decisions that the National Audit has reviewed were automated. This involves 121 million decisions

⁵⁸⁰² Government Offices of Sweden, Government Assignment from the Ministry of Finance, Assignment to the Digital Governance Agency and the Privacy Protection Authority to Develop Guidelines for the Use of Generative Artificial Intelligence in Public Administration, Registry Number Fi2024/01535 (Aug. 8, 2024),

 $\frac{https://www.regeringen.se/regeringsuppdrag/2024/08/uppdrag-till-myndigheten-for-digital-forvaltning-och-integritetsskyddsmyndigheten-att-ta-fram-riktlinjer-for-anvandningen-avgenerativ-artificiell-intelligens-inom-den-offentliga-forvaltningen/$

⁵⁸⁰³ DIGG, *AI for Public Administration*, https://www.digg.se/ai-for-offentlig-forvaltning
⁵⁸⁰⁴ DIGG, *Open Data, Data-Driven Innovation, and AI [Öppna data, datadriven innovation och AI]* (Jan. 29, 2021), https://www.digg.se/analys-och-

 $\frac{https://data.europa.eu/en/news-events/news/open-data-portals-around-europe-sweden-encouraging-and-fueling-innovation}{}$

⁵⁸⁰⁰ DIGG, *Promoting the Ability of Public Administration to Use AI* (Jan. 14, 2020), https://www.digg.se/analys-och-uppfoljning/publikationer/publikationer/2020-01-14-framja-den-offentliga-forvaltningens-formaga-att-anvanda-ai

⁵⁸⁰¹ DIGG, *About Us*, https://www.digg.se/om-oss

uppfoljning/publikationer/publikationer/2021-01-29-oppna-data-datadriven-innovation-och-ai European Union, *Open Data Portals around Europe: Sweden Encouraging and Fueling Innovation*, Publications Office of the European Union (Jul. 1, 2024),

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by 13 authorities."⁵⁸⁰⁶ Various benefits, including Welfare payments, parental benefits, and dental-care subsidies, are allocated without any human intervention.

As for municipalities, which oversee social services, a 2019 report published by the Union for Professionals, found that "only 16 out of a total of 290 municipalities have implemented RPA [Robotic Processing Automation] in their administration of social benefits." The Trellborg Municipality was the only one to implement solely automated decision-making.

In 2019 journalist Freddi Ramel and Union for Professionals chief economist Simon Vinge challenged the Trelleborg automated decision system. According to AlgorithmWatch, the Swedish Parliamentary Ombudsman has so far failed to determine whether the municipality provided "meaningful information" as required by Article 15 of the GDPR. ⁵⁸⁰⁸ However, Ramel obtained access to the source code after a court ruled that the code was a public record under the Swedish Freedom of Information Act. The Trelleborg municipality subsequently undertook an investigation.

Facial Recognition

In 2019, the Swedish DPA issued its first fine in a case involving facial recognition. A school in northern Sweden conducted a pilot using facial recognition to keep track of students' attendance in school. The Swedish DPA concluded that the test violates the GDPR and imposed a fine on the municipality of approximately 20,000 euros. The school processed sensitive biometric data unlawfully and failed to do an adequate impact assessment including seeking prior consultation with the Swedish DPA. The school based the processing on consent, but the Swedish DPA considers that consent was not a valid legal basis given the clear imbalance between the data subject and the controller. ⁵⁸⁰⁹

The data protection officer for the Swedish police undertook an investigation in March 2020 to determine whether the police used ClearView AI,

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⁵⁸⁰⁹ Swedish Authority for Privacy Protection, *Facial Recognition in School Renders Sweden's First GDPR Fine* (May 6, 2021), https://www.imy.se/en/about-us/arkiv/nyhetsarkiv/facial-recognition-in-school-renders-swedens-first-gdpr-fine/

Nord News, *The Swedish National Audit Office: Automatic Government Decisions Are Becoming More Common* (Nov. 19, 2020), https://nord.news/2020/11/19/the-swedish-national-audit-office-automatic-government-decisions-are-becoming-more-common/

⁵⁸⁰⁷ Lupita Svensson, "Technology Is the Easy Part": On Implementing Dgital Automation in the Processing of Social Assistance ["Tekniken är den enkla biten" Om att implementera digital automatisering i handläggningen av försörjningsstöd] (Nov. 20, 2019), https://akademssr.se/sites/default/files/files/LupitaSvensson.pdf

⁵⁸⁰⁸Leo Wallentin and Katarina Lind, AlgorithmWatch, *Central Authorities Slow to React as Sweden's Cities Embrace Automation of Welfare Management*, Automating Society Report 2020 (2020), https://automatingsociety.algorithmwatch.org/report2020/sweden/sweden-story/
⁵⁸⁰⁹ Swedish Authority for Privacy Protection, *Engial Recognition in School Renders Sweden's*

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an AI product for mass surveillance enabled by facial recognition. The Swedish police confirmed that they had used Clearview AI, after previously denying use of the face surveillance tool. State Subsequently, the IMY investigated the case and found in 2021 that the Swedish Police Authority had processed personal data in breach of the Swedish Criminal Data Act by using Clearview AI to identify individuals. The investigation concluded that Cleaview AI had been used sometimes without prior authorisation. The Police had failed to implement sufficient organisational measures to ensure and be able to demonstrate that the processing of personal data had been carried out in compliance with the Criminal Data Act. For example, no impact assessment had been concluded. As a result, the IMY imposed a 250,000 Euros fine.

The IMY noted that the European Data Protection Board (EDPB) "will produce guidance on how law enforcement authorities should approach facial recognition technology. Sweden is one of the driving countries in the world." The EDPB indeed issued guidelines on the use of facial recognition technologies in law enforcement in May 2022. The EDPB Chair said: "While modern technologies offer benefits to law enforcement, such as the swift identification of suspects of serious crimes, they have to satisfy the requirements of necessity and proportionality. Facial recognition technology is intrinsically linked to processing personal data, including biometric data, and poses serious risks to individual rights and freedoms." The EDPB stressed that facial recognition tools should only be used in strict compliance with the Law Enforcement Directive (LED). Moreover, such tools should only be used if necessary and proportionate, as laid down in the Charter of Fundamental Rights. S814

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⁵⁸¹⁰ SVT NYHETER, *Internal Investigation: Polie Are Not Allowed to Use Criticized AI*Service—Would Violate the Law [Intern utredning: Polisen får inte använda kritiserad AI-tjänst – skulle bryta mot lagen] (Mar. 12, 2020), https://www.svt.se/nyheter/inrikes/svensk-polis-forbjuds-att-anvanda-kontroversiella-ai-tjansten

⁵⁸¹¹ Mikael Grill Peterson and Linea Carlén, *Police Confirm: Have Used Controversial Clearview AI [Polisen bekräftar: Har använt omdiskuterade Clearview AI]*, SVT NYHETER (Mar. 11, 2020), https://www.svt.se/nyheter/inrikes/ekot-polisen-bekraftar-anvandning-av-kontroversiell-app

⁵⁸¹² European Data Protection Board, *Swedish DPA: Police unlawfully used facial recognition app* (Feb. 11, 2021), https://edpb.europa.eu/news/national-news/2021/swedish-dpa-police-unlawfully-used-facial-recognition-app en

⁵⁸¹³ European Data Protection Board, *Guidelines 05/2022 on the Use of Facial Recognition Technology in the Area of Law Enforcement* (now obsolete) (May12, 2022), https://edpb.europa.eu/system/files/2022-05/edpb-in-11/202205 follows:

guidelines 202205 frtlawenforcement en 1.pdf

⁵⁸¹⁴ European Data Protection Board, *EDPB Adopts Guidelines on Calculation of Fines & Guidelines on the Use of Facial Recognition Technology in the Area of Law Enforcement* (May 16, 2022), https://edpb.europa.eu/news/news/2022/edpb-adopts-guidelines-calculation-fines-guidelines-use-facial-recognition en

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In 2019, the Swedish DPA did approve the use of facial recognition technology by the police to help identify criminal suspects. However, such an authorization relates to the use of biometric templates in databases under the control of public authorities and established under Union or Member States law. Sals As the Chair of the European Data Protection Board subsequently emphasized, "[t]he possible use of a service such as offered by Clearview AI by law enforcement authorities would, however, be fundamentally different, in that it would imply, as part of a police or criminal investigation, the sharing of personal data with a private party outside the Union and the biometric matching of such data against the latter's mass and arbitrarily populated database of photographs and facial pictures accessible online. Sals She also clearly questioned the legality of the use of Clearview AI by public authorities.

In October 2023, Sweden's Ministry of Justice published a press release announcing a proposal to expand the use and increase access by Swedish Police to video surveillance, facial recognition, and automatic number plate recognition tools to enhance crime prevention. According to the press release, "the Government appointed an inquiry on video surveillance. The inquiry's task consists of two parts. The first is to investigate the need for simplified rules on video surveillance for municipalities and regions [...] aiming to abolish permit requirements for municipalities and regions that want to use video surveillance in public places. The second part is a broadly formulated assignment to investigate expanding the video surveillance powers of the Swedish Police," such as through the use of drones. The Prime Minister alluded to these measures, including increased surveillance of children, in a speech in September 2023. [5818]

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⁵⁸¹⁵ Official Journal of the European Union, *Directive EU 2016/680 of the European Parliament and of the Council* (Apr. 27, 2016), https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016L0680&from=EN

⁵⁸¹⁶ European Data Protection Board, EDPB Response to MEPs Sophie in 't Veld, Moritz Körner, Michal Šimečka, Fabiene Keller, Jan-Christoph Oetjen, Anna Donáth, Maite Pagazaurtundúa, Olivier Chastel, Concerning the Facial Recognition App Developed by Clearview AI (Jun. 10, 2020), https://edpb.europa.eu/sites/edpb/files/files/file1/edpb_letter_out_2020-0052 facialrecognition.pdf

⁵⁸¹⁷ Government Offices of Sweden, Press Release by the Ministry of Justice, *New Video Surveillance Offensive against Criminal Networks—New and Better Tools for the Swedish Police* (Oct. 19, 2023), https://www.government.se/press-releases/2023/10/new-video-surveillance-offensive-against-criminal-networks--new-and-better-tools-for-the-swedish-police/

⁵⁸¹⁸ Government Offices of Sweden, *Address to the Nation by Prime Minister Ulf Kristersson Following Violent Incidents in the Country, Stockholm* (Sept. 28, 2023), https://www.government.se/speeches/2023/09/prime-minister-ulf-kristerssons-address-to-the-nation/

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The IWY and investigators for Parliament have worked to align these measures with the restrictions, though not prohibitions, ⁵⁸¹⁹ on the use of AI systems for remote biometric identification and categorization. ⁵⁸²⁰ The bill to allow police to use facial recognition and DNA genealogy was accepted for Parliament's consideration in late 2024, ⁵⁸²¹ and fast-tracked in January 2025, following a series of gang-related offenses. ⁵⁸²²

Environmental Impact of AI

Sweden has played an extensive role in utilizing AI for climate change and taking initiatives to mitigate climate risks posed by AI development and use. The landmark GPAI Report of 2021 offers recommendations for governments to encourage responsible AI use in climate action, focusing on both positive and negative environmental impacts of AI.⁵⁸²³ The report aims to ensure AI supports climate goals while minimizing its environmental footprint. It highlights two key areas to address to reduce greenhouse gas (GHG) emissions arising from AI:

- 1. Compute-related impacts: Energy use and emissions from AI computations and hardware.
- 2. Application-related impacts: Al's role in either reducing or increasing greenhouse gas emissions.

⁵⁸¹⁹ European Parliament, Council of the European Union, Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 Laying Down Harmonised Rules on Artificial Intelligence and Amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU)

^{2019/2144} and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act) (Text with EEA relevance), PE/24/2024/REV/1 [2024] OJ L 1689/1 (Jun. 13, 2024), https://eur-lex.europa.eu/eli/reg/2024/1689/oj

⁵⁸²⁰ Abigail Opiah, *Sweden Proposal Tests AI Act's Live Facial Recognition Limits*, Biometric Update (Jul. 4, 2024), https://www.biometricupdate.com/202406/swedish-proposal-tests-ai-acts-live-public-facial-recognition-limits

⁵⁸²¹ US Library of Congress, *Sweden: Government Bill to Allow Police Use of Facial Recognition and DNA Genealogy Cleared for Parliament's Consideration* (Sept. 12, 2024), https://www.loc.gov/item/global-legal-monitor/2024-10-09/sweden-government-bill-to-allow-police-use-of-facial-recognition-and-dna-genealogy-cleared-for-parliaments-consideration/

⁵⁸²² Reuters, *Sweden to Speed Up Surveillance Legislation for Minors after Bombing Wave* (Jan. 30, 2025), https://www.government.se/press-releases/2023/10/new-video-surveillance-offensive-against-criminal-networks--new-and-better-tools-for-the-swedish-police/

⁵⁸²³ Clutton-Brock P, Rolnick D, Donti PL, Kaack L. *Climate Change and AI: Recommendations for Government Action*, GPAI, Centre for AI & Climate (2021),

https://gpai.ai/projects/responsible-ai/environment/climate-change-and-ai.pdf

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Sweden is pursuing Climate Policy Framework goals to achieve zero net emissions of greenhouse gases by 2045 (net zero approach). S824 As such, the country is progressively addressing both compute and application related impacts. While application related impacts are difficult to ascertain, the compute related impacts are majorly generated through data centers supporting AI based applications.

From 2024, under Article 12 of the recast EU Energy Efficiency Directive, data centers of member states will be required to publish information on their energy performance and sustainability. RISE, Sweden's research institute and innovation partner, estimates that by 2030 there will be doubling of energy use from data centers compared to 2020 because of AI and Generative AI-related computations. However, Sweden has taken proactive steps to mitigate the situation by adopting the EU Eco-design Regulations for servers and data storage products. The EcoDataCenter—Sweden is world's first "climate-positive data center" completely supported through renewable energy sources. The heat output generated from the data center supports district heating and cooling system.

RISE has noted that Sweden's leadership in international AI and innovation for climate change would be hugely beneficial to trade and industry: "The climate challenge is too important an issue to not adopt that perspective. There is no contradiction in investing in AI and investing in AI for the climate, or in developing AI applications and developing applications for the climate." The Sustainable AI and AI for Sustainability event hosted by the Swedish Presidency of the Council of Europe and the Ministry of Finance in May 2023 was one of a

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⁵⁸²⁴ Swedish Civil Contingencies Agency, Emergency Information from Swedish Authorities, *Sweden's Climate Goals* (Oct. 10, 2023), https://www.krisinformation.se/en/hazards-and-risks/climate-change/swedens-climate-goals

⁵⁸²⁵ European Commission, Directorate-General for Energy, *Commission Adopts EU-Wide Scheme for Rating Sustainability of Data Centres* (Mar. 15, 2024),

https://energy.ec.europa.eu/news/commission-adopts-eu-wide-scheme-rating-sustainability-datacentres-2024-03-15 en

⁵⁸²⁶ RISE Report to the Swedish Energy Agency, Energy Use in Digital Systems, Data Centres and Cryptocurrency (2024), https://www.diva-

portal.org/smash/get/diva2:1742192/FULLTEXT01.pdf

⁵⁸²⁷ International Energy Agency (IEA), *Data Centres and Data Transmission Networks: Policy* (Jul. 11, 2023), https://www.iea.org/energy-system/buildings/data-centres-and-data-transmission-networks

United Nations Climate Change (UNCC), EcoDataCenter—Sweden (2023),
 https://unfccc.int/climate-action/momentum-for-change/activity-database/ecodatacenter
 RISE, How AI Can Save the Climate—And Sweden Can Lead the Way (Feb. 10, 2021),

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number of sporadic events organized by the Swedish government to set out a clear pathway Envisioning sustainable AI. 5830

Swedish representatives attended the Global Conference on Energy and AI in December 2024 as part of the International Energy Agency (IEA) Energy for AI, and AI for Energy initiative. ⁵⁸³¹ Brainstorming on comprehensive assessment of the potential implications of AI in the energy sector during the conference and the endorsement and implementations of the outcome of this event will be of interest to policymakers in the coming years.

The UN climate conference COP28 rendered a significant focus on digital transformation and environmental sustainability through the formation of the Green Digital Action Initiative supported by EU member states in 2023. 5832 COP29 in Baku, Azerbaijan, in November 2024 provided high-level discussion on mitigating the environmental impact of digital technologies including AI. The Swedish Energy Agency and Business Sweden led the Swedish contingent to the event. 5833

Projects supported by AI Sweden seek to apply AI and digital technology to combat climate change. One such project, in collaboration with WWF-Sweden, explores the possibilities for AI to accelerate a deep green transition in global food systems. The Swedish Space Data Lab 3.0 is another such project. The lab would use space data for weather forecasting, climate monitoring, forestry, and agriculture. The state of the same project is a supported by AI Sweden seek to apply AI and digital technology to combat climate change. The sweden such project, in collaboration with WWF-Sweden, explores the possibilities for AI to accelerate a deep green transition in global food systems. The sweden support the sweden support to accelerate a deep green transition in global food systems.

Lethal Autonomous Weapons

Beginning in 2013, Swedish NGOs called for Sweden to endorse an official ban of LAWS.⁵⁸³⁶ As one NGO coalition stated in 2020, "A future where

https://www.sahlgrenskasciencepark.se/events/sustainable-ai-and-ai-sustainability

⁵⁸³⁰ Swedish Presidency of the Council of the European Union and the Ministry of Finance, *Sustainable AI and AI for Sustainability* (May 2, 2023),

⁵⁸³¹ International Energy Agency (IEA), *Global Conference on Energy & AI 2024* (Dec. 2024), https://www.iea.org/events/global-conference-on-energy-and-ai

⁵⁸³² International Telecommunication Union (ITU), *Imagine a World where Digital Transformation and Environmental Sustainability Go Hand in Hand* (2023), https://www.itu.int/initiatives/green-digital-action/impact/all/

⁵⁸³³ Niclas Carlsson and Sandra Lindström, *The Swedish Energy Agency at COP29*, Swedish Energy Agency (Nov.11, 2024), https://www.energimyndigheten.se/en/news/2024/the-swedish-energy-agency-at-cop29/

⁵⁸³⁴ AI Sweden, *AI for a Deep Green Transition*, https://www.ai.se/en/project/ai-deep-green-transition

⁵⁸³⁵ AI Sweden, *Swedish Space Data Lab 3.0.*, https://www.ai.se/en/project/swedish-space-data-lab-30

⁵⁸³⁶ Campaign to Stop Killer Robots, *Building Awareness in Sweden* (Oct. 6, 2013), https://www.stopkillerrobots.org/news/sweden-outreach/

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machines themselves decide over life and death, what and who is to be attacked in an armed conflict, is not the future we want. But the fact is that we are on our way there—and development is fast."⁵⁸³⁷ Previously, leaders in the Swedish government declared that "Sweden must take a leading role in the work for a ban on deadly autonomous weapon systems." However, the position adopted by Sweden so far has been more nuanced.

The Swedish government has emphasized human control and said "multilateralism remains our only chance to address our many common challenges and to ensure international peace and security." ⁵⁸³⁸ At the 75th UN General Assembly meeting in October 2020, Sweden's Ambassador stated "Sweden is of the strong conviction that human control over the use of force always must be upheld." She also expressed Sweden's support to the 11 LAWS Guiding Principles. ⁵⁸³⁹ Earlier, Sweden also explained that the "specific measures required for human control will thus need to be context dependent and assessed on a case-by-case basis" and referred to a report, supported by Sweden, together with Germany, Switzerland, and the Netherlands. ⁵⁸⁴⁰ The Swedish government has also set up a working group on autonomous weapons. According to the NGO Swedish Peace and Arbitration Society, this "working group is defense-oriented, with a majority of its members coming from defense-related authorities and institutions." ⁵⁸⁴¹

Sweden was one of the 70 countries that endorsed a joint statement on autonomous weapons systems at the 2022 United Nations General Assembly. The joint statement urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular

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⁵⁸³⁷ Amnesty International Sweden, Sweden Must Stand Against Killer Robots [Sverige måste stå upp mot mördarrobotar] (Sept. 21, 2020), , https://www.amnesty.se/aktuellt/sverige-maste-sta-upp-mot-mordarrobotar-debattartikel-publicerad-209-2020/

⁵⁸³⁸ Government of Sweden, Ministry of Foreign Affairs, *Statement Delivered by Ambassador Anna Karin Eneström, Permanent Representative of Sweden to the United Nations at the General Debate of the First Committee*, 75th session of the UN General Assembly, United Nations (Oct. 14, 2020), https://reachingcriticalwill.org/images/documents/Disarmament-

fora/1com/1com20/statements/14Oct_Sweden.pdf

⁵⁸³⁹ Geneva Internet Platform (DigWatch), *GGE on Lethal Autonomous Weapons Systems* (Feb. 17, 2025), https://dig.watch/process/gge-laws#view-14508-1

⁵⁸⁴⁰ Stockholm International Peace Research Institute, *Limits on Autonomy in Weapon Systems: Identifying Practical Elements of Human Control* (Jun. 2020),

 $[\]frac{https://www.sipri.org/publications/2020/other-publications/limits-autonomy-weapon-systems-identifying-practical-elements-human-control-\underline{0}$

⁵⁸⁴¹ Swedish Peace and Arbitration Society, *Questions and Answers about Killer Robots*, https://www.svenskafreds.se/vad-vi-gor/nedrustning/stoppamordarrobotar/faq-mordarrobotar/

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International Humanitarian Law, including through maintaining human responsibility and accountability in the use of force."5842

Sweden also submitted a working paper with Finland, France, Germany, the Netherlands, Norway, and Spain to the 2022 Chair of the Group of Governmental Experts on emerging technologies in the area of Lethal Autonomous Weapons Systems. The working paper presents a two-tier approach. Accordingly, States should commit to (1) outlaw fully autonomous lethal weapons systems operating completely outside human control and a responsible chain of command, and (2) regulate other lethal weapons systems featuring autonomy to ensure compliance with the rules and principles of international humanitarian law, by preserving human responsibility and accountability, ensuring appropriate human control, and implementing risk mitigation measures.

At the 78th UN General Assembly First Committee in November 2023, Sweden was amongst 164 countries voted in favor of resolution L.564991 on autonomous weapons systems. The Resolution emphasized the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems" and mandated the UN Secretary-General to prepare a report reflecting the views of member and observer states on ways to address the challenges and concerns autonomous weapon systems raise from humanitarian, legal, security, technological and ethical perspectives and reflect on the role of humans in the use of force.

Sweden's contribution to the report reiterated its support for the two-tier approach. The comments underline the importance that the Governmental Group of Experts (GGE) deliver on its mandate to develop regulation, acknowledging that even an agreement that might fall short of some delegations' expectations would still amount to a step forward. Sweden's view on preservation of meaningful human control over the use of force is a key objective.⁵⁸⁴⁵

⁵⁸⁴² United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate—Conventional Weapons (Oct. 21, 2022),

 $[\]underline{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcS\underline{nnAm_en.pdf}$

⁵⁸⁴³ Convention on Certain Conventional Weapons, *Documents from the 2022 CCW Group of Governmental Experts on Lethal Autonomous Weapons Systems* (Jul. 25, 2022), https://reachingcriticalwill.org/disarmament-fora/ccw/2022/laws/statements

⁵⁸⁴⁴ Isabelle Jones, *164 States Vote against the Machine at the UN General Assembly*, Stop Killer Robots (Nov. 1, 2023), https://www.stopkillerrobots.org/news/164-states-vote-against-the-machine/

⁵⁸⁴⁵ Government Offices of Sweden, Swedish Input to the Report of the Secretary General of the United Nations in Accordance with Resolution 78/241 "Lethal Autonomous Weapons systems" Adopted by the General Assembly (Dec. 22, 2023), https://docs-page-14.55

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Sweden has also been active in international summits on the responsible application of artificial intelligence in the military domain (REAIM). At the end of the REAIM2023 Summit, Sweden endorsed a joint call for action on the responsible development, deployment, and use of artificial intelligence in the military domain. States stressed "the importance of a holistic, inclusive and comprehensive approach in addressing the possible impacts, opportunities and challenges of the use of AI in the military domain and the need for all stakeholders, including states, private sector, civil society and academia, to collaborate and exchange information on responsible AI in the military domain. States also endorsed the Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023.

Following the second Responsible AI in the Military Domain (REAIM) summit in Seoul, Korea, in 2024, Sweden signed Blueprint for Action along with 62 other nations of the 90 in attendance. The Blueprint was more action-oriented than the earlier statement in keeping with advanced discussions and developments in the military such as AI-enabled drones being rolled out by Ukraine. The Blueprint provides guidance on what kind of risk assessments should be made, conditions such as human control, and how confidence-building measures can be taken to manage risks.

Endorsement of the Blueprint for Action coincides with Sweden's growing military investment amid growing instability in Europe, particularly given the war in Ukraine. The shift also coincides with Sweden's decision to abandon its long-standing policy of neutrality by applying to join NATO in 2022. 5850 AI in Swedish defense, including LAWS, is still at an early stage of conception. However, developments already in use, such as cloud-based data lakes for "real-time predictions about the physical behaviors of where people, ships or planes are going, and also predict the contextual behaviors of what these people,

 $\underline{library.unoda.org/General_Assembly_First_Committee_-Seventy-Ninth_session_(2024)/78-241-Sweden-EN.pdf$

⁵⁸⁴⁶ Government of Netherlands, *Call to Action on Responsible Use of AI in the Military Domain* (Feb. 16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action FEAIM Summit, *REAIM Call to Action* (Feb. 16, 2023),

https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action
5848 US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Nov. 27, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

⁵⁸⁴⁹ Brianna Rosen, *From Principles to Action: Charting a Path for Military AI Governance*, Carnegie Council for Ethics in International Affairs (Sept. 12, 2024),

https://www.carnegiecouncil.org/media/article/principles-action-military-ai-governance
5850 Alastair Finlan, *A Fertile Soil for AI? Defense AI in Sweden*, in The Very Long Game: 25
Case Studies on the Global State of Defense AI, Springer Nature, pp. 107–126 (Jul. 19, 2024), https://link.springer.com/chapter/10.1007/978-3-031-58649-1

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ships or planes are actually doing" highlight the necessity for responsible and accountable use of AI with human involvement in the initiative. 5851

Human Rights

Sweden is a signatory to many international human rights treaties and conventions, among which the Universal Declaration of Human Rights and the Council of Europe's European Convention on Human Rights. However, it has not yet ratified the modernized version of the Council of Europe Convention 108 for the protection of individuals with regard to the processing of personal data. 5852

Sweden typically ranks among the top nations in the world for the protection of human rights and transparency in the annual Freedom House Freedom in the World report. In 2024, Sweden earned recognition as "free" with a score of 99/100, down one from the score of 100 in 2023.⁵⁸⁵³

AI Sweden promotes responsible use of AI and suggests "AI systems must be designed and operated in a manner that respects human rights, values, and cultural diversity." However, while this approach is supported through an AI strategy, Sweden has not yet implemented legislation or regulation to enforce these principles. Human dignity is a fundamental human right and associated closely with concepts of autonomy and privacy. A recent debate sparked in Sweden over use of real time facial recognition for identifying suspected criminals reveals potential challenges to the privacy and civil liberties of Swedish people. On the other hand, such measures may help reduce gang violence. 5855

Sweden has an Equality Ombudsman (DO) serving as a government agency that works on behalf of the Swedish parliament and government to promote human rights associated with equal rights and opportunities and to combat discrimination. The DO supports human rights and equity broadly but engages with discrimination related to AI systems and data, such as with its 2023 report on AI in working life. 5856

 $\underline{\text{http://web.archive.org/web/20231001123126/https://www.saab.com/newsroom/stories/2021/september/artificial-eye}$

⁵⁸⁵³ Freedom House, Freedom in the World 2023: Sweden

⁵⁸⁵¹ Saab, AI at Saab: Artificial Eye (Sept. 16, 2021),

⁵⁸⁵² Council of Europe, *Chart of Signatures and Ratifications of Treaty 223* (Feb. 14, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=223

^{(2023),} https://freedomhouse.org/country/sweden/freedom-world/2023

⁵⁸⁵⁴ AI Sweden, An AI Strategy for Sweden (Mar. 20, 2024), https://strategy.ai.se/

⁵⁸⁵⁵ Masha Borak, *Swedish Police Want to Fight Crime with Live Facial Recognition* (Oct. 13, 2024), Biometric News, https://www.biometricupdate.com/202410/swedish-police-want-to-fight-crime-with-live-facial-recognition

⁵⁸⁵⁶ Equity Ombudsman, *AI and Risks of Discrimination in Working Life [Al och risker för diskriminering i arbetslivet]* (Nov. 15, 2023), https://www.do.se/rattsfall-beslut-lagar-stodmaterial/publikationer/2023/ai-och-risker-for-diskriminering-i-arbetslivet

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OECD / G20 AI Principles

Sweden is an OECD member and has endorsed the AI Principles.⁵⁸⁵⁷ In 2021, the OECD noted that Sweden published a document outlining its national approach to AI in 2019. "The purpose of this document was to identify an overall direction for AI-related work in Sweden and lay the foundation for future priorities." Sweden also described an AI governance structure with three Ministries—Ministry of Infrastructure, Ministry of Enterprise and Innovation, and Ministry of Education and Research —responsible for AI policies and related agencies in charge of implementation.⁵⁸⁵⁸ OECD considered the strategy a positive step toward implementing the OECD AI Principles.

The landmark OECD AI principles were revised in May 2024 to address challenges related to privacy, intellectual property rights (IPR), safety and information integrity, considering the emergence of Gen AI.⁵⁸⁵⁹ Sweden has implemented many of the values-based principles as well as the five recommendations for policymakers.

In line with principle 1.1, which emphasizes inclusive growth, sustainable development and wellbeing, multiple initiatives have been taken. To augment human capabilities and enhance creativity, for example, AI Sweden reported international collaboration with Unity Health, Toronto to integrate Canadian insights into the Swedish healthcare system. VINNOVA (the Swedish innovation agency) supported information-driven healthcare to offer personalized and scalable healthcare through AI applications. Citizen consultation on the recent draft of the digitization policy in 2024 has also been key to social dialogue and attempts to include diverse communities in policymaking, thereby promoting inclusive societal growth. To address gender inequalities through AI, VINNOVA

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⁵⁸⁵⁷ OECD AI Policy Observatory, OECD AI Principles Overview, Countries Adhering to the AI Principles (2025), https://oecd.ai/en/ai-principles

⁵⁸⁵⁸ OECD, State of Implementation of the OECD AI Principles: Insights from National AI Policies (Jun. 18, 2021), https://www.oecd.org/digital/state-of-implementation-of-the-oecd-ai-principles-1cd40c44-en.htm

Juraj Čorba, Audrey Plonk, Karine Perset, and Yoichi Iida, *Evolving with Innovation: The 2024 OECD AI Principles Update* (May 20, 2024), https://oecd.ai/en/wonk/evolving-with-innovation-the-2024-oecd-ai-principles-update

⁵⁸⁶⁰ OECD Secretariat, Committee on Digital Economy Policy, *The State of Implementation of the OECD AI Principles Four Years On*, OECD Artificial Intelligence Papers, no. 3 (Oct. 27, 2023), https://www.oecd.org/en/publications/the-state-of-implementation-of-the-oecd-ai-principles-four-years-on 835641c9-en.html

⁵⁸⁶¹ Johanna Bergman, *AI Sweden* × *Unity Health Toronto*, AI Sweden, https://www.ai.se/en/sector-initiatives/healthcare/ai-sweden-unity-health-toronto ⁵⁸⁶² Lorna Bartram & Nina Lahti, *Information-Driven Healthcare*, AI Sweden,

https://www.ai.se/en/sector-initiatives/healthcare/information-driven-healthcare

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tasked Ramboll and Women in AI (WAI) to study the potential of AI for achieving gender equality.5863

The recent AI Sweden strategy also emphasizes human-centered values and fairness (principle 1.2) and informs good governance. Transparency (OECD principle 1.3) is core to the AI strategy. 5864 Furthermore, Wallenberg AI, Sweden's largest individual research program, led a conference (WASP4ALL) in Stockholm involving participation from academics, government officials, and industry experts to explore how EU regulations affect AI research and development in Sweden and emphasized the importance of human-centered AI. 5865

Algorithmic impact assessment is one of the key components for addressing robustness, security, and safety (principle 1.4) in AI. The Add AI collaborative initiative, involving government officials, academicians, and tech companies, explores the impact of smart algorithms and AI on the Swedish society.5866

In terms of accountability (principle 1.5), AI Sweden, has declared that all AI solutions should be developed and used within the rule of law, and that stakeholders will be held accountable for their applications. 5867

Recently, VINNOVA was tasked by the government to propose strategically important technologies that can strengthen Sweden's global competitiveness. As a result, VINNOVA has recommended that the government prioritize AI and autonomous systems for societal change. 5868 In this way, Sweden continues to foster an enabling policy environment for AI (principle 2.3). Implementation of the EU AI Act and ratification of the Council of Europe AI Treaty will further enable the policy environment.

The national cooperation initiative for education in AI has been in effect in Sweden since June 2018 with the recent inclusion of AI Sweden, WASP Education Development Program (WASP-ED), Expert Learning Labs (ELLs) and multiple

https://www.VINNOVA.se/globalassets/mikrosajter/ai-for-jamstalldhet-starker-tillvaxtensamhallsekonomin-och-arbetsmarknaden/ai-for-genderequality-accessable.pdf

https://www.ai.se/en/adoption/responsible-use-ai

⁵⁸⁶³ Marisa Tschopp, Angela Kim, Susan Verdiguel, Alessandra Sala, Victoria Bolin, Sara Ibrahim, Elena Kell, AI For Gender Equality, VINNOVA (2020),

⁵⁸⁶⁴ AI Sweden, An AI Strategy for Sweden, (Mar. 20, 2024), https://strategy.ai.se/

⁵⁸⁶⁵ Wallenberg AI, Autonomous Systems, and Software Program (WASP), The Human-Centred Future of AI (Jun. 13, 2024), https://wasp-sweden.org/the-human-centred-future-of-ai/

⁵⁸⁶⁶ addAI, Liberty, Equality and AI, https://www.addai.org/

⁵⁸⁶⁷ Johanna Bergman, Responsible Use of AI, AI Sweden,

⁵⁸⁶⁸ Ylva Strander, Göran Marklund, Annika Zika, Lennart Stenberg, Nannan Lundin, Daniel Johansson, Karl Hallding, Strategic Techniques for Sweden: A Basis for National Priorities, VINNOVA (2024), https://www.vinnova.se/en/publikationer/strategic-technology-areas-forsweden/

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universities. The focus is on upskilling and reskilling the labor workforce. Moreover, AI jobs, skills and investments in AI sector has increased in 2024 compared to previous years. These initiatives and data suggest Sweden is effectively implementing OECD recommendation of AI skills, jobs, and labor market transformation (principle 2.4).

Sweden is a member of the Global Partnership on AI (GPAI), a multistakeholder initiative that aims to foster international cooperation on AI research and applied activities. GPAI is "built around a shared commitment to the OECD Recommendation on Artificial Intelligence." ⁵⁸⁷⁰ GPAI membership aligns with principle 2.5 on international and multistakeholder cooperation.

Council of Europe AI Treaty

Sweden contributed as a Council of Europe and EU Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy, and the Rule of Law. The EU, to which Sweden belongs, signed this first legally binding international treaty on AI when it opened for signature on September 5, 2024. The EU is a superscript of the EU in the

UNESCO Recommendation on AI Ethics

Sweden has endorsed the UNESCO Recommendation on the Ethics of AI, the first ever global agreement on the ethics of AI. Sweden has taken several initiatives to implement the UNESCO Recommendation, which outlines 11 areas of policy action along with components for monitoring and evaluation. 5874

https://search.coe.int/cm/pages/result_details.aspx?objectid=0900001680aee411

Artificial%20Intelligence%20-%20UNESCO%20Digital%20Library.pdf

⁵⁸⁶⁹ AI Competence for Sweden, *National Collaborative Initiative for Education and Skills Development in AI [Nationallt samverkansinitiativ för utbildning och kompetensutveckling inom AI]* (2024), https://ai-competence.se/om/

⁵⁸⁷⁰ Government of Canada, Canada Concludes Inaugural Plenary of the Global Partnership on Artificial Intelligence with International Counterparts in Montreal (Dec. 4, 2020), https://www.canada.ca/en/innovation-science-economic-development/news/2020/12/canada-concludes-inaugural-plenary-of-the-global-partnership-on-artificial-intelligence-with-international-counterparts-in-montreal.html

⁵⁸⁷¹ Council of Europe, *Draft Framework Convention on AI, Human Rights, Democracy and the Rule of Law* (Mar. 20, 2024),

⁵⁸⁷² Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Feb. 14, 2025), https://www.coe.int/en/web/Conventions/full-list/?module=signatures-by-treaty&treatynum=225

⁵⁸⁷³ UNESCO, UNESCO Member States Adopt the Frst Ever Global Agreement on the Ethics of Artificial Intelligence (Nov. 2021), https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence

⁵⁸⁷⁴ UNESCO, *Recommendation on the Ethics of Artificial Intelligence* (2022), https://www.naavi.org/uploads/wp/2023/Recommendation%20on%20the%20Ethics%20of%20

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However, several of these policy areas have yet to be fully implemented. While AddAI is providing oversight for smart algorithms, for example, Sweden has not carried out the Ethical Impact Assessment (EIM) or Readiness Assessment Methodology (RAM).⁵⁸⁷⁵ Many of the initiatives pose technical solutions to AI challenges without clear legal or policy bases for enforcement.

Evaluation

Sweden endorsed the OECD AI Principles and begun to implement them in part through a commitment to developing trustworthy AI and preparing citizens through educational and training opportunities. Sweden ranks at the top among nations for the protection of political rights and civil liberties and has proactive ombudsman institutions and an active data protection agency.

However, Sweden's opposition, along with other Nordic and Baltic countries, to a strong regulatory framework for AI raises concern about Sweden's commitment to take the necessary measures to prevent and mitigate ethical risks. The establishment of a Nordic AI Center, announced in August 2024, could be a key catalyzer in this direction, for it represents an opportunity to advance an ethical agenda for AI. The Nordic Ethical AI Expert Group has called for the development of "a joint Nordic strategy for ethical and responsible AI". 5876 To date, however, the prioritization of AI adoption and development has not been accompanied by sufficient emphasis on the ethical alignment of AI systems.

With the adoption of the EU AI Act, Sweden shall establish a national supervisory mechanism that, it is to be hoped, will be independent and committed to the protection of human rights. Although to date no supervisory mechanism has been established for AI oversight under the EU AI Act, the appointment of the AI Commission could be an important step in this direction, especially given its emphasis on the need for "competitive, safe and ethical AI development and AI use in Sweden.⁵⁸⁷⁷

Despite its excellent human rights record along with establishment of Equality Ombudsman, the absence of ratification of the modernized version of the Council of Europe Convention 108+ for the protection of individuals with regard to the processing of personal data raises questions. Likewise, developments on the implementation of the OECD AI Principles and UNESCO Recommendation on the

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⁵⁸⁷⁵ UNESCO Global AI Ethics & Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

⁵⁸⁷⁶ Nordic Innovation, *Press Release: Nordic AI Experts Launch Five Recommendations for Ethical AI* (Jun. 16, 2024), <a href="https://www.nordicinnovation.org/news/press-release-nordic-ai-experts-launch-five-recommendations-ethical-ai-experts-launch-five-r

⁵⁸⁷⁷ Government Offices of Sweden, Committee Directive from the Ministry of Finance, Strengthened AI Capabilities in Sweden [Förstärkt AI-förmåga i Sverige] Dir. 2023:164 (Dec. 8, 2023), https://www.regeringen.se/rattsliga-dokument/kommittedirektiv/2023/12/dir.-2023164

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Ethics of Artificial Intelligence has been prominent but marred by the lack of a conclusive Ethical Impact Assessment (EIA) and Readiness Assessment Methodology (RAM). Developments in the field of AI Policy and democratic values have been significant, but questions remain over how Sweden will protect human rights, democratic values, and the rule of law as it pursues leadership in AI development and use.

Switzerland

In 2024, Switzerland updated the Digital Switzerland Strategy to focus on AI regulation aligned with human rights and innovation. The new Foreign Policy Strategy 2024–2027 also emphasizes ethical AI governance and the goal to make Switzerland a Global AI hub. Switzerland contributed to negotiations for the Council of Europe International AI Treaty but has not yet signed.

National AI Strategy

The Swiss government announced AI Guidelines for the Federal Government in 2020. The AI Guidelines are intended to ensure a coherent government policy for AI. The AI Guidelines emphasize putting people at the center; Framework conditions for the development and use of AI; Transparency, traceability, and explainability; Human accountability; Safety and security; Active participation in the governance of AI; and Involvement of all affected national and international actors. Specific AI guidelines will be formulated for education and science. Future AI work will be undertaken by the Federal Office of Communications (OFCOM) together with the federal agencies concerned. The Digital Switzerland Strategy, 5879 which encompasses AI, and the Digital Foreign Policy Strategy 2021–20245880 will serve as reference frameworks for the implementing the guidelines.

The Swiss Federal Council emphasized the need for a joint strategic approach to artificial intelligence within the Federal Administration at its meeting

⁵⁸⁷⁹ Federal Council, *Digital Switzerland Strategy* (Sept. 2020),

⁵⁸⁷⁸ Federal Council, *Artificial Intelligence Guidelines for the Federal Administration Adopted [Leitlinien*, "Künstliche Intelligenz" für den Bund], Media Reports (Nov. 25, 2020), https://www.admin.ch/gov/de/start/dokumentation/medienmitteilungen.msg-id-81319.html

 $[\]frac{https://www.bk.admin.ch/dam/bk/en/dokumente/dti/StrategieDCH/strategiedch2020.pdf.download.pdf/Digital%20Switzerland%20Strategy%202020.pdf}{}$

⁵⁸⁸⁰ Federal Department of Foreign Affairs (FDFA), *Digital Foreign Policy Strategy 2021–2024* (Nov. 4, 2020),

https://www.eda.admin.ch/eda/en/fdfa/fdfa/publikationen.html/content/publikationen/en/eda/sch weizer-aussenpolitik/Digitalaussenpolitik 2021-2024.html

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in September 2024.⁵⁸⁸¹ The Council tasked the Federal Department of Home Affairs (FDHA) and the Federal Chancellery with developing a comprehensive proposal by the end of 2025 to coordinate all relevant AI activities. This initiative aims to foster synergy, promote innovation, and build public trust in the application of AI across the public sector. The strategy will address key areas such as infrastructure, regulatory development, workforce training, and stakeholder engagement, ensuring that AI adoption aligns with democratic principles and societal needs."⁵⁸⁸²

The AI Guidelines follow from the Digital Switzerland Strategies dating back to 2016. 5883 These strategies are binding for the Federal Administration and encompass the government's principles and key objectives for digital transformation across. 5884 Although these reports extend beyond AI, the federal government has taken further action to focus on AI. 5885 For example, the AI Guidelines aligned with the principles and objectives of the 2020 Digital Switzerland Strategy, which included "data, digital content, and artificial intelligence" among nine fields of action. 5886 The 2025 strategy includes Artificial Intelligence: Legal Situation and the Use of AI in the Federal Administration as one of three focus themes. 5887

The AI Guidelines introduced in 2020 derived in part from a 2019 Report of the Interdepartmental Working Group on Artificial Intelligence that summarized three reports by the federal government.⁵⁸⁸⁸ The report gave an

https://www.admin.ch/gov/en/start/documentation/media-releases.msg-id-102454.html | 5882 | Ibid

https://www.bakom.admin.ch/dam/bakom/en/dokumente/bakom/digitale_schweiz_und_internet/ Strategie%20Digitale%20Schweiz/Strategie/Strategie%20Digitale%20Schweiz.pdf.download.pd f/digital_switzerland_strategy_Brochure.pdf

https://www.bakom.admin.ch/dam/bakom/en/dokumente/informationsgesellschaft/strategie/Strategie DS Digital 2-EN-barrierenfrei.pdf.download.pdf/Strategie DS Digital 2-EN-barrierenfrei.pdf

https://www.bakom.admin.ch/dam/bakom/en/dokumente/informationsgesellschaft/strategie/strategie/digitale_schweiz.pdf.download.pdf/Strategie-DS-2020-EN.pdf

⁵⁸⁸¹ Federal Council, Confederation Wishes to Strengthen Coordination of Artificial Intelligence in the Administration, Swiss Federal Administration (Sept. 13, 2024),

⁵⁸⁸³ Federal Council, *Digital Switzerland Strategy* (Apr. 2016),

⁵⁸⁸⁴ Federal Council, *Digital Switzerland Strategy*, https://digital.swiss/en/

⁵⁸⁸⁵ Federal Council, *Digital Switzerland Strategy* (Sept. 2018),

⁵⁸⁸⁶ Federal Council, *Digital Switzerland Strategy* (Sept. 2020),

⁵⁸⁸⁷ Federal Council, *Digital Switzerland Strategy 2025* (Nov 2024),

https://digital.swiss/userdata/uploads/strategie-dch-en.pdf

⁵⁸⁸⁸ Federal Council, Challenges of Artificial Intelligence: Report of the Interdepartmental Group "Artificial Intelligence" to the Federal Council [Herausforderungen der künstlichen Intelligenz Bericht der interdepartementalen Arbeitsgruppe «Künstliche Intelligenz» an den Bundesrat] (Dec. 2019),

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overview of AI and the current legal situation and then considered AI in 17 different policy areas. The Working Group report emphasized the need for transparency, fairness or non-discrimination, accountability, and compliance with fundamental and human rights. The group points out that the more human or fundamental rights are impacted, the more transparency and comprehensibility are required. They concluded that no fundamental change to the Swiss regulatory framework was necessary because the legal principles of Swiss technology policy are formulated in a technology-neutral manner that allows them to be applied to AI systems. However, the group made several recommendations:

- AI should be monitored continuously as the report is only a snapshot of the current situation and respective legal action need to be taken when new developments are identified
- The Swiss government should engage in more international information and knowledge sharing on AI governance
- AI policy should be integrated into the Digital Switzerland Strategy
- Clarification of the 17 policy areas is necessary.

The Digital Switzerland Strategy 2024 built on its predecessors, emphasizing a forward-thinking framework to guide the country's digital transformation. Key priorities include ensuring digital sovereignty, promoting sustainable and resilient digital infrastructures, and fostering skills and competencies across the population, economy, and government.⁵⁸⁸⁹

The strategy's focus in 2024 has expanded to address artificial intelligence governance, enhanced cybersecurity partnerships, and the development of policies that reflect the rapid pace of technological advancements. A standout feature of the 2024 strategy is its commitment to digital sovereignty and the regulation of emerging technologies like AI, which were not emphasized in earlier strategies. This shift reflects the growing global importance of data governance and innovation frameworks.

Swiss Foreign Policy and Al

Switzerland is a hub for international policy as many international organizations are based in Geneva. The United Nations hosted the first annual AI for Good Global Summit in 2017. Switzerland leverages this internationalism in

for Good Global Summit in 2017. Switzerland leverages this internationalism in AI policy.

Digitization was one of the thematic focus areas of the Swiss Foreign Policy Strategy 2020–2023. The Federal Department of Foreign Affairs wrote,

 $\underline{https://www.sbfi.admin.ch/dam/sbfi/de/dokumente/2019/12/bericht_idag_ki.pdf.download.pdf/bericht_idag_ki.pdf/bericht_idag_ki.p$

⁵⁸⁸⁹ Federal Council, Federal Chancellery FCh, *Digital Switzerland Strategy 2024*, Digital Switzerland, Further Information, Archive, https://www.bk.admin.ch/bk/en/home/digitale-transformation-ikt-lenkung/digitale-schweiz.html#-1304610111

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"The focus is on people's needs. The rule of law and universal human rights—such as freedom of expression and information and the right to privacy—must also be guaranteed online. It is important to defend liberties such as press freedom." Furthermore, the Department seeks to "position Geneva as the location for global digitalisation and technology debate" and to promote sustainable development using digital technologies, digital self-determination and cyber diplomacy. 5891

Switzerland's Foreign Policy Strategy 2024–2027, reflects a commitment to open, inclusive governance that respects human rights and promotes democratic values. In this period, Switzerland plans to advance a strategic approach to AI policy, emphasizing its role in the creation of international regulations that support transparency, fairness, and ethical standards.⁵⁸⁹²

Public Participation

Switzerland is a direct democracy, which means that citizens have the right to decide on policy directly by optional referendums⁵⁸⁹³ or popular initiatives.⁵⁸⁹⁴ Further, policy revisions or proposals of importance go through a consultation procedure with relevant stakeholders to include their opinions and needs and therefore to minimize the chance of a referendum.⁵⁸⁹⁵

Further specifically in technology policy, the website for the "Digital Switzerland" Strategy provides a summary of the Strategy and lists related initiatives and committees. Updates on how the Strategy is being implemented are also published on a website. Organizations, companies, municipalities, and cantons can upload proposals to be considered for the Digital Switzerland action plan on the digital dialogue website. 5897

⁵⁸⁹² Federal Department of Foreign Affairs (FDFA). *Foreign Policy Strategy*, 2024–2027 (2024), https://www.eda.admin.ch/eda/en/fdfa/fdfa/publikationen.html/content/publikationen/en/eda/schweizer-aussenpolitik/Aussenpolitische-Strategie-2024-2027.html

https://www.admin.ch/gov/de/start/bundesrecht/vernehmlassungen.html

https://form.typeform.com/to/ulwdzc?typeform-source=digitaldialog.typeform.com

⁵⁸⁹⁰ Federal Department of Foreign Affairs FDFA, *Foreign Policy Strategy 2020–2023*, p. 17 (Jan. 2020), https://www.eda.admin.ch/eda/en/fdfa/fdfa/publikationen/alle-publikationen.html/content/publikationen/en/eda/schweizer-aussenpolitik/Aussenpolitische-Strategie-2020-2023

⁵⁸⁹¹ Ibid

⁵⁸⁹³ Federal Council, *Referendums*, https://www.bk.admin.ch/bk/de/home/politische-rechte/referenden.html

⁵⁸⁹⁴ Federal Council, *Popular Initiatives*, https://www.bk.admin.ch/bk/de/home/politische-rechte/volksinitiativen.html

⁵⁸⁹⁵ Fedlex, Consultations (2025),

⁵⁸⁹⁶ Swiss Confederation, *Digital Switzerland Strategy*, https://www.digitaldialog.swiss/en/

⁵⁸⁹⁷ Federal Council, Measures for a Digital Switzerland Action Plan,

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In 2018, the Federal Council established the OpenData website, "the Swiss public administration's central portal for open government data." The website, managed by the Federal Statistical Office, "supports organisations in publishing their open data" and "continuously monitors the quality of the catalogue."

The Swiss Tripartite Platform (*Plateforme Tripartite Suisse*) is an information hub and platform to exchange dialogue. The platform was established to prepare for the World Summit on the Information Society (WSIS) conference in 2003. It now "serves as a national forum for the informal exchange of information and experience on WSIS implementation and follow-up activities. It is open to all interested representatives from the administration, the business sector, civil society and the internet community at the national level and meets on an ad-hoc basis." 5899

The Federal Administration launched the Competence Network for Artificial Intelligence (CNAI) in 2022 to "foster the use of and confidence in AI and other new technologies within and outside the Federal Administration in a sustainable way." The CNAI informs the public and facilitates informationsharing from the public to the administration. Its project overview enables it to help ensure the transparency of ongoing AI projects.

The CNAI serves as an enabler and facilitator, built on two communities: the community of practice (CoP) and the community of expertise (CoE). The CoP is open to anyone and brings together people interested in AI to learn from each other and exchange information, for example, about best practices in using AI or concrete project experiences. ⁵⁹⁰¹ CNAI curates the CoE as a group of experts available to consult on projects related to their specialty areas. ⁵⁹⁰² Citizens and organizations can request a referral for an expert in fields such as data science or machine learning, for example, through the website.

Switzerland hosted the AI Policy Summit 2024 organized by ETH Zurich and RegHorizon. The Summit was a pivotal forum for multistakeholder dialogue on AI policy. 5903 The summit covered crucial topics such as global AI policy, AI

Governance and Artificial Intelligence in Switzerland (Mar. 11, 2024),

 $\frac{https://www.bakom.admin.ch/bakom/en/homepage/ofcom/international-activities/un-world-summit-on-the-information-society/wsis.html}{}$

https://cnai.swiss/en/products/community-of-practice/

https://cnai.swiss/en/products/community-of-expertise/

⁵⁸⁹⁸ opendata.swiss, *Portal*, https://opendata.swiss/en/about/

 $^{^{5899}}$ Federal Office of Communications OFCOM, The Plateforme Tripartite for Digital

⁵⁹⁰⁰ Federal Administration, CNAI, *About CNAI*, https://cnai.swiss/en/about/

⁵⁹⁰¹ Federal Administration, CNAI, Community of Practice (Nov. 13, 2024),

⁵⁹⁰² Federal Administration, CNAI, Community of Expertise,

⁵⁹⁰³ RegHorizon, *AI Policy Summit 2024* (Nov. 1–2, 2024), https://reghorizon.com/ai-policy-summit-2024/

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risk management, and AI's role in achieving the UN Sustainable Development Goals. The event encouraged public participation by broadcasting sessions globally, thus providing a platform for engagement across various sectors, including academia, business, government, and civil society. It underscored Switzerland's commitment to an inclusive approach to AI policymaking.

In addition, digitalswitzerland [sic] published a white paper on Generative AI (GenAI) that incorporated insights from 279 Swiss professionals through workshops and surveys. The paper stressed the importance of public participation in developing policies to address challenges such as workforce reskilling and the broader implications of generative AI. The paper also stressed the importance of critical thinking in education along with adoption of AI tools and recommended that policymakers act swiftly to create principles-based, technology-neutral regulations. 5904

Data Protection

The Federal Constitution states that every person has the right to respect for their private and family life, home, and correspondence, post, and telecommunications, and to protection against misuse of their personal data. The Federal Law on Data Protection enshrined this protection in law in July 1993. The FADP established the Federal Data Protection and Information Commissioner (FDPIC) as the authority in charge of enforcing and overseeing data protection.

The FADP was substantially revised into what's known as the new Data Protection Act (FADP). The FADP was passed in 2020 and came into effect along with the new Data Protection Ordinance (DPA) on September 1, 2023. The revisions address modern technological and social conditions, enhancing transparency, increasing data subjects' autonomy, and aligning with international standards such as the EU GDPR. For example, the FADP creates obligations to undertake privacy impact assessments in certain circumstances. 5907

^{4 1.}

digitalswitzerland, Charting the Future: Switzerland's Path to Generative AI Leadership in 2024 and Beyond (2024), https://digitalswitzerland.com/wp-content/uploads/2024/01/IMD AI WhitePaper Digital.pdf

⁵⁹⁰⁵ FedLex, Federal Constitution of the Swiss Confederation, Art. 13 (Apr. 18, 1999), https://www.fedlex.admin.ch/eli/cc/1999/404/en

⁵⁹⁰⁶ FedLex, Federal Act on Data Protection (FADP) (Jun. 19, 1992),

https://www.fedlex.admin.ch/eli/cc/1993/1945 1945 1945/en

⁵⁹⁰⁷ FedLex, *Federal Act on Data Protection*, *Art 22: Data Protection Impact Assessment* (Sept. 1, 2023), https://www.fedlex.admin.ch/eli/cc/2022/491/en

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The revised FADP allowed the Swiss president to present the instrument of ratification to the Council of Europe Secretary General to confirm the country's adoption of Convention 108+.5908

In addition, numerous provisions on the protection of personality also exist in other laws and areas. Articles 28–28l of the Civil Code (ZGB)⁵⁹⁰⁹ specify how legal action is taken in the event of personality violations.

Switzerland's FDPIC is a member of the Global Privacy Assembly (GPA), along with data protection commissioners from the cantons of Basel-Landschaft, Basel-Stadt, Zug, Zurich, and Bern. The FDPIC sponsored or co-sponsored the 2018 Declaration on Ethics and Data Protection in Artificial Intelligence, Secultion on Facial Recognition Technology, and 2023 Resolution on Generative AI. However, the FDPIC did not sponsor the 2020 GPA Resolution on AI Accountability.

AI Oversight

The Federal Data Protection and Information Commissioner (FDPIC) is the "competent authority for data processing by federal bodies and private persons, including enterprises." Data processing by cantonal or communal authorities is supervised further by cantonal and communal data protection commissioners. ⁵⁹¹⁵

⁵⁹⁰⁸ FDPIC, Switzerland Ratifies the Convention 108+ (Sept. 8, 2023),

https://www.edoeb.admin.ch/en/08092023-switzerland-ratifies-the-convention-108

⁵⁹⁰⁹ FedLex, SR 210 Swiss Civil Code (Dec. 10, 1907),

https://www.fedlex.admin.ch/eli/cc/24/233 245 233/en

⁵⁹¹⁰ Global Privacy Assembly, List of Accredited Members (2023),

https://globalprivacyassembly.org/participation-in-the-assembly/list-of-accredited-members/

⁵⁹¹¹ Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-

content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

⁵⁹¹² Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022),

https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁵⁹¹³ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁵⁹¹⁴ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), <a href="https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-developm

<u>content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and Use-of-AI-EN-1.pdf</u>

⁵⁹¹⁵ FDPIC, *Tasks: Data Protection* (Jul. 23, 2024), https://www.edoeb.admin.ch/en/tasks-data-protection

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The FADP amendments extended the duties and powers of the FDPIC, which will increase the number of investigations. 5916

Established in 2019, the National Human Rights Institute (NHRI) extends its oversight to include AI applications, reflecting its broad mandate to safeguard human rights across all sectors. 5917 According to the Federal Council, "The NHRI will be independent, include members from across society and receive an annual financial support from the Confederation."5918 The NHRI developed from a pilot project by the Swiss Centre of Expertise in Human Rights (SCHR), which completed over 200 projects to further human rights in Switzerland before its mandate ended in 2022.5919

On the cantonal level, Zurich was the first canton to establish a regulatory sandbox for AI in 2022. The Innovation Sandbox for Artificial Intelligence aims to "promote responsible innovation by allowing public administration and participating organizations to collaborate closely on regulatory issues and enabling the use of new data sources."5920 The Sandbox grants organizations access to regulatory know-how. In exchange, the organizations publicize their findings and results.

Algorithmic Transparency

Switzerland signed the Council of Europe Convention 108+ in 2019 and ratified in 2023. 5921 Convention 108+ ensures algorithmic transparency by granting every individual the right to request the logic behind automated decisions, the right to correct or erase data handled improperly, and the right to remedy "where his or her rights under this Convention have been violated."5922

A key amendment to the FADP increased transparency in data processing, requiring notification when data is processed for automated decisions and the right

⁵⁹¹⁶ FDPIC, New FDPIC's Role (Jul. 23, 2024), https://www.edoeb.admin.ch/en/new-fdpics-role ⁵⁹¹⁷ Federal Council, National Human Rights Institution to Be Established in Switzerland, Press Release (Dec. 13, 2019), https://www.admin.ch/gov/en/start/documentation/media-releases.msgid-77508.html

⁵⁹¹⁸ Ibid

⁵⁹¹⁹ Swiss Centre of Expertise in Human Rights, *About the SCHR*, https://skmr.ch/en/about

⁵⁹²⁰ Canton of Zurich, *Innovation Sandbox for Artificial Intelligence (AI)*,

https://www.zh.ch/de/wirtschaft-arbeit/wirtschaftsstandort/innovation-sandbox.html

⁵⁹²¹ Council of Europe Treaty Office, Chart of Signatures and Ratifications of Treaty 223 (Feb.

^{12, 2025),} https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/223/signatures ⁵⁹²² Council of Europe, 128th Session of the Committee of Ministers, *Modernized Convention for* the Protection of Individuals with Regard to the Processing of Personal Data, Article 9—Rights of the Data Subject (May 18, 2018), https://search.coe.int/cm?i=09000016807c65bf

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to know "logic behind the decisions." This introduces the general concept of automated individual decisions in Swiss law.

The FADP states that: (1) "The person responsible shall inform the person concerned of a decision that is based exclusively on automated processing that is associated with a legal consequence for them or significantly affects them (automated individual decision) and (2) "On request, it shall give the data subject the opportunity to state his or her position. The data subject may request that the automated individual decision be reviewed by a natural person."

Finally, there is a specific labeling requirement for an automated individual decision if it is issued by a federal body: 21(4) If the automated individual decision is issued by a federal body, it must label the decision accordingly. This requirement shows that higher demands are placed on government action in general, and in particular with regard to transparency.

These amendments grew in part from increasing calls from civil society, including organizations calling for an ADM register for public administration. Demands for a register were taken up at the federal level as at the cantonal level. The Federal Council rejected the federal motion, and it was subsequently written off. Developments in the canton of Zurich advanced farther. As part of the revision of the Information and Data Protection Act, the government council of the canton of Zurich proposed to establish a registry for automated decision-making systems (ADM systems). Petroposed to be particularly problematic from the point of view of the comprehensibility of the decision-making process.

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⁵⁹²³ FedLex, Federal Act on Data Protection, Art 21: Duty to Provide Information in the Case of an Automated Individual Decision, Art 25: Right of Access (Sept. 1, 2023), https://www.fedlex.admin.ch/eli/cc/2022/491/en

⁵⁹²⁴ AlgorithmWatch/CH, *Automated Decision-Making Systems in the Public Sector — Some Recommendations* (Feb. 25, 2022), https://algorithmwatch.ch/en/adm-publicsector-recommendation/: Digital Society Initiative (DSI), *Position Paper: Legal Framework for Artificial Intelligence in Switzerland* (Dec. 8, 2021), https://www.digitalegesellschaft.ch/2021/12/08/rechtsrahmen-fuer-kuenstliche-intelligenz-in-der-schweiz-positionspapier-digital-society-initiative-dsi/">https://algorithmwatch.ch/en/adm-publicsector-recommendations (Dec. 8, 2021), https://www.digitalegesellschaft.ch/2021/12/08/rechtsrahmen-fuer-kuenstliche-intelligenz-in-der-schweiz-positionspapier-digital-society-initiative-dsi/

⁵⁹²⁵ Federal Assembly—Swiss Parliament, *Motion 21.4508: Public List of Algorithms Use in Administration* (Dec. 22, 2023), https://www.parlament.ch/de/ratsbetrieb/suche-curia-vista/geschaeft?AffairId=20214508

⁵⁹²⁶ Nicola Yuste, Arianne Mosser, Gabrial Mäder, Willi Wilma, and Erika Zahler, *Postulate* 9/2022: Transparency about the Use of Artificial Intelligence in Administration (Jan. 17, 2022), https://www.kantonsrat.zh.ch/geschaefte/geschaeft/?id=7eaa64973b454a6ca4e5eceb86b13941

⁵⁹²⁷ AlgorithmWatch/CH, *Milestone: The Canton of Zurich Plans a Register for Automated Decision-Making Systems* (Oct. 17, 2022), https://algorithmwatch.ch/de/adm-register-kt-zh/

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Data Scraping

The FDPIC and international data protection and privacy counterparts released a follow-up joint statement laying out expectations for industry related to data scraping and privacy, following engagement with industry on an earlier statement. The initial statement in August 2023 established that "[social media companies] and other websites are responsible for protecting personal information from unlawful scraping." 5929

The follow-up, which incorporates feedback from engagement with companies such as Alphabet (YouTube), X Corp (formerly Twitter), and Meta Platforms (Facebook, Instagram, WhatsApp), adds that organizations must "comply with privacy and data protection laws when using personal information, including from their own platforms, to develop AI large language models"; must regularly review and update privacy protection measures to keep pace with technological advances; and ensure that permissible data scraping, such as that for research, "is done lawfully and following strict contractual terms." 5930

Data scraping generally involves the automated extraction of data from the web. Data protection authorities are seeing increasing incidents involving data scraping, particularly from social media companies and the operators of other websites that host publicly accessible data. Scraped personal information can be exploited for targeted cyberattacks, identity fraud, monitoring, profiling and surveillance purposes, unauthorized political or intelligence gathering purposes, unwanted direct marketing or spam.

Al and Criminal Justice

According to AlgorithmWatch, Swiss federal and canton institutions are using AI systems in a variety of applications. Federal government agencies are using AI systems to triage inmates as part of the process to develop an inmate's release plan and for automatic vehicle detection and traffic monitoring at state borders. The Federal Customs Administration uses a data processing system to help assess goods coming into the country. Some cantons use a police software to

⁵⁹²⁸ UK Information Commissioner's Office, *Global Privacy Authorities Issue Follow-Up Joint Statement on Data Scraping after Industry Engagement* (Oct. 28, 2024), https://ico.org.uk/about-the-ico/media-centre/news-and-blogs/2024/10/global-privacy-authorities-issue-follow-up-joint-statement-on-data-scraping-after-industry-engagement/

⁵⁹²⁹ Regulatory Supervision Information Commissioner's Office of the United Kingdom, *Joint Statement on Data Scraping and the Protection of Privacy* (Aug. 24, 2023), https://ico.org.uk/media/about-the-ico/documents/4026232/joint-statement-data-scraping-202308.pdf

⁵⁹³⁰ Office of the Privacy Commissioner of Canada, *Concluding Joint Statement on Data Scraping and the Protection of Privacy* (Oct. 2024), https://ico.org.uk/about-the-ico/media-centre/news-and-blogs/2024/10/global-privacy-authorities-issue-follow-up-joint-statement-on-data-scraping-after-industry-engagement/

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predict domestic burglaries. AlgorithmWatch allays some concern about the use of the extension of these AI applications to predictive policing by noting "the use of predictive policing in Switzerland is currently limited to a relatively small and clearly defined area of preventive police work."⁵⁹³¹

Although there is no legal framework in the Criminal Procedure Code (CrimPC) governing the use of facial recognition technology by police, ⁵⁹³² police occasionally use facial recognition to compare mug shots. A cantonal police database of known criminals is compared with another, e.g., a cross-cantonal database. The images often come from surveillance cameras of injured parties, such as a clothing store that has been robbed. The concrete identification of the suspected person is still the responsibility of a police officer and not of a software. ⁵⁹³³

Facial Recognition

The Swiss government submitted a draft amendment to the Aviation Act in August 2024 for consultation. The amendment would allow airports and airlines in Switzerland to use facial recognition to identify and move passengers through baggage drop-off, check-in, ticket control, and boarding. The amendment allows for passengers to opt out of facial recognition, noting that "the current process without biometric data must be offered as an alternative for people who reject this."

Civil society organizations are campaigning hard for a ban on facial recognition in public spaces. Amnesty International, AlgorithmWatch CH, and the Digital Society are joined together⁵⁹³⁵ and launched a petition calling for a ban on automatic facial recognition and biometric mass surveillance in Switzerland.⁵⁹³⁶

https://www.amnesty.ch/de/themen/ueberwachung/gesichtserkennung#

https://algorithmwatch.ch/de/gesichtserkennung-stoppen/

⁵⁹³¹ AlgorithmWatch, Nadja Braun Binder and Catherine Egli, *Automating Society Report 2020: Switzerland*, (Oct. 2020), https://automatingsociety.algorithmwatch.org/report2020/switzerland/5932 Swiss Criminal Procedure Code, *Federal Act on Data Protection (DPA)* (Jul. 1, 2024), https://www.fedlex.admin.ch/eli/cc/2010/267/en

Monika Simmler and Giulia Canova, Facial Recognition Technology: The "Smart" Police Work on the Legal Test Bench [Gesichtserkennungstechnologie: Die «smarte» Polizeiarbeit auf dem rechtlichen Prüfstand], Sicherheit&Recht [Security & Law], pp. 105–117 (Mar. 2021), https://www.alexandria.unisg.ch/server/api/core/bitstreams/3fa84a86-4fdb-4888-94e1-3350e64ec16e/content; Nadja Binder Braun, Eliane Kunz and Liliane Obrecht, Machined Facial

Recognition in Public Spaces [Maschinelle Gesichtserkennung im öffentlichen Raum], sui generis, pp. 54–61, open access (Apr. 11, 2022), https://sui-generis.ch/204
⁵⁹³⁴ SwissInfo, Swiss Airports and Airlines Allowed to Use Facial Recognition (Aug. 29, 2024),

https://www.swissinfo.ch/eng/workplace-switzerland/airports-and-airlines-should-be-allowed-to-use-facial-recognition/87456669

⁵⁹³⁵ Amnesty International, Swiss Section, Facial Recognition,

⁵⁹³⁶ AlgorithmWatch / CH, *Petition: Stop Facial Recognition* (Nov. 17, 2021),

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The petition was signed by more than 10,000 people and has also led to effects at the political level. 5937

Several local parliaments have discussed and even passed bans on facial recognition in public spaces. The St. Gallen city parliament agreed by a narrow margin to move toward a ban on facial recognition applications in public spaces in September 2019, becoming the first city in Switzerland to do so. 5938 The councils in Zurich, 5939 Lausanne, 5940 and the canton of Basel-Stadt 5941 followed, each considering motions for a ban on facial recognition. Similar motions are in progress in other Swiss cities. In a national survey, 78% of parliamentary candidates supported such a ban. 5942

Environmental Impact of AI

Switzerland aims to rely solely on renewable energy by 2050. The World Economic Forum sees "tremendous potential" in artificial intelligence to "help accelerate the global energy transition." 5943

The Swiss government has tasked the Federal Office of Energy (SFOE) with monitoring and tackling the challenges AI poses for the energy industry, though no official policy or strategy has been announced.⁵⁹⁴⁴

⁵⁹³⁷ AlgorithmWatch / CH, *Great Successes in the Ban on Automatic Facial Recognition in Public Spaces* (Nov. 14, 2022), https://algorithmwatch.ch/de/gesichtserkennung-erfolge/
5938 St. Gallen City Parliament, *Motion: Stop Automatic Facial Recognition in Public Space* (Sept. 13, 2022), https://www.stadt.sg.ch/home/verwaltung-politik/demokratie-politik/stadtparlament/geschaefte.geschaeftDetail.html?geschaeftGUID=233e32ab77714146b31d 608b80dc4755

⁵⁹³⁹ Zurich City Council, Treatment of Proposals from City Council, 2022/629: Finance Department, Partial Revision of the Data Protection Regulation, Video Surveillance (2022), https://www.gemeinderat-zuerich.ch/geschaefte/detail.php?gid=99d77a00-a8dd-4cfc-b207-618a3dadf947

⁵⁹⁴⁰ City of Lausanne, Municipal Council, *PR21/002 Prohibiting the Use of Facial and Biometric Recognition Technologies in Video Surveillance in Lausanne* (Aug. 20, 2024),

https://www.lausanne.ch/apps/agir/affaire/87/6f3999044b004229aab557844e5d1a87.htm ⁵⁹⁴¹ Grand Council of the Canton of Basel-Stadt, *Business 22.5022 Concerning No Use of Biometric Recognition Systems in Basel-Stadt* (Feb. 8, 2024),

https://grosserrat.bs.ch/ratsbetrieb/geschaefte/200111546

⁵⁹⁴² Amnesty International, Switzerland: Human Rights Report (2023),

 $\underline{https://www.amnesty.org/en/location/europe-and-central-asia/western-central-and-south-eastern-europe/switzerland/report-switzerland/$

⁵⁹⁴³ Swiss Info, *How AI Could Help Switzerland Shift to Renewables* (Dec. 2, 2021), https://www.swissinfo.ch/eng/sci-tech/how-artificial-intelligence-could-help-switzerland-s-move-to-all-renewable-electricity/47092918

⁵⁹⁴⁴ European Commission, Switzerland AI Strategy Report (Sept. 1, 2021), https://aiwatch.ec.europa.eu/countries/switzerland/switzerland-ai-strategy-report en

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Lethal Autonomous Weapons

Switzerland supports a two-tiered approach in international agreements related to Lethal Autonomous Weapons Systems (LAWS). The two-tiered approach would prohibit AWS that cannot be used in compliance with international law and international humanitarian law in terms of reliability or the extent or timing of the use of the force. For weapons that can be used in compliance, Switzerland supports regulation focused on "risk mitigation, including positive obligation to uphold human control and imposing limitations on weapon parameters and deployment contexts, all while considering military, security policy, and ethical considerations." 5945

In comments to the UN Secretary-General for the report on LAWS, Switzerland underlined support for the Convention on Certain Conventional Weapons (CCW)'s Group of Governmental Experts (GGE) on LAWS to "consider and formulate elements of an instrument on AWS by 2026 at the latest." Switzerland was a lead sponsor on the Lethal Autonomous Weapons resolution 78/241 and participates actively in CCW and GGE meetings.

Switzerland's statement to the UN Secretary-General acknowledges the potential benefits and opportunity of AI and autonomous weapons in the armed forces, noting "autonomy can provide advantages, including improved safety and efficiency. Also, [...] in specific applications and under certain conditions such technologies could contribute to better protecting civilians and civilian objects or to avoiding collateral damage." 5947

Human Rights

Switzerland is a signatory to many international human rights treaties and conventions. Switzerland typically ranks among the top nations in the world for the protection of human and political rights. Freedom House scored Switzerland 96/100 in 2024, 5948 unchanged from 2021, 5949 and noted that "Political rights and civil liberties are generally respected, though laws and policies adopted in recent years have reflected a growing wariness of immigration and ethnic minority groups, whose members face societal and systemic discrimination."

5947 Ibid

⁵⁹⁴⁵ UN Office of Disarmament Affairs, Swiss Confederation, *Views of Switzerland on "Lethal Autonomous Weapons Systems [...]" in Response to the Request of the UN Secretary-General* (Jul. 1, 2024), https://docs-library.unoda.org/General_Assembly_First_Committee_-Seventy-Ninth session (2024)/78-241-Switzerland-EN.pdf

⁵⁹⁴⁶ Ibid

⁵⁹⁴⁸ Freedom House, *Freedom in the World 2024: Switzerland* (2024), https://freedomhouse.org/country/switzerland/freedom-world/2024

⁵⁹⁴⁹ Freedom House, *Freedom in the World 2021: Switzerland* (2021), https://freedomhouse.org/country/switzerland/freedom-world/2021

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Guaranteeing human rights is also one of Switzerland's key goals for the Council of Europe's AI framework. 5950 As the Federal Council noted in a press release ahead of negotiations in 2022 noted that "The new legal framework should regulate the negative effects of artificial intelligence rather than the technology itself. It is also important to foster innovation while guaranteeing human rights, including data protection."

Al Safety Summits

Switzerland participated in the first AI Safety Summit and endorsed the Bletchley Declaration in November 2023. Switzerland thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible."

The second AI safety Summit was a primarily virtual event co-hosted by Britain and South Korea with in-person events in Seoul. Swiss Ambassador Benedikt Weschsler, head of digitalization at the department of foreign affairs, attended the event in-person. 5952

The third AI Safety Summit took place in February 2025 in Paris, France. France rebranded the event as the AI Action Summit to better encompass the scope of concerns and goals that will be covered. 5953

OECD / G20 AI Principles

Switzerland endorsed the G20 AI Guidelines and adheres to the OECD AI Principles. The OECD notes Switzerland's active involvement in relevant international organizations and processes as evidence of progress on

⁵⁹⁵⁰ Press Releases by the Federal Council, *Switzerland's Participation in Negotiations on Artificial Intelligence* (Sept. 16, 2022), https://www.admin.ch/gov/en/start/documentation/media-releases.msg-id-90367.html

⁵⁹⁵¹ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, Prime Minister's Office, *The Bletchley Declaration by Countries Attending the AI Safety Summit* (Nov. 1, 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration/the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

⁵⁹⁵² Reuters, *Second Global AI Safety Summit Faces Tough Questions, Lower Turnout* (Apr. 29, 2024), https://www.reuters.com/technology/second-global-ai-safety-summit-faces-tough-questions-lower-turnout-2024-04-29/

⁵⁹⁵³ Élysée Palace, *Summit for Action on AI* (2023), https://www.elysee.fr/en/sommet-pour-l-action-sur-l-ia

⁵⁹⁵⁴ OECD AI Policy Observatory, *OECD AI Principles Overview, Countries Adhering to the AI Principles* (2025), https://oecd.ai/en/ai-principles

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implementation of the principles. In a report on AI policies, the G20 Digital Economy Task Force noted that "Particularly important for Switzerland is to ensure that fundamental and established values and norms such as human rights are respected and that all relevant stakeholders are involved in decision-making." 5955

Council of Europe Al Treaty

Switzerland contributed as a Council of Europe Member State in the negotiations of the Council of Europe Framework Convention on AI and Human Rights, Democracy, and the Rule of Law. Switzerland chaired the Council of Europe Committee on AI. However, the Swiss neutrality was questioned. According to an article published in the Swiss press, Switzerland prioritized the potential global reach of the Convention at the expense of the Council of Europe's human rights standards. The Committee on AI approved the Draft Framework Convention at its 10th Plenary session in March 2024. Septimental S

Switzerland did not sign the treaty in 2024. 5958 However, a Federal Council press release in February 2025 announced that "Switzerland is to ratify the Council of Europe Convention on Artificial Intelligence (AI) and make necessary adjustments to Swiss law."5959 The announcement followed a meeting in which the Council defined the basic values to orient its work on AI regulation in 2025 along with three objectives: "the strengthening of Switzerland as an innovation location, the preservation of the protection of fundamental rights including economic freedom, and the strengthening of the confidence of the population in AI."

UNESCO Recommendation on AI Ethics

Switzerland is a member of UNESCO and as such supported the adoption of the UNESCO Recommendation of the Ethics of AI. In his speech before the 41st session of the General Conference of UNESCO, Federal Councilor Ignazio

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⁵⁹⁵⁵ G20 Digital Economy Task Force, Saudia Arabia 2020, *Examples of National AI Policies* (2020), https://www.mcit.gov.sa/sites/default/files/examples-of-ai-national-policies.pdf
⁵⁹⁵⁶ Adrienne Fichter, *AI Regulation: Is the Swiss Negotiator a US Stooge?* SwissInfo (Mar. 10, 2024), https://www.swissinfo.ch/eng/foreign-affairs/ai-regulation-is-swiss-negotiator-a-us-stooge/73480128

⁵⁹⁵⁷ Council of Europe, *Draft Framework Convention on AI and Human Rights, Democracy and the Rule of Law* (Mar. 20, 2024),

https://search.coe.int/cm/pages/result_details.aspx?objectid=0900001680aee411

⁵⁹⁵⁸ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Feb. 12, 2025), https://www.coe.int/en/web/Conventions/full-list/?module=signatures-by-treaty&treatynum=225

⁵⁹⁵⁹ Federal Council, Media Releases, *AI Regulation: Federal Council Wants to Ratify Council of Europe Convention* (Feb. 12, 2025), https://www.ekm.admin.ch/bj/de/home/aktuell/mm.msg-id-104110.html

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Cassis emphasized "Switzerland's unwavering commitment to encouraging respect for fundamental rights" and "support for the recommendation on the ethics of artificial intelligence." 5960

Despite not yet having AI-specific regulations implementing UNESCO's Recommendation on the Ethics of AI, Switzerland has shown commitment to upholding fundamental rights in the Digital Switzerland Strategy and other developments. However, Switzerland has not initiated UNESCO's Readiness Assessment Methodology (RAM) to help ensure ethical implementation of AI. 5961

Evaluation

Switzerland has established a national set of guidelines on ethics that are aimed at the public administration. Further, most reports and initiatives consider, integrate, and implement ethics in the government's work on AI policy. The Federal Council announced that its approach to issuing a firm mandate for an AI regulatory project in 2025 will be based on a report analyzing existing Swiss law. 5962 The project will define responsibilities with the goal of drafting national AI regulations, though the Council has indicated they will likely reserve cross-sectoral policies for areas requiring protections for fundamental rights like data protection. 5963

In recent years, initiatives on the federal as well as the cantonal level demonstrate, that the topic of AI policy is picking up speed in Switzerland. With the Federal Department of Foreign Affairs 2022 report and Switzerland's contribution to the Council of Europe AI framework, the country's ambitions for AI policy have become clear, attesting to its commitment to technological development that is compatible with human rights. However, there is no clear regulatory strategy for the private sector. The ethics guidelines for public administration signal a step toward implementation of the UNESCO Recommendation combined with the history of commitment to human rights despite lack of progress on UNESCO tools such as the RAM. Switzerland's educational efforts and programs such as the Competence Network for AI align to the OECD AI Principles. Ratification of Convention 108+ solidified algorithmic

⁵⁹⁶⁰ Press Releases by the Federal Council, *Federal Councillor* [sic] *Ignazio Cassis Speaks at UNESCO, Calls for Effective Multilateralism* (Nov. 12, 2021),

 $[\]underline{https://www.admin.ch/gov/en/start/documentation/media-releases.msg-id-85852.html}$

⁵⁹⁶¹ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

⁵⁹⁶² Digital Switzerland, Swiss Approach to Regulating AI Systems (2023),

 $[\]underline{https://digital.swiss/en/strategy/focus-topics/swiss-approach-to-regulating-ai-systems}$

⁵⁹⁶³ Federal Council, Media Releases, *AI Regulation: Federal Council Wants to Ratify Council of Europe Convention* (Feb. 12, 2025), https://www.ekm.admin.ch/bj/de/home/aktuell/mm.msg-id-104110.html

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transparency. Signing and ratifying the CoE AI Treaty and extending to the sector can help ensure Switzerland's AI governance protects rights from AI system sin the private as well as public sector.

Taiwan

In 2024, Taiwan carried out public consultation on the Draft AI Basic Law before submitting for legislative review. The Preparatory Office for the Personal Data Protection Commission initiated work on amendments to the personal data law ahead of the Commission's establishment in August 2025.

National AI Strategy

In 2018 the Government of Taiwan officially introduced its four-year AI Action Plan, which aims to propel Taiwan "into the ranks of the world's leading smart nations." 5964 "Guided by the principles of deregulation, open access and technology investment," the AI Action Plan is designed to "sharpen Taiwan's advantages, prioritize innovation and real-world implementation, and develop software and hardware in tandem, thereby injecting greater momentum into Taiwan's industries."

To this end, the Action Plan focuses on five action areas: 1) developing AI talent; 2) promoting Taiwan's lead role in AI by expanding its world-leading position in the semiconductor chip industry; 3) building Taiwan into an AI innovation; 4) liberalizing laws and opening test grounds to ease restrictions on innovative technologies; and 5) Transforming industry with AI.

The AI Action Plan follows on the five-year AI strategy developed by the Ministry of Science and Technology (MOST),⁵⁹⁶⁵ now known as the National Science and Technology Council (NSTC), to "cultivate AI technology specialists and create an environment for AI scientific research." This "Grand Strategy for a Small Country⁵⁹⁶⁶" builds on Taiwan's "strengths and potential advantages, such as semiconductors and information and communications technology."

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⁵⁹⁶⁴ Government of Taiwan, Executive Yuan, *AI Taiwan Action Plan* (Aug. 7, 2019), https://english.ey.gov.tw/News3/9E5540D592A5FECD/1dec0902-e02a-49c6-870d-e77208481667; Government of Taiwan, *AI Taiwan*, https://ai.taiwan.gov.tw/#actionplan
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The AI Strategy aims to "develop select fields for the future, including the internet of things, security solutions and driverless vehicles" and has five "key facets": 1) R&D services with the creation of an AI cloud service and high-speed computing platform; 2) Value-added innovation with the establishment of four AI innovation research centers; 3) Creativity and practice with an AI Robot Makerspace; 4) Industrial pilot program with an AI semiconductor "moonshot" project; and 5) Social participation with three Formosa Grand Challenge technology competitions to uncover talent, develop technology, and stimulate creativity. Ethical questions are also targeted in Taiwan as one of the many aspects related to AI. 5967

The Executive Yuan announced the Taiwan Artificial Intelligence (AI) Action Plan 2.0 in June 2023 ⁵⁹⁶⁸ to run from 2023 through 2026. According to the NSTC, ⁵⁹⁶⁹ the emphasis of the AI Action Plan 2.0⁵⁹⁷⁰ is Human-Centered AI, with a focus on the following five main tasks:

- 1. Optimize and expand the talent pool
- 2. Deepen AI software and core chip technology
- 3. Improve data governance and AI legal environment
- 4. Actively participate in international AI-related organizations
- 5. Address humanistic and social issues

The Ministry of Digital Affairs (MoDA) would "establish an AI evaluation center, which, alongside draft acts for AI regulation, would provide a legislative basis for AI usage, and allow for more laws to be drafted as AI technology is implemented in other fields, such as medicine, finance and transportation." ⁵⁹⁷¹

Al Core Values

Taiwan's AI Technology R&D Guidelines were announced in September 2019, "in a bid to create a reliable environment conforming to international trends

⁵⁹⁶⁷ Netherland Innovation Network, *Artificial Intelligence: An Overview of Policies and Developments in Taiwan* (Mar. 2020), https://netherlandsinnovation.tw/posts/report-on-artificial-intelligence-an-overview-of-policies-and-developments-in-taiwan-2020/

⁵⁹⁶⁸ AI Taiwan, *Executive Yuan Announces Taiwan Artificial Intelligence (AI) Action Plan 2.0* (Jun. 4, 2023), https://ai.taiwan.gov.tw/news/executive-yuan-announces-artificial-intelligence-plan/

⁵⁹⁶⁹ NSTC, AI, https://ostp.nstc.gov.tw/PolicyContent.aspx?id=12

⁵⁹⁷⁰ NSTC, *Artificial Intelligence (AI) Action Plan 2.0* (Feb. 2023) (original in Chinese), https://digi.nstc.gov.tw/File/7C71629D702E2D89/e8ccec35-9e42-431c-b778-45dae073d5b5?A=C

⁵⁹⁷¹ AI Taiwan, *Executive Yuan Announces Taiwan Artificial Intelligence (AI) Action Plan 2.0* (Jun. 4, 2023), https://ai.taiwan.gov.tw/news/executive-yuan-announces-artificial-intelligence-plan/

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of AI R&D and to provide directions for Taiwan AI researchers to follow."⁵⁹⁷² When presenting the Guidelines, Minister Chen Liang-gee said that his ministry "has the responsibility of helping humans be able to trust" AI⁵⁹⁷³ and that "those who provide digital tools must be ethical."⁵⁹⁷⁴ He also explained that the whole world is still watching the evolution of artificial intelligence and that it is right now "more appropriate to adopt guidelines than sanctions."

The AI R&D Guidelines are based on three core values: 5975

- 1. Human-centered: the human being should be at the heart of research; an AI-based society should respect human dignity, rights and freedom; and application of AI is to prompt human welfare and hike human living standards)
- 2. Sustainable development: AI R&D should seek balance among economic growth, social progress, and environmental protection to reach co-existence and common prosperity among human being, society and environment
- 3. Diversity and inclusion: AI R&D is to create an AI-based human society of diverse value concepts and backgrounds via interdisciplinary dialog mechanisms.

"AI research and development must be people-oriented," the Minister said, asking that research teams retain the source codes and AI training materials so that the work can be traced. The complexity of AI means that it is vulnerable to misuse, which countries are seeking to mitigate by establishing standards for its development, he said. AI technology systems can perpetuate and amplify human biases, he said, 5976 adding: "After an artificial intelligence program is written, it evolves based on the data provided to it. If the data is discriminatory, the program will be discriminatory. If the data is deviant, it will be deviant."

More precisely, eight guidelines derive from Taiwan's AI core values, including 1) Common good and well-being; 2) Fairness and non-discrimination; 3) Autonomy and control; 4) Safety; 5) Privacy and data governance; 6)

⁵⁹⁷² AI Taiwan, *Ministry Releases Guidelines for AI Research* (Sept. 24, 2019), https://ai.taiwan.gov.tw/news/ministry-releases-guidelines-for-ai-research/

⁵⁹⁷³ Shirley Lin, *Taiwan First in World to Set R&D Guidelines for AI*, Radio Taiwan International (Sept. 23, 2019), https://en.rti.org.tw/news/view/id/2001895

⁵⁹⁷⁴ Radio Taiwan International, *The Ministry of Science Defines a Research Framework for Artificial Intelligence* (Sept. 23, 2019) (original in French), https://fr.rti.org.tw/news/view/id/90832

⁵⁹⁷⁵ Bryan Chuang and Adam Hwang, *MOST Announces AI R&D guidelines*, DigiTIMES (Sept. 24, 2019), https://www.digitimes.com/news/a20190923PD209.html

⁵⁹⁷⁶ Radio Taiwan International, *The Ministry of Science Defines a Research Framework for Artificial Intelligence* (Sept. 23, 2019) (original in French), https://fr.rti.org.tw/news/view/id/90832

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Transparency and traceability; 7) Explainability; and 8) Accountability and communication. 5977

The official press release points to the fact that the core of AI technology is its people-oriented nature, so researchers must safeguard human rights and preserve human dignity and that the guidelines' eight criteria emphasize promoting shared benefits and common well-being, with researchers who should aim to develop systems that are free of discrimination. Likewise, AI tools should support human policies, and people using the tool. 5978

"Human-centered AI" for Taiwan AI start-up iKala means the involvement of people in AI development and applications, as well as the creation of ethical, humane AI. As an illustration, iKala Co-founder and CEO Cheng cites the example of an innovative picture-as-a-service (PicaaS) technology which automatically edits product pictures to allow companies to circulate clean photos of their products. However, following complaints that it could potentially be used to infringe on image owners' intellectual property rights, Cheng and his team retrained the software to recognize and reject copyrighted images. "That's the kind of responsible AI we want to be working on," says Cheng. "Putting humans in the equation—not just stealing and not just replacing people." 5979

The NSTC submitted a draft AI Basic Law in 2024 to reinforce these core values. ⁵⁹⁸⁰ The legal framework would help to ensure that AI development and application align with human rights and democratic principles. ⁵⁹⁸¹

Smart Country Program (2021–2025)

The Smart Nation Program (2021–2025) was passed by the Executive Yuan in May 2021. The National Communications Commission (NCC) states that this program builds on the foundation and achievements of the Digital Nation and Innovative Economic Development Program, 2017–2025 (DIGI+ Program) ⁵⁹⁸² The DIGI acronym reflected Taiwan's commitment to development, innovation, governance, and inclusion, with the "+" reflecting the government's intention to

⁵⁹⁷⁸ AI Taiwan, *Ministry Releases Guidelines for AI Research* (Sept. 24, 2019), https://ai.taiwan.gov.tw/news/ministry-releases-guidelines-for-ai-research/

https://iapp.org/news/a/taiwan-s-ai-governance-framework-unveiled

⁵⁹⁷⁷ Bryan Chuang and Adam Hwang, MOST Announces AI R&D Guidelines, DigiTIMES (Sept.

 $^{24,2019), \}underline{https://www.digitimes.com/news/a20190923PD209.html}$

⁵⁹⁷⁹ Jeremy Olivier, *Taiwan Tests the Limits with Artificial Intelligence*, Taiwan Business (May 15, 2020), https://topics.amcham.com.tw/2020/05/taiwan-tests-limits-ai/

National Development Commissioner, *National Science and Technology Commissioner: Preview the Formulation of the Draft of the "Basic Law on Artificial Intelligence"* (Sept. 13, 2024), https://join.gov.tw/policies/detail/4c714d85-ab9f-4b17-8335-f13b31148dc4

⁵⁹⁸¹ IAPP, Taiwan's AI Governance Framework Unveiled (Aug. 28, 2024),

⁵⁹⁸² National Communications Commission, *Smart Country Program (2021–2025)*, https://www.ncc.gov.tw/english/files/22061/815 5575 220610 1.pdf

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apply the strategy toward promoting innovation at every level of society and the economy. 5983

The DIGI+ Program highlights are:

- "Enhance soft infrastructure to create an environment conducive to digital innovation: DIGI+ calls for the construction of an innovation-friendly legal framework and the cultivation of interdisciplinary technical talent, matched to the research and development of advanced digital technologies.
- Promote development of the digital economy
- Create a service-oriented digital government and promote open governance: This includes the development of an open application programming interface (Open API) for government data, and the establishment of demand-oriented, one-stop smart government cloud services.
- Develop a vibrant online society with equality of access: The DIGI+ program aims to ensure broadband internet access for the disadvantaged, implement participatory democracy, promote digital infrastructure in remote regions and outlying islands, build a comprehensive legal foundation for digital human rights, and provide citizens with equal opportunities for digital development.
- Build sustainable, smart cities and townships."5984

Taiwan inaugurated the new Ministry of Digital Affairs (MoDA) in August 2022. According to the new Minister, Audrey Tang, MoDA "is aimed to build digital resilience for all, connect the digital technologies with civil affairs, strengthen industrial competitiveness and cybersecurity practices, accelerate social digital development and realize the vision of a smart country."5985

MoDA is responsible for promoting Taiwan's overall digital policy innovation and reform. Major digital development policies include holding deliberative assemblies⁵⁹⁸⁶ to determine the development direction of AI policy. The assemblies provided opportunities for public participation and informed the Executive Yuan in drafting the Basic Law on Artificial Intelligence. 5987

https://english.ev.gov.tw/News3/9E5540D592A5FECD/659df63b-dad4-47e3-80abc62cb40a62cd

⁵⁹⁸³ Government of Taiwan, DIGI+: Digital Nation and Innovative Economic Development Program, Executive Yuan (2017),

⁵⁹⁸⁴ Ibid

⁵⁹⁸⁵ Ministry of Digital Affairs, Taiwan Inaugurates Ministry of Digital Affairs, Strives to "Free the Future" (Aug. 27, 2022), https://moda.gov.tw/en/press/press-releases/1986

⁵⁹⁸⁶ MoDA, Alignment Assemblies (2024), https://moda.gov.tw/en/major-policies/alignmentassemblies/1453

⁵⁹⁸⁷ MoDA, The Ministry of Digital Affairs Has Partnered with the International Organization, the "Collective Intelligence Project" (CIP), in Fostering Consensus on the Needs and Risks Associated with Artificial Intelligence (May 2023), https://moda.gov.tw/en/press/pressreleases/5243

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Taiwan's National Science and Technology Council (NSTC) announced a draft Artificial Intelligence (AI) Basic Law in September 2024.⁵⁹⁸⁸ This draft represents Taiwan's commitment to advancing a "human-centered AI ecosystem" where research, development, and application of AI safeguard the essential dimensions of life, health, and safety, while preserving citizens' rights, national welfare, cultural values, and societal resilience.⁵⁹⁸⁹

The draft AI Basic Law is guided by 7 basic principles: 1) Sustainable development and well-being, 2) Human autonomy, 3) Privacy Protection and Data Governance, 4) Security and safety, 5) Transparency and explainability, 6) Fairness and non-discrimination, and 7) Accountability. Governance provisions within the draft ensure that AI "supports human agency, safeguards fundamental rights, and reflects Taiwan's cultural heritage," all while fostering an environment of accountability and transparency. ⁵⁹⁹⁰ Taiwan's draft AI Basic Law aims to shape an AI landscape that serves both the individual and society, paving the way for an inclusive digital future. ⁵⁹⁹¹

Public Participation

One of the key goals of DIGI+ is to further participatory democracy.⁵⁹⁹² The 2021Taiwan Open Government National Action Plan goes in the same direction and aims at "deepening democratic values and strengthening international ties," applying technology toward furthering government transparency and increasing public participation in government policies.⁵⁹⁹³

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⁵⁹⁸⁸ NSTC, *Preview of Draft Basic Law on Artificial Intelligence Promoting Innovation with Human Rights and Risks in Mind* (original Chinese) (Jul. 15, 2024),

https://www.nstc.gov.tw/folksonomy/detail/87e76bcd-a19f-4aa3-9707-ca8927dcb663?l=ch

⁵⁹⁸⁹ Lee and Li Attorneys-at-Law, *NSTC Announced the Draft Artificial Intelligence Basic Act* (Jul. 17, 2024), https://www.leeandli.com/EN/NewslettersDetail/7293.htm

⁵⁹⁹⁰ Science and Technology Law Institute, *After the European Union's Artificial Intelligence Law, the Draft of AI Basic Law Is Announced in Taiwan* (Sept. 19, 2024), https://stli.iii.org.tw/en/article-detail.aspx?tp=2&i=168&d=9246&no=105

NSTC, Announcement from NSTC Draft of AI Basic Law (original Chinese) (Jul. 15, 2024), https://join.gov.tw/policies/detail/4c714d85-ab9f-4b17-8335-f13b31148dc4

⁵⁹⁹² Government of Taiwan, DIGI+: Digital Nation and Innovative Economic Development Program (Aug. 7, 2019), https://english.ey.gov.tw/News3/9E5540D592A5FECD/659df63bdad4-47e3-80ab-c62cb40a62cd

⁵⁹⁹³ Government of Taiwan, National Development Council, *Taiwan Open Government National Action Plan* (2021–2024),

 $[\]frac{https://ws.ndc.gov.tw/Download.ashx?u=LzAwMS9hZG1pbmlzdHJhdG9yLzExL3JlbGZpbGUvMC8xMzY5My84YzRmMWVmNi01NTk0LTQyMTYtYjFkNS04MjE1YzEzY2JmODIucGRm\&n=MTI4YTJkNDctZWJkYi00OGZhLTkyODAtMzY5YjQ4NmZiOTM2LnBkZg%3d%3d&icon=..pdf$

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For the last few years, Taiwan has organized public debates via the citizenrun vTaiwan platform. 5994 vTaiwan's (for Virtual Taiwan) algorithms highlight where there is consensus in a debate while minimizing the voices at the most extreme ends. 5995 This system is officially and routinely part of the law-making process of Taiwanese institutions, involving thousands of citizens in varying degrees.⁵⁹⁹⁶ The outcomes of vTaiwan have been put in front of Parliament by government to form the core of 11 laws and regulation, with eight more on everything from revenge porn to fintech regulation still pending.

The vTaiwan process is giving weight to the citizen voice and has led to regulatory innovations at four stages: (1) informing the public; (2) collecting the strategic approaches through Polis, ⁵⁹⁹⁷ an open-source self-learning algorithm; (3) deliberating; and (4) observing decision-making. 5998

"When people started using Polis, we found that it became a consensusgenerating mechanism," co-founder Colin Megill told Wired. 5999 To bring the groups closer together, Polis has reengineered many of the features we take for granted on social media. No reply button, hence no trolling. No echo-chambers, replaced by an attitudes map showing you where you are in relation to everyone else. The statements that get attention are those that find support not only in one cluster, but across other groups, too.

The MoDA partnered with the international nongovernmental organization Collective Intelligence Project (CIP) to participate in the Alignment Assemblies project in May 2023 to ensure the governance and application of artificial intelligence is consistent with the people's interests. 6000 The first Alignment Assembly focused on Democratizing AI Futures. The second focused on Utilizing AI to Enhance Information Integrity. These activities are recognized as innovative policy making 6001 processes.

⁵⁹⁹⁵ Walter Kerr, Taiwan Is Beating Political Disinformation. The West Can Too, Foreign Policy (Nov. 11, 2020), https://foreignpolicy.com/2020/11/11/political-disinformation-taiwan-success/

⁵⁹⁹⁶ Bluenove, vTaiwan: Making Citizens the Key to Public Debate (May 28, 2018),

https://bluenove.com/en/blog/vtaiwan-making-citizens-the-key-to-public-debate/ ⁵⁹⁹⁷ The Computational Democracy Project, *Designing Future Democracies*,

https://compdemocracy.org

⁵⁹⁹⁴ vTaiwan, *About* (Dec. 2023), https://info.vtaiwan.tw/

⁵⁹⁹⁸ Bluenove, vTaiwan: Making Citizens the Key to Public Debate (May 28, 2018), https://bluenove.com/en/blog/vtaiwan-making-citizens-the-key-to-public-debate/

⁵⁹⁹⁹ Wired, Taiwan Is Making Democracy Work Again. It's Time We Paid Attention (Nov. 26,

^{2019),} https://www.wired.co.uk/article/taiwan-democracy-social-media

⁶⁰⁰⁰ MoDA, Alignment Assemblies (2024), https://moda.gov.tw/en/major-policies/alignmentassemblies/1453

⁶⁰⁰¹ Min-sho Ho, Exploring Worldwide Democratic Innovations: A Case Study of Taiwan (Jun. 2022), https://epd.eu/content/uploads/2023/07/Case-Study-Taiwan.pdf

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The MoDA anticipates that these alignment assemblies will provide critical information to policymakers and technology developers through the CIP ⁶⁰⁰² pilot demonstration to ensure that the AI Basic Act and AI development is consistent with the interests of the people.

The public release of the General Explanation and Provisions of the Draft Basic Law on Artificial Intelligence⁶⁰⁰³ by the NTSC provided a meaningful opportunity for public participation. There was a sixty-day period for anyone to comment on the draft AI Basic Law, including CAIDP. ⁶⁰⁰⁴ Minister Lang has also stated that the MoDA will be involved in the development of the AI Basic Law. ⁶⁰⁰⁵

In comments on the AI Basic Law, the Center for AI and Digital Policy (CAIDP) commended Taiwan for centering the draft law on human rights and democratic values. 6006 However, CAIDP recommended that Taiwan establish red lines to prohibit practices that violate privacy laws and require protections such as human and civil rights impact assessments, algorithmic transparency, and human oversight and control, including a termination obligation if the system fails to uphold rights.

Data Protection

Personal data protection in Taiwan is essentially subject to the 2015 Personal Information Protection Act (PDPA), which applies to the public and private sectors. The 2016 Enforcement Rules of the Personal Data Protection Act supplement the original. Local and national government authorities enforce the Act.

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⁶⁰⁰² MoDA, The Ministry of Digital Affairs Has Partnered with the International Organization, the "Collective Intelligence Project" (CIP), in Fostering Consensus on the Needs and Risks Associated with Artificial Intelligence (May 2023), https://moda.gov.tw/en/press/press-releases/5243

⁶⁰⁰³ NSTC, General Explanation and Provisions of the Draft Basic Law on Artificial Intelligence (July 22, 2024), https://join.gov.tw/policies/detail/4c714d85-ab9f-4b17-8335-f13b31148dc4 6004 CAIDP, Comments to Taiwan/Republic of China (Roc) National Science Technology Council (NSTC) on The Artificial Intelligence (AI) Basic Law Draft 2024 (Sept 9, 2024), https://www.caidp.org/app/download/8527568963/CAIDP-Statement-Taiwan-AI-09092024.pdf 6005 Amanda Ruth Stephens, Draft AI Law Headed for October Legislative Review (Sept. 30, 2024), https://en.rti.org.tw/news/view/id/2011794

⁶⁰⁰⁶ CAIDP, Comments to Taiwan/Republic of China (Roc) National Science Technology Council (NSTC) on the Artificial Intelligence (AI) Basic Law Draft 2024 (Sept. 9, 2024), https://www.caidp.org/app/download/8527568963/CAIDP-Statement-Taiwan-AI-09092024.pdf

⁶⁰⁰⁷ Laws and Regulation Database of the Republic of China (Taiwan), *Personal Data Protection Act* (May 31, 2023), https://law.moj.gov.tw/ENG/LawClass/LawAll.aspx

⁶⁰⁰⁸ Laws and Regulation Database of the Republic of China (Taiwan), *Enforcement Rules of the Personal Data Protection Act* (Mar. 2, 2016),

https://law.moj.gov.tw/ENG/LawClass/LawAll.aspx?pcode=I0050022

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The Taiwan Government has considered amending the PDPA to meet the EU GDPR standards to obtain an adequacy decision⁶⁰⁰⁹ and held several public hearings in 2019 to solicit public comments. Among the various topics discussed during the public hearings, the government contemplated the adoption of data breach notification obligations and cross-border data transfer restrictions similar to those under the GDPR. Taiwan continues to dialogue with the EU in this regard.

According to the National Development Council's website, "The Personal Data Protection Office under the National Development Council was established on July 4, 2018, in response to the implementation of the GDPR and to ensure a coherent enforcement of the PDPA. The National Development Council replaced the Ministry of Justice to become the governing authority of the PDPA, so that all matters relating to the PDPA may be handled and coordinated by the Council in a coherent matter."

Taiwan's Digital Minister said in 2020 that she supported the idea of establishing a dedicated agency for personal data protection before the electronic identification cards (eID) were rolled out in 2021. However, as of March 2023, this does not seem to have happened.

In a landmark August 2022 case concerning the secondary use of the National Health Insurance Research Database, ⁶⁰¹¹ the Taiwanese constitutional court ruled that since the PDPA and other related laws in Taiwan lack an independent supervision mechanism for personal data protection, such protection is inadequate and potentially unconstitutional. The Constitutional Court also ruled that a competent authority should be established within three years⁶⁰¹² from the decision. In response, the Taiwan Legislative Yuan passed amendments to the Personal Data Protection Act in May 2023, including Article 1-1,⁶⁰¹³ with the

Huang Tzu-ti, Taiwan's Digital Minister Says Personal Data Protection Agency Needed for Digital ID: Measure to Introduce eID Has Been Met with Fierce Opposition from Academics, Experts, Taiwan News (Jul. 30, 2020), https://www.taiwannews.com.tw/en/news/3976854
6011 Hannah Kuo, Jaime Cheng and Aaron Chen, The Secondary Use of the National Health Insurance Database Found Partially Unconstitutional in Taiwan Constitutional Court Decision (Oct. 2022), https://www.leetsai.com/ltp-special-column/the-secondary-use-of-the-national-health-insurance-database-found-partially-unconstitutional-in-taiwan-constitutional-court-decision; Wu Cheng-feng and William Hetherington, Health Data Access Partly Unconstitutional: Court (Aug. 13, 2022),

https://www.taipeitimes.com/News/taiwan/archives/2022/08/13/2003783452

National Development Council, *Personal Data Protection Office*, https://www.ndc.gov.tw/en/Content List.aspx?n=F01BA39CDAD39B01

⁶⁰¹² Constitutional Court ROC (Taiwan), Summary of TCC Judgment 111-Hsien-Pan-13 (2022) Case on the National Health Insurance Research Database (Aug. 12, 2022), https://cons.judicial.gov.tw/en/docdata.aspx?fid=5535&id=347736

⁶⁰¹³ Laws and Regulation Database of the Republic of China (Taiwan), *Personal Data Protection Act* (May 31, 2023), https://law.moj.gov.tw/ENG/LawClass/LawAll.aspx

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provision that the competent authority of the PDPA is the Personal Data Protection Commission (the PDPC). The Preparatory Office of the PDPC was established in December 2023 and is now responsible for completing the enactment of the organic statute and officially establishing the PDPC by August 2025. 6014

Algorithmic Transparency

The PDPA regulates "the collection, processing and use of personal data so as to prevent harm on personality rights, and to facilitate the proper use of personal data." The PDPA covers data retrieval and management by automated and non-automated means. However, the PDPA does not provide for algorithmic transparency or mention automated decisions or algorithms. 6016

While the draft AI Basic Law seeks to address this gap by including provisions related to transparency and traceability, the language is vague. As written, the draft law does not include clear and enforceable requirements for algorithmic transparency and explainability to ensure that users are always informed when they are interacting with AI systems and are provided with clear and valid reasons for decisions affecting them.⁶⁰¹⁷

The 2019 AI Technology R&D Guidelines identify "transparency and traceability," as well as "explainability" as "core AI values."

Medical Data and AI Ethics

Research projects on AI Ethics in the medical and biomedical areas are ongoing with government support. One such project examines the Ethical, Legal, and Societal Issues Surrounding Artificial Intelligence-Assisted Medical Care (ELSI-AIM),⁶⁰¹⁸ This project includes four subprojects: (1) The deliberation of ethical issues on artificial intelligence-assisted medicine; (2) legal and policy implications of artificial intelligence in medicine; (3) the implications of societal issues on artificial intelligence-assisted end-of-life physician-patient communication: opportunities and challenges; and (4) artificial intelligence-based medicine assisted system from analytical design to practical application. The project is still in literature review and planning phases.

⁶⁰¹⁴ Lee and Li Attorneys-at-Law, *The Preparatory Office of the PDPC Established* (Dec. 28, 2023), https://www.leeandli.com/EN/Newsletters/7197.htm

⁶⁰¹⁵ Laws and Regulations Database of the Republic of China, *Personal Data Protection Act*, Article 1 (May 31, 2023), https://law.moj.gov.tw/ENG/LawClass/LawAll.aspx?pcode=I0050021 ⁶⁰¹⁶ Ibid, Article 2.a

⁶⁰¹⁷ CAIDP, Comments on Taiwan's Basic AI Law (Sept. 9, 2024),

https://www.caidp.org/app/download/8527568963/CAIDP-Statement-Taiwan-AI-09092024.pdf 6018 NTU Center for Artificial Intelligence and Advanced Robotics, Medical and Health Care, Examining the Ethical, Legal, and Societal issues Surrounding Artificial intelligence-Assisted Medical Care (ELSI-AIM), http://mahc.ntu.edu.tw/en/research_view.php?id=14

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The Taiwan Biobank created in 2012 is a repository of tissues/information but is not allowed to carry out research directly. Information on participants, all voluntary, whose samples are included in the biobank will link several sources of data: national identification number, National Health Insurance system, cancer registry, and cause of death registry. Biobank operations are regulated by detailed legislation.

Current discussions focus on how the Taiwan Biobank can be transformed by leveraging digital technologies. For some, greater participant engagement and the uptake of Information Technology and AI applications can be used in partnership with vertical and horizontal integration as part of a four-pronged approach to promote biobank sustainability and facilitate the biobank's transformation. 6019

Others seem more cautious, 6020 pointing to key issues raised by the current ethical governance of the Taiwan Biobank, namely i) the handling of ethnicity, including the special requirements that it imposes with respect to obtaining participant consent, and ii) transparency (and accountability) around governance. Taiwan Biobank established an Ethics and Governance Council (EGC) to act as an independent guardian of the Ethics and Governance Framework, and to advise the Competent Authority (the MOHW) on its revision from time to time. 6021

COVID-19 and Big Data Analytics

In January 2020, Taiwan integrated its national health insurance database with its immigration and customs database to begin the creation of big data for analytics and allow case identification by generating real-time alerts during a clinical visit based on travel history and clinical symptoms.⁶⁰²²

"The combination of these two sets of data allows us to generate alerts to tell healthcare staff when a patient returns from a risk area," said Yu-Lun Liu, doctor in the intelligence department of the Taiwan Center for Disease Control (CDC). The identified patients are then treated through a separate circuit, limiting

⁶⁰¹⁹ Jui-Chu Lin, Wesley Wei-Wen Hsiao, and Chien-Te Fan, *Transformation of the Taiwan Biobank 3.0: Vertical and Horizontal Integration*, Journal of Translational Medicine 18, no. 1, p. 304 (Aug. 16, 2020), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7406956/

⁶⁰²⁰ Shawn H.E. Harmon, Shang-Yung Yen, and Shu-Mei Tang, *Biobank Governance: The Cautionary Tale of Taiwan Biobank*, Journal of Law, Technology and Society 15, no. 1 (Aug. 2018), https://script-ed.org/article/biobank-governance-the-cautionary-tale-of-taiwan-biobank/6021 Ibid

⁶⁰²² Beth Duff-Brown, *How Taiwan Used Big Data, Transparency and a Central Command to Protect Its People from Coronavirus* (Mar. 3, 2020), https://fsi.stanford.edu/news/how-taiwan-used-big-data-transparency-central-command-protect-its-people-coronavirus

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contact with other patients.⁶⁰²³ To strengthen this new dataset, the authorities are "working with telephone providers, on the basis of roaming data, to identify people whose last stopover is not necessarily an area at risk, but who have made trips with stops in areas affected by the epidemic." The authorities are developing a model for processing public video surveillance images to estimate the proportion of masked people. "This artificial intelligence-based model has allowed us to see a rapid increase in the number of people wearing masks. We have chosen to stop their export and increase local production," recalls Yu-Lun Liu.

In March 2020, the BBC reported that when the phone belonging to an American University student in Taiwan, who was subject to 14 days quarantine after returning from Europe, ran out of battery power, in less than an hour he had received phone calls from four different local administrative units, a text message notifying him he would be arrested if he broke quarantine, and a visit from two police officers. The phone tracking system uses phone signals to triangulate locations of the more than 6,000 people subject to home quarantine; an alert was sent to the authorities if the phone is turned off for more than 15 minutes.⁶⁰²⁴

Autonomous Vehicles

In November 2018, the Legislative Yuan passed the Act for Unmanned Vehicle Technology Innovative Experiments, which was enacted by the President in December 2018. Entered into force in May 2019, the Act frees autonomous vehicles and drones from the limits of some traffic regulations in their test runs. Moreover, the regulations specifically call for AI-boosted algorithmic unmanned platforms. Taiwan CAR (Connected, Autonomous, Road-test) Lab, 6027 the nation's first closed field for testing self-driving cars, also opened for use in 2019.

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⁶⁰²³ L'Usine Digital, *COVID-19: How Taiwan Relied on Technology to Control the Epidemic* (Mar. 20, 2020), https://www.usine-digitale.fr/article/covid-19-comment-taiwan-s-est-appuye-sur-la-technologie-pour-contenir-l-epidemie.N943431

⁶⁰²⁴ BBC, *Coronavirus: Under Surveillance and Confined at Home in Taiwan* (Mar. 24, 2020), https://www.bbc.co.uk/news/technology-52017993

GNSS Asia, *Taiwan's Executive Yuan Approves Bill Promoting Unmanned Vehicle Experimentation* (May 24, 2019), https://gnss.asia/new/taiwans-executive-yuan-approves-bill-promoting-unmanned-vehicle-experimentation/

⁶⁰²⁶ Yisuo Tzeng, *Prospect for Artificial Intelligence in Taiwan's Defense*, Jewish Policy Center (Winter 2019), https://www.jewishpolicycenter.org/2019/01/11/prospect-for-artificial-intelligence-in-taiwans-defense/

⁶⁰²⁷ Taiwan Car Lab, *About Taiwan Intelligent Driving Test Laboratory* (Dec. 4, 2024), https://taiwancarlab.narlabs.org.tw/zh-TW/

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Facial Recognition

Facial recognition has been implemented in Taiwan across various sectors, including banks, ⁶⁰²⁸ retail stores, ⁶⁰²⁹ airports, ⁶⁰³⁰ and law enforcement. ⁶⁰³¹ In June 2019, the Taiwan Railways Administration announced that, due to privacy concerns, its surveillance system trial would no longer apply facial recognition technology. 6032 AI-based surveillance will still be capable of monitoring railway passenger behavior, including trespassing, loitering in restricted areas, and prohibited acts. 6033

In 2019, Liao Wei-min, an associate professor at Taiwan National Chung Hsing University's Department of Law called for legislation limiting facial recognition and similar private data collection. "What is essentially a beneficial technology is deeply problematic given the lack of precise and targeted legislation, and this is the fault not of civil servants, but their politically appointed masters. Something needs to be done to address this."6034 As yet, however, there have been no formal proposals by Taiwan's government to protect citizens from the risks of facial recognition used for surveillance.

EdTech and Children Tracking

A recent report from Human Rights Watch⁶⁰³⁵ highlighted a practice exacerbated by the need for virtual learning during the COVID-19 pandemic by which educational technology governments required students to use shared children's personal data with advertising technology companies. Taiwan-based

⁶⁰²⁸ Luana Pascu, Public Bank of Taiwan Rolls Out Kneron Edge AI Facial Recognition, Biometric Update (Sept. 24, 2019), https://www.biometricupdate.com/201909/public-bank-oftaiwan-rolls-out-kneron-edge-ai-facial-recognition

⁶⁰²⁹ Telpo, 7-Eleven Opens the 2nd Face Recognition Unstaffed Store in Taiwan (Nov. 20, 2018), https://www.telpo.com.cn/blog/7-eleven-taiwan-face-recognition-store.html

⁶⁰³⁰ Gorilla, Gorilla Technology Secures Two Major Wins in Taiwan, Advancing Airport Security and National Law Enforcement Capabilities (Sept. 3, 2024), https://investors.gorillatechnology.com/gorilla-technology-secures-two-major-wins-in-taiwan-advancing-airportsecurity-and-national-law-enforcement-capabilities/

⁶⁰³¹ Ibid

⁶⁰³² Focus Taiwan, TRA to Cut Racial Recognition Feature from Surveillance System Trial (Nov. 6, 2019), https://focustaiwan.tw/society/201911060011

⁶⁰³³ Taiwan Immigrants' Global News Network, Taiwan Railways Backtracks on Facial Recognition System (Nov. 6, 2019),

https://news.immigration.gov.tw/NewsSection/Detail/b33779d7-9794-4817-a6dced195635cd4c?category=1&lang=EN

⁶⁰³⁴ Liao Wei-min, Legislation Needed for Advances in Surveillance, Taipei Times (Dec. 28, 2019), http://www.taipeitimes.com/News/editorials/archives/2019/12/28/2003728301

⁶⁰³⁵ Human Rights Watch, How Dare They Peep into My Private Life (May 25, 2022), https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rightsviolations-governments

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technology companies produce several of the educational technology and advertising technology products implicated by the report. Additionally, Taiwan's government produced three of its own, proprietary educational technology products that transmitted personal data about children to advertising technology companies. As the report notes, by making it compulsory for children to use this technology to access public education, these governments not only subjected children to potential exploitation of their data but also left no alternative for children and families to opt out of this privacy infringement. 6036

Lethal Autonomous Weapons

Taiwan is not a member of the United Nations and thus was not a party to the UN's October 2022 Joint Statement on Lethal Autonomous Weapons. The Taiwan government has not taken a formal policy position on the application of these lethal technologies.

Environmental Impact of AI

In Taiwan's draft AI Basic Law, Sustainable Development is the first of seven key principles. 6037 The principle stipulates that the research and use of AI should be human-oriented, with the goals of benefiting the people and promoting sustainable development. Referencing the G7 Hiroshima Process Code of Conduct for Organizations Developing Advanced AI Systems, 6038 AI stakeholders shall engage in responsible AI management to benefit humanity and the planet. The Bill focuses on promoting social fairness and a sustainable environment. The inclusion of sustainable development as a core principle aligns Taiwan's draft AI law with international trends and guidelines for responsible AI development. However, the bill has not yet become law.

Human Rights

Taiwan is ranked by Freedom House as a global leader in its protection of human rights and transparency, with a combined score for political and civil liberties of 94 out of 100.6039 This rating underscores Taiwan's robust protection of political rights (38 out of 40) and civil liberties (56 out of 60), positioning it second in Asia behind Japan and tied for seventh globally with nations like Iceland

⁶⁰³⁶ Ibid

⁶⁰³⁷ Science and Technology Law Institute, After the European Union's Artificial Intelligence Law, the Draft of AI Basic Law Is Announced in Taiwan (Sept. 19, 2024), https://stli.iii.org.tw/en/article-detail.aspx?tp=2&i=168&d=9246&no=105

⁶⁰³⁸ Japanese Ministry of Foreign Affairs, G7 2023 Hiroshima Summit, Hiroshima Process Code of Conduct for Organizations Developing Advanced AI Systems (Oct. 30, 2023), https://www.mofa.go.jp/files/100573473.pdf

⁶⁰³⁹ Freedom House, Freedom in the World 2024: Taiwan (2024), https://freedomhouse.org/country/taiwan/freedom-world/2024

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and the Czech Republic. Taiwan's Human Rights Commission⁶⁰⁴⁰ continues to provide national oversight.

Although in 2024 internet freedom in the Asia-Pacific Region declined, 6041 Taiwan saw an improvement, up 1 to 79, earning it the highest Internet Freedom score in the region. On internet freedom, Freedom House awarded Taiwan top marks for internet freedom, characterizing the nation as, "one of the freest online environments in Asia. An independent judiciary protects free expression. Civil society, the technology sector, and the government have taken innovative action to counteract the impact of disinformation campaigns originating from China."6042 Freedom House notes that a prominent concern threatening the continuation of these liberties relates to "the Chinese government's efforts to influence policy-making, the media, and democratic infrastructure in Taiwan."6043

In April 2022, the Executive Yuan authorized the establishment of the Department of Human Rights and Transitional Justice under its authority and approved the first national action plan on human rights that May. In the announcement, Premier Su Tseng-chang pointed out that "to date, Taiwan has created its own laws to implement five of the United Nations' nine core international human rights instruments" and issued national reports addressing their implemented.

The human rights action plan lays out open and transparent procedures and involves widespread participation by government, civic groups, and scholars and experts from all sectors "to reconcile and align the nation's policies to human rights values." The plan includes efforts such as those "to prevent digital technologies from violating human rights" among the actions and indicators designed to address emerging human rights issues in addition to "striving for equality and nondiscrimination against vulnerable groups such as children and youth, the elderly, mentally or physically disabled people, indigenous peoples, migrant workers and the LGBTI community."6044

https://freedomhouse.org/country/taiwan/freedom-net/2022

6043 Ibid

⁶⁰⁴⁰ National Human Rights Commission Taiwan, The Website Security and Privacy Policy (Aug. 2023), https://nhrc.cy.gov.tw/en-US/cp.aspx?n=9742

⁶⁰⁴¹ Freedom House, *Internet Freedom in the Asia-Pacific Region Declined in 2024*, Press Release (Oct. 16, 2024), https://freedomhouse.org/article/fotn-2024-asia-pacific-release ⁶⁰⁴² Freedom House, Freedom on the Net 2022: Taiwan (2022),

⁶⁰⁴⁴ Department of Information Services, Executive Yuan, Taiwan Unveils First National Human Rights Action Plan (May 5, 2022), https://english.ev.gov.tw/Page/61BF20C3E89B856/d4db0a5a-0a13-47fe-bd4c-bbab6af39405

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OECD / G20 AI Principles

Although Taiwan is not an OECD member country, many of its AI policies align with the OECD AI Principles. The Ministry of Science and Technology noted in the announcement of the AI Technology R&D Guidelines that "many countries and organizations have established ethical standards for AI R&D, such as the EU's Ethics Guidelines for Trustworthy AI, OECD's Principles on Artificial Intelligence and IEEE's Ethically Aligned Design-Version II." 6045

Taiwan AI Labs and Taiwan Federated Learning were invited to participate in the 2021 Global Partnership on AI (GPAI) Annual Meetings. "Members and participants of GPAI are brought together first and foremost by a shared commitment to the values expressed in the OECD Recommendation on Artificial Intelligence. All GPAI activities are intended to foster responsible development of AI grounded in these principles of human rights, inclusion, diversity, innovation and economic growth."

Council of Europe AI Treaty

Taiwan is not an EU member state. Taiwan's unique geopolitical status precludes participation in this legally binding international AI Treaty. 6047

UNESCO Recommendation on AI Ethics

Taiwan has not been a member of the United Nations since 1971, when the country was expelled via United Nations Resolution 2758, in deference to the People's Republic of China, which was henceforth recognized as "the only legitimate representative of China to the United Nations." Taiwan is not a party to the UNESCO Recommendation on the Ethics of AI.

Evaluation

While Taiwan's unique geopolitical status precludes its formal membership in organizations like UNESCO, the OECD, and the EU, its AI policies demonstrate a strong alignment with international trends, frameworks, and guidelines for AI development and deployment. The latest draft of AI Basic Law emphasizes human-centered AI and democratic values, showing progress in policy development. Additionally, Taiwan seeks alignment through the AI Action

⁶⁰⁴⁵ Digitimes, *MOST Announces AI R&D Guidelines* (Sept. 24, 2019), https://www.digitimes.com/news/a20190923PD209.html

⁶⁰⁴⁶ Global Partnership on Artificial Intelligence, *About GPAI*, https://gpai.ai/about/

⁶⁰⁴⁷ Council of Europe Treaty Office, Chart of Signatures and Ratifications of Treaty 225 (Nov.

^{14, 2024), &}lt;a href="https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225">https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

⁶⁰⁴⁸ Sigrid Winkler, Brookings Institute Op-Ed, Taiwan's UN Dilemma: To Be or Not to Be (Jun. 20, 2012), https://www.brookings.edu/articles/taiwans-un-dilemma-to-be-or-not-to-be/

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Plan 2.0 and aims to participate in other related trustworthy AI initiatives such as the Global Partnership on AI (GPAI)⁶⁰⁴⁹ and strives to be a GPAI observer.⁶⁰⁵⁰

The country upholds human rights by endorsing the Universal Declaration of Human Rights (UDHR)⁶⁰⁵¹ and establishing an independent National Human Rights Commission.⁶⁰⁵² Public participation is encouraged through the Ministry of Digital Affairs (MoDA) initiatives and public consultations⁶⁰⁵³ on the policy initiatives including the AI Action Plan 2.0 and AI Basic Law.

An independent AI oversight agency has not yet established, but a preparatory office has been set up to operationalize the Personal Data Protection Commission (PDPC) by August 2025. 6054 While AI policy goals are articulated, issues remain regarding algorithmic transparency, as current provisions are considered vague with more scope for further improvement. Taiwan is not a signatory to the GDPR, Council of Europe AI Treaty, or the UNESCO Recommendation on the Ethics of AI, and has limited engagement with the Global Privacy Assembly (GPA).

Thailand

In 2024, Thailand drafted a royal decree on Business Operations that Use Artificial Intelligence Systems and an Act on Artificial Intelligence Promotion and Support. The country also began preparations for the UNESCO Readiness Assessment Methodology (RAM).

National AI Strategy

The Prime Minister's Cabinet Office approved the Thailand National AI Strategy and Action Plan 2022–2027 on July 26, 2022. ⁶⁰⁵⁵ The vision of the strategy is for Thailand to have an effective ecosystem for developing and

⁶⁰⁴⁹ GPAI, Working Group on Data Governance (2024), https://gpai.ai/projects/data-governance/

⁶⁰⁵⁰ NSTC, *Taiwan AI Action Plan 2.0* (2023), https://digi.nstc.gov.tw/File/BCE59F5DFF03244A ⁶⁰⁵¹ Office of the President, *The Presidential Office Human Rights Consultative Committee*,

https://english.president.gov.tw/Page/225

⁶⁰⁵² National Human Rights Commission, Taiwan, *International Conventions* (Mar. 27, 2024), https://nhrc.cy.gov.tw/en-US/cp.aspx?n=8693

⁶⁰⁵³ Ministry of Digital Affairs, *Utilizing AI to Enhance Information Integrity, Citizens' Deliberative Assembly* (2024), https://moda.gov.tw/en/major-policies/alignment-assemblies/2024-deliberative-assembly/1521

⁶⁰⁵⁴ Constitutional Court ROC (Taiwan), Summary of TCC Judgment 111-Hsien-Pan-13 (2022) (Aug. 12, 2022), https://cons.judicial.gov.tw/en/docdata.aspx?fid=5535&id=347736 (Summary of TCC Judgment 111-Hsien-Pan-13 (2022) (Aug. 12, 2022), https://cons.judicial.gov.tw/en/docdata.aspx?fid=5535&id=347736 (Bull 11, 2022) (Aug. 12, 2022), https://cons.judicial.gov.tw/en/docdata.aspx?fid=5535&id=347736 (Bull 12, 2022), https://cons.judicial.gov.tw/en/docdata.aspx?fid=5535&id=347736 (Bull 12, 2022), https://cons.judicial.gov.tw/en/docdata.aspx?fid=5535&id=347736 (Bull 12, 2022), https://cons.judicial.gov.tw/en/docdata.aspx?fid=5535&id=347736 (Bull 12, 2022), https://cons.judicial.gov.tw/en/docdata.aspx?fid=5535&id=347736 (Bull 12, 2022), https://cons.judicial.gov.tw/en/docdata.aspx?fid=5535&id=347736 (Bull 12, 2022), https://cons.judicial.gov.tw/en/docdata.aspx?fid=5535&id=347736 (Bull 12, 2022), https://cons.judicial.gov.tw/en/docdata.aspx?fid=5535&id=347736 (Bull 12, 2022), https://cons.judicial.gov.tw/en/docdata.aspx?fid=5535&id=347736 (Bull 12, 2022), https://cons.judicial.gov.tw/en/docdata.aspx?fid=55

https://www.ai.in.th/en/about-ai-thailand/; AI Thailand, NAIS Presentation (Dec. 20222), https://ai.in.th/wp-content/uploads/2022/12/2022-NAIS-Presentation-eng.pdf

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applying AI, one proven to enhance the economy and improve the quality of life of Thais by 2027.

Thailand's National AI Strategy has 5 sub-strategies with 15 more actionable work plans and measures. 6056 These are:

- 1. Preparing Thailand's readiness in social, ethics, law, and regulation for AI application, including policies, standards, awareness, and education for AI Ethics as part of enforceable AI Law and Regulation
- 2. Developing Infrastructure for Sustainable AI Development by increasing investment in digital infrastructure by 10% per year, improving the Government AI Readiness index to the top 50 globally, creating AI expert networks, creating a national platform for advanced data analytics and management, creating a national AI service platform, and developing High-Performance Computing (HPC) infrastructure
- 3. Increasing human capability and improving AI education to develop AI talent for more than 30,000 citizens by improving AI education and knowledge creation, AI Scholarship programs, and cooperation mechanisms with researchers & experts from abroad
- 4. Driving AI technology and innovation development to strengthen AI technology by developing at least 100 R&D prototypes within 6 years and to facilitate wide adoption of AI research, development, and innovation that helps create business & social impact of at least 48 billion Baht by 2027 by applying AI technology and innovation for strategic sectors developing AI core technology and platform
- 5. Promoting the use of AI in public and private sectors so the number of agencies (government, business & new entrepreneurs) using AI innovation increases to at least 600 agencies in 6 years and Thailand's AI competitiveness is increased by AI applications

Thailand's National AI Strategy targets development in 10 sectors: Manufacturing, Energy and Environment, Medical and Wellness, Food and Agriculture, Education, Tourism and Creative Economy, Security, Logistics and Transformation, Finance and Commerce, and Government Service. 6057

The national policy and plan are formulated with an emphasis on digital technologies, empowering people to increase their "citizen well-being and quality of life." Increasing the transparency and accountability of public agencies is mentioned several times in these plans. However, it is not clear how the goals will be adopted by the agencies and how the actions will be coordinated across different levels of government.

⁶⁰⁵⁶ Ibid

⁶⁰⁵⁷ AI Thailand, *Thailand National AI Strategy and Action Plan*, 2022–2027 (Jul. 26, 2022), https://www.ai.in.th/en/about-ai-thailand/

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The strategy and action plan make no explicit mention of concepts such as fundamental rights, human rights, rule of law, and fairness with respect to AI. The 12th National Economic and Social Development Plan acknowledges that Thailand "has high inequality and a lack of fairness" across society. The only mention of specific AI ethics guidelines is acknowledging the existence of EU Ethics Guidelines for Trustworthy AI, and the World Government Summit's Ethical AI Systems Design through a reference in a Thailand Digital Government Development (TDG) Plan summary document. 6059 The Electronic Government Agency (EGA), as the agency responsible to implement standards, models, measures, principles, and approaches in the form of digital technology, only mentions openness, integrity, and collaboration under its eight core values. 6060

In 2019, the Ministry of a Digital Economy and Society, academics and experts from Mahidol University and Microsoft Thailand joined together to draft Digital Thailand: Draft AI Ethics Guidelines. 6061 The Ethics Guidelines serve as a manual and provide ethical codes regarding AI development for government agencies, private firms, regulatory bodies, researcher, designers, developers, and users. The draft guidelines cover six aspects of development: competitiveness and sustainable development; legal regulations and international ethical standards; operational codes and duties; security and privacy; equality, diversity, and fairness; and credibility.

Digital Thailand: AI Ethics Guideline was published in November 2019, 6062 taken up by the Cabinet of Thailand in December 2020, 6063 and approved by the Cabinet in February 2021. The guideline is freely available and accessible online; however, the document is currently only in the Thai language. 6064

The Office of National Higher Education Science Research and Innovation Policy Council (NXPO) established five technical working groups to explore

Thailand-AI-Ethics-Principle-and-Guideline.pdf.aspx?lang=th-TH

⁶⁰⁵⁸ Office of the National Economic and Social Development Board, Office of the Prime Minister, The Twelfth National Economic and Social Development Plan (2017–2021), https://www.nesdc.go.th/nesdb en/ewt dl link.php?nid=4345

⁶⁰⁵⁹ Digital Government Development Agency, How Government Is Transforming with AI, https://www.dga.or.th/upload/download/file 310433b825a546dcfd59203b423ca175.pdf 6060 Digital Government Development Agency, DGA Core Value,

https://www.dga.or.th/en/about-us/core-value/

⁶⁰⁶¹ National News Bureau of Thailand, Digital Ministry Outlines AI Ethics (Oct. 24, 2019), https://thainews.prd.go.th/en/news/detail/TCATG191024113200588

⁶⁰⁶² Alita Sharon, *Thailand Drafts Ethics Guidelines for AI*, Open Gov Asia (Nov. 4, 2019), https://opengovasia.com/thailand-drafts-ethics-guidelines-for-ai/

⁶⁰⁶³ Suchit Leesa-Nguansuk, National AI Ethics Going to Cabinet, Bangkok Post (Nov. 17, 2020), https://www.bangkokpost.com/tech/2020635/national-ai-ethics-going-to-cabinet 6064 Thailand Ministry of Digital Economy and Society, Digital Thailand: AI Ethics Guideline, https://www.etda.or.th/getattachment/9d370f25-f37a-4b7c-b661-48d2d730651d/Digital-

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ethical issues in genetic engineering and technology; artificial intelligence, robotics, and big data; climate change and environment; research ethics; and communications and youth engagement in science and technology policy development. One outcome was the Bangkok Statement on the Ethics of Science and Technology and Sustainable Development. The statement calls for concerted efforts of all stakeholders to take action on the ethics of science and technology so that new technologies can progress and develop to benefit mankind.

While Thailand's National AI Strategy seeks to enhance the development of AI across multiple sectors of the economy, the Thailand Development Research Institute (TDRI) has also highlighted the risk of job disruption due to AI.⁶⁰⁶⁷ The TDRI estimated that 3 million Thais work in high-risk occupations with an over-70 percent likelihood to be replaced by AI.⁶⁰⁶⁸ The International Labor Organization (ILO) warned that women in Thailand face a higher risk of job disruption from AI as they currently lack access to STEM education and training opportunities.⁶⁰⁶⁹

A report commissioned by the Institute of Public Policy and Development predicted: "If Thai workers whose jobs are at risk of automation fail to retrain, by 2035, the employment rate could fall by 23 percentage points," requiring decisive policies to reform workforce development. Whether AI adoption in Thailand will result in job disruption or job transformation will be determined by the overall readiness and AI-preparedness of both younger and older Thais. These findings demonstrate the significance of Thailand's National AI Strategy envisioning the increase of human capability and the improvement of AI education.

6066 OECD AI Observatory, Bangkok Statement on the Ethics of Science and Technology and Sustainable Development (2019), https://oecd.ai/en/dashboards/countries/Thailand

⁶⁰⁶⁷ Bangkok Post, *TDRI: Government Badly Needs AI Strategy for Competitiveness* (Jun. 28, 2018), https://www.bangkokpost.com/business/1493554/tdri-government-badly-needs-ai-strategy-for-competitiveness

https://www.ilo.org/wcmsp5/groups/public/---ed dialogue/---

act emp/documents/publication/wcms 579554.pdf

⁶⁰⁷⁰ Economic Intelligence Unit, *Impacts of AI on Thailand's Economy and Society* (Feb. 25, 2020), https://www.eiu.com/n/impacts-of-ai-on-thailand/

⁶⁰⁷¹ Rachaniphorn Ngotngamwong, *Artificial Intelligence and Its Impacts on Employability*, Human Behavior, Development and Society (Jun. 2020), https://so01.tci-thaijo.org/index.php/hbds/article/download/230753/164140

⁶⁰⁷² AI Thailand, *Thailand National AI Strategy and Action Plan, 2022–2027* (Jul. 26, 2022), https://www.ai.in.th/en/about-ai-thailand/; AI Thailand, *NAIS Presentation* (Dec. 2022), https://ai.in.th/wp-content/uploads/2022/12/2022-NAIS-Presentation-eng.pdf

⁶⁰⁶⁵ NXPO, Ethics of S&T, https://www.nxpo.or.th/th/en/ethics-of-st/

⁶⁰⁶⁸ TDRI, 3 Million Jobs to Go If Thailand Fails to Navigate Technology Upheavals (May 16, 2018), https://tdri.or.th/en/2018/05/3m-job-and-technology-disrupt/

⁶⁰⁶⁹ Jae-Hee Chang and Phu Huynh, *ASEAN in Transformation: The Future of Jobs at Risk of Automation*, International Labour Organization (ILO) (Jul. 2016),

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The National Science and Technology Development Agency shared in February 2024 the McKinsey & Company report on the recommendations on questions to be answered before government agencies use Gen AI. The list of questions include whether the government is able to address risks posed by the AI tool. ⁵⁰⁷³ In addition, in March 2024, the Ministry of Higher Education, Science, Research and Innovation and the Ministry of Digital Economy and Society discussed the National Artificial Intelligence Action Plan for the Development of Thailand Phase 2, 2024–2027. ⁶⁰⁷⁴ A Thai Large Language Model was discussed, among other topics.

Public Participation

The Digital Government Plan (2017–2021) defined improving government transparency and public participation by facilitating easy access to government data as one of four goals. Two of the indicators that the plan commits to measuring itself against are "Promoting Country's Open Data Index to place in the World's top 25" and "Creating e-Gov Act." However, the plans and initiatives relating to AI have been developed by the central government without meaningful public participation. The National AI Strategy includes no indication of public participation or consultation. Source

Data Protection

Thailand's Personal Data Protection Act (PDPA) is the country's first consolidated law on data protection, framing the collection, use, and disclosure of personal data. The PDPA draws key concepts and principles from the EU General Data Protection Regulation (GDPR) and establishes a Personal Data Protection Committee. 6077 Enforcement of the PDPA began on June 1, 2022. 6078

⁶⁰⁷³ AI Thailand, 3 Questions that the "Government Sector" Must Answer Before Using GenAI in Organizations (Feb. 12, 2024), https://ai.in.th/news/3-question-gov-genai/

⁶⁰⁷⁴ AI Thailand, Open 6 Projects to Push Thailand's AI Plan! 2 Major Ministries, MHESI and DE, Sit at the Head of the Table to Brainstorm Ideas on the Direction of AI Development to Cover All Dimensions (Mar. 8, 2024), https://ai.in.th/en/news/ai-thailand-phase2-flagship-project/

⁶⁰⁷⁵ e-Government Agency, *Thailand Digital Government Development Plan 2017–2021* (May 2018), http://jfcct.bypronto.com/wp-content/uploads/sites/1871/2018/05/Digital-Government-Development-Plan-2017-2021-executive-version.pdf

⁶⁰⁷⁶ AI Thailand, *Thailand National AI Strategy and Action Plan, 2022–2027* (Jul. 26, 2022), https://ai.in.th/en/about-ai-thailand/

⁶⁰⁷⁷ Government Gazette, *Personal Data Protection Act B.E. 2562*, unofficial translation (May 27, 2019), https://thainetizen.org/wp-content/uploads/2019/11/thailand-personal-data-protection-act-2019-en.pdf

⁶⁰⁷⁸ Janine Phakdeetham, *Explainer: What is PDPA, Thailand's New Data Law?* (Jun. 1, 2022), https://www.bangkokpost.com/business/2319054/explainer-what-is-pdpa-thailands-new-data-law-; Digital Council of Thailand, *The Personal Data Protection Act* [Thai],

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The PDPA defines personal data as "any information relating to a Person, which enables the identification of that Person, whether directly or indirectly." The PDPA mandates that Data Protection Officers (DPO) be appointed for government agencies and firms with large-scale data processing. DPOs will be responsible for helping organizations ensure that personal data is processed in compliance with the PDPA. DPOs will also serve as contact points on PDPA issues with authorities and data subjects. 6080

Research on the PDPA highlights gaps in data protection, such as provisions that grant the Thai government preferential exemptions and allow the government to exercise a relative degree of flexibility to expand its powers should it deem necessary. For example, the PDPA currently mandates the outright exclusion of public authorities involved in national security, law enforcement, and the National Credit Bureau from its ambit. The definition of personal data in the PDPA also lacks clarity as to whether it covers IP addresses and cookie identifiers. Moreover, the PDPA does not provide a definition of anonymized or pseudonymized data.

The Digitalization of Public Administration and Services Delivery Act requires the establishment of a government data exchange center to act as a sharing center for digital data and digital registration between State Agencies. The exchange center would support agency operations in the provision of services to the people via digital means. The data exchange center shall also determine policies and standards in relation to interconnectivity and sharing of digital data and present them for the approval of the Digital Government Development

files/ASPI RaisingStandards report fin web 0.pdf

 $[\]underline{\text{https://www.dct.or.th/upload/downloads/1612025563SummaryPDPA_DigitalCouncilofThailand.}} \\ pdf$

Government Gazette, *Personal Data Protection Act B.E. 2562*, unofficial translation, Section 6 (May 27, 2019), https://thainetizen.org/wp-content/uploads/2019/11/thailand-personal-data-protection-act-2019-en.pdf

⁶⁰⁸⁰ Ibid, pp. 17–19

⁶⁰⁸¹ Elina Noor and Mark Bryan Manantan, *Raising Standards: Data and Artificial Intelligence in Southeast Asia, Asia Society Policy Institute* (Jul. 2022),

https://asiasociety.org/sites/default/files/inline-

⁶⁰⁸² Ibid

⁶⁰⁸³ Ibid

⁶⁰⁸⁴ Alexis Kateifides et al., *Comparing Privacy Laws: GDPR v. Thai Personal Protection Act*, OneTrust DataGuidance (Dec. 18, 2019),

https://www.dataguidance.com/sites/default/files/gdpr v thailand updated.pdf

⁶⁰⁸⁵ Digital Government Development Agency Thailand, *Digitalization of Public Administration and Services Delivery Act* (May 19, 2019), https://www.dga.or.th/wp-content/uploads/2021/02/6.pdf

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Commission.⁶⁰⁸⁶ The Act mandates that the public shall have free access to the digital data from state agencies and be able to distribute or utilize the data or use it as a means to develop services and innovation in various ways.⁶⁰⁸⁷ As per the Act, the Digital Government Development Commission will prescribe standards and rules on the disclosure of such data.⁶⁰⁸⁸

The Electronic Transactions Development Agency (ETDA), under the Ministry of Digital Economy and Society, builds confidence in innovation with the ETDA Sandbox testing field. The ETDA cooperates with the Bank of Thailand to expand the scope of innovation testing, which covers innovations in health tech and AI. The ETDA and Bank of Thailand also cooperate in driving operations corresponding to the government policy of the Face Verification System (FVS).

Thailand does not have a representative in the Global Privacy Assembly (GPA). Thus, the country did not co-sponsor the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence, 6090 the 2020 GPA Resolution on AI Accountability, 6091 the 2022 GPA Resolution on Facial Recognition Technology, 6092 or the 2023 GPA Resolution on Generative AI. 6093

Algorithmic Transparency

Thailand's PDPA does not provide for algorithmic transparency and no other protections guarantee such a right. Draft legislation or the Digital Thailand

 $\frac{content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf}{}$

⁶⁰⁸⁶ Ibid

⁶⁰⁸⁷ Ibid

⁶⁰⁸⁸ Ibid

⁶⁰⁸⁹ Electronic Transactions Development Agency (ETDA) Thailand, *ETDA Revamps New Step in 2022 "Build a Better Digital Life with Digital Technology"* (Nov. 17, 2021),

https://www.etda.or.th/en/pr-news/ETDA-Revamps-New-Step-in-1.aspx
Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial*

Intelligence (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

Global Privacy Assembly, Resolution on Accountability in the Development and Use of Artificial Intelligence (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/EDIAL GRA Resolution on Accountability in the Development of

⁶⁰⁹² Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁶⁰⁹³ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

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ethical principles may provide guidance for such a right, but they are not available in English.

AI System for Surveillance

The AI System for Surveillance and Criminal Analysis in Public in east Bangkok links with security cameras at crime hotspots under Huai Kwang police jurisdiction. The system's facial recognition compares faces against photos in a database of arrest warrants, while its behavior analysis aims to prevent petty crime. The Thai government positioned the pilot program in 2019 as a public safety tool under its wider Thailand 4.0 and Smart Cities initiatives. Following a pilot phase, the Bangkok Metropolitan Administration ordered its Traffic and Transportation Department to install more CCTVs along Khao San Road, one of the top tourist destinations. The Administration is also considering using AI in other ways to boost safety.

The Interim report of the United Nations (UN) Special Rapporteur on freedom of religion or belief to the 75th session of the UN General Assembly in 2020 found that Thai authorities reportedly used AI-enabled closed-circuit television system, biometric data, and frequent police checks to surveil minority Muslim groups. The Thai military denied using AI to surveil Muslims in the restive southern provinces where an armed insurgency since 2004 has killed more than 7000 people. The following the following follows the follows the follows the following follows the following follows the follow

Anti-Fake News Centre

Thailand launched the Anti-Fake News Centre in November 2019. The Ministry of Digital Economy and Society (MDES) defines "fake news" as any viral online content that misleads people or damages the country's image. The Centre is staffed by around 30 officers at a time, who review online content gathered through "social listening" tools. Coupled with a law prohibiting criticism of the monarchy, the Centre allows the government to censor or suppress any news

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⁶⁰⁹⁴ Nation Thailand, *Bangkok Police to Pilot AI Surveillance System* (Jul. 25, 2019), https://www.nationthailand.com/news/30373672

⁶⁰⁹⁵ Supoj Wancharoen, *AI, More Cameras Mulled to Boost Revelers' Safety* (Mar. 6, 2024), https://www.bangkokpost.com/thailand/general/2753664/ai-more-cameras-mulled-to-boost-revellers-safety

⁶⁰⁹⁶ OHCHR, A/75/385: Interim Report of the Special Rapporteur on Freedom of Religion or Belief, Ahmed Shaheed: Elimination of All Forms of Religious Intolerance (Oct. 12, 2020), https://www.ohchr.org/en/documents/thematic-reports/a75385-interim-report-special-rapporteur-freedom-religion-or-belief

⁶⁰⁹⁷ Mariyam Ahmad, *Thai Military Denies Using AI to Monitor Muslims in Deep South*, Benar News (Nov. 16, 2020), https://www.benarnews.org/english/news/thai/monitoring-concerns-11162020172147.html

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it finds broadly affecting "peace and order, good morals, and national security"6098 without the need for evidence.

In February 2022, the Cabinet of Thailand approved a regulation to set up centers at three different levels to coordinate efforts to tackle fake news on social media. A central coordination center would be set up at the permanent secretary's office of MDES. Furthermore, each ministry will also set up its own center to deal with fake news. The Provincial Administration Department of the Interior Ministry would also set up similar centers in all provinces under the leadership of provincial governors or their deputies. 6099 According to the regulation, officials must alert the public immediately in the event of the spread of fake news and inform the Public Relations Department within one hour to correct the news and take action against those spreading it. Officials must also promptly notify the MDES to remove the fake news from the computer system. 6100

However, the Move Forward Party considers that the original Centre failed in its task and asked to cut the total budget. According to their metrics, the Centre received 5.47 million complaints about fake news in September 2023 from which 539 messages were flagged for fact-checking. Of those items, 235 were verified and deemed able to be disseminated.6101

Digital ID

Thailand is currently working on legislation that would replace physical ID cards with the Digi-ID as the backbone of e-commerce transactions in the country. The Digi-ID would use blockchain to securely exchange user data but also require facial-recognition verification in an effort toward a "self-sovereign" digital identity management system. 6102 It remains unclear how the government conducted the risk or impact assessment on the mandatory use of biometric data.

The Digital Economy and Society Ministry began working on a Digital ID Framework for Thailand to ease the process to access online services by using a digital ID.6103 The first phase of this framework, 2022-2024, comprised eight strategies including making the Ministry of Interior the main agency providing

⁶⁰⁹⁸ Reuters, Thailand Unveils "Anti-Fake News" Center to Police the Internet (Nov. 1, 2019), https://www.reuters.com/article/technology/thailand-unveils-anti-fake-news-center-to-police-theinternet-idUSKBN1XB48N/

⁶⁰⁹⁹ Bangkok Post, Government to Form Centres to Tackle Fake News (Feb. 1, 2022), https://www.bangkokpost.com/thailand/general/2257119/government-adopts-multi-levelapproach-to-fake-news

⁶¹⁰⁰ Ibid

⁶¹⁰¹ Aekarach Sattaburuth, Anti-Fake News Hub under Fire (Mar. 22, 2024),

https://www.bangkokpost.com/thailand/general/2762639/anti-fake-news-hub-under-fire 6102 ND ID, About Us, https://ndid.co.th/about-us/ndid/

⁶¹⁰³ Mongkol Bangprapa, Govt Readies Phone App Digital IDs, Bangkok Post (Jan. 4, 2023), https://www.bangkokpost.com/thailand/general/2474884/govt-readies-phone-app- digital-ids

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identity information; giving Thai citizens, corporations, and foreigners Digital ID; and making Electronic Transactions Development Agency (ETDA) the entity responsible for Digital ID policy. ETDA issued a Royal Decree on the Supervision of Regulated Digital Identification Authentication and Verification Service Businesses to regulate business operators that provide digital identification authentication and verification services. 6105

During this first phase, digital ID cards were introduced for people who use public services provided by agencies under the Ministry of Interior. To access D.Dopa, the digital ID mobile application, the citizens had to register with their district office's registry division using their physical ID cards. ⁶¹⁰⁶

The Digital Economy and Society Ministry approved the draft of phase 2 of the Framework, which will cover 2025–2027, in November 2024. Phase 2 will seek to increase the number of e-government services that accept digital ID.⁶¹⁰⁷

EdTech and Children Tracking

According to a report by Human Rights Watch (HRW), Thailand's Digital Education Excellence Platform (DEEP) is one of 56 EdTech products built or financed by governments that transmitted children's data to AdTech companies. This represents a violation of children's privacy. In addition, HRW found that Edmodo, an online learning platform used by Thailand and several other countries, may have granted access to users' contact data to third-party companies. Furthermore, HRW found that Edmodo has the capability to collect Android Advertising ID (AAID) for those using an Android device, which enables advertisers to track a person over time and across different apps installed on their device for advertising purposes. HRW highlighted that an AAID is neither

⁶¹⁰⁴ Sawasdee Thailand, *Digital ID Framework: Access to Online Services of the Public and Private Sectors* (Aug. 9, 2023), https://thailand.go.th/issue-focus-detail/001_05_005-2
⁶¹⁰⁵ Electronic Transactions Development Agency, *Royal Decree on the Supervision of Regulated Digital Identification Authentication and Verification Service Businesses B.E. 2565* (2022), https://www.etda.or.th/getattachment/Regulator/DigitalID/law/Clean-Royal-Decree-on-DID-Corrected-2.pdf.aspx?lang=th-TH

⁶¹⁰⁸ Human Rights Watch, 'How Dare They Peep into My Private Life?' Children's Rights Violations by Governments that Endorsed Online Learning During the COVID-19 Pandemic (May 25, 2022), https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rights-violations-governments

⁶¹⁰⁹ Ibid

⁶¹¹⁰ Ibid

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necessary nor relevant for an app to function.⁶¹¹¹ Thailand's usage of Edmodo for children's learning during the COVID-19 pandemic, therefore, compromised children's privacy.

Environmental Impact of AI

The Thailand National AI Strategy and Action Plan considers Social and Environmental Impact among the objectives. 6112 More specifically, the strategy aims to provide for a better environment and efficient use of natural resources.

Lethal Autonomous Weapons

Thailand is not a party to the Convention on Conventional Weapons (CCW). 6113 However, Thailand voted in support of the United Nations General Assembly Resolution 78/241 on lethal autonomous weapons systems (LAWS) in December 2023. The Resolution stresses the need to address challenges and concerns raised by LAWS. 6114 Additionally, Thailand voted in favor of Draft Resolution L.77 on Lethal Autonomous Weapons Systems, adopted at the United Nations General Assembly in October 2024.6115

Human Rights

Thailand has experienced 19 constitutional changes in less than a century. The government acknowledges that Thailand is both a destination and transit country for human trafficking linked to illegal immigration, child labor, and prostitution. 6116 However, most of the plans put the responsibility of respecting human rights on the citizens and not the government.

In 2020, citizen protests criticize the government and requested reform of the monarchy. In response, the Thai government extended the powers of an emergency decree.

⁶¹¹¹ Ibid

⁶¹¹² AI Thailand, *Thailand National AI Strategy and Action Plan 2022–2027* (Jul. 26, 2022), https://ai.in.th/en/about-ai-thailand/

⁶¹¹³ UN Office for Disarmament Affairs, High Contracting Parties and Signatories CCW, States Which Are Not Parties to the CCW (Jun. 25, 2024), https://www.un.org/disarmament/theconvention-on-certain-conventional-weapons/high-contracting-parties-and-signatories-ccw/ 6114 United Nations General Assembly, Resolution Adopted by the General Assembly on 22 December 2023 [on the Report of the First Committee A/78/409, para. 89] (Dec. 22, 2023),

https://documents.un.org/doc/undoc/gen/n23/431/11/pdf/n2343111.pdf 6115 United Nations General Assembly, Draft Resolution L.77 on Lethal Autonomous Weapons Systems (Oct. 18, 2024), https://reachingcriticalwill.org/images/documents/Disarmamentfora/1com/1com24/resolutions/L77.pdf

⁶¹¹⁶ Office of the National Economic and Social Development Board, Office of the Prime Minister, Thailand, The Twelfth National Economic and Social Development Plan, 2017— 2021(2017), https://www.nesdc.go.th/nesdb_en/ewt_dl_link.php?nid=4345

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Under the 2017 Constitution, members of the NCPO are protected from prosecution for human rights violations committed during NCPO rule. 6117 This protection is concerning given the reports of torture, extrajudicial executions, and enforced disappearances against human rights defenders.

The 2019 Thailand Cybersecurity Act gives the government the authority to monitor and seize data and equipment without a court order in the name of cybersecurity risk and denies a right to appeal to anyone targeted by the law in the cases of a crisis or critical threat. 6118

Despite continuous promises of reform, Thai authorities continue to suppress and prosecute citizens criticizing the monarchy or the military. The combination of AI policing, Fake-News monitoring, and the Cybersecurity Act creates further concerns about fundamental rights. A group of international public and private experts and NGOs launched the study Thailand's Cybersecurity Act: Towards a Human-Centered Act Protecting Online Freedom and Privacy, While Tackling Cyber Threat to help build the discourse on the necessity of applying a human rights-based approach to cybersecurity legislation. ⁶¹¹⁹

Thailand inched up from "not free" to a "partly free" mark for political and civil liberties in its Freedom in the World 2024 report due to "highly competitive" parliamentary elections. 6120 However, unelected parties got to exclude the party that got the most votes out of the government. Freedom House highlighted that in 2021 the combination of democratic deterioration and frustrations over the role of the monarchy in Thailand's governance triggered large and regular antigovernment protests. The government responded with authoritarian tactics, such as arbitrary arrests, intimidation, lèse-majesté charges, and harassment of activists. 6121 Freedom House also noted that "press freedom remains constrained, due process is not guaranteed, and there is impunity for crimes committed against activists."6122

⁶¹¹⁷ Constitute, *Thailand's Constitution of 2017* (PDF generated Apr. 27, 2022), https://www.constituteproject.org/constitution/Thailand 2017.pdf?lang=en

⁶¹¹⁸ Voice of America, Rights Groups Urge Thai Government to Curb Powers in New Cybersecurity Act (Sept. 24, 2019), https://www.voanews.com/a/east-asia-pacific rights-groupsurge-thai-government-curb-powers-new-cybersecurity-act/6176371.html

⁶¹¹⁹ Manushya Foundation, Thailand' Cybersecurity Act: Toward a Human-Centered Act Protecting Online Freedom and Privacy, While Tackling Cyber Treats (Sept. 2019), https://www.manushyafoundation.org/study-on-cybersecurity-act

⁶¹²⁰ Freedom House, Freedom in the World 2024: Thailand (2024),

https://freedomhouse.org/country/thailand/freedom-world/2024

⁶¹²¹ Freedom House, Freedom in the World 2022: Thailand

https://freedomhouse.org/country/thailand/freedom-world/2022

⁶¹²² Freedom House, Freedom in the World 2024: Thailand (2024),

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Thailand passed the Gender Equality Act in 2015. However, the legislation still allows for exceptions to gender discrimination on grounds of religion and national security. 6123

Thailand endorsed the Universal Declaration of Human Rights in 1948.

OECD / G20 AI Principles

Thailand has not endorsed the OECD AI Principles.⁶¹²⁴ However, an evaluation by the OECD AI Observatory shows that various OECD AI principles are reflected in the Thailand National AI Strategy.⁶¹²⁵

Thailand is also the only country from Southeast Asia to benefit from an OECD Country Program, which comprises 15 projects drawing from four key strategic pillars: good governance and transparency, business climate and competitiveness, "Thailand 4.0," and inclusive growth. It includes peer reviews, capacity-building activities, inclusion in the OECD's statistical tools, participation in eight OECD Committees or their subsidiary bodies, and adherence to nine OECD legal instruments. 6126

Council of Europe AI Treaty

Thailand has not signed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law, which opened for signature in September 2024.⁶¹²⁷

UNESCO Recommendation on AI Ethics

Thailand adopted the UNESCO Recommendation on the Ethics of AI. 6128 Thailand is currently in the preparatory stages of the Readiness Assessment

⁶¹²³ United Nations Human Rights Committee, International Covenant on Civil and Political Rights, *Concluding Observations on the Second Periodic Report of Thailand*, p. 3 (Apr. 25, 2017).

https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download.aspx?symbolno=CCPR/C/THA/CO/2&Lang=En

<u>6126 OECD</u>, *Thailand and the OECD* (2024), http://www.oecd.org/southeast-asia/countries/thailand/

⁶¹²⁴ OECD AI Policy Observatory, *OECD AI Principles Overview, Countries Adhering to the AI Principles* (Feb. 7, 2025), https://oecd.ai/en/ai-principles

⁶¹²⁵ OECD AI Observatory, *Thailand National AI Strategy and Action Plan* (Feb. 2024), https://oecd.ai/en/dashboards/countries/Thailand

⁶¹²⁷ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Nov. 24, 2024), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

⁶¹²⁸ UNESCO, *UNESCO Member States Adopt the First Ever Global Agreement on the Ethics of Artificial Intelligence* (Nov. 25, 2021), https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence

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Methodology (RAM).⁶¹²⁹ The RAM will highlight any institutional and regulatory gaps in Thailand's ethical AI implementation, allowing UNESCO to support the country in mending such gaps and implementing the UNESCO Recommendation.

Evaluation

Thailand has taken steps to govern AI and protect personal data with the release of its National AI Strategy, Digital Thailand: AI Ethics Guideline, enforcement of the Personal Data Protection Act (PDPA), and adoption of the UNESCO Recommendation on the Ethics of AI. The Draft Royal Decree on Business Operations that Use Artificial Intelligence Systems and the Draft Act on Thailand Artificial Intelligence Promotion and Support being considered and developed by relevant Thailand authorities offer insight into upcoming policy action. 6130 However, concerns remain regarding AI-powered surveillance practices, especially given limited human rights protections.

Trinidad and Tobago

In 2024, Trinidad and Tobago continued work to realize the National Digital Transformation Strategy 2023–2026 with IDB support. However, the Ministry of Digital Transformation failed to deliver updates to the Data Protection Act and to staff the country's data protection authority, the Office of the Information Commissioner. Trinidad and Tobago signed the CELAC Kingstown Declaration emphasizing the need for ethical, people-centered AI to support sustainable development and address associated risks.

National AI Strategy

Trinidad and Tobago has not developed a national AI strategy. However, other relevant policy initiatives, including a Digital Transformation Strategy, address AI and other technologies as they relate to inclusion, access, safety, and security.

The Ministry of Digital Transformation,⁶¹³¹ the entity in charge of the digitalization of Trinidad and Tobago, released a draft national digital

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⁶¹²⁹ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024) https://www.unesco.org/ethics-ai/en/global-hub

⁶¹³⁰ Lexology, *Current Stage of Thailand's Regulatory Approach to AI* (Jul. 2024), https://www.lexology.com/library/detail.aspx?g=4e09c320-e675-456e-b0eb-2f2264d79c18
6131 Beena Mahase, *Bacchus: We Are Becoming a Digital Society*, TT Loop (Mar. 2, 2022), https://tt.loopnews.com/content/bacchus-we-are-going-become-digital-society; Ministry of Digital Transformation, *Our Mandate*, https://mdt.gov.tt/our-mandate/

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transformation strategy in August 2022.⁶¹³² The strategy identifies three pillars of digital transformation: Digital Society, described as "people centered and knowledge based—access, skills, participation (inclusion), connected communities"; Digital Government focusing on "Public value—efficiency in service delivery, citizen-centric, no-wrong door"; and Digital Economy.⁶¹³³ The strategy includes guidelines such as inclusion (digital, social, financial), access, safety and security (protection of fundamental rights), for policymakers supporting digital transformation.

In this context, the Government of Trinidad and Tobago's e-Government Interoperability Framework (e-GIF) sets out specifications for integrating ICT systems across the public sector to facilitate seamless communication between agencies and secure data sharing. According to the IMF, this framework is part of a broader strategy to enhance public sector efficiency, citizen engagement, and service delivery through initiatives such as building a government cloud and data center to establish a reliable foundation for digital transformation. According to UNDP, the aim is "to increase the ease of access and efficiency of government services for members of society," particularly benefiting underserved and vulnerable populations such as persons with disabilities, rural residents, and women.

Key interoperability projects include the National Electronic Identification (e-ID), which provides a secure digital identity for accessing government services online; the Health Information Management Systems (HIMS), which streamlines healthcare data management; and the Integrated Financial Management Information System (IFMIS), which improves financial operations in government entities. These projects align with the objectives of the National Digital

https://www.elibrary.imf.org/view/journals/002/2024/151/article-A004-en.xml

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⁶¹³² Ministry of Digital Transformation, Let's Build a #DigitalTT Together: Consultations on a National Strategy for a DigitalTT: 2023–2026 (Aug. 2022), https://mdt.gov.tt/wp-content/uploads/2023/07/MDT%20DigitalTT%20Consultation%20Slides%20-%20Expanded%20Society%20General%20%204%20-%20FINAL.pdf

⁶¹³³ Ministry of Digital Transformation, *Review the National Strategy for a DigitalTT* (2025), https://mdt.gov.tt/digital-transformation-strategy/review-national-strategy/

⁶¹³⁴ International Monetary Fund (IMF), *Trinidad and Tobago: Digitalization in Trinidad and Tobago, IMF Staff Country Report No. 24/151* (Jun. 5, 2024),

⁶¹³⁵ United Nations Development Programme (UNDP), *The Trinidad and Tobago Digital Transformation Project*, UNDP Trinidad & Tobago, Aruba, Curaçao, Sint Maarten (2023), https://www.undp.org/trinidad-and-tobago/projects/trinidad-and-tobago-digital-transformation-project

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Transformation Plan (2024–2027), which emphasizes inclusive, accessible, and efficient government services. 6136

The national digital transformation strategy is part of the National Development Strategy (NDS) 2016–2030, Vision 2030. The Vision is "intended to provide for an orderly long-term development process, inclusive of the United Nations (UN) Sustainable Development Goals (SDGs)."6137 Keith Rowley, Trinidad and Tobago's Prime Minister stated, "I am committed to rebuilding our country and economy, restoring confidence, equity and social justice, and improving every area of national life. We recognise that, as a nation, we face several challenges—some triggered by global events beyond our control, with consequential ripple effects at the national level."6138

The Ministry of Digital Transformation aims to turn Trinidad and Tobago into a digital society. 6139 The objective is "a new way to address the end-to-end consumption and delivery of goods and services to customers using appropriate digital technology"6140 and to "ensure that all citizens and residents are able to participate in a digital society and to have access to digital resources."6141

The "implementation arm" of the Ministry for Digital Transformation is the National Information Communication and Technology Company, IgovTT. IgovTT was tasked with the procurement, project management, and implementation of IT solutions for the Government of Trinidad and Tobago. 6142 IgovTT was established in 2009 after various mergers among communications, information, and technology ministries to reflect "the government's unwavering commitment to leveraging technology for national development."6143

Trinidad and Tobago also developed a Cloud Computing Consideration Policy advancing the adoption of cloud services and procurement from the public

https://www.elibrary.imf.org/view/journals/002/2024/151/article-A004-en.xml

⁶¹³⁶ International Monetary Fund (IMF), Trinidad and Tobago: Digitalization in Trinidad and Tobago, IMF Staff Country Report No. 24/151 (Jun. 5, 2024),

⁶¹³⁷ Government of the Republic of Trinidad and Tobago, Vision 2030, World Bank Group Public Documents (2016), https://thedocs.worldbank.org/en/doc/d265f594531eb28b44e50ff05aaf4632-0460012022/original/Vision-2030-The-National-Development-Strategy-of-Trinidad-and-

Tobago-2016-2030.pdf

⁶¹³⁸ Ibid, Preface

⁶¹³⁹ Loop News Agency, Bacchus: We Are Becoming a Digital Society (Mar. 2, 2022), https://tt.loopnews.com/content/bacchus-we-are-going-become-digital-society

⁶¹⁴⁰ Ministry of Digital Transformation, Our Mandate, https://mdt.gov.tt/

⁶¹⁴¹ Senator The Honorable Hassel Bacchus, in Who's Who in Trinidad and Tobago Business (Oct. 6, 2022), https://www.whoswhotnt.com/attaining-digital-nation-status-for-trinidad-andtobago/

⁶¹⁴² National ICT Company, Company Profile (2025), https://www.igovtt.tt/?page_id=46

⁶¹⁴³ National ICT Company, Celebrating Our Digital Journey: 14 Years of Innovation,

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sector together with a National Hybrid Cloud (GovNeTT NG) enabling public sector entities to acquire greater information security controls.⁶¹⁴⁴

Trinidad and Tobago's digital policy will be supported by the Inter-American Development Bank (IDB). In December 2023, Trinidad and Tobago signed a US\$90 million IDB credit line and an initial US\$42 million loan to help step up its digital transformation strategy by enhancing public services, cybersecurity, and AI capabilities. The program will boost digital skills, support over 150 firms, and increase digital inclusion to drive innovation and inclusive growth. 6145 According to Minister of Planning and Development Pennelope Beckles, the program reflects the government's commitment to fostering a secure and inclusive digital economy. 6146 The loan supports key initiatives such as the National e-ID system, the Interoperability Framework, and cybersecurity modernization. These align with the Ministry of Digital Transformation's 2024 budget allocation of TT\$329 million, which prioritizes \$50 million for the Digital Government Program, encompassing e-ID development and cybersecurity strategies, and \$20 million for digital society initiatives such as broadband expansion and ICT access centers. 6147 Combining IDB funding with national budget commitments demonstrates Trinidad and Tobago's commitment to the implementation of concrete policies to enhance AI implementation, bolster cybersecurity, and promote digital inclusion, ensuring a more citizen-centric and secure digital transformation.

The Ministry of Digital Transformation, Government of Trinidad and Tobago established the Caribbean Data Centre Association (CDA) in March 2024 to boost "regional digital collaboration efforts to provide a robust platform for digital transformation and the development of the regional digital economy. 6148 This is significant as the Trinidad and Tobago government is collaborating with

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⁶¹⁴⁴ Ministry of Public Administration, *Cloud Computing Consideration Policy* (Mar. 2020), https://www.mpa.gov.tt/sites/default/files/file_upload/publications/Cloud%20Computing%20Policy%202020.pdf

⁶¹⁴⁵ Inter-American Development Bank, *Trinidad and Tobago Will Advance Digital Transformation with IDB Support* (Dec. 13, 2023), https://www.iadb.org/en/news/trinidad-and-tobago-will-advance-digital-transformation-idb-support-0

⁶¹⁴⁶ Ministry of Digital Transformation, *IDB Partners with T&T to Aid Digital Transformation* (Mar. 7, 2024), https://mdt.gov.tt/resources/idb-partners-with-tt-to-aid-digital-transformation/
6147 Parliament of Trinidad and Tobago, Financial Scrutiny Unit, *Head 82: Ministry of Digital Transformation – Allocation: \$329,645,032: A Summary of the Department's Projects Expenditure, Divisions and Projects*, Fourth Session of the 12th Parliament (2024), https://www.ttparliament.org/wp-content/uploads/2023/10/BG2024_MDT.pdf

⁶¹⁴⁸ Ministry of Digital Transformation, Caribbean Data Center Association (CDA) Inaugurated, Boosting Digital Collaboration in the Region, Press Release (Mar. 18, 2024), https://mdt.gov.tt/wp-content/uploads/2024/03/MDT-Media-Release-Caribbean-Data-Center-Association-CDA-Inaugurated-Boosting-Digital-Collaboration-in-the-Region.pdf

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regional peers to develop data infrastructure as they "pursue sustainable digital transformation in the Caribbean." ⁶¹⁴⁹

Trinidad and Tobago has also been part of the Caribbean Artificial Intelligence Initiative led by the UNESCO Cluster Office for the Caribbean and the Broadcasting Commission of Jamaica (BCJ), with the support of UNESCO Information for all Program (IFAP) National Committee of Jamaica. The Initiative "aims to develop a sub-regional strategy on the ethical, inclusive and humane use of AI in the Caribbean Small Island Developing States." The Caribbean AI Policy Roadmap was released in June 2021, following a period of stakeholder consultation in which Trinidad and Tobago participated.

The Caribbean AI Policy Roadmap acknowledges that "AI systems raise new types of ethical issues that include, but are not limited to, their impact on decision-making in employment and labour, social interaction, health care, education, media, freedom of expression, access to information, privacy, democracy, discrimination, and weaponization. Furthermore, new ethical challenges are created by the potential of AI algorithms to reproduce biases, for instance regarding gender, ethnicity, and age, and thus to exacerbate already existing forms of discrimination, identity prejudice and stereotyping. As Caribbean nations expand their adoption of AI tools and other exponential technologies, stakeholders (policymakers, citizens, private sector, academia, and NGOs) must proactively collaborate to create strategies for the humanistic development of guidelines, regulations and laws. Boundaries should be defined to regulate the AI decision-making, AI rights, inclusion of manual overrides and AI accountability protocols."6152

The Policy Roadmap was developed based on a series of assumptions about the Caribbean and Artificial Intelligence. These include: "Human creativity is inextricably linked to Caribbean identify, economic viability and sustainable development"; "AI is a product of human creativity"; "AI is in service of humanity"; "AI must be inclusive, fair, transparent, accountable"; "AI must be regulated"; "Human rights supersede AI rights"; "Bias is everywhere in AI"; "We

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⁶¹⁴⁹ Data Center Dynamics, *Caribbean Leaders Commit to Digital Transformation, New Regional Data Center* (May 26, 2023), https://www.datacenterdynamics.com/en/news/caribbean-leaders-commit-to-digital-transformation-new-regional-data-center/

⁶¹⁵⁰ UNESCO Web Archive, *UNESCO Caribbean Artificial Intelligence Initiative* (May 8, 2024), https://www.unesco.org/en/articles/unesco-caribbean-artificial-intelligence-initiative

⁶¹⁵¹ Caribbean Artificial Intelligence Initiative, *Caribbean Artificial Intelligence Roadmap* (2021), https://ai4caribbean.com/wp-content/uploads/2021/07/Caribbean-Artificial-Intelligence-Policy-Roadmap.pdf

⁶¹⁵² Ibid, p. 2

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Are Our Data"; "Data rights will be the civil rights movement of the 21st century."6153

The Policy Roadmap is based on six principles: Resiliency, Governance, Transformation, Upskilling, Preservation and Sustainability. 6154 For each principle, the Roadmap includes specific strategies and deliverables that UNESCO recommends "to enable the Caribbean's effective adaption of AI technologies and digital transformation of its economies."6155 For example, under the Governance principle, the Roadmap includes actions like establishing national and regional oversight boards and licensing regimes, developing tools to monitor biases in AI, and protecting personal privacy as ways to "Develop Responsible AI Governance, Oversight, Principles & Policies to Do No Harm and to enhance safety, security and accountability of AI."6156

Public Participation

Following release of the draft national digital transformation strategy, the Ministry of Digital Transformation sought public and stakeholder engagement. According to the Ministry, "co-creation and stakeholder engagement are key elements of the development of the National Digital Transformation Strategy. Contributions will be curated by four Technical Working Groups under the categories of Digital Society; Digital Economy; Digital Government; and Regional Integration and Global Linkages."6157

The Ministry of Digital Transformation website continues to host a form for citizen input⁶¹⁵⁸ based on their review of the national strategy. ⁶¹⁵⁹ However, neither the public comments nor information about their integration into the strategy are easily accessible.

Vision 2030 was also the object of public consultation. 6160 The Trinidad and Tobago Bureau of Standards issued a draft Voluntary National Standard for

⁶¹⁵³ Ibid, p. 5

⁶¹⁵⁴ Ibid, p. 11

⁶¹⁵⁵ Ibid, pp. 41–42

⁶¹⁵⁶ Ibid, p. 41

⁶¹⁵⁷ Ministry of Digital Transformation, Trinidad and Tobago Digital Transformation Strategy 2023-2026 (Aug. 2022), https://mdt.gov.tt/wp-

content/uploads/2023/07/MDT%20DigitalTT%20Consultation%20Slides%20-

^{%20}Expanded%20Society%20General%20%204%20-%20FINAL.pdf

⁶¹⁵⁸ Ministry of Digital Transformation, We Need You, Submit Your Input (Feb. 6, 2025),

https://mdt.gov.tt/digital-transformation-strategy/submit-your-input/

⁶¹⁵⁹ Ministry of Digital Transformation, Review the National Strategy for a DigitalTT (Feb. 6, 2025), https://mdt.gov.tt/digital-transformation-strategy/review-national-strategy/

⁶¹⁶⁰ Government of the Republic of Trinidad and Tobago, Vision 2030, World Bank Group Public Documents (2016), https://thedocs.worldbank.org/en/doc/d265f594531eb28b44e50ff05aaf4632-

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Artificial Intelligence and Information Technology for public comment in 2024.⁶¹⁶¹ This voluntary national standard would specify the requirements and provide guidance for "establishing, implementing, maintaining and continually improving an AI management system within the context of an organisation."⁶¹⁶² The standard applies to all types of organizations, including public sector organizations, private sector organizations, small and medium-sized enterprises, and conformity assessment bodies, enabling them to demonstrate compliance with AI management best practices.⁶¹⁶³

Data Protection

Trinidad and Tobago's Data Protection Act (DPA)⁶¹⁶⁴ was enacted in 2011 to protect personal data of citizens in the private and public sector but is only partly proclaimed. In January 2012, the following sections were proclaimed with Legal Notice: Preliminary Provisions; general objective of the Act; and the provisions concerning the Office of the Information Commissioner.⁶¹⁶⁵ In August 2021, two additional sections regarding the Protection of Personal Data by Public Bodies were proclaimed with Legal Notice.⁶¹⁶⁶ Most of the other provisions covering the protection of personal data are not yet in force. The Data Protection Act is also notably missing the right to erasure, the right to object or opt out of consent, the right to data portability, and the right not to be subject to data processing decisions based solely on automated decision making.⁶¹⁶⁷

 $\underline{0460012022/original/Vision-2030-The-National-Development-Strategy-of-Trinidad-and-Tobago-2016-2030.pdf}$

6163 Ibid, p. viii

http://news.gov.tt/sites/default/files/E-

<u>Gazette/Gazette%202012/Legal%20Notice/Legal%20Notice%20No.%202%20of%202012.pdf</u> ⁶¹⁶⁶Government of Trinidad and Tobago, *Legal Notice No. 220* (Aug. 20, 2021), http://news.gov.tt/sites/default/files/E-

Gazette/Gazette%202021/Legal%20Notices/Legal%20Notice%20No.%20220%20of%202021.p

⁶¹⁶¹ Trinidad and Tobago Bureau of Standards, For Public Comment: Draft Voluntary National Standard Related to Information Technology — Artificial Intelligence (Jul. 31, 2024), https://gottbs.com/2024/07/31/for-public-comment-draft-voluntary-national-standard-related-to-information-technology-artificial-intelligence

⁶¹⁶² Ibid, p. x

⁶¹⁶⁴ Ministry of the Attorney General and Legal Affairs, *Data Protection Act 2011* (Jan. 2012), https://rgd.legalaffairs.gov.tt/laws2/Alphabetical List/lawspdfs/22.04.pdf

⁶¹⁶⁵Republic of Trinidad and Tobago, *Legal Notice No. 2* (Jan. 5, 2012),

⁶¹⁶⁷ Republic of Trinidad and Tobago, *Act No. 13 of 20211, Data Protection Act, 2011* (Jan. 2012), https://www.ttparliament.org/wp-content/uploads/2011/06/a2011 13g.pdf

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A draft bill, inspired by the GDPR "to be in greater compliance with more recent legislation in Jamaica and Barbados," was expected to be read in Parliament in 2022.⁶¹⁶⁸ However, no such bill has been reported.

In February 2023, the parliamentary opposition introduced a motion calling for the Government to fully proclaim the Data Protection Act. The Trinidad and Tobago Guardian reported that Senator Jearlean John stressed that "the PNM Government is keeping T&T in the Stone Age, failing to protect citizens' information by not fully proclaiming the Data Protection Act 2011. This is the situation at a time when people's lives are stored on phones, there's ChatGPT technology and the US Government has banned TikTok on government-issued devices following security concerns."

In March 2023, Parliament granted an 18-month extension for updating and operationalizing the Data Protection Act. Opposition senator Wade Mark highlighted that while some sections of the Act were operationalized in 2012 and 2021, critical provisions necessary to safeguard citizens' privacy remain unproclaimed. He urged the Senate to call on the government to address this gap immediately. 6172

Implementation of the DPA as proclaimed has also been delayed. Despite the Attorney General of Trinidad and Tobago announcing in the press in December 2020 that the position of the Information Commissioner "is expected to be filled with immediacy," ⁶¹⁷³ as of March 2023, there was "no office. There is no Information Commissioner." ⁶¹⁷⁴ The Office of the Information Commissioner will be responsible for the oversight, interpretation and enforcement of the DPA. ⁶¹⁷⁵

⁶¹⁶⁸ Mark Lyndersay, *What's Happening with Regional Data Protection Legislation?* (May. 23, 2022), tnt&t, https://technewstt.com/bd1355-caribbean-data-protection/

⁶¹⁶⁹ Trinidad and Tobago Parliament, *Motion to Proclaim the Remaining Sections of the Data Protection Act* (Mar. 28, 2023), https://www.ttparliament.org/motions/proclaim-the-remaining-sections-of-the-data-protection-act/

⁶¹⁷⁰ Trinidad & Tobago Guardian, *Jearlean John: PNM Keeping T&T in Stone Age without Data Protection* (Feb. 28, 2023), https://guardian.co.tt/news/jearlean-john-pnm-keeping-tt-in-stone-age-without-data-protection-6.2.1645083.b26b8523a6

⁶¹⁷¹ Elizabeth Gonzales, *Government Gets 18 Months to Update the Data Protection Law*, Newsday (Mar. 31, 2023), https://newsday.co.tt/2023/03/31/government-gets-18-months-to-update-data-protection-law/

⁶¹⁷² Trinidad and Tobago Parliament, *Motion to Proclaim the Remaining Sections of the Data Protection Act* (Mar. 28, 2023), https://www.ttparliament.org/motions/proclaim-the-remaining-sections-of-the-data-protection-act/

⁶¹⁷³Clint Chan Tack, *AG: Changes Coming to Data Protection Laws*, Trinidad and Tobago Newsday (Dec. 1, 2020), https://newsday.co.tt/2020/12/01/ag-changes-coming-to-data-protection-laws/

⁶¹⁷⁴ Mark Lyndersay, *What's Happening with Regional Data Protection Legislation?* (May. 23, 2022), tnt&t, https://technewstt.com/bd1355-caribbean-data-protection/

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Media sources reported in November 2023 that the Ministry of Digital Transportation expected to conclude updates to the Data Protection Act and operationalize the Office of the Information Commissioner by 2024. As of October 2024, however, no updates to the DPA have appeared nor has an Information Commissioner been named. The lack of progress raises concerns about government accountability and the protection of citizens' fundamental right to privacy.

Algorithmic Transparency

Although transparency and explainability are mentioned in the Caribbean AI Policy Roadmap, no law in Trinidad and Tobago guarantees a right to algorithmic transparency.

Online Disinformation

On the occasion its seventh summit, the Community of Latin American and Caribbean States (CELAC), released the Buenos Aires Declaration in January 2023. Trinidad and Tobago endorsed the Declaration. The Declaration strengthens the signatories' commitment to safeguard the rights and interests of citizens, fostering greater regional integration and collaboration. The signatories also recognized the need for further integration and collaboration to fight against disinformation with AI and algorithms and their impact on state infrastructures, firms, and people's well-being. The summit of the community of Latin American and Caribbean States (CELAC), released the Buenos Aires Declaration in January 2023. Trinidad and Tobago endorsed the Buenos Aires Declaration in January 2023. Trinidad and Tobago endorsed the Buenos Aires Declaration in January 2023. Trinidad and Tobago endorsed the Buenos Aires Declaration in January 2023. Trinidad and Tobago endorsed the Buenos Aires Declaration in January 2023. Trinidad and Tobago endorsed the Buenos Aires Declaration in January 2023. Trinidad and Tobago endorsed the Buenos Aires Declaration in January 2023. Trinidad and Tobago endorsed the Buenos Aires Declaration in January 2023. Trinidad and Tobago endorsed the Buenos Aires Declaration in January 2023. Trinidad and Tobago endorsed the Buenos Aires Declaration in January 2023. Trinidad and Tobago endorsed the Buenos Aires Declaration in January 2023. Trinidad and Tobago endorsed the Buenos Aires Declaration in January 2023. Trinidad and Tobago endorsed the Buenos Aires Declaration in January 2023. Trinidad and Tobago endorsed the Buenos Aires Declaration in January 2023. Trinidad and Tobago endorsed the Buenos Aires Declaration in January 2023. Trinidad and Tobago endorsed the Buenos Aires Declaration in January 2023. Trinidad and Tobago endorsed the Buenos Aires Declaration in January 2023. Trinidad and Tobago endorsed the Buenos Aires Declaration in January 2023. Trinidad and Tobago endorsed the Buenos Aires Declaration in Ja

Digital ID Initiative

In its post-COVID recovery plan, the government of Trinidad and Tobago stresses the importance of a digital society. The plan includes the goal of a cashless society and the creation of an e-identity for every citizen. The e-identity will be mandatory for using governmental services and aims at integrating existing identifiers. In effect, the e-identity will be used for government services as well as

 $\underline{https://tt.loopnews.com/content/data-protection-act-be-proclaimed-2024}$

 $\underline{\text{https://eulacfoundation.org/sites/default/files/attachments/Declaration\%20of\%20Buenos\%20Aires.pdf}$

https://www.cancilleria.gob.ar/userfiles/prensa/declaracion_de_buenos_aires_-version_final.pdf;

https://eulacfoundation.org/sites/default/files/attachments/Declaration%20of%20Buenos%20Aires.ndf

⁶¹⁷⁹ Office of the Prime Minister, *Phase 2 Roadmap for Trinidad and Tobago* (Sept. 10, 2020), https://www.opm.gov.tt/wp-content/uploads/RoadMap-PHASE-2-REPORT-.pdf

⁶¹⁷⁶ Loop News, Data Protection Act to Be Proclaimed in 2024 (Nov. 23, 2023),

⁶¹⁷⁷ CELAC Summit, Declaration of Buenos Aires (Jan. 24, 2023),

⁶¹⁷⁸ CELAC Summit, *Declaration of Buenos Aires*, Ministry of Foreign Affairs, International Trade and Worship (Jan. 24, 2023),

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digital commerce. The e-identity should also address the digital divide between different social groups. ⁶¹⁸⁰

The e-identity integrates with a larger ecosystem for access digital government that will include "all GoRTT services, digital signing, accessing financial, education and health services as well as Private Sector services." ⁶¹⁸¹

Facial Recognition

Prime Minister Keith Rowley stated in November 2022 that "the Government was spending \$80 Million to acquire and install 2500 CCTV cameras across the country." A few days later, the Acting Police Commissioner announced that facial recognition software to detect and prevent crime will soon be used. There is currently no legal framework in Trinidad and Tobago regarding the use of facial recognition, no guidelines made public to prevent racial profiling/biases, no algorithmic transparency, and no opportunity for public comment. 6182

Environmental Impact of AI

While there has been no concrete development specifically targeting the environmental impacts of AI in Trinidad and Tobago, the country has begun integrating sustainability considerations into its broader digital transformation agenda. Initiatives like the establishment of a government cloud and secure data center aim to reduce paperwork and improve efficiency, indirectly contributing to environmentally responsible practices.⁶¹⁸³

Moreover, Trinidad and Tobago has actively engaged in regional efforts, participating in the Second Ministerial and High-Level Authorities Summit on the Ethics of Artificial Intelligence in Montevideo. As a signatory of the Montevideo Declaration, it has committed to prioritizing "environment, sustainability, and climate change" in AI governance, supporting measures to align AI technologies with sustainable development.

⁶¹⁸⁰ Trinidad and Tobago Newsday, *Roadmap Committee Recommends e-ID for Nationals* (Jun. 7, 2020), https://newsday.co.tt/2020/06/07/roadmap-committee-recommends-e-id-for-nationals/6181 Ministry of Digital Transformation, *e-identity and Interoperability Infrastructure*, https://mdt.gov.tt/digital-solutions-services/e-identity/

⁶¹⁸² Sharlene Rampersad, *Ag. CoP: Facial Recognition to Fight Crime Coming Soon*, Trinidad & Tobago Guardian (Nov. 11, 2022), https://guardian.co.tt/news/ag-cop-facial-recognition-to-fight-crime-coming-soon-6.2.1565456.ad6427e451

⁶¹⁸³ Government of the Republic of Trinidad and Tobago, Intellectual Property Office, *Digital Innovations for Sustainable Environmental and Economic Recovery in Trinidad and Tobago Project* (Aug. 14, 2024), https://ipo.gov.tt/digital-innovations-for-sustainable-environmental-and-economic-recovery-in-trinidad-and-tobago-project/

⁶¹⁸⁴ Government of Uruguay, Montevideo Declaration Approved: For the Construction of a Regional Approach on the Governance of Artificial Intelligence and Its Impacts on Our Society (Oct. 2024), <a href="https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-conocimiento/sites/agencia-gobierno-electronico-sociedad-informacion-conocimiento/sites/agencia-gobierno-electronico-sociedad-informacion-

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ECLAC has further emphasized the need for regulatory frameworks that mitigate environmental harm, promote data-efficient AI models, and encourage innovation through AI sandboxes, aligning with the region's sustainability goals. 6185 The Caribbean AI Policy Roadmap to which Trinidad and Tobago contributed recommends concrete applications for AI to "Enable Environmental Management and Climate Change Fight." These include early warning systems for climate-related disasters, remote monitoring, and public education. 6186

Lethal Autonomous Weapons

Trinidad and Tobago endorsed the Bélen Communiqué in February 2023, along with more than 30 other Latin American and Caribbean states. The Bélen Communiqué calls for "urgent negotiation" of a binding international treaty to regulate and prohibit the use of autonomous weapons to address the grave concerns raised by removing human control from the use of force.

On this occasion, Trinidad and Tobago issued a statement acknowledging "that new and emerging technologies hold great promise for the advancement of human welfare, yet it is becoming increasingly evident that the introduction of new technological applications, such as those related to autonomy in weapon systems, raise serious concerns from humanitarian, legal, security, technological and ethical perspectives. The risk is real. It has not yet been demonstrated that any algorithm can reliably make the human-like decisions and judgments required to comply with international law."⁶¹⁸⁸

Trinidad and Tobago's Office of the Attorney General co-hosted CARICOM (Caribbean Community) member states and civil society organizations including Stop Killer Robots for a two-day regional Conference on the Human Impacts of Autonomous Weapons in September 2023. At the end of the conference, the member states issued the CARICOM Declaration on

conocimiento/files/documentos/noticias/EN%20-

%20Montevideo%20Declaration%20approved.pdf

https://repositorio.cepal.org/server/api/core/bitstreams/d3b32e18-7912-4e27-a7d5-42450e6042d8/content

⁶¹⁸⁵ ECLAC, Artificial Intelligence and the Caribbean: Towards Ethical and Sustainable AI Governance in the Region (Oct.–Dec. 2023),

⁶¹⁸⁶ Caribbean Artificial Intelligence Initiative, *Caribbean Artificial Intelligence Roadmap*, p. 41 (2021), https://ai4caribbean.com/wp-content/uploads/2021/07/Caribbean-Artificial-Intelligence-Policy-Roadmap.pdf

⁶¹⁸⁷ Communiqué of the Latin American and the Caribbean Conference of Social and Humanitarian Impact of Autonomous Weapons (Feb. 24, 2023), https://conferenciaawscostarica2023.com/communique/?lang=en

⁶¹⁸⁸ Regional Conference on Latin America and the Caribbean States on the Social and Humanitarian Impact of Autonomous Weapons, *Trinidad and Tobago Statement* (Feb. 2023), https://conferenciaawscostarica2023.com/wp-content/uploads/2023/02/Trinidad-and-Tobago-statement-Regional-Conference.pdf.

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Autonomous Weapons, which called for the "urgent pursuit of an international legally binding instrument, incorporating prohibitions and regulations on autonomous weapons systems." 6189

Trinidad and Tobago cited the CARICOM statement and Bélen Communiqué in the country's input to the Report of the UN Secretary on Lethal Autonomous Weapons Systems. Trinidad and Tobago's input cited concerns over a lack of conformity with international criminal, human-rights, and humanitarian laws and "the implications of LAWS for non-proliferation and the risks of diversion to non-state actors, including criminals and terrorist groups and the challenges of LAWS to internal and domestic security." The statement concluded by reiterating the country's support for "an international legally binding instrument that prohibits unpredictable or uncontrollable autonomous weapons systems, capable of using force without meaningful human control [...] while implementing regulations for other forms of autonomous weapons systems."

Human Rights

Trinidad and Tobago received a score of 82/100 by Freedom House and is thus classified as "Free." The country has a functioning parliamentary democracy with an active and free civil society. However, discrimination against LGBT+ people, violence against women, and human trafficking persist.

Trinidad and Tobago has endorsed the Universal Declaration of Human Rights and ratified a number of UN treaties protecting these rights. These treaties include the International Covenant on Civil and Political Rights, Convention on the Elimination of All Forms of Discrimination against Women, International Convention on the Elimination of All Forms of Racial Discrimination, Convention on the Rights of the Child, and the Convention on the Rights of Persons with Disabilities.⁶¹⁹²

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⁶¹⁸⁹ CARICOM, CARICOM Member States Call for Urgent Negotiation of New International Legally Binding Instrument to Prohibit and Regulation Autonomous Weapons (Sept. 11, 2023), https://caricom.org/caricom-states-call-for-urgent-negotiation-of-new-international-legally-binding-instrument-to-prohibit-and-regulate-autonomous-weapons/

⁶¹⁹⁰ UN Office for Disarmament Affairs, Input by Trinidad and Tobago to the Report of the Secretary-General on UNGA Resolution 78/241 of 22 December 2023 Entitled, "Lethal Autonomous Weapons Systems" (2024), https://docs-page-1014

<u>library.unoda.org/General_Assembly_First_Committee_-Seventy-Ninth_session_(2024)/78-241-Trinidad-and-Tobago-EN.pdf</u>

⁶¹⁹¹ Freedom House, *Freedom in the World 2024: Trinidad and Tobago* (2024), https://freedomhouse.org/country/trinidad-and-tobago/freedom-world/2024

⁶¹⁹² OHCHR, UN Treaty Body Database: Trinidad and Tobago (Feb. 6, 2025),

 $[\]underline{\text{https://tbinternet.ohchr.org/_layouts/15/TreatyBodyExternal/Treaty.aspx?CountryID=177\&Lang} = \underline{EN}$

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OECD / G20 AI Principles

Trinidad and Tobago has not endorsed the OECD AI principles. 6193 According to OECD AI Principle 2.5 regarding international co-operation for trustworthy AI, "Governments, including developing countries and with stakeholders, should actively cooperate to advance these principles and to progress on responsible stewardship of trustworthy AI. Governments should work together in the OECD and other global and regional fora to foster the sharing of AI knowledge, as appropriate." The OECD acknowledges the work of the Inter-American Development and its ""fAIr LAC" initiative to promote the responsible and ethical use of AI and improve the public services e.g., education, health, and social protection, in Latin American and Caribbean (LAC) countries,"6194 which includes Trinidad and Tobago.

In 2022, the OECD, in partnership with the Development Bank of Latin America (CAF) also published a report on "The Strategic and Responsible Use of Artificial Intelligence in the Public Sector of Latin America and the Caribbean" including Trinidad and Tobago.

Council of Europe AI Treaty

Trinidad and Tobago has not signed the first legally binding international treaty on AI, the council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law. 6195

UNESCO Recommendation on AI Ethics

Trinidad and Tobago is a member state of UNESCO⁶¹⁹⁶ and endorsed the UNESCO Recommendations on AI Ethics.⁶¹⁹⁷ Trinidad and Tobago has taken steps to implement the UNESCO Recommendation through regional initiatives such as those organized in cooperation with the CAF (Development Bank of Latin America and the Caribbean) and UNESCO.⁶¹⁹⁸ Although Trinidad and Tobago

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https://pax.unesco.org/countries/ListeMS.html

⁶¹⁹³ OECD, *Recommendations of the Council on Artificial Intelligence* (May 21, 2019), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449

⁶¹⁹⁴ OECD, *State of Implementation of the OECD AI Principles*, p. 76 (Jun. 2021), https://www.oecd-ilibrary.org/docserver/1cd40c44-

⁶¹⁹⁵ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Feb. 6, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

⁶¹⁹⁶ UNESCO, List of the Member States (Feb. 19, 2025),

⁶¹⁹⁷ United Nations, 193 Countries Adopt First-Ever Global Agreement on the Ethics of Artificial Intelligence (Nov. 25, 2021), https://news.un.org/en/story/2021/11/1106612

⁶¹⁹⁸ UNESCO, CAF and UNESCO Will Create a Council to Review Ethical Criteria for Artificial Intelligence in Latin America and Caribbean (Jun. 23, 2022),

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did not participate in the first meeting of the regional council on AI ethics in Santiago, Chile, in 2023, the country endorsed the Montevideo Declaration, the outcome document from the Second Ministerial and High-Level Summit in 2024,6199

The Caribbean AI Policy Roadmap to which Trinidad and Tobago contributed was developed in collaboration with UNESCO "as a framework for policy development and regional collaboration [based on] The Recommendation on the Ethics of Artificial Intelligence. 6200

Trinidad and Tobago has also called for responsible, secure, inclusive, and people-centered AI systems as a member of the Community of Latin American and Caribbean States (CELAC). The CELAC 2024 Declaration of Kingston asserts "We recognize that the responsible, inclusive, people centered, and ethical design, development, deployment, and use of secure artificial intelligence systems has the potential to accelerate sustainable development, we also acknowledge that A.I. systems pose risks that are particularly challenging for developing countries."6201

Trinidad and Tobago has not initiated the UNESCO Readiness Assessment Methodology (RAM), a tool to help countries identify and address challenges to integrating AI ethically and responsibly. 6202

Evaluation

Trinidad and Tobago endorsed the UNESCO Recommendation on the Ethics of AI and can help foster implementation through regional cooperation with other Caribbean or Latin American countries. At the national level, Trinidad and Tobago has developed a national digital tragedy, however it has not turned its attention to artificial intelligence. Likewise, its 2012 Data Protection Act has not

https://www.unesco.org/en/articles/caf-and-unesco-will-create-council-review-ethical-criteriaartificial-intelligence-latin-america-and

%20Montevideo%20Declaration%20approved.pdf

https://www.unesco.org/ethics-ai/en/global-hub

⁶¹⁹⁹ Government of Uruguay, Montevideo Declaration Approved: For the Construction of a Regional Approach on the Governance of Artificial Intelligence and Its Impacts on Our Society (Oct. 2024), https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacionconocimiento/sites/agencia-gobierno-electronico-sociedad-informacionconocimiento/files/documentos/noticias/EN%20-

⁶²⁰⁰ UNESCO, Caribbean Artificial Intelligence Policy Roadmap (Dec. 9, 2024), https://www.unesco.org/en/articles/caribbean-artificial-intelligence-policy-roadmap 6201 Community of Latin American and Caribbean States, Declaration of Kingstown, VIII Summit of Heads of State and Government of the Community of Latin American and Caribbean States, p. 12 (Mar. 1, 2024), https://propuestaciudadana.org.pe/forociudadano-celac-ue/wpcontent/uploads/2024/03/CELAC-Kingstown-Final-Declaration March-2024 ENG.pdf ⁶²⁰² UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024),

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fully been enacted, most importantly the provisions regarding data subjects' rights, and it would need to be updated for concerns related to AI such as establishing rights such as algorithmic transparency. The lack of progress to implement the protections in the privacy law that have been proclaimed, such as opening the Office of the Information Commissioner, deepens concerns about Trinidad and Tobago's ability to protect fundamental rights in the AI era. Initiatives such as the development of an e-identity and the use of facial recognition technology for crime prevention and detection are, without proper legal frameworks and oversight mechanisms, of particular concern.

Tunisia

In 2024, the Tunisian parliament passed laws to implement biometric identity cards and passports, deepening concerns over surveillance. The country also continued to advocate in the UN for a legally binding treaty to restrict lethal autonomous weapons.

National Al Strategy

Tunisia's path toward the establishment of a National AI Strategy started in 2018 when the Minister of Higher Education in partnership with the National Agency for the Promotion of Scientific Research (ANPR) produced a five-year AI development plan (2016–2020). The ANPR set up a Task Force to provide oversight of the project and a Steering Committee to define a methodology and action plan. This was further discussed during workshops organized by the UNESCO Chair on Science, Technology and Innovation Policy. 6204

Tunisian's political instability curtailed the plans to move the initiative forward.⁶²⁰⁵ In 2019, the Ministry of Industry, Mines and Energy led the development of a 5-year AI roadmap for 2021–2025 with the aims to:⁶²⁰⁶

• Raise awareness of the real challenges and possibilities of AI

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⁶²⁰³ Agence Nationale de la Promotion de la Recherche Scientifique (ANPR), *Unlocking Tunisia's Capabilities Potential* (2017), http://www.anpr.tn/national-ai-strategy-unlocking-tunisias-capabilities-potential

⁶²⁰⁴ Tim Dutton, *Artificial Intelligence Strategies* (Jun. 28, 2018), https://medium.com/politics-ai/an-overview-of-national-ai-strategies-2a70ec6edfd

⁶²⁰⁵ UNESCO, *Maghreb: Mapping the Artificial Intelligence Ecosystem* [French], UNESCO Web Archive (Dec. 2020),

 $[\]underline{https://webarchive.unesco.org/20240313054533/https://fr.unesco.org/sites/default/files/20210526}\\ \underline{mappingecosystemeiadsmaghreb.pdf}$

⁶²⁰⁶ OECD AI Policy Observatory, *Policies for Tunisia: Tunisia Artificial intelligence Roadmap* (Mar. 2022), https://oecd.ai/en/dashboards/policy-

initiatives?conceptUris=http:%2F%2Fkim.oecd.org%2FTaxonomy%2FGeographicalAreas%23T unisia

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- Strengthen the ecosystem to develop AI by addressing the main pillars of AI
- Implement AI pilot projects in public and private sectors.

The Ministry of Industry, Mines and Energy (MIEM) and the National Institute of Normalization and Intellectual Property also drafted a bill to protect the Intellectual Property of Algorithms. 6207

The Ministries of Communication Technologies; Industry, Mines and Energy; Economics & Planning; and Higher Education & Scientific Research signed a memorandum aiming to define the general orientations of the national artificial intelligence strategy and to follow up on the results of a study planned for this purpose. 6208

As a member of the African Union, Tunisia is committed to working toward the alignment of the country's efforts with the vision of the Union to build a continental digital transformation strategy⁶²⁰⁹ and a continental AI strategy.⁶²¹⁰

For engagement beyond the African region, with the aim of cooperation on Artificial Intelligence, Tunisia signed a Memorandum of Intent with the Ministry of Companies and Industry of Italy to advance digital technology, 6211 a Memorandum of Understanding with the Ministry of Science and Communication Technologies of Korea centered on developing 5G, 6212 and discussions with the Swedish Minister of Public Administration and others to enhance cooperation and shared expertise on digital areas such as AI strategies and legislative frameworks. 6213

⁶²⁰⁷ OECD AI Policy Observatory, *Policies for Tunisia: Intellectual Property Policy for AI* [draft] (2021), OECD AI Policy Observatory, https://oecd.ai/en/dashboards/policy-initiatives?conceptUris=http:%2F%2Fkim.oecd.org%2FTaxonomy%2FGeographicalAreas%23Tunisia

⁶²⁰⁸ Kapitalis, *Tunisia Toward the Development of a National AI Strategy* (Feb. 2022), http://kapitalis.com/tunisie/2022/02/20/tunisie-vers-lelaboration-de-la-strategie-nationale-de-lintelligence-artificielle/

⁶²⁰⁹ African Union, *The Digital Transformation Strategy for Africa, (2020–2030)*, https://au.int/sites/default/files/documents/38507-doc-dts-english.pdf å

⁶²¹⁰ AUDA-NEPAD, *The African Union Artificial Intelligence Continental Strategy For Africa* (May 30, 2022), https://www.nepad.org/news/african-union-artificial-intelligence-continental-strategy-africa

⁶²¹¹ Agency Tunis-Afrique Press, *Tunisia-Italy Ink MoU in Digital Technology, Applications in Industry*, Zawya (May 29, 2024), https://www.zawya.com/en/economy/north-africa/tunisia-italy-ink-mou-in-digital-technology-applications-in-industry-dk7lx3zh

⁶²¹² Isaac K. Kassouwi, *Tunisia Taps South Korean Expertise for 5G Deployment*, WeAreTech.Africa (Jun. 7, 2024), https://www.wearetech.africa/fr/fils/actualites/tech/tunisia-taps-south-korean-expertise-for-5g-deployment

⁶²¹³ IFM, *Tunisia, Sweden: Working Visit to Boost Digital Cooperation* (May 18, 2024), https://www.ifm.tn/fr/article/english-news/tunisia-sweden-working-visit-to-boost-digital-cooperation/81307#google vignette

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Public Participation

The Tunisian government does not have a systematic public participation process to develop policies in general or AI policies in particular. Discussions took place among the task forces and steering committees designated by the Tunisian government. Since September 2021, The Future Society (TFS) and GIZ Digital Transformation Center Tunisia have also supported a multi-stakeholder process to develop Tunisia's National AI Strategy with the Tunisian Ministry of Communication Technologies, Ministry of Economy and Planning, Ministry of Higher Education and Scientific Research, and the Ministry of Industry, Mines, and Energy. According to TSF, "The project's goal is to capitalize on Tunisia's strengths in AI in order to support economic growth, promote social inclusion, and ensure better service to citizens." This project emphasizes the Tunisia Government's efforts to consult with civil society and different stakeholders in the drafting process. 6214

Notwithstanding the various initiatives put forth by the Tunisian government to establish a national AI policy, not all the documents are available on the government's official websites. Only the Organic Act No. 2004-63 for Personal Data Protection is available online.⁶²¹⁵

The first ever political consultation took place in January 2022 on the matter of the referendum to revise the constitution. The government set the website E-Istichara (e-consultation) as the repository of public input. 6216 The initiative had mixed reviews due to the requirement of a national identity number and a validation code sent to mobile phones. While E-Istichara is presented as a portal for citizens to express their opinions, under the motto "your opinion, our decision," reservations were evident about the degree of inclusiveness and privacy of the platform. The National Center for Informatics, the Ministry of Communication Technologies, and the Ministry of Youth and Sports oversee operation of E-Istichara. 6218

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⁶²¹⁴ The Future Society, Stakeholder Consultation Workshops Drive Insights for National AI Strategies in Tunisia and Ghana (Jun. 9, 2022), https://thefuturesociety.org/stakeholder-consultation-workshops-drive-insights-for-national-ai-strategies-in-tunisia-and-ghana/

⁶²¹⁵ National Authority for Protection of Personal Data, Organic Act n°2004-63 on the Protection of Personal Data [French and Arabic] (Jul. 2004), https://www.inpdp.tn/Texte.html
6216 Cathrin Schaer and Tarak Guizani, Tunisia's Controversial First Online Political

Consultation (Jan. 12, 2022), https://www.dw.com/en/tunisias-first-digital-political-consultation-divides/a-60390183

⁶²¹⁷ Bedirhan Mutlu and Salih Yasun, *Tunisia's e-Consultation Process Is Another Pretence for Saied's Power Grab*, TRTWorld Opinion (Mar. 4, 2022),

https://www.trtworld.com/opinion/tunisia-s-e-consultation-process-is-another-pretence-for-saied-s-power-grab-55131

⁶²¹⁸ All Africa, Tunisia: Online Platform E-Istichara.tn, Operational from January 15 (Jan. 14, 2022), https://allafrica.com/stories/202201170221.html

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The OECD offered guidance and technical assistance to support the Tunisian government in improving public participation and creating citizen charters for public projects in three municipalities. Earlier in 2016, the OECD worked with Tunisia to create a citizen dialogue platform, activating working groups to promote stakeholder participation. The enactment of the Access to Information (ATI) Law of 2016, led to the publication of the Access to Information Guide for public officials, which was adopted by over 600 public institutions in Tunisia. The Guide aims to promote the participation of civil society, government, and ATI stakeholders in matters of public governance.

In August 2020, the UNESCO Maghreb office, the Ministry of Industry and SMEs organized a reflection workshop entitled "Inclusive Dialogue on the Ethics of AI" to draft international recommendations and establish a normative instrument on the ethics of AI.⁶²²⁰ Tunisian AI experts, such as start-ups, university researchers, and public officials attended the event.

The Ministry of Communication Technology launched a platform for citizen participation, including submission of complaints, an ideation forum, and access to open data and government documents.⁶²²¹ In 2021, the Ministry of Interior called for a public consultation on a new national ID and biometric database, yet the results of the process are not public.

Tunisia set up a National Digital Observatory in 2023 with the aim of informing public decision-making in the digital sector. 6222

In the most recent UN e-Government Survey of 2024, Tunisia ranked 99th out of 193 countries in the world in e-participation⁶²²³ and among the top 3 African countries, in terms of the e-Government development index (EGDI).⁶²²⁴

⁶²¹⁹ OECD, *Good Governance and Anti-Corruption in Tunisia: Project Highlights*, OECD Web Archive (Sept. 2019), https://web-archive.oecd.org/2019-12-16/511741%20-good-governance-and-anti-corruption-in-tunisia-highlights-en.pdf

⁶²²⁰ Agence Tunis Afrique Presse, *Deliberation on AI Ethics* (Aug. 6, 2020), https://www.tap.info.tn/en/Portal-Sciences-Technology-Eng/12952220-deliberation-on-ai;; UNESCO and Mila, *Missing Links in AI Governance*, UNESCO Digital Library (2023), https://unesdoc.unesco.org/ark:/48223/pf0000384787?posInSet=2&queryId=N-EXPLORE-d451c47f-26f8-4a54-8eed-fb60fe1bf75b

⁶²²¹ Republique Tunisienne [Tunisian Republic], Tunisian Government Portal [Portail du Gouvernment Tunisien] (2023), http://fr.tunisie.gov.tn/

⁶²²² acteurspublics, *Tunisia Sets Up a National Digital Observatory* (Jan. 17, 2023), https://acteurspublics.fr/articles/la-tunisie-se-dote-dun-observatoire-national-du-numerique
6223 United Nations, *UN E-Government Knowledgebase*, *Tunisia* (2024),

 $[\]frac{https://publicadministration.un.org/egovkb/en-us/Data/Country-Information/id/175-Tunisia/dataYear/2024}{}$

⁶²²⁴ United Nations, Department of Economic and Social Affairs, *E-Government Survey 2024* (Sept. 17, 2024), https://desapublications.un.org/file/20866/download

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Data Protection

The protection of personal data was included in the review of the Tunisian constitution of 1959 in 2002, with Article 9, mentioning: "protection of personal data shall be guaranteed, save in exceptional cases prescribed by law." The Constitution of 2014 expanded the rights to data protection by including Article 24 about Privacy and Personal Data⁶²²⁶ which provides that "the state protects the right to privacy and the inviolability of the home, and the confidentiality of correspondence, communications, and personal information." Following a referendum, Tunisia created a new Constitution of 2022 that maintains protection of the right to privacy (Art 30), endorsing Law No. 2004-63, to protect the rights and freedoms of Tunisians.

In 2004, the Ministry of Justice established a legal framework for data protection rights that later led to the enactment of the Organic Act no. 2004-63 of July 27, 2004 on the Protection of Personal Data. The National Authority for Protection of Personal Data (INPDP) was created that same year, later renamed National Personal Data Authority. This entity is deemed an independent oversight body for data protection.

Under the authoritarian regime of Ben Ali, the National Agency for Data Protection (INPDP) did not operate as an independent body. After the Tunisian Jasmine Revolution of 2011, processors began to regularly declare their personal data processing activities under the law. 6228

The Data Protection Law of 2004 includes only certain provisions on transparency, related to notifications that data is being processed but it does not include provisions to notify the authority or data subjects in case of a data breach. In terms of accountability, there is no explicit provision for civil liability, but the Data Protection Authority is designated to investigate cases and subpoena or require evidence, and to impose penalties.⁶²²⁹

While the 2004 Organic Act is based on principles of lawfulness, processing, and accountability, the multiple exemptions for law enforcement,

Protection in Tunisia, https://www.inpdp.tn/Diapositive1.JPG

https://www.inpdp.tn/Formulaires.html

https://dataprotection.africa/tunisia/

⁶²²⁵ Centre for Internet and Human Rights, *Policy Analysis of Data Protection in Tunisia: A Legal Illusion?*, https://cihr.eu/policy-analysis-data-protection-in-tunisia-a-legal-illusion/
https://cihr.eu/policy-analysis-data-protection-in-tunisia-a-legal-illusion/
https://cihr.eu/policy-analysis-data-protection-in-tunisia-a-legal-illusion/
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<a href="https://cihr.eu/policy-analysis-data-protection-in-tunisia-a-legal-illusion/

⁶²²⁷ National Authority for Protection of Personal Data (INPDP), *Organic Law No. 63 of 2004 on the Protection of Personal Data* (Jul. 27, 2004), https://www.inpdp.tn/ressources/loi_2004.pdf
⁶²²⁸ National Authority for Protection of Personal Data (INPDP), *Forms*,

⁶²²⁹ Data Protection Africa, Data Protection Factsheet: Tunisia (2023),

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tribunals and universities, public entities, and employers weaken the protection of personal data. 6230

The Ministry of Justice was expected to propose a review of the framework for the protection of personal data. The review project of the Law was under parliamentary scrutiny since 2017. However, in March 2018, a new legislative project was introduced before the Tunisian Parliament. The new draft law on the Protection of Personal Data is aligned with the GDPR. 6231 Tunisia's general data protection regime strongly seeks to align with that of the EU. Negotiations in 2015 between Tunisia and the EU in the framework of the Deep and Comprehensive Free Trade Area, increased the Tunisian government's awareness of the need for alignment.

Tunisia ratified the Council of Europe Convention 108 for the Protection of Individuals with regard to Automatic Processing of Personal Data in 2015. 6232 Basic Law No. 2017/33 on the Approval of the Accession of the Republic of Tunisia to Convention 108 and its additional protocol was passed by the Parliament in 2017. Tunisia has signed but not yet ratified the Protocol amending the Convention for the Protection of Individuals about Automatic Processing of Personal Data (Convention 108+). 6234

In 2019, Tunisia also signed the African Union (AU) Convention on Cyber Security (Malabo Convention).⁶²³⁵ However, the country has not ratified the Convention yet.⁶²³⁶ The Convention emphasizes that each country is to develop its legislative framework, observing the African Charter on Human and People's

⁶²³⁰ Centre for Internet and Human Rights, *Policy Analysis of Data Protection in Tunisia: A Legal Illusion?*, https://cihr.eu/policy-analysis-data-protection-in-tunisia-a-legal-illusion/
6231 DLA Piper, *Data Protection Laws of the World, Data Protection in Tunisia* (Jan. 27, 2025), https://www.dlapiperdataprotection.com/index.html?t=law&c=TN

⁶²³² Council of Europe, *Modernised Convention for the Protection of Individuals with Regard to the Processing of Personal Data* (May 18, 2018), https://www.coe.int/en/web/data-protection/convention108-and-protocol

⁶²³³ Council of Europe, *Details of Treaty No. 108*, https://www.coe.int/en/web/conventions/full-list?module=treaty-detail&treatynum=108

⁶²³⁴ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 223* (Feb. 5, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=223

⁶²³⁵ African Union. *African Union Convention on Cybersecurity (Malabo Convention)* (Jun. 27, 2014), https://au.int/en/treaties/african-union-convention-cyber-security-and-personal-data-protection

⁶²³⁶ African Union. List of Countries Which Have Signed, Ratified/Acceded to the African Union Convention on Cyber Security and Personal Data Protection (Mar. 25, 2022), https://au.int/sites/default/files/treaties/29560-sl-

AFRICAN UNION CONVENTION ON CYBER SECURITY AND PERSONAL DATA P
ROTECTION.pdf

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Rights. Tunisia's 2022 Cybercrime Decree⁶²³⁷ has instead been used to stifle free speech.⁶²³⁸

Tunisia's Data Protection Authority was accredited to join the Global Privacy Assembly (GPA) during the 34th Session held in 2012 in Uruguay. Tunisia has not endorsed the GPA 2018 Declaration on Ethics and Data Protection, 6240 the GPA 2020 Resolution on Accountability in the Development and Use of AI, 6241 the GPA 2022 Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology, 6242 or the 2023 GPA Resolution on Generative AI. 6243

Algorithmic Transparency

Since Tunisia has not ratified Convention 108+ yet, the right to algorithmic transparency in Tunisia remains limited. ⁶²⁴⁴ The Law of Protection of Personal Data applies to automatic processing of personal data as well as non-automatic processing of personal data carried out by individuals or by legal entities. The law

 $\underline{https://globalprivacyassembly.org/wp\text{-}content/uploads/2015/02/2-Accreditation-Resolution-}\underline{Uruguay.pdf}$

 $\underline{\text{https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922}}\underline{\text{ICDPPC-40th}}\underline{\text{AI-Declaration ADOPTED.pdf}}$

⁶²⁴³ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁶²³⁷ President of the Republic, *Decree-Law No. 2022-54 Relating to the Fight against Offenses Relating to Information and Communication Systems*, DCAF (Sept. 13, 2022), https://legislation-securite.tn/latest-laws/decret-loi-n-2022-54-du-13-septembre-2022-relatif-a-la-lutte-contre-les-infractions-se-rapportant-aux-systemes-dinformation-et-de-communication/

⁶²³⁸ Human Rights Watch, *Tunisia: Cybercrime Decree Used against Critics* (Dec. 19, 2023), <a href="https://www.hrw.org/news/2023/12/19/tunisia-cybercrime-decree-used-against-critics?gad_source=1&gclid=Cj0KCQiAwtu9BhC8ARIsAI9JHanDnrN01LS4JJzKJDmvVJLFgi5SvbbLfAodRpEcbM0xqx7AC8N3qoYaAn-qEALw_wcB

⁶²³⁹ Global Privacy Assembly, Resolution on Accreditation (2012),

⁶²⁴⁰ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁶²⁴¹ Global Privacy Assembly (GPA). *Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020). https://globalprivacyassembly.org/wp-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN.pdf

⁶²⁴² International Conference of Data Protection & Privacy Commissioners. *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018),

⁶²⁴⁴ Data Protection Africa, *Data Protection Factsheet: Tunisia* (2023), https://dataprotection.africa/tunisia/

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imposes mandatory obligations on individuals or legal entities responsible for the automated processing of personal data and their sub-contractors to take all the required technical steps to ensure that they provide the data subject, their heirs or their tutor a means for rectification, modification, correction, or deletion of their personal data through request by e-mail. However, the law does not explicitly address automatic decision-making.

The Ministry of Finance of Tunisia has plans to apply AI in several applications, including fraud analysis and risk management.⁶²⁴⁶ The goal of the ministry is to use algorithms to sort through data that supports a more open government, including making the algorithms available for public review.

Al Projects in the Public Sector

The ecosystem of AI innovation is in the nascent stages in Tunisia. A report by UNESCO mapping the AI ecosystem of the Maghreb countries (Tunisia, Morocco, and Algeria) included government initiatives to support AI startups. ⁶²⁴⁷ The Smart Tunisia Program was launched through a Public-Private Partnership to create 50,000 jobs in the digital sector. ⁶²⁴⁸ The Program offers multiple opportunities for the promotion of entrepreneurship and investment in digital startups through cooperation with different Tunisian bodies.

As of 2020, the government has launched AI projects in the public sector through the Directorate of Innovation and Technology Development. Projects included a predictive model for fraud detection, voice transcriptions for parliamentary deliberations, image recognition to monitor mask-use in public, industry chatbots, chatbots for questions related to COVID-19, and imaging to detect COVID-19.

International cooperation supports the Tunisian initiatives in the AI landscape. The FIRST program (Fiscal Reform for a Strong Tunisia) is an initiative of the United States Agency for International Development (USAID) to support the government of Tunisia through the Ministry of Finance in matters of tax policy and fiscal reforms. The project relies on an AI algorithm and general

6246 Global Information Society Watch, *An Artificial Intelligence Revolution in Public Fnance Management in Tunisia* (2019), https://giswatch.org/node/6192

National Authority for Protection of Personal Data (INPDP), *Organic Law No. 63 of 2004 on the Protection of Personal Data* [French and Arabic] (Jul. 27, 2004), https://www.inpdp.tn/ressources/loi 2004.pdf

⁶²⁴⁷ UNESCO Web Archives, *Maghreb, Mapping the Artificial Intelligence Ecosystem* [Maghreb, Mapping de l'ecosysteme de l'intelligence artificielle] (Dec. 2020), https://webarchive.unesco.org/20240313054533/https://fr.unesco.org/sites/default/files/20210526 mappingecosystemeiadsmaghreb.pdf

⁶²⁴⁸ Fondation Tunisie pour le Développement [Tunisian Foundation for Development], *Smart Tunisia* (2022), https://fondationtunisie.org/en/smart-tunisia/

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algebraic modeling system (GAMS) software to analyze data as input to policy decisions. ⁶²⁴⁹

Tunisia received a score of B (or high) for its digital government transformation by the World Bank's GovTech Maturity Index (GTMI) for 2022. 6250 The index evaluates core government system indexes, public service delivery, digital citizen engagement, and gov tech enablers in the country.

The Ministry of Communication Technologies published the Electronic Government (e-Government) policy in a circular in early 2024. The policy requires all government authorities to adopt common building blocks centered on 12 Rules designed to accelerate digitization and modernize how the state serves citizens and businesses through online administrative procedures.⁶²⁵¹

Tunisia launched its first public institute dedicated to Artificial Intelligence at the University of Tunis in September 2024. The Minister of Higher Education and Scientific Research announced the launch of the institute during an earlier seminar titled "AI for a Resilient Economy." 6252

The Minister of Higher Education and Scientific Research emphasized the importance of expanding the application of AI in Tunisia while ensuring the ethical use and protection of citizens' data. The aim of the AI Institute is to promote Tunisia's 2035 vision, which can be summed up as "fostering a knowledge-based society based on the development of AI programs across various Tunisian institutions." The AI Institute's objective is to teach AI to everyone, not just experts, so that Tunisia's economic, industrial, and technological challenges can be addressed.

 $\underline{https://tn.usembassy.gov/embassy/tunis/usaid-tunisia/economic-growth/fiscal-reform-for-a-strong-tunisia-first/}$

⁶²⁴⁹ US Embassy, Fiscal Reform for a Strong Tunisia First,

⁶²⁵⁰ World Bank, *State of GovTEch Maturity by GTMI Groups 2022* (Nov. 2022), https://www.worldbank.org/en/data/interactive/2022/10/21/govtech-maturity-index-gtmi-data-dashboard

⁶²⁵¹ Ministry of Communication Technologies, *Circular n° 03 of 19 January 2024 on the Development of Electronic Administrative Services* (Jan. 19, 2024), <a href="https://legislation-securite.tn/ar/latest-laws/%D9%85%D9%86%D8%B4%D9%88%D8%B1-%D8%B1-%D8%AF-%D9%81%D9%85%D8%A4%D8%B1%D8%AE-%D9%81%D9%8A-19-%D8%AC%D8%A7%D9%86%D9%81%D9%8A-2024-%D8%AD%D9%88%D9%84-%D8%AA%D8%B7%D9%88%D9%8A%D8%B1-%D8%A7%D9%84/

Ministry of Higher Education and Scientific Research, *The Minister of Higher Education and Scientific Research Supervises the Opening of a Scientific Event on Artificial Intelligence and Its Role in the Development of the Economy* (Apr. 17, 2024),

https://www.mes.tn/detail_evennement.php?code_menu=548&code_evennement=4029

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In addition, the AI Institute will help Tunisia play a pioneering role in AI training in the region and on the African continent, which will be advantageous for developing comprehensive AI legislation and using AI for good. 6253

Biometric ID

The Tunisian Parliament approved draft laws on Biometric Identity Cards and Biometric Passports in March 2024. This decision comes despite a campaign led by Access Now and civil society partners in Tunisia since 2016 advocating against the creation of a mandatory biometric ID system without robust data protection and privacy safeguards for Tunisian citizens. 5255

Biometric data such as fingerprints and photographs will be recorded and stored in a database managed by the Ministry of Interior, particularly by the central administration of information. Only specifically authorized agents, such as the police, national guard, and customs, will have access to this information through automated readers. 6256

The implementation of the biometric ID project will fall under the National Personal Data Protection Authority despite critics arguing that "this data protection agency lacks the necessary authority to enforce effective privacy and security measures." To ensure respect for individual rights in this transition to biometrics, the rights and freedoms commission proposes the creation of a new oversight body.

The laws must still receive approval from the President of the Republic and be published in the Official Gazette. No estimate has yet been provided of when the laws would take effect. 6257

https://www.universityworldnews.com/post.php?story=20240423064239372

⁶²⁵³ University World News, Africa Edition, *Tunisia's First Public AI Institute to Start Its Work Soon* (Apr. 25, 2024),

⁶²⁵⁴ Resilient Digital Africa, *Tunisia Officially Adopts Biometric Passports and ID Cards* (Mar. 27, 2024), https://resilient.digital-africa.co/en/blog/2024/03/27/tunisia-officially-adopts-biometric-passports-and-id-cards/

⁶²⁵⁵ Access Now, Eight Years in the Making: Tunisia's Controversial Biometric ID and Passport Bills Risk Rights (Mar. 7, 2024), https://www.accessnow.org/press-release/tunisia-biometric-id-passport-bills-passed/

⁶²⁵⁶ Masha Borak, *Tunisia Biometric ID Card and Passport Law Approved by Parliament*, Biometric Update (Mar. 8, 2024), https://www.biometricupdate.com/202403/tunisia-biometric-id-card-and-passport-law-approved-by-parliament

⁶²⁵⁷ Access Now, Eight Years in the Making: Tunisia's Controversial Biometric ID and Passport Bills Risk Rights (Mar. 7, 2024), https://www.accessnow.org/press-release/tunisia-biometric-id-passport-bills-passed/

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Facial Recognition

Reports of practices of mass surveillance in Tunisia are closely linked to the history of authoritarian regimes and the suppression of political opposition. Following the Jasmine Revolution of 2011, the new government dismantled intelligence services and created new ones. In 2015, the Tunisian government declared a state of emergency as the result of a terrorist attack and in 2016 announced the installation of more than 1,000 surveillance cameras in 30 electronic checkpoints in Tunis and at least four cities.

Practices of surveillance in public spaces and the use of facial recognition are concerning. A report by Privacy International identified surveillance practices in public spaces under the pretense of enforcement of the COVID lockdown.⁶²⁵⁹ The Ministry of Interior of Tunisia operated a robot that patrolled the streets and required ID documentation to be shown to the camera. The PGuard robot was equipped with infrared and thermal imaging cameras to question "suspected violators" of the lockdown.⁶²⁶⁰ These robots, valued at \$100,000–140,000 were donated to the Ministry.

Smart Cities

The concept of Smart Cities is in the early stages in Tunisia, promoted by the Tunisian Smart Cities Association (TSC) in cooperation with the General Public-Private Partnership Authority (IGPPP) and the Fund Deposits and Consignment (CDC). The initiative has more than 260 partners from the public, private sector, and civil society engaged in working groups to build a three-year plan. No reports exist about the progress of this initiative or the cooperation with multi-lateral entities, such as UNDP.

⁶²⁵⁸ Privacy International, *State of Surveillance Tunisia* (Mar. 14, 2019), https://privacyinternational.org/state-privacy/1012/state-surveillance-tunisia

⁶²⁵⁹ Privacy International (PI). *Under Surveillance: (Mis)use of Technologies in Emergency Reponses. Global lessons from the COVID-19 Pandemic* (Dec. 14, 2022). https://privacyinternational.org/report/5003/under-surveillance-misuse-technologies-emergency-responses-global-lessons-covid-19

⁶²⁶⁰ Agence French Presse, *Tunisia "Robocop" Enforces Coronavirus Lockdown*, *The National* (Apr. 5, 2020), https://www.thenationalnews.com/world/mena/tunisia-robocop-enforces-coronavirus-lockdown-1.1001263

⁶²⁶¹ Meriem Khdimallah, *Smart City: Let's Go for the Implementation of the Tunisian Smart Cities Program* (Apr. 3, 2021), https://lapresse.tn/92965/ville-intelligente-cest-parti-pour-limplementation-du-programme-tunisian-smart-cities/

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Environmental Impact of AI

The Future Society reported on its contribution to the drafting of Tunisia's National AI Strategy 2021–2025 and the aim to harness AI responsibly to achieve national objectives and inclusive and sustainable development goals.⁶²⁶²

Reports suggest that the application of AI in environment-impacting sectors like agriculture are well under way. 6263 Tunisian officials announced in late 2024 that the AI Strategy to be launched in 2025 will aim to integrate AI into the environmental sector, among others. 6264

Lethal Autonomous Weapons

Tunisia is a UN Member State and High Contracting Party to the Convention on Certain Conventional Weapons (CCW)⁶²⁶⁵ and has participated in several meetings since 2015.⁶²⁶⁶ Tunisia is not among the 30 states of the Africa Group that called for a ban on lethal autonomous weapons.⁶²⁶⁷

Tunisia supports the negotiation of e legally binding instrument on autonomous weapons systems. Tunisia is a member of three groups that support the negotiation of a legally-binding instrument on autonomous weapons systems: The African Group and Arab Group in the United Nations and the Non-Aligned Movement. The African Group called for reflection on the "ethical, legal, moral and technical questions" raised by autonomous weapons systems and urged concrete policy recommendations, including prohibitions and regulations to be adopted. 6268

⁶²⁶² The Future Society, *National AI Strategies for Inclusive & Sustainable Development* (Oct. 28, 2022), https://thefuturesociety.org/policies-ai-sustainable-development/

https://automatedresearch.org/news/state_position/tunisia/

⁶²⁶³ APO, *Tunisia's Artificial Intelligence (AI) Potential: A Path to Economic Growth and Job Creation* (May 8, 2024), https://african.business/2024/05/apo-newsfeed/tunisias-artificial-intelligence-ai-potential-a-path-to-economic-growth-and-job-creation

⁶²⁶⁴ Samira Njoya, *Tunisia Announces New Digital Transformation and AI Strategy* (Nov. 13, 2024) https://www.wearetech.africa/en/fils-uk/tech-stars/tunisia-announces-new-digital-transformation-and-ai-strategy

⁶²⁶⁵ United Nations, *High Contracting Parties and Signatories CCW* (Jun. 25, 2024), https://www.un.org/disarmament/the-convention-on-certain-conventional-weapons/high-contracting-parties-and-signatories-ccw/

⁶²⁶⁶ Automated Decision Research, State Positions: Tunisia (2023),

⁶²⁶⁷ Diplo Foundation, *Africa's Participation in International Processes Related to AI* (2021), https://www.diplomacy.edu/resource/report-stronger-digital-voices-from-africa/africa-participation-international-processes-ai/

⁶²⁶⁸CCW Group of Governmental Experts Meeting on LAWS, *Statement by the African Group*, Digital Recordings Poral (Dec. 3, 2021),

https://conf.unog.ch/digitalrecordings/en/legacy?guid=public/61.0500/BAD51755-BF87-465D-A3D0-5FC6D9D20B23 10h05&position=768&channel=ORIGINAL

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In February 2023, Tunisia participated in the first international summit on the responsible application of artificial intelligence in the military domain hosted by the Netherlands. At the end of the Summit, known as REAIM, Tunisia, together with other countries, agreed on a joint call for action on the responsible development, deployment, and use of artificial intelligence in the military domain. 6269 In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability."6270 Tunisia did not endorse the outcome document, Blueprint for Action, from the Second REAIM Summit, hosted by South Korea. 6271

Tunisia supported Draft Resolution L.77 on Lethal Autonomous Weapons Systems adopted by the United Nations General Assembly in November 2024. The resolution raises concerns about the "negative consequences and impact of autonomous weapon systems on global security and regional and international stability, including the risk of an emerging arms race, of exacerbating existing conflicts and humanitarian crises, miscalculations, lowering the threshold for and escalation of conflicts and proliferation, including to unauthorized recipients and non-State actors" and stresses the "the importance of the role of humans in the use of force to ensure responsibility and accountability and for States to comply with international law." It also notes "the repeated calls by the Secretary-General to urgently conclude negotiations of a legally binding instrument with prohibitions and regulations for autonomous weapons systems, in line with a two-tier approach." of the role of humans in the use of force to ensure responsibility and accountability and for States to comply with international law." It also notes "the repeated calls by the Secretary-General to urgently conclude negotiations of a legally binding instrument with prohibitions and regulations for autonomous weapons systems, in line with a two-tier approach."

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⁶²⁶⁹ Government of Netherlands, *Call to Action on Responsible Use of AI in the Military Domain*, Press Release (Feb.16, 2023) https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action

⁶²⁷⁰ Responsible AI in the Military Domain Summit, *REAIM Call to Action* (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action
⁶²⁷¹ REAIM24, *Blueprint for Action, List of Countries Supporting the REAIM Blueprint for Action* (Sept. 11, 2024),

 $[\]frac{https://www.reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163\&shareBbsMng}{No=10264\&shareMenuId=11613\&shareTabMenuId=}$

⁶²⁷² United Nations General Assembly, *Seventy-Ninth Session First Committee Agenda Item 98* (ss) General and Complete Disarmament: Lethal Autonomous Weapons Systems (Oct. 18, 2024), https://documents.un.org/doc/undoc/ltd/n24/305/45/pdf/n2430545.pdf

⁶²⁷³ Isabella Jones, Stop Killer Robots, *161 States Vote against the Machine at the UN General Assembly* (Nov. 5, 2024), https://www.stopkillerrobots.org/news/161-states-vote-against-the-machine-at-the-un-general-assembly/

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autonomous weapon systems on global security and regional and international stability, including the risk of an emerging arms race, of exacerbating existing conflicts and humanitarian crises, miscalculations, lowering the threshold for and escalation of conflicts and proliferation, including to unauthorized recipients and non-State actors" and stresses the "the importance of the role of humans in the use of force to ensure responsibility and accountability and for States to comply with international law." It also notes "the repeated calls by the Secretary-General to urgently conclude negotiations of a legally binding instrument with prohibitions and regulations for autonomous weapons systems, in line with a two-tier approach." ⁶²⁷⁴

Human Rights

Freedom House scored Tunisia as "Partly Free" with a score of 51/100 in 2024, 6275 down from 64/100 in 2022. 6276 As Freedom House reported, "Tunisia's score reflects an increasingly authoritarian state under President Saïed, high rates of arrests that have left little to no political pluralism, and a repressive media environment. Tunisia scored 60/100 for net freedom and 18/40 on users' rights on the Freedom on the Net Report. 6278

The Ibrahim Index of African Governance in 2024 scored Tunisia at 61.2/100 for overall governance, and 56.1/100 in Participation Rights & Inclusion, placing the country in position 9 out of 45 African countries, with an overall decreasing trend since 2014.6279

Tunisia endorsed the Universal Declaration of Human Rights (UDHR) and ratified the African Charter on Human and Peoples' Rights (African Charter). Tunisia is a member of the Arab League but has not ratified the Arab Charter on Human Rights. The country ratified various covenants including the International Convention on Civil and Political Rights (ICCPR) and the

⁶²⁷⁴ United Nations General Assembly, *Seventy-Ninth Session First Committee Agenda Item 98* (ss) General and Complete Disarmament: Lethal Autonomous Weapons Systems (Oct. 18, 2024), https://documents.un.org/doc/undoc/ltd/n24/305/45/pdf/n2430545.pdf

⁶²⁷⁵ Freedom House, Freedom in the World: Tunisia (2024),

https://freedomhouse.org/country/tunisia/freedom-world/2024 Freedom House, *Freedom in the World: Tunisia* (2022),

https://freedomhouse.org/country/tunisia/freedom-world/2022

⁶²⁷⁷ Freedom House, *Tunisia: About the Project: Election Watch 2024* (Sept. 10, 2024),

 $[\]underline{https://freedomhouse.org/country/tunisia/about-project-election-watch/2024}$

⁶²⁷⁸ Freedom House, Freedom on the Net Report 2024: Tunisia (2024),

https://freedomhouse.org/country/tunisia/freedom-net/2024

⁶²⁷⁹ Ibrahim Index of African Governance, *Tunisia 2024, Overall Governance* (2024), https://iiag.online/locations/tn.html?meas=GOVERNANCE&loc=TN

⁶²⁸⁰ International Justice Resource Center, Country Factsheet Series (Sept. 15, 2017),

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International Covenant on Economic, Social and Cultural Rights (ICSECR).⁶²⁸¹ Other agreements Tunisia is a Party to are: The African Charter on the Rights and Welfare of the Child; the Convention on the Rights of the Child; the United Nations Convention against Transnational Organized Crime, and the United Nations Convention Against Corruption.⁶²⁸² Tunisia acceded to the Council of Europe Convention on Cybercrime (Budapest Convention) in early 2024.⁶²⁸³

Tunisia's transition to a democratic system was an imperative to guarantee human rights and respect for fundamental freedoms. The road to restore democracy has not been smooth, however, and required the drafting of a Tunisian constitution as a "social contract between state and citizens." ⁶²⁸⁴ The government promoted the new constitution as the foundation for a modern and democratic society that respects human freedom and aligns to the commitment to the international human rights system.

Nevertheless, human right organizations have continued to warn about the risks to the future of human rights and democracy in Tunisia. The new 2014 Constitution shifted power from the parliament to the presidency and won approval in a referendum later that month, with a voter turnout of roughly 31 percent. In July 2021, the government banned the Assembly of People's Representatives (ARP) from meeting and dismissed the Head of Government. Increasing travel bans affecting several segments of the population, house arrests, use of military courts to try civilians and hate speech spreading in the country raised concerns. Restrictions to freedom of the press escalated with the announcement of a state of exceptional measures.

⁶²⁸¹ University of Minnesota, *Ratification of International Human Rights Treaties- Tunisia* (2023), http://hrlibrary.umn.edu/research/ratification-tunisia.html

⁶²⁸² International Justice Resource Center, *Country Factsheet Series* (Sept. 15, 2017), https://iircenter.org/country-factsheets/

G283 Council of Europe, *Tunisia Becomes the 70th Party to Convention on Cybercrime* (Mar. 8, 2024) https://www.coe.int/en/web/cybercrime/-/tunisia-becomes-the-70th-party-to-convention-on-cybercrime

⁶²⁸⁴ Maha Yahya, Carnegie Middle East Center, *Beyond Tunisia's Constitution: The Devil in the Details* (Apr. 28, 2014), https://carnegie-mec.org/2014/04/28/beyond-tunisia-s-constitution-devil-in-details-pub-55398

⁶²⁸⁵ Euromed Rights, What Future for Human Rights and Democracy (2021),

https://euromedrights.org/publication/tunisia-what-future-for-human-rights-and-democracy/ Freedom House, *Freedom in the World: Tunisia (2023)*,

https://freedomhouse.org/country/tunisia/freedom-world/2023

⁶²⁸⁷ Euromed Rights. "Reporting Under the Weight of Fear": Restrictions on the Media in Tunisia under the President's Exceptional Measures (15 July 25 2021–15 April 2022) (May 17, 2022), https://euromedmonitor.org/en/article/5121/"Reporting-Under-the-Weight-of-Fear':-Restrictions-on-the-media-in-Tunisia-under-the-president's-exceptional-measures-(25-July-2021-%E2%80%93-15-April-2022)

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issued a new electoral law by presidential decree, and the first round of elections for a new parliament was held in late December 2021. Amid an opposition boycott, voter turnout was extremely low at 11 percent. A second round of voting took place in January 2023 with a low turnout. 6288

OECD / G20 AI Principles

Tunisia is not a member of the OECD or the G20 and has not endorsed the G20 or the OECD AI principles. The country has submitted the National AI Strategy and reports to OECD AI Observatory on AI use cases in the public sector, the law on the protection of personal data, and a draft bill on intellectual property policy for AI to protect algorithms. OECD recognized alignment with the value-based principles of inclusive growth, sustainable development, and well-being; human rights and fairness; and robustness; and security and safety. OECD also recognized the National AI Strategy's alignment with recommendations for policymakers to invest in AI R&D and build human capacity and prepare for labor market transition. 6290

Council of Europe AI Treaty

Tunisia has not endorsed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law. 6291

UNESCO Recommendation on AI Ethics

Tunisia is a member state of UNESCO since 1956,⁶²⁹² and is one of 193 countries that endorsed the UNESCO Recommendation on AI Ethics in November 2021.⁶²⁹³ Tunisia was also one of only five African nations that offered comments on the first draft of the Recommendation.⁶²⁹⁴ However, the 2021 UNESCO AI

⁶²⁸⁸ Carter Center, *Post-Election Statement: Low Turnout in Tunisia Election Reaffirms Need for Broad-Based Consensus* (Feb. 1, 2023), https://www.cartercenter.org/news/pr/2023/tunisia-020123.html

⁶²⁸⁹ OECD AI Policy Observatory, *OECD AI Principles Overview, Countries Adhering to the AI Principles* (Feb. 20, 2025), https://oecd.ai/en/ai-principles

⁶²⁹⁰ OECD AI Policy Observatory, *AI in Tunisia, Tunisia AI Roadmap* (Jan. 12, 2024), https://oecd.ai/en/dashboards/countries/Tunisia

⁶²⁹¹ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Feb. 5, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

⁶²⁹² UNESCO, Tunisia (2023), https://www.unesco.org/en/countries/tn

⁶²⁹³ UNESCO, 193 Member States Adopt the First Ever Global Agreement on the Ethics of Artificial Intelligence (Nov. 25, 2021), https://news.un.org/en/story/2021/11/1106612
6294 DiploFoundation, Africa's Participation in International Processes Related to AI (2021), https://www.diplomacy.edu/resource/report-stronger-digital-voices-from-africa/africa-participation-international-processes-ai/

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Needs Assessment Survey did not include responses from Tunisia. 6295 Tunisia is currently preparing for the Readiness Assessment Methodology (RAM), a key step to implementing the UNESCO Recommendation. 6296

Evaluation

Although Tunisia has yet to formulate a National AI policy, the 2021–2025AI Roadmap is a starting point. Despite taking preliminary steps to implement the UNESCO Recommendation on AI Ethics with preparation for the RAM, the approval of biometric ID systems and persistence of AI-powered surveillance deepen human rights concerns in the context of restricted freedom of expression and political rights. The ratification of Council of Europe Convention 108+ and a comprehensive modernization of the country's data protection legal regime would contribute to strengthening the protection of human rights in the digital age.

Türkiye

In 2024, Türkiye's government issued a resolution outlining principles for ethical use of AI systems by public officials. The Data Protection Authority issued AI recommendations focused on rights and freedoms and an information note on the data and privacy implications of chatbots with special attention to children. Internationally, Türkiye further prepared to undergo the UNESCO Readiness Assessment Methodology (RAM).

National AI Strategy

In 2020, the Digital Transformation Office (DTO) of the Turkish government published a National Artificial Intelligence Strategy. The Strategy was prepared in accordance with the Eleventh Development Plan 299 and

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⁶²⁹⁵ UNESCO, *Artificial Intelligence Needs Assessment Survey in Africa* (2021), https://unesdoc.unesco.org/ark:/48223/pf0000375322

⁶²⁹⁶ UNESCO, Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

⁶²⁹⁷ OECD AI Policy Observatory, *AI in Tunisia, Tunisia AI Roadmap* (Jan. 12, 2024), https://oecd.ai/en/dashboards/countries/Tunisia

⁶²⁹⁸ Digital Transformation Office of the Presidency of the Republic of Türkiye, *National Artificial Intelligence Strategy 2021–2025* (Aug. 20, 2021),

https://cbddo.gov.tr/SharedFolderServer/Genel/File/TRNationalAIStrategy2021-2025.pdf 6299 Presidency of the Republic of Türkiye, Presidency of Strategy and Budget, *Eleventh Development Plan (2019–2023)*, pp. 84–85 (Jul. 18, 2019), https://www.sbb.gov.tr/wp-content/uploads/2022/07/Eleventh Development Plan 2019-2023.pdf

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Presidential Annual Programs, 6300 and in line with the Digital Türkiye vision and the National Technology Initiative. 6301 The Strategy is based on six strategic priorities:

- 1. Training AI Experts and Increasing Employment in the Domain
- 2. Supporting Research, Entrepreneurship and Innovation
- 3. Facilitating Access to Quality Data and Technical Infrastructure
- 4. Regulating to Accelerate Socioeconomic Adaptation
- 5. Strengthening International Cooperation
- 6. Accelerating Structural and Labor Transformation.

The National AI Strategy dedicates a section to AI values and principles and cites frameworks published by international organizations including OECD, G20, EU, and UNESCO. The Strategy explicitly adopts these values:

- Respect for Human Rights, Democracy, and Rule of Law such that "Human dignity, human rights and fundamental freedoms must be essential throughout the lifecycle of AI systems. [...] No human should be harmed physically, economically, socially, politically or psychologically at any stage in the lifecycle of AI systems."6302
- Flourishing the Environment and Biological Ecosystem
- Ensuring Diversity and Inclusiveness such that "Respect, protection and promotion for diversity and inclusiveness must be ensured throughout the lifecycle of AI systems, in a manner consistent with demographic, cultural, social diversity and inclusiveness, as well as international human rights law, standards and principles. [...] The production, development implementation of AI technologies should not result in discrimination in any way, and datasets should be audited in this regard."6303
- Living in Peaceful, Just and Interconnected Societies

The "trustworthy and responsible AI" principles in the Strategy are Proportionality, Safety and Security, Fairness, Privacy, Transparency and Explainability, Responsibility and Accountability, Data Sovereignty, and Multi-Stakeholder Governance. 6304

https://cbddo.gov.tr/SharedFolderServer/Genel/File/TRNationalAIStrategy2021-2025.pdf 6303 Ibid

⁶³⁰⁰ Presidency of the Republic of Türkiye, Presidency of Strategy and Budget, Presidential Annual Program (2020), p. 218 [Turkish] (Nov. 3, 2019), https://www.sbb.gov.tr/wpcontent/uploads/2019/11/2020 Yili Cumhurbaskanligi Yillik Programi.pdf

⁶³⁰¹ Digital Transformation Office of the Presidency of the Republic of Türkiye, National Artificial Intelligence Strategy 2021–2025 (Aug. 20, 2021), https://cbddo.gov.tr/en/nais 6302 Digital Transformation Office of the Presidency of the Republic of Türkiye, National Artificial Intelligence Strategy 2021–2025, p. 59 (Aug. 2021),

⁶³⁰⁴ Ibid, pp. 60-61

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While preparing the national AI strategy, Ali Taha Koç, the President of the DTO, acknowledged the importance of transparency, security, and accountability for AI. He stated that "To eliminate the concerns that may arise, this system must first be human-centered, it must be fair, it must increase social welfare, it must be transparent, reliable, accountable, value-based, and dependent on national and ethical values." 6305

The Digital Transformation Office has committed to pursuing projects "with the purpose of ensuring the privacy and security of data," 6306 making Black Box algorithms explainable, and preventing misleading artificial intelligence algorithms. Projects include methods such as Federated Learning and Differential Privacy technologies, though the objectives have not yet been detailed.

The National Artificial Intelligence Strategy Steering Committee, which is responsible 6307 for the appointment of the ministries that will prepare and coordinate the implementation of the detailed action plans regarding the measures in the Strategy, the preparation of said action plans in harmony with each other, and the coordination between institutions, held its first meeting under the presidency of Fuat Oktay, the Vice-President of the Republic of Türkiye in January 2022. 6308 The Steering Committee is in charge of the implementation of the National Strategy and its coordination with the relevant Ministries. In a statement before second Steering Committee, Mr Oktay stated that a draft of the Action Plan for the National AI Strategy consisted of 120 actions and 451 execution steps had been prepared. 6309 Among these actions, Mr Oktay emphasized the preparation of Data Governance Guidance, along with the establishment of an AI Ecosystem Advisory Committee and the Türkiye AI Portal. 6310

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⁶³⁰⁵ Şule Guner, *Experts to Map Out Turkey's Strategy on AI Centered on Ethics and Data Protection*, Daily Sabah (Mar. 4, 2020), https://www.dailysabah.com/life/experts-to-map-out-turkeys-strategy-on-ai-centered-on-ethics-and-data-protection/news

⁶³⁰⁶ Digital Transformation Office of the Presidency of the Republic of Türkiye, *Artificial Intelligence*, https://cbddo.gov.tr/en/artificial-intelligence

⁶³⁰⁷ Digital Transformation Office of the Presidency of the Republic of Türkiye and Ministry of Industry and Technology, *National Artificial Intelligence Strategy 2021–2025*, p. 84 (Aug. 20, 2021), https://cbddo.gov.tr/SharedFolderServer/Genel/File/TRNationalAIStrategy2021-2025.pdf ⁶³⁰⁸ Kemal Montenegro, *National Artificial Intelligence Strategy Steering Committee Held Its First Meeting*, Anadolu Ajans (Jan. 13, 2022), https://www.aa.com.tr/tr/bilim-teknoloji/ulusal-yapay-zeka-stratejisi-yonlendirme-kurulu-ilk-toplantisini-yapti/2472776

Fuat Oktay, Vice-President of the Republic of Türkiye, *Mr Oktay's Speech at the National Artificial Intelligence Strategy Steering Committee Meeting* [Turkish] (Apr. 21, 2022), https://www.youtube.com/watch?v=gmYmteHZLWA

⁶³¹⁰ Özcan Yildirim, Vice President Oktay: The Big Data We Create on Artificial Intelligence Will Be Processed and Value Will Be Generated, Anadolu Ajans (Apr. 21, 2022), https://www.aa.com.tr/tr/gundem/cumhurbaskani-yardimcisi-oktay-yapay-zeka-konusunda-olusturdugumuz-buyuk-verinin-islenerek-deger-uretilmesi-saglanacak/2569443

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Building on the National Artificial Intelligence Strategy for 2021–2025, the DTO and the Ministry of Industry and Technology released a new National AI Action Plan for 2024–2025. This plan articulates 19 strategic initiatives, including comprehensive AI legislation, targeted talent attraction, educational enhancement, infrastructure investment, and the introduction of a Trusted AI Seal certification system. It identifies six strategic priorities: (1) training AI experts and increasing recruitment in relevant fields; (2) supporting research, entrepreneurship, and innovation; (3) expanding access to quality data and technical infrastructure; (4) enacting regulations to foster socioeconomic integration; (5) strengthening international cooperation; and (6) facilitating structural and labor market transitions.⁶³¹¹

Public Participation

Türkiye has consulted multistakeholder groups to consult on digital policies. Türkiye established a Working Group in January 2020 to develop the AI Technology Roadmap. The working Group comprised representatives from academia, the private sector, and major umbrella NGOs. The Working Group operates under the Science, Technology and Innovation Policy Council of the Turkish Presidency, via the technical contribution of the Scientific and Technological Research Council of Türkiye.

The purpose of the Working Group is to help ensure effective intergovernmental coordination and to identify frontier scientific themes and priority sectoral applications of AI technologies. The National AI Strategy explicitly addressed the AI Technology Roadmap⁶³¹³ and views from this multistakeholder group to establish priorities and development of the National AI Strategy. Workshops and evaluations by domain experts provided additional opportunities for stakeholder input. 6315

Public participation continues after the entry into force of the National Strategy. The Steering Committee for the National AI Strategy will be supported

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⁶³¹¹ Digital Transformation Office of the Presidency of the Republic of Türkiye, *National AI Strategy 2021–2025* (Oct. 20, 2023), https://cbddo.gov.tr/en/nais

⁶³¹² OECD G20 Digital Economy Task Force, *Examples of AI National Policies* (2020), https://www.mcit.gov.sa/sites/default/files/examples-of-ai-national-policies.pdf

⁶³¹³ OECD AI Policy Observatory, *AI in Turkey, Priority Areas and Upcoming Technology Roadmap* (Dec. 2021), https://oecd.ai/en/dashboards/countries/T%C3%BCrkiye

⁶³¹⁴ Digital Transformation Office of the Presidency of the Republic of Türkiye and Ministry of Industry and Technology, *National Artificial Intelligence Strategy 2021–2025*, pp. 64, 67 (Aug. 20, 2021), https://cbddo.gov.tr/SharedFolderServer/Genel/File/TRNationalAIStrategy2021-2025.pdf

⁶³¹⁵ Digital Transformation Office of the Presidency of the Republic of Türkiye, *National Artificial Intelligence Strategy 2021–2025*, p. 7 (Aug. 20, 2021), https://cbddo.gov.tr/en/nais

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in its work by an AI Ecosystem Advisory Group and various working groups representing all relevant stakeholders.

The National Strategy is publicly available on the official website of the Digital Transformation Office of the Presidency of Türkiye both in English and in Turkish.6316

In 2019, Türkiye's Ministry of Industry and Technology published the 2023 Industry and Technology Strategy, taking a holistic approach to the fields of industry and technology, and aiming to ensure wide participation and to mobilize society. 6317 The Industry and Technology Strategy 2023 includes sectoral and R&D competency mapping on AI technology and AI and machine learning, with a view to strengthening Türkiye's capacity of scientific research and product development.

This vision of AI and industrialization includes applying emerging technology in military and defense. According to an Atlantic Council report, "Turkey's military-industrial sector has focused heavily on innovation and increasing research and development, driven by a desire for self-sufficiency and operational sovereignty. The country's National Artificial Intelligence Strategy 2021–2025 outlines these ambitions."6318 The report mentions loitering munitions, drones, and robotics.

Data Protection

The Turkish Constitution establishes rights for privacy and for data protection with limits. 6319 The Turkish Law on the Protection of Personal Data was published in April 2016 protects those rights. 6320 Türkiye ratified Convention 108 of the Council of Europe and its data protection law originates from European Union Directive 95/46/EC.

The data protection legislation ensures:

data is processed lawfully and fairly; accurate and where necessary, kept up to date; processed for specified, explicit and legitimate purposes; relevant, limited and proportionate to the purposes for which they are processed; and

⁶³¹⁶ Ibid

⁶³¹⁷ Ministry of Industry and Technology, 2023 Sanayi ve Teknoloji Stratejisi [Turkish] (Sept. 18, 2019), https://www.sanayi.gov.tr/assets/pdf/SanayiStratejiBelgesi2023.pdf

⁶³¹⁸ Can Kasapoğlu and Sine Özkaraşahin, Atlantic Council, Turkey's Emerging and Disruptive Technologies Capacity and NATO: Defense Policy, Prospects, and Limitations (Jul. 8, 2024), https://www.atlanticcouncil.org/in-depth-research-reports/issue-brief/turkeys-emerging-anddisruptive-technologies-capacity-and-nato-defense-policy-prospects-and-limitations/

⁶³¹⁹ Republic of Turkey, *Constitution*, Article 20, Grand National Assembly of Turkey, Department of Laws and Resolutions, Official Translation (May 2019),

https://www.anayasa.gov.tr/media/7258/anayasa eng.pdf 6320 Turkish Data Protection Authority, About Us: History (2022),

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stored for the length of time determined by the relevant legislation or the period deemed necessary for the purpose of the processing. 6321

- explicit consent is required by an individual for data collection and data transfer. Further, data transfer outside of Türkiye is strictly regulated. 6322
- individuals have the right to access and complain regarding data collection. 6323

The Law on the Protection of Personal Data adopts a broad definition of the processing of personal data that encompasses both "automated means and non-automated means." ⁶³²⁴

The Law on the Protection of Personal Data established the Turkish Data Protection Authority (DPA), an independent regulatory authority. The DPA is composed of the Personal Data Protection Board and the Presidency. The Personal Data Protection Board implements and interprets the data protection law in line with the GDPR. Currently, efforts are also underway to adopt a new data protection law, based on the GDPR. 6325

The mission of the DPA is to provide personal data protection and to develop public awareness in line with the fundamental rights related to privacy and freedom stated in the Constitution.

Concerning personal data processing in relation to AI, the DPA issued its Recommendations on the Protection of Personal Data in the Field of Artificial Intelligence in September 2021. 6326 The DPA specifies that: "In the process of developing and adopting AI applications, the fundamental rights and freedoms of data subjects should be respected and there should be no violation of any right. [...] An approach, that focuses on avoiding and mitigating the potential risks and considers human rights, functioning of democracy, social and ethical values, should be adopted in processing of personal data. [...] Data subjects should be able to have control over the processing activities, considering the effect of processing activities on individuals and society." 6327

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⁶³²¹ Turkish Data Protection Authority, *Personal Data Protection Law*, *Law No. 6698*, Article 4(2) (Mar. 24, 2016), https://www.kvkk.gov.tr/Icerik/6649/Personal-Data-Protection-Law

⁶³²² Ibid, Article 5

⁶³²³ Ibid, Chapter 4

⁶³²⁴ Ibid, Article 2(2)

⁶³²⁵ Turkish Ministry of Justice, *Action Plan on Human Rights: Free Individual, Strong Society; More Democratic TURKEY: "6.7 The Law on Protection of Personal Data Will be Harmonized with the European Union Standards"* (Mar. 2021),

https://inhak.adalet.gov.tr/Resimler/SayfaDokuman/1262021081047Action_Plan_On_Human_Rights.pdf

⁶³²⁶ Turkish Data Protection Board, *Recommendations on the Protection of Personal Data in the Field of Artificial Intelligence* (Sept. 15, 2021),

 $[\]underline{\text{https://www.kvkk.gov.tr/SharedFolderServer/CMSFiles/58678459-eba4-451a-a2f3-c1baf17b90f5.pdf}$

c1baf1/b90f3.p
6327 Ibid, p. 17

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The 2021 Recommendations continued: "The role of human intervention in decision-making processes should be ensured."6328 The DPA makes clear that the principles enshrined in the Protection of Personal Data Law and applicable in general to the processing of personal data are applicable when AI is involved. These include lawfulness, fairness, proportionality, accountability, transparency.

Building on the 2021 Recommendations, the DPA issued a specific information note for chatbots in November 2024. The note emphasized the need for transparency about data usage, secure data transmission, risk assessments, and adherence to international standards to mitigate privacy risks for users, especially children.6329

The DPA is a member of the Global Privacy Assembly (GPA) since 2017. The DPA hosted the 2022 GPA in Türkiye. However, the DPA did not endorse the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence, ⁶³³⁰ the 2020 GPA Resolution on AI Accountability, ⁶³³¹ the 2022 GPA Resolution on Facial Recognition Technology, 6332 or the 2023 GPA Resolution on Generative AI. 6333

The Human Rights and Equality Institution of Türkiye, affiliated with the Ministry of Justice, could also provide independent oversight of AI practices. Established by Law No. 6701 in 2016, ⁶³³⁴ the Human Rights Institution is a public body endowed with an independent legal status and administrative and financial autonomy. The mission of the Human Rights Institution is to ensure the protection and promotion of human rights, to guarantee individuals' right to equal treatment, and to prevent discrimination in the exercise of rights and freedoms.

⁶³²⁸ Ibid, p. 20

⁶³²⁹ Data Protection Authority, Information Note on Chatbots [Turkish] (Nov. 8, 2024), https://kvkk.gov.tr/SharedFolderServer/CMSFiles/967c7518-2a4c-4318-9c97-01dcac2591f3.pdf 6330 Global Privacy Assembly, Declaration on Ethics and Data Protection in Artificial Intelligence (Oct. 23, 2018), https://globalprivacyassembly.org/wpcontent/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

⁶³³¹ Global Privacy Assembly, Resolution on Accountability in the Development and Use of Artificial Intelligence (Oct. 2020), https://globalprivacyassembly.org/wpcontent/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN-1.pdf

⁶³³² Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate *Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principlesand-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁶³³³ Global Privacy Assembly, Resolution on Generative Artificial Intelligence Systems (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁶³³⁴ Human Rights and Equality Institution of Türkiye, About Us, Promotion Brochure, https://www.tihek.gov.tr/public/editor/uploads/1551881762.pdf

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The Ombudsman Institution of the Republic of Türkiye could also provide independent oversight. The Ombudsman was established in 2012 as a constitutional public entity affiliated with the Grand National Assembly of Türkiye. 6335 The Ombudsman has its own private budget, headquarters in Ankara, and an office in Istanbul. According to the Ombudsman Law, the Ombudsman shall be responsible for examining, investigating, and recommendations to the Administration regarding all sorts of acts and actions as well as attitudes and behaviors of the Administration upon complaint. The Ombudsman Institution aims to increase the service quality of the administration, contribute to internalizing principles of good administration, foster transparent and accountable administration, improve human rights standards, and strengthen a culture of seeking legal remedies among citizens. 6336

Algorithmic Transparency

Transparency and explainability are among the AI values and principles enshrined in the National AI Strategy. The Strategy provides that: "Person(s) and organizations involved in the lifecycle of AI systems should ensure that the AI system is transparent and explainable in accordance with its context. People have the right to be informed of a decision that was made based on AI algorithms and to request explanatory information from public institutions and private sector organizations in such cases. It should be possible to explain to the end user and other stakeholders in non-technical terms and in plain language, why, how, where and for what purpose the decisions made based on automatic and algorithmic decisions, the data leading to said decisions and the information obtained from that data are used."

Türkiye has not signed yet the protocol modernizing Council of Europe Convention 108, which enshrines the right to algorithmic transparency.⁶³³⁸ The Law on the Protection of Personal Data provides for the obligation of data controller to inform the data subjects about "the method and legal basis of collection of personal data."⁶³³⁹ Data subjects are also entitled "to object to the

https://english.ombudsman.gov.tr/about-the-institution

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Regard to the Processing of Personal Data, Article 9 c) (Jun. 2018),

 $\underline{https://rm.coe.int/convention-108-convention-for-the-protection-of-individuals-with-\underline{regar/16808b36f1}}$

⁶³³⁵ Grand National Assembly of Türkiye, Ombudsman Institution (2024),

⁶³³⁶ Ibid

⁶³³⁷ Ministry of Industry and Technology, *National Artificial Intelligence Strategy 2021–2025*, p. 61 (Aug. 20, 2021),

https://cbddo.gov.tr/SharedFolderServer/Genel/File/TRNationalAIStrategy2021-2025.pdf 6338 Council of Europe, Convention 108+: Convention for the Protection of Individuals with

⁶³³⁹ Personal Data Protection Authority, *Law No. 6698, Personal Data Protection Law*, Article 10 (c) (Mar. 24, 2016), https://www.kvkk.gov.tr/Icerik/6649/Personal-Data-Protection-Law

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occurrence of a result against the person himself/herself by analyzing the data processed solely through automated systems."6340 However, the principles of transparency, algorithmic transparency, and explainability are not enshrined explicitly in the Law on the Protection of Personal Data.

As for the DPA's Recommendations on the Protection of Personal Data in the Field of Artificial Intelligence, they provide that "the Artificial intelligence and data collection works that rely on processing of personal data should be based on the principles of [...] transparency and accountability." 6341

Amendment to the Law No. 5651 on Regulating Broadcasting in the Internet and Fighting Against Crimes Committed through Internet Broadcasting (Internet Law), which entered into force in October 2022, imposed a new obligation on the foreign and local social network providers that receive over one million daily visits from Türkiye. 6342 Additional Article 4/5 states that the said social network providers shall submit biannual reports containing information on their algorithms, advertising policies, and transparency policies regarding title tags and featured or reduced-access content to the Information Technologies and Communication Authority of Türkiye.

The following statements are included in the same article: "social network provider shall include on its website in a clear, understandable and easily accessible manner which 'parameters' it uses when providing suggestions to users. Social network provider shall take the necessary measures to update users' preferences regarding the content it recommends and to offer the option to limit the use of their personal data, and shall include these measures in its report."6343

With the 18th paragraph added to Additional Article 4 on the date above, the Information Technologies and Communication Authority of Türkiye is authorized to request explanations from the social network provider regarding the provider's compliance with this Law, including organizational structure, information systems, algorithms, data processing mechanisms, and commercial attitudes.6344

⁶³⁴⁰ Ibid, Article 11(g)

⁶³⁴¹ Turkish Data Protection Board, Recommendations on the Protection of Personal Data in the Field of Artificial Intelligence, p. 16,

https://www.kvkk.gov.tr/SharedFolderServer/CMSFiles/58678459-eba4-451a-a2f3c1baf17b90f5.pdf

⁶³⁴² Legislation Information System, Law No. 5651 on the Regulating Broadcasting in the Internet and Fighting Against Crimes Committed through Internet Broadcasting, Additional Article 4/5 (Oct. 13, 2022),

https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=5651&MevzuatTur=1&MevzuatTertip=5 6343 Mehmet Bedii Kaya, The Turkish Internet Law: Full Translation (Jan. 5, 2021), https://mbkaya.com/turkish-internet-law/

⁶³⁴⁴ Legislation Information System, Law No. 5651 on the Regulating Broadcasting in the Internet and Fighting Against Crimes Committed through Internet Broadcasting, Additional

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The DTO Big Data and Artificial Intelligence Department has carried out the COVID-19 Detection with Artificial Intelligence project, 6345 in which the predictions made by the developed AI models using the X-Ray and Computed Tomography images and the reasoning for these predictions can be presented to the relevant doctors. 6346

Open Data Project

Türkiye's Open Data Project, which was launched under the coordination of the Digital Transformation Office of the Presidency of the Republic of Türkiye, aims to establish an open data portal to make public data available "as open data under privacy principles in order to increase transparency, accountability and participation and to enable production of new value-added services." As a platform for the datasets needed for developing AI technologies and applications, the initiative will contribute to fostering a digital ecosystem for AI.

The Project includes managing the regulatory and legislative area of open data, which are necessary steps for participation in the Open Government Partnership.⁶³⁴⁸ The initiative also aims to provide effective coordination in preparing the labor market for digital transformation.⁶³⁴⁹

Some municipalities, including Istanbul and İzmir, the 1st and the 3rd biggest cities in Türkiye respectively, have already launched their own open data portals. Furthermore, Ankara Metropolitan Municipality implemented the Transparent Ankara project, the first and only map-based open data platform

Article 4/18 (Oct. 13, 2022),

https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=5651&MevzuatTur=1&MevzuatTertip=5
6345 OECD AI Policy Observatory, *AI in Türkiye, COVID-19 Detection with AI* (Nov. 8, 2022), https://oecd.ai/en/dashboards/countries/Turkey

⁶³⁴⁶ Digital Transformation Office of the Presidency of the Republic of Türkiye, *National Artificial Intelligence Strategy 2021–2025*, p.62 (Aug. 20, 2021), https://cbddo.gov.tr/en/nais6347 Digital Transformation Office of the Presidency of the Republic of Türkiye, *Open Data: Generating Value from Data for Our Country*, https://cbddo.gov.tr/en/opendata/about-the-project/

⁶³⁴⁸ STIP COMPASS, *Open Data Project and Open Government Partnership* (Aug. 2, 2021), https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2021%2Fdata%2FpolicyInitiatives%2F26589

⁶³⁴⁹ Digital Transformation Office of the Presidency of the Republic of Türkiye, *Open Data: Generating Value from Data for Our Country*, https://cbddo.gov.tr/en/opendata/about-the-project/

⁶³⁵⁰ For Istanbul, see Istanbul Metropolitan Municipality, *Open Data Portal*, https://data.ibb.gov.tr/en/dataset; İzmir Department of Information Technology [İzmir Büyükşehir Belediyesi], *Open Data Portal [Açık Veri Portalı]*, https://acikveri.bizizmir.com/
6351 Ankara Metropolitan Municipality, *The First and Only Map-Based Open Data Sharing in the World: "Transparent Ankara" Has Started* (Jul. 18, 2022),

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in the world.⁶³⁵² Turkish citizens from all over the world can easily access data such as transportation boarding data, social benefits, green areas, level of dams, population and demographic information, weather conditions, WiFi hotspots, bicycle paths, and trekking routes in Ankara from the open data on this platform 24/7.⁶³⁵³

Freedom of Expression

In October 2020, a law entered into force requiring all domestic and foreign social network providers that serve more than one million users in Türkiye to have local representation in Türkiye. The law gives authority to the Information and Communication Technologies Authority to order social network providers to remove or block content related to violation of personality and privacy rights, listed crimes, threats to public order or security, or other pressing and immediate dangers within 48 hours.⁶³⁵⁴

The Turkish Criminal Code was amended in October 2022 with Article 217/A on Openly Disseminating Misleading Information. The criminal code now provides that "publicly disseminating false information about the internal and external security, public order and general health of the country, in a way that is suitable for disturbing the public peace, solely for the purpose of creating anxiety, fear or panic among the people" constitutes a crime to be punished by imprisonment.⁶³⁵⁵

EdTech and Children Tracking

In May 2022, Human Rights Watch published a global investigative report on the education technology (EdTech) endorsed by 49 governments, including Türkyie, for children's education during the pandemic. Based on technical and policy analysis of 163 EdTech products, including some built and offered by the Turkish Government, Human Rights Watch found that governments' endorsements of the majority of these online learning platforms put at risk or

https://www.ankara.bel.tr/haberler/dunyada-ilk-ve-tek-harita-tabanli-acik-veri-paylasimi-seffaf-ankara-basladi-15749; to see the map: https://seffaf.ankara.bel.tr/

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⁶³⁵² Ankara Metropolitan Municipality, *The First and Only Map-Based Open Data Sharing in the World: "Transparent Ankara" Has Started* (Jul. 18, 2022),

 $[\]frac{https://www.ankara.bel.tr/haberler/dunyada-ilk-ve-tek-harita-tabanli-acik-veri-paylasimi-seffaf-ankara-basladi-15749}{}$

⁶³⁵³ Ibid

⁶³⁵⁴ Council of Europe, European Commission for Democracy through Law (Venice Commission), *Turkey, Opinion: Law No:5651 on the Regulation of Publications on the Internet and Combatting Crimes Committed by Means of Such Publications* (Jun. 15, 2016), https://www.venice.coe.int/webforms/documents/default.aspx?pdffile=CDL-AD(2016)011-e
⁶³⁵⁵ Legislation Information System, *Turkish Criminal Code, Law No.5237*, Article 217/A (Oct. 12, 2004),

https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=5237&MevzuatTur=1&MevzuatTertip=5

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directly violated children's rights. Some EdTech products targeted children with behavioral advertising. Many more EdTech products sent children's data to AdTech companies that specialize in behavioral advertising or whose algorithms determine what children see online.⁶³⁵⁶

Against this background, the 2024 DPA's information note on chatbots emphasizes the importance of safeguarding children's data in digital environments, aligning with international standards such as the United Nations Convention on the Rights of the Child (UNCRC) and GDPR. The DPA stresses the need for parental consent and the principle of the best interests of the child in data processing. These actions align with concerns raised by Human Rights Watch regarding the risks posed by EdTech platforms. While the DPA's guidance supports stronger protections, further development may be needed to address the broader risks identified in digital education tools.

Digital ID

Türkiye is currently working on a project that citizens can log into e-Government⁶³⁵⁷ with digital IDs created in the blockchain network via the e-wallet mobile application.⁶³⁵⁸ As Dr. Koç stated, with the e-Wallet Application to be offered by the DTO, citizens will be able to securely store their digital identities and log into the e-Government Gateway with their digital identities.⁶³⁵⁹

Digital Government

DTO initiated the preparation of the Digital Government Strategy to set out Türkiye's Roadmap during the transition from e-Government to Digital Government in 2022 with the participation of all stakeholders. The OECD Digital Government Review for Türkiye is being conducted under the coordination of the DTO and will serve as a foundation for the Digital Government Strategy.

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⁶³⁵⁶ Human Rights Watch, *How Dare They Peep into My Private Life* (May 25, 2022), https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rights-violations-governments

⁶³⁵⁷ Digital Transformation Office of the Presidency of the Republic of Türkiye, *e-Government Gateway* (Feb. 21, 2025), https://www.turkiye.gov.tr/non-citizens

⁶³⁵⁸ Turkish Radio and Television Corporation, "Digital Identity" Application Will Be Implemented in e-Government (Jan. 2, 2023) https://www.trthaber.com/haber/gundem/e-devlette-dijital-kimlik-uygulamasi-hayata-gecirilecek-735167.html

⁶³⁵⁹ Digital Transformation Office of the Presidency of the Republic of Türkiye, News, *Efforts Begun for Access to e-Government Gateway Using Blockchain Technology* (Jan. 2, 2023) https://cbddo.gov.tr/haberler/6579/e-devlet-kapisi-na-blokzincir-teknolojisi-kullanilarak-giris-yapilabilmesi-icin-calismalar-basladi

Government Strategy (May 15, 2023), https://cbddo.gov.tr/en/digital-government-strategy/

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DTO first submitted a survey to public institutions and organizations to analyze the status of Türkiye in terms of the OECD's recent Digital Government Policy Framework and conducted peer review studies with representatives from public institutions and peer countries. The DTO committed to producing policy recommendations in line with the needs and opportunities identified by the OECD and to prepare and publish the Digital Government Review Report for Türkiye. The DTO explicitly stated that "the findings and recommendations of the OECD Digital Government Review will also serve as a foundation for the Digital Government Strategy," which was expected to be released in 2023. 6362

The first focus group meeting was held in January 2023 with 137 representatives from the government, universities, NGOs, and private sector to carry out solution development studies on six main pillars, especially data management of the private sector in the public sector and digital inclusion and participation. 6363

Environmental Impact of AI

Türkiye's National AI Strategy identifies "Flourishing the Environment and Biological Ecosystem" as an AI value. 6364 The Strategy advises that "All actors involved in the lifecycle of AI systems should adhere to relevant international and national legislation, standards and practices designed for the protection, restoration and sustainable development of the environment and ecosystem." However, Türkiye has published no information on specific requirements or regulations to limit the negative environmental impact of AI development, deployment, or use.

Lethal Autonomous Weapons

Türkiye is one of the most important lethal autonomous weapon systems (LAWS) developers and exporters in the world. "Though Turkey's defense sector remains small compared with giants like China, it has outsized influence because of the impact of its drones in recent conflicts. The country's Bayraktar TB-2

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⁶³⁶² Ibid

⁶³⁶³ Digital Transformation Office of the Presidency of the Republic of Türkiye, *Focus Group Meetings on Digital Government Strategy Held in Ankara* (Jan. 9, 2023),

https://cbddo.gov.tr/en/news/6672/dijital-devlet-stratejisi-odak-grup-toplantilari-gerceklestirildi 6364 Digital Transformation Office of the Presidency of the Republic of Türkiye, *National*

Artificial Intelligence Strategy 2021–2025, p. 59 (Aug. 2021),

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drones have been used in at least four different conflicts—Ukraine, Syria, Libya⁶³⁶⁵ and in Azerbaijan's conflict with Armenia."

Türkiye has participated in every Convention on Certain Conventional Weapons (CCW) meeting on lethal autonomous weapons systems between 2014 and 2023. At the 2022 meeting of the CCW Meeting High Contracting Parties, Türkiye stated that "We believe that the development and use of autonomous weapons systems which does not have meaningful human control are undesirable and risk compliance with our obligations steaming from the International Humanitarian Law. Humans (commanders and operators) have to be involved in the decision loop and bear the ultimate responsibility when dealing with the decision of life and death in order to ensure compliance with International Law, in particular International Humanitarian Law." Türkiye also repeated its commitment to fully implement the CCW and its annexed Protocols.

However, Türkiye abstained from voting on Resolution 78/241 on lethal autonomous weapons, adopted by the UN General Assembly in December 2023. This resolution aimed to address the development, use, and potential consequences of lethal autonomous weapons systems (LAWS), calling for an international regulatory framework to prevent the weaponization of autonomous systems that could undermine human accountability in warfare. 6368

Türkiye endorsed the Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023, 6369 following the first global Summit on Responsible Artificial Intelligence in the Military Realm in the Hague. At the

Panel of Experts on Libya Established Pursuant to Resolution 1973 of 2011, *Letter to President of the Security Council, Final Report*, UN Digital Library (Mar. 8, 2021), https://digitallibrary.un.org/record/3905159?ln=en

https://reachingcriticalwill.org/images/documents/Disarmament-fora/ccw/2022/hcp-meeting/statements/16Nov Turkiye.pdf

⁶³⁶⁵ For the use of Kargu-2 drones on human targets in 2020 in Libya, see also British Embassy Ankara, *Open Data in Turkey* (Mar. 2020), http://www.novusens.com/s/2462/i/UK-Turkey Open Data Writeup ENG.pdf;

⁶³⁶⁶ J. Malsin, *Drones, Unmanned Boats and Killer Robots Have Made Turkey an Arms-Industry Powerhouse*, The Wall Street Journal (Jul. 21, 2022), https://www.wsj.com/articles/drones-unmanned-boats-and-killer-robots-have-made-turkey-an-arms-industry-powerhouse-11658404887

⁶³⁶⁷ Türkiye, 2022 Meeting of High Contracting Parties to the CCW, *Statement by Türkiye*, Reaching Critical Will (Nov. 16, 2022),

⁶³⁶⁸ UN General Assembly, *Resolution 78/241 on Lethal Autonomous Weapons Systems* (Dec. 22 2023), https://documents.un.org/doc/undoc/gen/n23/431/11/pdf/n2343111.pdf; United Nations voting data are available at https://digitallibrary.un.org/record/4060887

⁶³⁶⁹ US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy*, Endorsing States (Feb. 12, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

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Summit, attendees issued joint call to action on the responsible development, deployment, and use of artificial intelligence in the military domain.⁶³⁷⁰

Türkiye also endorsed the Blueprint for Action, the outcome document from the second REAIM summit in 2024, hosted by the Republic of Korea. 6371 The Blueprint for Action is the first step toward operationalizing the commitments from the first REAIM Summit.

Human Rights

According to Freedom House, Türkiye is "Not Free." Türkiye receives low scores for political rights and civil liberties (33/100) in 2024. This assessment reflects ongoing restrictions on freedoms of expression, assembly, and political participation, alongside concerns over judicial independence and human rights practices.

According to the 2022 Freedom House report, "President Recep Tayyip Erdoğan's Justice and Development Party (AKP) has ruled Turkey since 2002. After initially passing some liberalizing reforms, the AKP government showed growing contempt for political rights and civil liberties and has pursued a wideranging crackdown on critics and opponents since 2016. Constitutional changes in 2017 concentrated power in the hands of the president, removing key checks and balances. While Erdoğan continues to dominate Turkish politics, a deepening economic crisis and opportunities to further consolidate political power have given the government new incentives to suppress dissent and limit public discourse." 6373

Regarding transparency, Freedom House reports that while Turkish law official grants citizens access to information, "in practice the government lacks transparency and arbitrarily withholds information on the activities of state officials and institutions."

AI Safety Summit

Türkiye participated in the first AI Safety Summit and endorsed the Bletchley Declaration in November 2023. 6374 Türkiye thus committed to participate

 $\underline{https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action}$

https://www.reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163&shareBbsMngNo=10264&shareMenuId=11613&shareTabMenuId=

https://freedomhouse.org/country/turkey/freedom-net/2024

https://freedomhouse.org/country/turkey/freedom-world/2022

⁶³⁷⁰ Government of the Netherlands, REAIM 2023 Call to Action (Feb. 16, 2023),

⁶³⁷¹ REAIM, Blueprint for Action (Sept. 11, 2024),

⁶³⁷² Freedom House, Freedom in the World 2024: Turkey (2024),

⁶³⁷³ Freedom House, Freedom in the World 2022: Turkey (2022),

⁶³⁷⁴ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, *Prime Minister's Office, The Bletchley Declaration by Countries Attending the AI Safety Summit*, (Nov. 2023), https://www.gov.uk/government/publications/ai-safety-

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in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully realise their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible."

OECD / G20 AI Principles

As a founding member of the OECD, NATO ally, and G20 member, Türkiye adopted the OECD AI Principles. According to the OECD, Türkiye's AI Technology Roadmap is a multistakeholder effort that supports implementation of the G20 AI Principles on inclusive growth, robustness, and accountability. 6375 The National AI Strategy explicitly acknowledges that Türkiye is a stakeholder of human-centric AI principles determined by OECD and adopts "trustworthy and responsible AI" values and principles. 6376

Türkiye is an active member of the OECD Network of Experts on Artificial Intelligence with representatives at ministerial and presidential levels⁶³⁷⁷ and contributes to the OECD Committee on Digital Economy Policy (CDEP) Working Party on Artificial Intelligence Governance (WPAIGO) meetings and policy documents at both the technical and bureau membership levels. 6378

The application of Türkiye for membership to the Global Partnership for Artificial Intelligence (GPAI) was approved⁶³⁷⁹ by consensus at the GPAI Ministerial Council Meeting in Tokyo in November 2022. With its membership in GPAI, Türkiye will be able to partake in the ongoing international cooperation on the responsible development and use of AI and benefit from the multi-stakeholder cooperation within GPAI to adopt trustworthy AI, share multi-disciplinary research, identify knowledge gaps, maximize coordination, and identify and mitigate potential challenges.

summit-2023-the-bletchley-declaration/the-bletchley-declaration-by-countries-attending-the-aisafety-summit-1-2-november-2023

https://www.mcit.gov.sa/sites/default/files/examples-of-ai-national-policies.pdf

https://cbddo.gov.tr/SharedFolderServer/Genel/File/TRNationalAIStrategy2021-2025.pdf ⁶³⁷⁷ OECD AI Policy Observatory, *OECD.AI Community* (Feb. 20, 2025),

https://oecd.ai/en/community

⁶³⁷⁵ OECD G20 Digital Economy Task Force, Examples of AI National Policies (2020),

⁶³⁷⁶ Ministry of Industry and Technology, National Artificial Intelligence Strategy 2021-2025, p. 58 (Aug. 20, 2021),

⁶³⁷⁸ OECD, Online Guide to OECD Intergovernmental Activity (Mar. 15, 2022), https://oecdgroups.oecd.org/Bodies/ShowBodyView.aspx?BodyID=7755&BodyPID=13964&Bo ok=False

⁶³⁷⁹ Global Partnership on Artificial Intelligence, Community (2024), https://gpai.ai/community/

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Türkiye's government adopted an AI Ethics Decision mandating public sector compliance with several principles for ethical behavior, emphasizing human-centered design and rights in September 2024. The Ethics Decision enables the country to make further strides in implementing OECD principles. Focused on public sector applications that could impact citizen welfare, the decision highlights human rights concerns in line with international AI guidelines. It underscores the importance of accountability, transparency, and fairness in AI usage, aligning with Türkiye's broader focus on maintaining data sovereignty and enforcing strict data protection protocols.

Council of Europe AI Treaty

Türkiye contributed as a Council of Europe Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of Law. The Framework Convention opened for signature in September 2024. 6381

The DTO served as the national coordinator and secretariat for the Council of Europe Ad Hoc Committee on Artificial Intelligence (CAHAI)⁶³⁸² and represented Türkiye⁶³⁸³ as one of the lead coordinators of the Policy Development subworking⁶³⁸⁴ group and Legal Frameworks group.⁶³⁸⁵ The DTO also served as the national coordinator and secretariat for the Committee on Artificial Intelligence (CAI) that took over after the CAHAI mandate expired. Türkiye was represented at the plenary meetings by the observers and government-appointed representatives.

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⁶³⁸⁰ Government of Türkiye, Resolution No. 2024/108 Principles of Ethical Behavior to be Followed by Public Officials in the Use of Artificial Intelligence Systems (Sept. 16 2024), https://www.icisleri.gov.tr/personel/2024108-sayili-ilke-karari-yapay-zek-sistemlerinin-kullaniminda-kamu-gorevlilerinin-uymasi-gereken-etik-davranis-ilkeleri

⁶³⁸¹ Council of Europe, *The Framework Convention on Artificial Intelligence* (Feb. 5, 2025), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

Gase Council of Europe, Ad Hoc Committee on Artificial Intelligence (CAHAI) Policy Development Group, 6th Online Meeeting: Abridged Report (Oct. 12, 2021) https://rm.coe.int/cahai-pdg-2021-pv4-meeting-report-6th-meeting/1680a45412

⁶³⁸³ Council of Europe, CAHAI - Ad hoc Committee on Artificial Intelligence, *List of Participants* (Dec. 2, 2021) https://rm.coe.int/cahai-2021-lp3-fin-nov-dec-web-2778-2444-1349-v-1/1680a4d242

G384 Council of Europe, Ad Hoc Committee on Artificial Intelligence (CAHAI) Policy Development Group, 5th Online Meeting: Abridged Report (May 27, 2021), https://rm.coe.int/cahai-pdg-2021-pv3-abridged-meeting-report-5th-meeting-2763-0718-0035-/1680a2d8a1

⁶³⁸⁵ Council of Europe, *Ad Hoc Committee on Artificial Intelligence (CAHAI) Legal Frameworks Group (CAHAI-LFG)* (Jun. 1, 2021), https://rm.coe.int/cahai-lfg-2021-pv3-en-3rd-meeting-report-2787-1916-6723-v-1/1680a2d64a

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Despite these contributions, Türkiye has not signed this first legally binding international treaty on AI. 6386

UNESCO Recommendation on AI Ethics

Türkiye has endorsed the 2021 UNESCO Recommendations on the Ethics of AI. The Turkish National AI Strategy mentions that the "country is a stakeholder of human-centric AI principles determined by [...] UNESCO, and adopts "trustworthy and responsible AI" values and principles," although it does not refer specifically to the UNESCO Recommendation.

Türkiye carried out its membership in the Executive Board of UNESCO for the period of 2017–2021. In addition, in the election of Members to the Executive Board held at the 41st General Conference of UNESCO in November 2021, Türkiye was re-elected for the 2021–2025 period. The Ministry of Foreign Affairs states that Türkiye "embraces the purpose and ideals of UNESCO," believes "in the significance of maintaining active support to all levels of the Organization," and "will continue to contribute strengthening UNESCO's activities and values as a member of the Executive Board." Following the adoption of the UNESCO Recommendation on the Ethics of Artificial Intelligence, Türkiye started to participate and contribute to meetings by the Group of Friends of the Implementation of the Recommendation on the Ethics of Artificial Intelligence. Signal Intelligence.

It is worth underlining that the Executive Board adopted a decision to include a section on the Implementation of the Recommendation on the Ethics of Artificial Intelligence at its 215th session held in October 2022.⁶³⁹¹

⁶³⁸⁷ Ministry of Industry and Technology, *National Artificial Intelligence Strategy 2021–2025*, p. 58 (Aug. 20, 2021),

https://cbddo.gov.tr/SharedFolderServer/Genel/File/TRNationalAIStrategy2021-2025.pdf
6388 Ministry of Foreign Affairs of Republic of Türkiye, *Press Release Regarding Turkey's Election as a Member to the UNESCO Executive Board* (Nov. 17, 2021),
https://www.mfa.gov.tr/no_-384_-unesco-vurutme-kurulu-uveligine-secilmemiz-hk en mfa

 $\underline{\text{https://www.mfa.gov.tr/no_-384_-unesco-yurutme-kurulu-uyeligine-secilmemiz-hk.en.mfa}}_{\text{6389}} \text{ Ibid}$

⁶³⁹⁰ UNESCO, *Decisions Adopted by the Executive Board at its 215th Session* (Nov. 18, 2022), https://unesdoc.unesco.org/ark:/48223/pf0000383611

⁶³⁹¹ United Nations Educational, Scientific and Cultural Organization (UNESCO), *Implementation of the Recommendation on the Ethics of Artificial Intelligence* (Oct. 7, 2022), https://unesdoc.unesco.org/ark:/48223/pf0000382931

⁶³⁸⁶ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Feb. 5, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

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Türkiye has taken the step to prepare for the Readiness Assessment Methodology (RAM).⁶³⁹² As of 2024, Türkiye is participating in a UNESCO project in partnership with the Patrick J. McGovern Foundation to advance the RAM and develop a robust ethical framework for AI governance. This initiative aims to translate UNESCO's AI Ethics Recommendation into Türkiye's national institutional and regulatory frameworks while fostering a national consensus on a shared vision for AI.⁶³⁹³

Evaluation

Türkiye is an emerging market for AI and a regional leader in AI. Türkiye adopted a National AI Strategy with a clear human-centered approach. The country demonstrated a focus on operationalizing the strategy with an action plan for 2024–2025. In the absence of any AI legislation and despite the lack of provisions in the Law on the Protection of Personal Data regarding algorithmic transparency, the Turkish Data Protection Authority has issued Recommendations on the Protection of Personal Data in the Field of Artificial Intelligence, including a note on the use of chatbots.

Although the DPA hasn't adopted any AI-related decisions, Türkiye's government adopted an AI Ethics Decision mandating public sector compliance with several principles of ethical behavior, emphasizing human-centered design and rights.

Uganda

In 2024, Uganda drafted a National Data Strategy, a step toward amending existing data protection laws to accommodate artificial intelligence. Uganda was also party to the African Union Continental AI Strategy. Concerns remain over Uganda's use of biometric IDs and facial recognition for mass surveillance.

National AI Strategy

Uganda is yet to issue a national AI strategy. The Uganda Communications Commission (UCC) recently announced a taskforce made up of experts from the UCC and academia to develop a comprehensive concept note addressing various

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⁶³⁹² UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

G393 UNESCO, We Are Hiring: Lead National Expert for the Preparation of AI Readiness Country Report (Aug. 14, 2024), https://www.unesco.org/en/articles/we-are-hiring-lead-national-expert-preparation-ai-readiness-country-report

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aspects of AI to "inform relevant interventions." ⁶³⁹⁴ However, no further information has been published, and local authorities continue to call for a law. ⁶³⁹⁵

According to the OECD AI observatory, the country has a national task force to advise the government on the localization of fourth industrial revolution technologies to propel economic development.⁶³⁹⁶ The Taskforce led the process of development of Uganda's National 4IR Strategy: A continental 4IR HUB that enables a smart and connected Uganda society, published in 2019.⁶³⁹⁷ The Taskforce analyzed global trends in emerging technologies with a focus on Uganda and the East African region's development goals and aspirations.⁶³⁹⁸

Under the coordination of the Office of the Prime Minister, Uganda's National Fourth Industrial Strategy (National 41R) aims to transform the country into a continental 4IR hub with a view to transform and accelerate Uganda's development into an innovative, productive and competitive society using 4IR technologies by 2040.⁶³⁹⁹ The four pillars of the strategy are: Agriculture, Industry, Service, and ICTs.

The 4IR Strategy outlines 7 objectives:

- 1. To enhance the deployment and use of 4IR technologies in Uganda's key economic sectors to drive productivity, value addition, and commercialization
- 2. To build a strong healthy, knowledgeable and productive population by leveraging emerging technologies
- 3. To generate jobs through digitally traded exported services, automated financial services, and digitally augmented logistics and trade
- 4. To leverage 41R technologies in the establishment of smart cities and the management of critical resources
- 5. To transform government performance and service delivery of improved standards of living, quality of life, and well-being
- 6. To strengthen and stimulate research and innovation in 4IR
- 7. Supporting national security in the physical and digital world

⁶³⁹⁴ Uganda Communications Commission (UCC), @*UCC_Official, X account* (Jul. 26, 2024), https://x.com/UCC_Official/status/1816740417095749673

⁶³⁹⁵ Priscilla Maloba, Monitor, *Tayebwa Renews Call for Law on Artificial Intelligence* (Nov. 14, 2024), https://www.monitor.co.ug/uganda/news/national/tayebwa-renews-call-for-law-on-artificial-intelligence-4823444

⁶³⁹⁶ OECD.AI, Expert National Task Force on Fourth Industrial Revolution (2019), https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faipo.oecd.org%2F2021-data-policyInitiatives-27387

⁶³⁹⁷ Ministry of ICT, *Uganda's National 4IR Strategy* (Oct 2020), https://ict.go.ug/wpcontent/uploads/2020/10/Executive-Summary-Ugandas-National-4IR-Strategy.pdf

⁶³⁹⁸ Government Media, Nicholas Opolot, HE *Museveni Appoints 4th Industrial Revolution Taskforce* (Apr. 9, 2019), https://www.media.gcic.go.ug/he-museveni-appoints-4th-industrial-revolution-taskforce

⁶³⁹⁹ Ibid

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Critical enablers of the 4IR strategy include: 4IR connectivity, regulatory agility, upskilled population, e-Government, and resource mobilization. The enabler of regulatory agility will require improving governance; closing gaps between regulation, legislation, and strategy; and enacting data protection legal frameworks to facilitate data sharing, meet global standards for data protection, and harmonize with emerging technologies. The implementation of the strategy requires the coordination of the 4IR initiatives through the Prime Minister's office, the facilitation of an ecosystem of centers of excellence, and the coordination of funding through the ICT Sector Working Group (SWG). In December 2022, the Task Force presented the first 4IR strategy report to the Prime Minister of Uganda. 6400

The National Vision 2040 frames the National 4IR in Uganda. The Vision identifies Science, Technology Engineering, and Innovation (STEI) as key drivers for development. Uganda's National Vision 2040 aspires to transform the country from a predominantly peasant and low income country to a competitive upper-middle-income country. The Vision 2040 is in line with the East African Vision 2050, 402 which affirms that Science Technology, and Innovations (STI), whether embodied in human skills, capital goods, or practices and organizations, is one of the key drivers of economic growth and sustainable development. Uganda's policy aims to strengthen infrastructure (energy, transport, water, oil and gas, and ICT); Science, Technology, Engineering, and Innovation (STEI); land use and management; urbanization; human resource; and peace, security and defense.

The National Development Plan (NDPIII) sets the aspirations articulated in Uganda Vision 2040.⁶⁴⁰³ Within the theme of sustainable industrialization for inclusive growth and sustainable wealth creation, the goals of the (NDPIII) 2020/21–2024/25 are: increased household incomes and improved quality of life of Ugandans. The NDPIII plan includes a Digital Transformation Program aiming to realize 18 projects to increase ICT penetration and use of ICT services for social and economic development, ICT incubation and increasing e-government services.

The focus of the Digital Transformation Program for Artificial Intelligence is on capacity-building but not on policy or regulatory framework, or strategic

https://www.foreign.go.tz/uploads/eac_vision_2050-_web.pdf

⁶⁴⁰⁰ Office of the Prime Minister, *PM Receives 4IR Strategy Report, Commits Government to Implement It* (Dec. 9, 2022), https://opm.go.ug/pm-receives-4ir-strategy-report-commits-government-to-implement-it/

⁶⁴⁰¹ National Planning Authority, Uganda Vision 2040 (Dec. 29, 2024), https://www.npa.go.ug/wp-content/uploads/2023/03/VISION-2040.pdf

⁶⁴⁰² East African Community (EAC), Vision 2050 (Feb. 2016),

⁶⁴⁰³ National Planning Authority, *National Development Plan III 2020/21–2024/25* (Jul. 2020), https://www.npa.go.ug/wp-content/uploads/2023/03/NDPIII-Finale Compressed.pdf

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intent in the field of AI. Notable in the NDPIII, however, is the commitment to a Human-Rights Based Approach (HRBA) for sustainable economic development, expressed as follows: "Ensure inclusive sustainable development [...] with particular attention to human rights principles of equality and non-discrimination, empowerment and participation and attention to vulnerable groups. [...] All sectors, ministries, departments, agencies, and local governments are expected to adopt HRBA in their respective policies, programs, legislation, and plans."6404

In line with both the Vision 2040 and NDPIII, the National Science, Technology and Innovation (STI) Policy of 2009⁶⁴⁰⁵ guides innovations in these fields. 6406 The Ugandan government established the Ministry of Science, Technology, and Innovation to coordinate STI efforts in the country, creating linkages with all actors, and providing clear policy direction and supervision of STI initiatives.

Other supportive policies for the creation of an STI ecosystem is the National Science, Technology and Innovation Plan (NSTP) 2012/2013-2017/2018 and the Science, Technology, and Innovation Sector Development Plan (SDP) 2019/2020-2024/2025.6407 The seven strategic objectives of the SDP include the enhancing policies, planning, and coordination in the sector; developing infrastructure; funding public and private funding for science, technology, and innovation; improving education and outreach in the sector; increasing transfer of technologies and adoption; strengthening R&D capacities and applications; and implementing a legal-regulatory framework to guide the safe and appropriate use of new technologies.

At the regional level, Uganda has been actively participating in several relevant policy initiatives. As a member of the African Union (AU), Uganda is committed to take specific measures to formulate and implement human-centered policies, in alignment with the goals of the AU digital transformation strategy, 6408 the AU Continental Data Policy Framework, 6409 and the AU Continental Artificial

⁶⁴⁰⁴ Ibid, p. 72

⁶⁴⁰⁵ Ministry of Finance, Planning and Economic Development, *National Science Technology* and Innovation Policy (Aug. 2009) http://www.istafrica.org/home/files/Uganda STI Policy 2009.pdf

⁶⁴⁰⁶ UN Capital Development Fund (UNCDF), NITA-U and UNCDF Announce Partnership to Develop a Data Protection Portal (Sept. 3, 2021), https://www.uncdf.org/article/7117/nita-u-anduncdf-announce-partnership-to-develop-a-data-protection-portal

⁶⁴⁰⁷ UNCTAD, Science, Technology & Innovation Policy Review of Uganda (Oct. 16, 2020), https://unctad.org/publication/science-technology-and-innovation-policy-review-uganda

⁶⁴⁰⁸ African Union, The Digital Transformation Strategy for Africa (2020–2030),

https://au.int/sites/default/files/documents/38507-doc-dts-english.pdf

⁶⁴⁰⁹ African Union, 40th Ordinary Session of the Executive Council (Feb. 2-3, 2022), https://au.int/sites/default/files/decisions/41584-EX CL Dec 1143-1167 XL E.pdf

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Intelligence Strategy.⁶⁴¹⁰Ugandan representatives from government, academia and private sectors form part of the committees and AI working groups that hold discussions around AI and ICT for social-economic development in Smart Africa and the African Union. The Smart Africa initiative is a new commitment of more than 36 African Heads of State and Government to accelerate sustainable social-economic transformation using ICTs and affordable broadband access.⁶⁴¹¹ Uganda has been actively participating in the drafting of the recently published "AI for Africa" Blueprint strategy report⁶⁴¹² by Smart Africa. Uganda has also contributed to the work of the African Union High-Level Panel on Emerging Technologies (APET),⁶⁴¹³ mandated to advise the AU on harnessing emerging technology innovations for Africa's social-economic transformation.

Public Participation

The Republic of Uganda set a Guide to Policy Development & Management for the country in 2013⁶⁴¹⁴ to address the lack of a formalized process for policy management. The government set forth a commitment to public consultations to promote democratization and empowerment. Modes of public consultation range from information consultations to one-time meetings with stakeholders to discussion papers and draft legislation. Recommendations included reasonable periods for consultation and participation in the early stages of policy formulation. The government of Uganda in collaboration with UN Global Pulse organized the Expert National Task Force on Fourth Industrial Revolution, under the leadership of the Ministry of ICT & National Guidance. The process involved 23 experts from academia, engineering, science, and policy-

⁶⁴¹⁰ African Union, Continental Artificial Intelligence Strategy (Aug. 9, 2024),
https://unctad.org/publication/science-technology-and-innovation-policy-review-uganda
6411 Smart Africa, Who We Are: Smart Africa (Jan. 31, 2014), https://smartafrica.org/who-we-are/
6412 Sedola, Pescino, and Greene, First Edition Blueprint: Artificial Intelligence for Africa (2021),
https://smartafrica.org/wp-content/uploads/2023/11/70029-eng_ai-for-africa-blueprint-min.pdf
6413 African Union Development Agency, African Union High Level Panel on Emerging
Technologies (APET) (Dec. 11, 2020), https://www.nenad.org/microsite/african-union-high-

Technologies (APET) (Dec. 11, 2020), https://www.nepad.org/microsite/african-union-high-level-panel-emerging-technologies-apet

⁶⁴¹⁴ Republic of Uganda, *Revised Guide to Policy Development Management 2013* (Sept. 2016), http://regulatoryreform.com/wp-content/uploads/2016/09/Uganda-Revised-Guide-to-Policy-Development-Mgt-2013.pdf

⁶⁴¹⁵ UN Global Pulse, *Breakfast Meeting on Governance of Data and AI for the Expert Task Force on Fourth Industrial Revolution Technologies* (Dec. 17, 2019), https://www.unglobalpulse.org/event/breakfast-meeting-on-governance-of-data-and-ai-for-the-expert-task-force-on-ffourth-industrial-revolution-technologies/

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makers.⁶⁴¹⁶ The draft strategy validated in October 2020⁶⁴¹⁷ guides the Ugandan government in harnessing emerging technologies.

In the most recent UN e-Government Survey of 2024, Uganda ranked 150th out of 193 countries in the world and in the bottom ten among African countries, in terms of the e-Government development index (EGDI).⁶⁴¹⁸ Uganda has yet to establish a systematic process to engage stakeholders in meaningful participation in policymaking.

Data Protection

The Data Protection and Privacy Act (DPPA)⁶⁴¹⁹ was enacted in 2019 and ancillary regulations known as the Data Protection and Privacy Regulations were published in 2021.⁶⁴²⁰ The DPPA took the European Union GDPR as a model and seeks to "protect the privacy of individual and personal data by regulating the collection and processing of personal information; to provide for the rights of the persons whose data is collected (data subjects) and the obligations of data collectors, data processors and data controllers; and to regulate the use or disclosure of personal information; and for related matters."

The DPPA provides also that all personal data must be handled in accordance with the principles of accountability, lawfulness, minimization, retention, quality, transparency, and security. ⁶⁴²¹ The Law establishes the Personal Data Protection Office under the National Information Technology Authority, Uganda (NITA-U) to oversee the implementation of and be responsible for the enforcement of the Act. ⁶⁴²²

The Ministry of Information and Communications Technology and National Guidance (MoICT & NG) drafted a National Data Strategy, which is

⁶⁴¹⁷ Ministry of ICT and National Guidance, *Executive Summary: Uganda's National 4IR Strategy* (Oct. 26, 2020), http://ict.go.ug/wp-content/uploads/2020/10/Executive-Summary-Ugandas-National-4IR-Strategy.pdf

⁶⁴¹⁶ OECD, Expert National Task Force on Fourth Industrial Revolution (2019), https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faipo.oecd.org%2F2021-data-policyInitiatives-27387

⁶⁴¹⁸ United Nations, *E-government Survey 2024: Accelerating Digital Transformation for Sustainable Development* (2024), https://desapublications.un.org/file/20866/download (May, 3, 2019), https://www.nita.go.ug/sites/default/files/2021-

^{12/}Data%20Protection%20and%20Privacy%20Act%20No.%209%20of%202019.pdf
6420 Personal Data Protection Office, *Data Protection and Privacy Regulations 2021* (Mar. 12, 2021), https://pdpo.go.ug/media/2022/03/Data_Protection_and_Privacy_Regulations-2021.pdf
6421 NITA Uganda, *Data Protection and Privacy Act 2019* (May, 3, 2019),

https://www.nita.go.ug/sites/default/files/2021-12/Data%20Protection%20and%20Privacy%20Act%20No.%209%20of%202019.pdf

⁶⁴²²Personal Data Protection Office, *About Us*, https://www.pdpo.go.ug/about-us

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currently in the pre-validation stage.⁶⁴²³ At recent Data Protection Day events, the Deputy President of Uganda announced the introduction of the 2023–2028 Strategic Plan and the braille version of the Data Protection and Privacy Act. In his speech, he emphasized the importance of updating existing data protection laws to adapt to developments in artificial intelligence and technology.⁶⁴²⁴

The Personal Data Protection Officer is not a member of the Global Privacy Assembly (GPA)⁶⁴²⁵ and has not endorsed the 2018 GPA Declaration on Ethics and Data Protection,⁶⁴²⁶ the 2020 GPA Resolution on Accountability in the Development and Use of AI,⁶⁴²⁷ the 2022 GPA Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology,⁶⁴²⁸ or the 2023 GPA Resolution on Generative AI.⁶⁴²⁹

The Data Protection and Privacy Regulations of May 2021 give effect to Article 27 of the Constitution on the right to privacy. 6430 Some data protection safeguards are also contained in other laws including the Electronic Transactions Act, 2011, Computer Misuse Act, 2011, Electronic Signatures Act, 2011, National Information Technology Authority, Uganda Act (NITA-U Act), and the Access to Information Act, 2005.

⁶⁴²³ Brandy Azeirwe, *Paving the Way for a Data-Driven Future through a National Data Strategy* (Jun. 19, 2024), https://ict.go.ug/2024/06/19/paving-the-way-for-a-data-driven-future-through-a-national-data-strategy/

⁶⁴²⁴ Thomas Tayebwa, X Platform, @Thomas_Tayebwa (Feb 2, 2024),

https://x.com/Thomas Tayebwa/status/1753312588237275568

⁶⁴²⁵ Global Privacy Assembly, *List of Accredited Members* (2023),

https://globalprivacyassembly.org/participation-in-the-assembly/list-of-accredited-members/
6426 Global Privacy Assembly, International Conference of Data Protection & Privacy
Commissioners, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922_ICDPPC-40th AI-Declaration ADOPTED.pdf

⁶⁴²⁷ Global Privacy Assembly (GPA), *Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence*, (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN.pdf

⁶⁴²⁸ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁶⁴²⁹ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁶⁴³⁰ Personal Data Protection Office, *Data Protection and Privacy Regulations 2021* (Mar. 12, 2021), https://pdpo.go.ug/media/2022/03/Data Protection and Privacy Regulations-2021.pdf

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Uganda is not a party to the AU Convention on Cyber Security and Personal Data Protection (Malabo Convention). The Convention addresses the development of information and communication technologies while upholding fundamental rights and freedoms.

Algorithmic Transparency

Section 27 of the Data Protection and Privacy Act addresses the rights of data subjects related to automated decision making.⁶⁴³² However, it does not provide for a right to algorithmic transparency.

Biometric Identification

Uganda's National Identification (ID) program was launched in 2014 and further expanded after the passage of the Registration of Persons Act in 2015, making purchasing a SIM card mandatory and making registration essentially a pre-requisite for getting online.⁶⁴³³ Registration for the National ID is also required for a range of other vital services, including accessing public education or healthcare services; obtaining a passport; opening a bank account; voting and public service verification, which has led to the weeding out of many "ghost" workers; citizen verification for passport issuance; and tax identification.⁶⁴³⁴

Under the National ID system citizens' biometric data is captured and validated for adults and children. Infants are are issued a National Identification Number (NIN) or an ID card upon registration of their birth. The National ID system managed by the National Identification & Registration Authority (NIRA) is moving towards the development of its digital ID ecosystem that was to be put in place by 2024, including a new biometrics registration drive.⁶⁴³⁵ The process

AFRICAN UNION CONVENTION ON CYBER SECURITY AND PERSONAL DATA P ROTECTION 0.pdf

12/Data%20Protection%20and%20Privacy%20Act%20No.%209%20of%202019.pdf

⁶⁴³¹ African Union, *African Union Convention on Cybersecurity (Malabo Convention)* (Jun. 27, 2014), https://au.int/en/treaties/african-union-convention-cyber-security-and-personal-data-protection; African Union, *List of Countries which Have Signed, Ratified/Acceded to the African Union Convention on Cyber Security and Personal Data Protection* (Mar. 25, 2022), https://au.int/sites/default/files/treaties/29560-sl-

⁶⁴³² NITA Uganda, *Data Protection and Privacy Act 2019* (May 3, 2019), https://www.nita.go.ug/sites/default/files/2021-

⁶⁴³³ Michael Karanicolas, *Serious Concerns Around Uganda's National Biometric ID Program*, Yale Law School Initiative on Intermediaries and Information, Information Society Project (Nov. 20, 2019), https://law.yale.edu/isp/initiatives/wikimedia-initiative-intermediaries-and-information/wiii-blog/serious-concerns-around-ugandas-national-biometric-id-program
⁶⁴³⁴ Ibid

⁶⁴³⁵ Ayang Macdonald, *Uganda's Digital ID Achievements, Challenges, and Prospects: Biometrics Registration Drive Planned* (Jan. 31, 2022),

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will expand the system to forms of biometrics other than fingerprints, including iris and face biometrics. However, the system has also been plagued by technical challenges since its inception, including allegations of a major data breach in June 2017. Though the government denied these reports, it admitted that citizens' biometric data had been shared with telecommunications companies as part of the process of verifying SIM cards.⁶⁴³⁶

A coalition of civil society organizations filed a lawsuit in the High Court of Kampala for digital exclusion in 2022.⁶⁴³⁷ The case Initiative for Social and Economic Rights [ISER], the Health Equity and Policy Initiative [HEAPI], & Unwanted Witness v. Attorney General and National Identification and Registration Authority (NIRA) alleges that the digital ID system, also known as Ndaga Muntu, poses an exclusionary barrier that violates women's rights to health care, and the right to social security benefits.⁶⁴³⁸ The alleged exclusion has been fatal, especially among the elderly and pregnant women who have been barred from healthcare and welfare services. Research conducted by the plaintiffs estimates that up to 33% of adults in Uganda have yet to receive the biometric ID card launched in 2015, limiting their access to a range of public services from welfare benefits and maternity care to college enrollment, formal employment, and opening bank accounts.⁶⁴³⁹

Facial Recognition

The government of Uganda has actively used AI and new technologies for purposes of mass surveillance, policing, and crime prevention. The government rushed the procurement of 24-hour CCTV cameras in crime-prone areas in Kampala and surrounding areas following a wave of murders. These crimes included high-profile Ugandan citizens, Muslim clerics, military and police officers, Cabinet Ministers, among others. The first phase of the plan included the

 $\frac{https://www.biometricupdate.com/202201/ugandas-digital-id-achievements-challenges-and-prospects}{}$

⁶⁴³⁶ Michael Karanicolas, *Serious Concerns Around Uganda's National Biometric ID Program*, Yale Law School Initiative on Intermediaries and Information, Information Society Project (Nov. 20, 2019), <a href="https://law.yale.edu/isp/initiatives/wikimedia-initiative-intermediaries-and-information/wiii-blog/serious-concerns-around-ugandas-nation-wiii-blog/serious-concerns-around-ugandas-nation-biometric-id-program

⁶⁴³⁷ Nita Bhalla, Reuters, *FEATURE: Uganda Sued over Digital ID System that Excludes Millions* (May 16, 2022), https://www.reuters.com/article/markets/commodities/feature-uganda-sued-over-digital-id-system-that-excludes-millions-idUSL3N2X32RG/

⁶⁴³⁸ Frank Hersey, *Civil Society Coalition Sues Ugandan Government, Alleging Digital ID Exclusion* (Apr. 26, 2022), https://www.biometricupdate.com/202204/civil-societycoalition-sues-ugandan-government-alleging-digital-id-exclusion

⁶⁴³⁹ Nita Bhalla, Reuters, FEATURE- Uganda Sued over Digital ID System that Excludes Millions (May 16, 2022), https://www.reuters.com/article/markets/commodities/feature-uganda-sued-over-digital-id-system-that-excludes-millions-idUSL3N2X32RG/

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installation of 1,940 cameras in 2018 in the capital city area.⁶⁴⁴⁰ The second phase cost the Ugandan public over USD 104 million, in a procurement deal hastened through Parliament under vague loan terms.⁶⁴⁴¹

The Ugandan Parliament endorsed the deployment of the technology for policing functions without legislating a corresponding legal framework fostering issues of the legality of such actions.⁶⁴⁴² Human rights concerns emerged over the fact that the system was operated on a centralized database, with the potential of negatively affecting citizens' right to privacy, and freedom of peaceful assembly.

The CCTV project was not well received due to the lack of openness, and transparency in the procurement process and in the management of the system, hindering public trust. Reports of unexplainable leaked footage from CCTV cameras⁶⁴⁴³ raised further questions on the ethical standards and requirements to manage the retrieval, sharing and elimination of public CCTV footage.⁶⁴⁴⁴ Additionally, concerns exist about how the infrastructural deficiencies (poor or no street lighting, limited connectivity, low standards of maintenance) have undermined the benefits of the use of CCTV in several instances of application of the system. Despite these reservations, the Ugandan police proceeded with the plans to integrate their CCTV camera and forensic system with other key agencies' data such as Uganda Revenue Authority (URA), NITA-U, NIRA, and the immigration office. In the second phase of this plan, started in 2020, 20 facial recognition cameras were installed and connected to 107 monitoring centers at different police stations within 2,319 mapped countryside municipalities and major towns.⁶⁴⁴⁵

Key concerns around transparency and accountability of both resources and personal data remain unanswered, in particular the use of AI facial recognition technologies to indiscriminately deal with persons of interest, including

⁶⁴⁴¹ Privacy International, *Huawei Infiltration in Uganda* (Jun. 25, 2020),

https://privacyinternational.org/case-study/3969/huawei-infiltration-uganda

G440 The Independent, *More than 1900 CCTV Cameras Installed in Kampala* (Apr. 15, 2019), https://www.independent.co.ug/more-than-1900-cctv-cameras-installed-in-kampala

⁶⁴⁴² Unwanted Witness, *Parliament Endorses Unregulated Surveillance amidst Risks to Human Rights* (Jan. 2022), https://www.unwantedwitness.org/download/Surveillance-State-Parliament-Endorses-Unregulated-Surveillance.pdf

⁶⁴⁴³ <u>Kampala</u> Dispatch, *Who Are These People Who Leak Footage from CCTV Cameras in Kampala* (Apr. 25, 2019), https://twitter.com/dispatchug/status/1121455937724788736
⁶⁴⁴⁴ Daniel Mwesigwa, *Cameras, Mobiles, Radios – Action!: Old Surveillance Tools in New Robes in Uganda*, Global Information Society Watch (2019), https://giswatch.org/node/6194
⁶⁴⁴⁵ Privacy International, *Huawei Infiltration in Uganda* (Jun. 25, 2020), https://privacyinternational.org/case-study/3969/huawei-infiltration-uganda">https://privacyinternational.org/case-study/3969/huawei-infiltration-uganda

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dissidents.⁶⁴⁴⁶ In a report regarding concerns in the use of AI in Africa, AfriPoli found the use of facial recognition systems in the 2020 Ugandan elections, to monitor, track and arrest 836 supporters of the opposition.⁶⁴⁴⁷ The participation of Huawei AI in 16 African countries, including Uganda has led to the use of mass surveillance data to local law enforcement.⁶⁴⁴⁸

Tracking

In 2020, the government adopted a measure that linked the RECS system to the efforts to combat the spread of COVID-19.⁶⁴⁴⁹ A task force that included the Uganda Revenue Administration Commissioner General and the Uganda Trade Minister, set up to discuss how the RECS could trace the movement of trucks (and their drivers) in real-time across trade routes. The plans came about after a COVID-positive truck driver was intercepted at the border upon mandatory testing, a condition to clear Customs.

The Ugandan government later announced a plan to install GPS trackers on every vehicle in the country.⁶⁴⁵⁰ The project would require the registration of all number plates for every public and private vehicle, water vessel, and motorcycles (commonly known as Boda Bodas.). This plan posed an evident risk to freedom of mobility as the government would potentially be able to track the whereabouts of a particular person at all times.

In the original plan, the Ugandan government signed a Memorandum of Understanding and a 10-year agreement with the Russian firm Joint-stock Company Global Security, under a project dubbed Intelligent Transport

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⁶⁴⁴⁶ Global Information Society Watch, *Artificial intelligence: Human Rights, Social Justice and Development*, Collaboration on International ICT Policy for East and Southern Africa (CIPESA) (2019), https://giswatch.org/sites/default/files/gisw2019 web uganda.pdf

⁶⁴⁴⁷Rachel Adams, *AI in Africa: Key Concerns and Policy Considerations for the Future of the Continent*, Africa Policy Institute (AfriPoli) (May 30, 2022), https://afripoli.org/ai-in-africa-key-concerns-and-policy-considerations-for-the-future-of-the-continent

⁶⁴⁴⁸Khwezi Nkwanyana, *China's AI Deployment in Africa Poses Risks to Security and Sovereignty*, Australian Strategic Policy Institute (May 5, 2021), https://www.aspistrategist.org.au/chinas-ai-deployment-in-africa-poses-risks-to-security

 $[\]underline{\text{https://www.aspistrategist.org.au/chinas-ai-deployment-in-africa-poses-risks-to-security-and-sovereignty/}$

⁶⁴⁴⁹ The Independent, How URA Electronic Cargo Tracking System (RECTS) Helped Intercept Truck Driver Who Tested Positive for COVID-19 (Apr. 16, 2020),

 $[\]underline{https://www.independent.co.ug/how-ura-electronic-cargo-tracking-system-rects-helped-intercept-truck-driver-who-tested-positive-for-covid-19/\underline{\ }$

⁶⁴⁵⁰ Elias Biryabarema, *Ugandan Opposition, Activists Denounce Digital Car Tracker Plan*, Reuters (Jul. 29, 2021), https://www.reuters.com/world/africa/ugandan-opposition-activists-denounce-digital-car-tracker-plan-2021-07-29/

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Monitoring System (ITMS).⁶⁴⁵¹ While the government presented these plans as an effort to curb the rampant transport kidnappings and robberies to aid during investigations, legal groups sued the government over these plans, and pleaded to the High Court to halt and restrain the implementation of the compulsory digital surveillance, due to privacy concerns.⁶⁴⁵² The lawsuit includes a request for explanations to the government regarding the adjudication of the contract to a foreign entity without due diligence. The government planned to deploy the systems in March 2023.

Environmental Impact of Al

Uganda does not have formal policies addressing the environmental impact of AI.

Lethal Autonomous Weapons

The governance and control of Unmanned Aerial Systems (UAS), Remotely Piloted Aircraft Systems (RPAS), or drones, have been a concern of the Uganda authorities. In a report of 2019, the Uganda Civil Aviation Authority and Customs officials started awareness sessions about the threats that non-registered drones pose to national security. Uganda developed laws to regulate drones under the Civil Aviation Authority (CAA) Remotely Piloted Aircraft Systems Regulations 2020, but is lacking a unified legal framework. Such a framework is in the draft stage in consultation with the Civil Aviation Safety and Security Oversight Agency (CASSOA). The Uganda Communications Commission issued guidelines for the operation of remotely piloted aircraft (RPAS)/drones in Uganda in 2021.

Uganda was part of the African Group that issued a joint statement calling for an international discussion on the "ethical, legal, moral and technical

 $\underline{https://www.monitor.co.ug/uganda/news/national/251-drones-held-at-entebbe-1835474}$

Roger Bambino, *How the Vehicle Number Plates Tracking Technology Will Work in Uganda and Looming Privacy Concerns* (Jul. 26, 2021), https://techjaja.com/of-how-the-vehicle-number-plates-tracking-technology-will-work-in-uganda-and-looming-privacy-concerns/

⁶⁴⁵² Nebert Rugadya, Court Petitioned Over Delays to Decide Case on Installation of Digital Trackers in Vehicles, Uganda Radio Network (Jan. 6, 2023),

 $[\]underline{\text{https://ugandaradionetwork.net/story/court-petitioned-over-delays-to-decide-case-on-installation-of-digital-trackers-in-vehicles}$

⁶⁴⁵³ Monitor, 251 Drones Held at Entebbe (Jul. 5, 2019),

⁶⁴⁵⁴ Uganda Gazette Statutory, *Instruments 2020 No. 23. The Civil Aviation Remotely Piloted Aircraft Systems Regulations 2020* (Feb. 17, 2020), https://caa.go.ug/wp-content/uploads/2021/01/CAA-REMOTELY-PILOTED-AIRCRAFT-SYSYTEMS.pdf

⁶⁴⁵⁵ Uganda Communications Commission, *The Uganda Communications Commission Guidelines for Operation of Remotely Piloted Aircraft (RPAS)/Drones in Uganda* (Nov. 2021), https://www.ucc.co.ug/wp-content/uploads/2021/12/UCC-Guideline_Drones-Guidelines 2021.pdf

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questions" raised by the use of autonomous weapons systems and urging concrete policy recommendations, including prohibitions and regulations.⁶⁴⁵⁶

Human Rights

According to the 2024 Freedom in the World Report, Uganda is not free in terms of human rights protection, with a score of only 34/100.⁶⁴⁵⁷ Uganda's civil society and independent media sectors suffered from legal and extra-legal harassment and state violence. Increasing accusations of the overreach of the Executive over Judicial independence, as well as an increase in systemic corruption are the most salient conclusions of the Freedom House report.

The Ibrahim Index of African Governance in 2021 scores Uganda at 47.5/100 for overall governance and 38.9/100 in Participation Rights & Inclusion, placing the country in position 31 out of 45 African countries, with a decreasing trend since 2012.⁶⁴⁵⁸

Uganda is a signatory of the Universal Declaration of Human Rights and has ratified various covenants including the International Convention on Civil and Political Rights (ICCPR) and International Covenant on Economic, Social and Cultural Rights (ICSECR). Uganda ratified the African Charter on Human and People's Rights in 1986. Chapter four (4) of the Constitution of Uganda of 1995 provides for the protection of fundamental civic, economic, social, and political rights and freedoms. Article 20 (1) of the Constitution stipulates that the fundamental rights and freedoms of individuals are inherent and not granted by the State.

In line with the Constitution, the country has a Uganda Human Rights Commission that monitors human rights violations.⁶⁴⁶¹ There is a Human Rights Committee in Parliament⁶⁴⁶² scrutinizing the work of the government, making

https://freedomhouse.org/country/uganda/freedom-world/2024

Governance, https://iiag.online/data.html?loc=RW&meas=GOVERNANCE

periodic-report-2006

https://ftp.parliament.go.ug/standing-committees

⁶⁴⁵⁶ Statement by the African Group, *CCW Group of Governmental Experts Meeting on LAWS* (Dec. 3, 2021), http://149.202.215.129:8080/s2t/UNOG/LAWS3-03-12-2021-AM_mp3_en.html ⁶⁴⁵⁷ Freedom House, *Freedom in the World 2024: Uganda* (2024),

⁶⁴⁵⁸ Ibrahim Index of African Governance, *Uganda, 2021, Overall*

⁶⁴⁵⁹ International Justice Resource Center, *Country Factsheet Series: Uganda* (Sept. 15, 2017), https://ijrcenter.org/wp-content/uploads/2017/11/Uganda.pdf

⁶⁴⁶⁰ African Commission on Human and People's Rights, *Concluding Observations and Recommendations, Uganda: Periodic Reports, 2006–2008* (May 29, 2009), https://achpr.au.int/en/state-reports/concluding-observations-and-recommendations-uganda-3rd-

⁶⁴⁶¹ Uganda Human Rights Commission (UHRC), About UHRC, https://uhrc.ug/about/

⁶⁴⁶² Parliament of the Republic of Uganda, *Standing Committees*,

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recommendations aimed to improve human rights protection, and overseeing the National Action Plan on Human Rights.⁶⁴⁶³

Uganda is a multiparty democracy, yet the same party (National Resistance Movement) and President have ruled since 1986 with fast-rising opposition to the incumbency. ⁶⁴⁶⁴ In the 2021 elections, media reports indicated that the political campaign was marred by killings, arrests, beatings, and disappearances by security forces as well as harassment and intimidation of journalists. ⁶⁴⁶⁵

The Human Rights Foundation's universal periodic review (UPR) report of Uganda⁶⁴⁶⁶ found actions by the Uganda government such as ordering internet blackouts on the evening of elections in 2018. A five-day internet shutdown and blockage of social media, compounded by a government decision to replace a 200 shilling (\$0.05) social media tax with a 12 percent tax on internet data. The government adopted further regulations to restrict freedom of expression by levying fees on the use of online communication. A new shutdown of social media services occurred close to the date of the 2021 elections. The UPR report exhorts the Ugandan government to ensure the protection of all individuals and cooperate with international human rights organizations and generate an internal dialogue toward peace.

Amnesty International highlighted that freedom of expression has become increasingly constrained and civic space significantly narrowed as Human Rights defenders (HRDs) and organizations working on electoral accountability were particularly targeted for their work.⁶⁴⁶⁷

OECD / G20 AI Principles

Uganda is not a member of the OECD and is not a signatory to OECD AI Principles.⁶⁴⁶⁸ The OECD AI Observatory reports that the 4IR strategy is aligned

⁶⁴⁶³ Inter-Parliamentary Union, Parline, *Uganda: Parliamentary Committee on Human Rights*, https://data.ipu.org/parliament/UG/specialized-bodies/UG-LC-SB01

⁶⁴⁶⁴ Daniel Mwesigwa, *Cameras, Mobiles, Radios – Action!: Old Surveillance Tools in New Robes in Uganda*, Global Information Society Watch (2019), https://giswatch.org/node/6194
⁶⁴⁶⁵ U.S. Department of State, *2022 Country Reports on Human Rights Practices: Uganda*, https://www.state.gov/reports/2022-country-reports-on-human-rights-practices/uganda

⁶⁴⁶⁶ Human Rights Foundation, *Universal Periodic Review Submission for Uganda* (Jul. 14, 2021), https://www.upr-info.org/sites/default/files/documents/2022-01/h.r.f upr40 uga e main.pdf

⁶⁴⁶⁷ Amnesty International, *Uganda: Guarantee Human Rights*, Amnesty International Submission for the UN Universal Periodic Review, 40TH Session of the UPR Working Group (Jan.–Feb. 2022) https://www.amnesty.org/en/wp-

content/uploads/2021/08/AFR5945392021ENGLISH.pdf
6468 OECD, Forty-Two Countries Adopt New OECD Principles on Artificial Intelligence (May 22, 2019), https://www.oecd.org/newsroom/forty-two-countries-adopt-new-oecd-principles-on-artificial-intelligence.htm

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with two OECD AI principles: (1) Fostering a digital ecosystem for AI and (2) Providing and enabling policy environment for AI. However, no reports are available for implementation.⁶⁴⁶⁹

Council of Europe Al Treaty

Uganda has not endorsed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and Rule of Law, the first legally binding international treaty on AI and human rights. ⁶⁴⁷⁰

UNESCO Recommendation on AI Ethics

Uganda is a member of UNESCO since 1962⁶⁴⁷¹ and is among the member states that adopted the UNESCO Recommendation on the Ethics of AI.⁶⁴⁷²

According to the UNESCO AI Needs Assessment Survey in Africa, Uganda is one of the countries in Africa that established AI as a priority in their national development plans. Strategies and policies are underway, but legislation and ethical guidelines as well as the operation of Centers of Excellence are yet to be implemented. Uganda reported work in progress in the establishment of a legal framework and plans for education programs to introduce government officials to AI skills. Uganda has requested support from UNESCO to guide the development of AI at the national level.⁶⁴⁷³

Uganda has not initiated the UNESCO Readiness Assessment Methodology (RAM) to support implementation of the UNESCO AI ethics Recommendation.⁶⁴⁷⁴

Evaluation

Uganda's engagement at regional and international level as well as Uganda's 4IR strategy, 2019 Data Protection and Privacy Act, Vision 2040, and

 $\underline{uganda.ug/\#:\sim:text=By\%20virtue\%20of\%20Uganda's\%20membership,on\%20the\%209th\%20November\%201962}$

⁶⁴⁷² UNESCO, *Recommendation on the Ethics of Artificial Intelligence* (Nov. 2021), https://unesdoc.unesco.org/ark:/48223/pf0000380455

⁶⁴⁷³ UNESCO, *Artificial Intelligence Needs Assessment Survey in Africa* (2021), https://unesdoc.unesco.org/ark:/48223/pf0000375322

⁶⁴⁶⁹ OECD, Expert National Task Force on Fourth Industrial Revolution (2019), https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faipo.oecd.org%2F2021-data-policyInitiatives-27387

⁶⁴⁷⁰ Council of Europe, *The Framework Convention on Artificial Intelligence: Signatories* (2025), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

⁶⁴⁷¹ UNESCO, Establishment of Uganda National Commission for UNESCO (2023), https://unesco-

⁶⁴⁷⁴ UNESCO Global Ethics and Governance Observatory, *Global Hub: Country Profiles* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub#country-profiles

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NDP III indicate the country's intent to spearhead digital transformation. The 4IR strategy is a first step in the formulation of a dedicated AI policy and the 2019 Data Protection and Privacy Act provides for protection of data subjects' rights. However, the absence of a national AI strategy with a human-centered approach at its core and of data subjects' right to algorithmic transparency, as well as the lack of independence of the data protection authority create additional hurdles in tackling the widespread use of AI for surveillance purposes. Should Uganda take its commitment to the UNESCO Recommendation on the Ethics of AI seriously, the Recommendation could provide a template for regulating the deployment of AI in way that respects human rights.

Ukraine

In 2024, Ukraine issued Guidelines on the Responsible Use of AI in the News Media. The country also initiated public consultations on a white paper on AI regulation and a draft act for using AI technologies in the country. Ukraine continued to prepare the UNESCO Readiness Assessment Methodology (RAM) as part of its implementation of the UNESCO Recommendation on the Ethics of AI.

National AI Strategy

Ukraine's government approach to AI is set out in two Orders issued by the Cabinet of Ministers of Ukraine. The Cabinet published its first Order, 6475 which approved the "Concept for the Development of Artificial Intelligence in Ukraine." The order recognized that deployment of AI systems must include compliance with fundamental principles, such as those enshrined in personal data protection legislation and respect the constitutional rights to privacy and private and family life. The second order approved the Action Plan for implementing the Concept between 2021–2024.⁶⁴⁷⁶ The Order comprises a list of initial, specific tasks assigned to the relevant ministries.

The Action Plan elaborates on AI priorities for Ukraine, highlighting the use of AI in support of defense and public welfare while emphasizing responsible

⁶⁴⁷⁵ Order of the Cabinet of Ministers of Ukraine, On the Approval of the Concept of the Development of Artificial Intelligence in Ukraine (Dec. 2, 2020), https://zakon.rada.gov.ua/laws/show/1556-2020-p#Text

⁶⁴⁷⁶ Order of the Cabinet of Ministers of Ukraine, On the Approval of the Plan of Measures for the Implementation of the Concept of the Development of Artificial Intelligence in Ukraine for 2021–2024 (May 12, 2021), https://zakon.rada.gov.ua/laws/show/438-2021-%D1%80#n10

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and trustworthy AI use.⁶⁴⁷⁷ The Cabinet of Ministers of Ukraine is charged with the responsibility for the overall management and oversight of the Plan implementation. An Expert Committee on the Development of Artificial Intelligence – an independent expert body established under the Ministry of Digital Transformation of Ukraine—assists in strategic planning of the activities, advises on the thematic issues, and facilitates cooperation between key stakeholders.⁶⁴⁷⁸

The Ministry of Education and Science of Ukraine has also published its proposed, much more detailed National Strategy for the Development of Artificial Intelligence for 2021–2030.⁶⁴⁷⁹ In particular, the strategy notes that as a member of the Council of Europe Ad Hoc Committee on Artificial Intelligence, Ukraine should focus primarily on the standards of the EU, the Council of Europe, and other pan-European institutions that work on AI-related matters. The strategy also acknowledges the need to ensure alignment with the OECD AI Principles and the principles enshrined in the EU Charter of Fundamental Rights including human dignity, non-discrimination, and consumer protection.

Recent updates from the Ministry of Digital Transformation reaffirm these principles, with Ukraine joining global AI governance efforts through participation in summits such as the AI Seoul Summit.⁶⁴⁸⁰ The strategy has not been formally approved by the Ukrainian government since the priorities have changed following the Russian full-scale invasion.⁶⁴⁸¹ Instead, the government decided to develop a regulatory roadmap.

The Expert Committee on the Development of Artificial Intelligence in Ukraine in cooperation with the Ministry of Digital Transformation presented a

⁶⁴⁷⁸ Ministry of Digital Transformation of Ukraine, *Expert Committee on the Development of Artificial Intelligence in Ukraine* (Updated Nov. 3, 2023), https://ai.org.ua/

⁶⁴⁷⁷ Order of the Cabinet of Ministers of Ukraine, *On the Approval of the Concept of the Development of Artificial Intelligence in Ukraine* (July 2023), https://zakon.rada.gov.ua/laws/show/438-2021-%D1%80#n10

⁶⁴⁷⁹ Ministry of Education and Science of Ukraine, National Academy of Sciences of Ukraine, Institute of Artificial Intelligence Problems, *National Strategy for the Development of Artificial Intelligence in Ukraine* (Jun. 11, 2021),

https://www.naiau.kiev.ua/images/news/img/2021/06/strategiya-110621.pdf

⁶⁴⁸⁰ Ministry of Digital Transformation of Ukraine, *Ukraine Joins Global Cooperation for Safe Development of Artificial Intelligence* (May 2024), https://www.kmu.gov.ua/en/news/mintsyfry-ukraina-pryiednuietsia-do-hlobalnoi-spivpratsi-shchodo-bezpechnoho-rozvytku-shi

⁶⁴⁸¹ Yuriy Kondratenko, Galyna Kondratenko, Anatolii Shevchenko, Vadym Slyusar, Yuriy Zhukov, and Maxym Vakulenko, *Towards Implementing the Strategy of Artificial Intelligence Development: Ukraine Peculiarities* (Sept. 21–23, 2023), https://ceur-ws.org/Vol-3513/paper09.pdf

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Roadmap for the regulation of AI in Ukraine.⁶⁴⁸² The Roadmap proposes a bottom-up approach to AI regulation, which involves a gradual "moving from less to more," starting from self-regulatory initiatives and ending up with the legislative acts. A phased approach further detailed in the 2024 White Paper on Artificial Intelligence Regulation in Ukraine emphasizes readiness tools like AI regulatory sandboxes.⁶⁴⁸³ The document proposes two phases for AI regulation.

Phase one, which is estimated to take 2–3 years, prioritizes self- and coregulation by providing businesses with tools for future compliance. This involves developing capabilities of both the state to regulate and enforce and the industry to comply with future legislative requirements by introducing regulatory sandboxes, AI and human rights impact assessments (including Council of Europe HUDERIA methodology), AI labeling tools, voluntary codes of conduct, guidelines and recommendations. Ukraine also intends to establish an AI Transparency Centre, which will serve as a one-stop shop for all information on AI regulation, general and thematic guidelines.

One of the thematic recommendations released by the National Council of Television and Radio Broadcasting addresses the responsible use of AI in the media. The guidelines provide specific frameworks for transparency, ethics, and human oversight in AI use for journalism.⁶⁴⁸⁵

The second phase reaffirms Ukraine's commitment to adopt a law similar to the EU AI Act in the framework of its accession plan to the European Union. The Roadmap notes that implementation may be a gradual process that commences with the implementation of the most important or demanding provisions. The Roadmap emphasizes the importance of protecting Ukrainians' fundamental rights in the digital space and their personal data. The Ministry of

⁶⁴⁸² Expert Committee on the Development of Artificial Intelligence in Ukraine, *A Road Map of AI Regulation in Ukraine* (Oct. 7, 2023), https://ai.org.ua/a-road-map-of-ai-regulation-in-ukraine

⁶⁴⁸³ Ministry of Digital Transformation of Ukraine, White Paper on Artificial Intelligence Regulation in Ukraine: Vision of the Ministry of Digital Transformation of Ukraine Version for Consultation (Jun. 2024),

https://thedigital.gov.ua/storage/uploads/files/page/community/docs/Біла книга з регулювання ШІ в Україні АНГЛ.pdf

⁶⁴⁸⁴ Ministry of Digital Transformation of Ukraine, White Paper on Artificial Intelligence Regulation in Ukraine: Vision of the Ministry of Digital Transformation of Ukraine Version for Consultation (Jun. 2024),

https://thedigital.gov.ua/storage/uploads/files/page/community/docs/Біла книга з регулювання
ШІ в Україні АНГЛ.pdf

⁶⁴⁸⁵ National Council of Television and Radio Broadcasting of Ukraine, *Guidelines on the Responsible Use of Artificial Intelligence in the News Media* (Mar. 2024), https://webportal.nrada.gov.ua/wp-content/uploads/2024/03/Ukraine-AI-Guidelines-for-Media.pdf

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Digital Transformation published comprehensive AI guidelines prioritizing human rights and personal data protection, including recommendations for responsible AI governance.⁶⁴⁸⁶

The Ukraine Parliamentary Commissioner for Human Rights also announced the initiation of a project with EU4DigitalUA concerning AI regulation. This initiative, which was completed in March 2024, explores how advanced AI impacts fundamental rights such as privacy and outlines the legal frameworks required to ensure ethical and lawful use of these technologies. Developed with Ukrainian governmental and civil stakeholders, the EU4DigitalUA initiative draws from international laws and standards, including GDPR and UN guidelines, and provides recommendations for balancing technological progress with the protection of rights and freedoms. The initiative further highlights Ukraine's goals to align with global standards while addressing unique domestic challenges like data protection and ethical AI use. By emphasizing transparency, accountability, and risk management, EU4DigitalUA seeks to ensure safe AI adoption that supports societal progress without compromising individual rights. 6488

Public Participation

The Institute of Artificial Intelligence Problems of the Ministry of Education and the National Academy of Sciences of Ukraine sent letters of inquiry to more than 300 different organizations for their views that would inform the development and implementation of the National Strategy for the Development of Artificial Intelligence for 2022–2030. These included most ministries in Ukraine, scientific institutions, public and private institutions of higher education, and commercial entities.⁶⁴⁸⁹

The Roadmap for the regulation of AI in Ukraine was developed following a series of meetings with representatives of business, education, science, NGOs, and the parliament, as well as the Expert Committee.⁶⁴⁹⁰

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⁶⁴⁸⁶ EU4Digital, Human Rights in the Era of Artificial Intelligence: Challenges and Legal Regulation, European Union (Feb. 2024), https://eufordigital.eu/eu4digitalua-and-ukrainian-officials-present-artificial-intelligence-guidelines/

⁶⁴⁸⁷ Secretariat of the Commissioner for Human Rights, *The Ombudsman's Office Discussed the Prospect of Regulating AI* (Nov. 28, 2023), https://ombudsmana.gov.ua/news_details/u-ofisi-ombudsmana-vidbulosya-obgovorennya-perspektiv-regulyuvannya-shtuchnogo-intelektu-shi
6488 EU4Digital, *Human Rights in the Era of Artificial Intelligence: Challenges and Legal Regulation*, European Union (Feb. 2024), https://eufordigital.eu/eu4digitalua-and-ukrainian-officials-present-artificial-intelligence-guidelines/

⁶⁴⁸⁹ A. Shevchenko et al., *Regarding the Draft Strategy Development of Artificial Intelligence in Ukraine*, 2022–2030) (Aug. 2022), https://doi.org/10.15407/jai2022.01.008

⁶⁴⁹⁰ Expert Committee on the Development of Artificial Intelligence in Ukraine, *A Road Map of AI Regulation in Ukraine* (Oct. 7, 2023), https://ai.org.ua/a-road-map-of-ai-regulation-in-

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Interested individuals can also engage by applying to join the Expert Committee on the Development of Artificial Intelligence under the Ministry of Digital Transformation.

The Ministry of Strategy and Industry of Ukraine also published a public consultation on the draft Act regarding the State targeted scientific and technical program for the use of AI technologies in priority sectors of the economy of the period until 2026. The electronic consultation will enable individuals, legal entities and their associations to comment on proposals to create favorable conditions for the development and deployment of innovative AI technologies in priority sectors of the economy and to strengthen Ukraine's position in the world market.⁶⁴⁹¹ The Law on Access to Public Information allows Ukrainians to submit requests for information, including on AI policies and state decisions in this area.⁶⁴⁹² Another platform for citizen input consists of electronic petitions on the President's website. These petitions must garner 25,000 supporters within 90 days to be reviewed by the President.⁶⁴⁹³

Data Protection

The primary legislation governing data protection in Ukraine is the Law of Ukraine on Personal Data Protection (PDP), enacted in 2010. The legislation has been amended several times. The law outlines fundamental requirements and obligations concerning the collection, processing, and use of personal data by both private entities and the Ukrainian government.

The Constitution of Ukraine, the Council of Europe Convention 108 for the Protection of Individuals with regard to Automatic Processing of Personal Data, the Civil Code of Ukraine, and various by-law documents and recommendations approved by the Ukrainian Parliament Commissioner for Human Rights⁶⁴⁹⁴ constitute sources of personal data protection standards in Ukraine.

ukraine/; Tech Ukraine, Regulation of Artificial Intelligence in Ukraine: MinDigital Presents a Roadmap (Oct. 13, 2023), https://techukraine.org/2023/10/13/regulation-of-artificial-intelligence-in-ukraine-mindigital-presents-a-roadmap/

⁶⁴⁹¹ Ministry of Strategic Industries of Ukraine, *Electronic Consultation with the Public* (Feb. 20, 2024), https://mspu.gov.ua/dlya-gromadskosti/konsultaciyi-z-gromadskistyu/elektronni-konsultaciyi-z-gromadskistyu

⁶⁴⁹² Verkhovna Rada (Parliament of Ukraine), *The Law of Ukraine on Access to Public Information*, Article19.org, https://www.article19.org/data/files/pdfs/laws/ukraine-the-law-on-access-to-public-information.pdf

⁶⁴⁹³ Official Online Representation the President of Ukraine, *Electronic Petitions* (Dec. 28, 2024), https://petition.president.gov.ua/

⁶⁴⁹⁴ Baker McKenzie, *Global Data Privacy and Cybersecurity Handbook: Ukraine* (Dec. 28, 2023), https://resourcehub.bakermckenzie.com/en/resources/global-data-privacy-and-cybersecurity-laws

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Ukraine is in the process of modernizing its data protection laws to align with the GPDR. The Association Agreement between the European Union and Ukraine underscores cooperation to ensure an adequate level of personal data protection in line with European and international standards. Several drafts, including a Draft Law on Protection of Personal Data and the Draft Law on the National Commission on Personal Data Protection and Access to Public Information, reflect ongoing efforts to align Ukrainian legislation with EU requirements. The aim is to establish a comprehensive framework for personal data protection in both public and private sectors. 6495

An expert discussion on the Draft Law on Personal Data Protection was held on June 14, 2023, involving MPs, government representatives, NGOs, and experts. The Draft Law was anticipated to be approved by the Parliament in 2023 and take effect on January 1, 2024. However, the Parliament failed to reach consensus regarding the proposed bills and there are currently undergoing another round of review processes.

The Draft Law incorporates key GDPR principles but introduces some variations, regarding for example the certification of Data Protection Officers, adherence to EU guidelines and case law, CCTV recording retention periods, extraterritoriality, posthumous personal data processing, cross-border transfer, data breach notification or reasonable fees for data subject requests.

Articles 18(15), 19, and 25 would, with certain exceptions, provide data subjects with a right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning individuals or similarly significantly affects such individuals.

The Office of the Ukrainian Parliament Commissioner for Human Rights, also known as the Ombudsman, is an independent, authoritative institution that oversees the protection of human and citizen rights and freedoms across Ukraine and for Ukrainians abroad. 6496 Specifically, the Department for Personal Data Protection, an independent structural unit of the Secretariat of the Verkhovna Rada of Ukrainian Parliament Commissioner for Human Rights, ensures compliance and aligns Ukraine's personal data protection practices with national and EU standards.6497

The Parliament Commissioner publishes an annual report on the state of protection of citizens' rights and freedoms in Ukraine. The latest report relating to 2023 highlighted the progress on legislation to protect personal data and the access

https://ombudsman.gov.ua/en/informaciya-pro-pidrozdil-zpd

⁶⁴⁹⁵ Council of Europe, Opinion on the Draft Law of Ukraine "On Personal Data Protection," No. 8153 as of 25 October 2022 (Apr. 24, 2023), https://rm.coe.int/opinion-on-the-draft-law-onpersonal-data-protection-in-ukraine-final-/1680ab9e06

⁶⁴⁹⁶ Ombudsman of Ukraine, *About Us*, https://ombudsman.gov.ua/en/about

⁶⁴⁹⁷ Ombudsman of Ukraine, Information about the Department,

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to information.⁶⁴⁹⁸ The report noted the increased threat of cyberattacks given the ongoing war with Russia. The report noted that the Commissioner acted on violations of human rights in the following high-risk areas: Unlawful processing of personal data, Fraudulent actions with personal data, Unlawful publication of videos containing personal data (including images of people), Violation of the right to access personal information, Issues of organization of personal data processing.

The Draft Law on the DPA proposes to establish an independent government agency that would be responsible for both policymaking (adopting mandatory regulations) and enforcement (prosecuting infringers) in the sphere of data privacy and access to public information.

Algorithmic Transparency

Ukraine has not yet signed and ratified the modernized version of Council of Europe Convention 108 which provides for algorithmic transparency. 6499 Ukraine has no specific law granting a right to algorithmic transparency. However, the Ministerial Statement from the AI Seoul Summit, an international agreement signed by Ukraine and 26 other countries, commits the country to uphold transparency in the public use of AI applications. 6500

Articles 8(12) and 8(13) of the Ukrainian Data Protection Law does provide data subjects with the right to: (i) be made aware of the automatic processing of personal data; and (ii) be protected from automated decisions that have legal consequences, 6501 i.e. request the provision of public services by humans as an alternative to algorithmic processing. 6502

Use of AI in the Media

The Ministry of Foreign Affairs introduced an AI-generated spokesperson, Victoria Shi, to provide accurate consular information to the public and media. This initiative marks a significant step in Ukraine's use of AI to enhance

⁶⁴⁹⁸ Ombudsman of Ukraine, Report on the State of Observance and Protection of Rights and Freedoms of Persons and Citizens in Ukraine in 2023 (2024), https://ombudsman.gov.ua/report-2023/rozdil-9-informatsiini-prava

⁶⁴⁹⁹ Council of Europe Portal, Chart of Signatures and Ratifications of Treaty 223 (Updated Dec. 29, 2024), https://www.coe.int/en/web/conventions/full-list?module=signatures-bytreaty&treatynum=223

⁶⁵⁰⁰ Ministry of Digital Transformation of Ukraine, Ukraine Joins Global Cooperation on Secure AI Development (May 30, 2024), https://www.kmu.gov.ua/en/news/mintsyfry-ukrainapryiednuietsia-do-hlobalnoi-spivpratsi-shchodo-bezpechnoho-rozvytku-shi

⁶⁵⁰¹ Verkhovna Rada of Ukraine, Legislation of Ukraine, On Protection of Personal Data (Jun. 7, 2021), https://zakon.rada.gov.ua/laws/show/en/2297-17#Text

⁶⁵⁰² Tetyana Avdeeva, Actions and Dreams: Artificial Intelligence in the Public Sector (Feb. 19, 2024), https://dslua.org/publications/dii-ta-mrii-shtuchnyy-intelekt-u-publichnomu-sektori/

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governmental communication and transparency, offering a model for integrating AI in public services responsibly. 6503

The AI-generated spokesperson followed the Ministry of Digital Transformation published Recommendations for Responsible Use of Artificial Intelligence in the Media. 6504 "The purpose of the recommendations is to implement and use the Guidelines for the Responsible Use of Artificial Intelligence Systems in Journalism, as well as to disseminate current international practices, principles and approaches to the responsible use of AI systems in the media to respect human rights and professional ethical standards." The recommendations can be applied to content creation using generative AI systems, analyzing large amounts of data, administration and automation of work processes, content management such as searching and verifying content, and translating material.

The basic principles of using AI in the media include: responsible editorial decision (implementation of AI systems based on a conscious decision of the editorial staff taking into account the understanding of the mission of media outlets), legality, regular assessment of risks associated with the use of AI systems, transparency and clarity (disclosure of information on the use of AI systems), confidentiality and data protection (preventing leakage of personal data or other confidential information through the AI systems used), diversity and non-discrimination (ensuring audience access to diverse content when using personalization tools), human oversight, responsibility and adaptability (improvement in line with technological development of AI systems and changes in legal regulation). Significant attention is paid to the labeling requirement and content curation mechanisms.

Use of Facial Recognition

According to media reports, the Ukrainian government is using Clearview AI's facial recognition technology for a range of potential purposes related to its wartime efforts including uncovering Russian soldiers, combating misinformation, and identifying personnel at checkpoints, abducted children, and

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⁶⁵⁰³ Ministry of Foreign Affairs of Ukraine, *Announcement of AI-generated Spokesperson Victoria Shi* (May 2024),

https://x.com/MFA_Ukraine/status/1785558101908742526?ref_src=twsrc%5Etfw%7Ctwcamp%5Etweetembed%7Ctwterm%5E1785558101908742526%7Ctwgr%5Ecf55ae8f51a49c4cdb38fa5_bd23832379ffe64d7%7Ctwcon%5Es1_c10&ref_url=https%3A%2F%2Fwww.ndtv.com%2Fworl_d-news%2Fukraine-introduces-ai-generated-spokesperson-for-foreign-ministry-5570521

⁶⁵⁰⁴ Ministry for the Digital Transformation, *Guidelines on the Responsible Use of Artificial Intelligence in the News Media* (Jan. 24, 2024), https://webportal.nrada.gov.ua/wp-content/uploads/2024/05/Ukraine-AI-Guidelines-for-Media.pdf

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deceased servicemen.⁶⁵⁰⁵ This use, while potentially advantageous for national security, raises substantial privacy concerns as the technology has been widely criticized for its lack of transparency and accuracy.⁶⁵⁰⁶

More than 1,500 officials across 18 Ukrainian government agencies were using the facial-recognition tool as of November 2023. The use of this type of surveillance technology is unprecedented in a war context and remains controversial as Clearview AI faces several legal challenges including infringement of privacy rights.

Facial recognition is also used in street surveillance cameras. In 2021, the then-Minister for Internal Affairs even threatened to use facial recognition to identify protesters. ⁶⁵⁰⁸ Journalistic investigation also revealed that some systems used by the municipal authorities were based on Russian software TRASSIR. ⁶⁵⁰⁹

A Draft Law on video surveillance has since been introduced in Parliament. However, Ukrainian civil society finds the law to be overly permissive toward the technology and lacking safeguards against abusive practices because it allows law enforcement to access both private and public surveillance infrastructure without a court order.⁶⁵¹⁰

Environmental Impact of AI

Ukraine has not published specific documents addressing the environmental impacts of AI. However, as a member of the United Nations (UN), Ukraine has agreed to the resolution on Seizing the Opportunities of Safe, Secure,

⁶⁵⁰⁵ Paresh Dave and Jeffrey Dastin, Reuters, *Exclusive: Ukraine Has Started Using Clearview AI's Facial Recognition during War* (Mar. 14, 2022),

https://www.reuters.com/technology/exclusive-ukraine-has-started-using-clearview-ais-facial-recognition-during-war-2022-03-13/

⁶⁵⁰⁶ Ministry of Digital Transformation of Ukraine, Guidelines on Protecting Human Rights and Privacy in AI (Section 2, p. 4), White Paper on Artificial Intelligence Regulation in Ukraine (2024),

https://thedigital.gov.ua/storage/uploads/files/page/community/docs/Біла_книга_з_регулювання
IIII в Україні АНГЛ.рdf

6507 Vera Bergengruen, *Ukraine's 'Secret Weapon' against Russia Is a Controversial U.S. Tech Company*, Time (Nov. 14, 2023), https://time.com/6334176/ukraine-clearview-ai-russia/6558 Part of the com/6334176/ukraine-clearview-ai-russia/

⁶⁵⁰⁸ Pravda, *Kyiv Has Purchased Cameras: They Can Recognize Faces and Temperatures, the Data Will Be Transmitted to Police* (Apr. 3, 2020),

https://www.pravda.com.ua/news/2020/04/3/7246428/

Radio Svoboda, Klymenko: the Ministry of Internal Affairs Will Thoroughly Check the Information of "Scheme" about the Possible Transfer of Data from Thousands of Surveillance Cameras in Ukraine to Russia (Dec. 8, 2023), https://www.radiosvoboda.org/a/news-skhemy-trassir-kamery-mvs-klymenko/32722531.html

⁶⁵¹⁰ Digital Laboratory, Security, *Video Surveillance Bill: Protection of Public Safety or License for Mass Surveillance* (Mar. 9, 2024), https://dslua.org/publications/zakonoproiekt-provideomonitorynh-zakhyst-publichnoi-bezpeky-chy-litsenziia-na-masove-stezhennia/

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and Trustworthy Artificial Intelligence Systems for Sustainable Development, which was adopted by the General Assembly. This resolution includes commitments to seizing the benefits while mitigating the negative impact of rapid technological change on the achievement of the UN Sustainable Development Goals. Potential negative impacts include those to the environment. ⁶⁵¹¹

Lethal Autonomous Weapons

The Concept of AI Development in Ukraine prioritizes the development of AI capacities for command-and-control tasks and AI use in weapons and military equipment. Russia's invasion of Ukraine has intensified work on applying AI in the military industry. The Ministry of Defense is advancing its logistics and supply operations by diversifying technological resources to better equip the Armed Forces of Ukraine for effective mission support. According to media reports, Ukraine is becoming a testing field for weapons using AI components to strengthen defense capabilities. Particularly, Ukraine uses "AI to analyze satellite imagery, open-source data, drone footage, and reports from the ground to present commanders with military options." 6513

Ukraine has secured an extensive contract covering 1.8 million drones through collaboration between the Ministry of Defense and the Ministry of Digital Transformation. Fully autonomous drones are already being used to defend Ukrainian energy facilities from other drones, thus being anti-vehicle weapon systems. Mykhailo Fedorov, Deputy Prime Minister, Minister of Digital Transformation of Ukraine, stated "so far, six systems to counter enemy drones have been purchased. These are the most advanced defensive technologies that are used to protect strategic facilities in the US. Radar jamming and deception systems help detect and block enemy UAVs, then the system releases its own drones. For example, the Fortem DroneHunter F700 is an autonomous drone with radar control and artificial intelligence that flies at speeds of over 100 km/h, and

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⁶⁵¹¹ United Nations General Assembly, Seizing the Opportunities of Safe, Secure, and Trustworthy Artificial Intelligence Systems for Sustainable Development A/78/L.49 (Nov 11, 2024), https://undocs.org/en/A/78/L.49

⁶⁵¹² John A. Nagl and Katie Crombe, *A Call to Action: Lessons from Ukraine for the Future Force*, Strategic Studies Institute, U.S. Army War College (Jun. 2024), https://media.defense.gov/2024/Jun/27/2003493264/-1/-1/0/20240627 CROMBE-

⁶⁵¹³ Vera Bergengruen, *How Tech Giants Turned Ukraine into an AI War Lab*, Time (Feb. 8, 2024) https://time.com/6691662/ai-ukraine-war-palantir/

⁶⁵¹⁴ Ministry of Defense of Ukraine, For 2024-2025, the Ministry of Defense, in Collaboration with the Ministry of Digital Transformation, Has Already Contracted 1.8 Million Drones Totaling Nearly UAH 147 Billion, <a href="https://mod.gov.ua/en/news/2024/10/29/for-2024-2025-the-ministry-of-defense-in-collaboration-with-the-ministry-of-digital-transformation-has-already-contracted-1-8-million-drones-totaling-nearly-uah-147-billion

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intercepts and lands enemy drones. The operators have already been trained and the systems have been installed at energy plants."6515

Ukraine deployed the world's first drones that are capable of both detecting and attacking targets autonomously in September 2023. The Ukrainian government stresses that a key challenge implies an active use of autonomous weapons by Russia and a need to counterbalance it and gain a military advantage, which is currently impossible to achieve with the conventional means. Ukraine is also using multiple situation awareness systems, which assist in planning operations, conducting intelligence and predicting threats, e.g. Delta and Palantir systems. Ukraine is also using Clearview AI facial recognition systems for a number of military purposes, most notably to identify Russian army soldiers, conduct intelligence operations or find kidnapped Ukrainian children.

The efforts around research and development of AI MilTech are currently coordinated by the defense state-governed cluster Brave1, which unites industry representatives and the relevant state authorities.⁶⁵²⁰

At the Responsible AI in the Military Domain Summit (REAIM 2023) cohosted by the Netherlands and the Republic of Korea, nearly sixty states agreed to issue a joint call to action on the responsible development, deployment and use of AI in the military domain. Ukraine endorsed the resulting Political Declaration. 6522

Oversight, Forbes (Oct. 17, 2023),

 $\underline{https://www.forbes.com/sites/davidhambling/2023/10/17/ukraines-ai-drones-seek-and-attack-russian-forces-without-human-oversight/}$

https://forbes.ua/innovations/yaderna-zbroya-v-it-amerikanskiy-palantir-mae-kontrakti-z-tsru-a-z-travnya-dopomagae-ukraini-naskilki-virishalna-rol-shtuchnogo-intelektu-na-viyni-10032023-12280

⁶⁵²⁰ Brave1, Ukrainian Defense Innovations: United Coordinational Platform for Defense Tech Powered by the Government, https://brave1.gov.ua/en/

⁶⁵²¹ Government of Netherlands, *Call to Action on Responsible Use of AI in the Military Domain* (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action

⁶⁵²² US Department of State, *Political Declaration on Responsible Military Use of Artificial and Autonomy, Endorsing States* (Feb. 12, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

United24, "Shahed Hunter": First Anti-Drone Systems Now Installed at Critical Infrastructure Facilities (Jan. 27, 2023), https://u24.gov.ua/news/shahed_hunters_defende

⁶⁵¹⁷ Morgan Meaker, Wired, *Ukraine's War Brings Autonomous Weapons to the Front Lines* (Feb. 24, 2023), https://www.wired.co.uk/article/ukraine-war-autonomous-weapons-frontlines (Feb. 24, 2023), https://www.wired.co.uk/article/ukraine-war-autonomous-weapons-frontlines (Feb. 24, 2023), https://www.wired.co.uk/article/ukraine-war-autonomous-weapons-frontlines (Feb. 24, 2023), https://www.wired.co.uk/article/ukraine-war-autonomous-weapons-frontlines (Feb. 24, 2023), https://www.wired.co.uk/article/ukraine-war-autonomous-weapons-frontlines (Feb. 24, 2023), https://www.wired.co.uk/article/ukraine-war-autonomous-weapons-frontlines (Feb. 24, 2023), https://www.wired.co.uk/article/ukraine-war-autonomous-weapons-frontlines (Feb. 2023), https://www.wired.co.uk/article/ukraine-war-autonomous-weapons-frontlines (Feb. 2023), <a href="https://www.wired.co.uk/article/ukraine-war-autonomous-weapons-frontlines-war-autonomous-weapons-frontlines-war-autonomous-weapons-frontlines-war-autonomous-weapons-frontlines-war-autonomous-weapons-frontlines-war-autonomous-weapons-frontlines-war-autonomous-weapons-frontlines-war-autonomous-weapons-frontlines-war-autonomous-weapons-frontlines-war-autonomous-weapons-frontlines-war-autonomous-weapons-frontlines-war-autonomous-weapons-frontlines-war-autonomous-war-autonomous-war-autonomous-war-autonomou

⁶⁵¹⁹ Vera Bergengruen, Time, *Ukraine's "Secret Weapon" against Russia Is a Controversial U.S. Tech Company* (Nov. 14, 2023), https://time.com/6334176/ukraine-clearview-ai-russia/

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Ukraine participated in the second REAIM summit took place in Korea. 6523 As the focus was on responsible behavior in military AI, it was concluded with a more concrete Blueprint for Action, 6524 negotiated by 35 countries including Ukraine prior to the event. The document outlines specific commitments across the summit's themes and aims to pave the way for a more structured Plan for Action in 2025.

Ukraine signed the Convention on Certain Conventional Weapons. 6525 At the 78th UN General Assembly First Committee in 2023, Ukraine voted in favor of resolution L.56 on autonomous weapons systems, along with 163 other states. Resolution L.56 stressed the "urgent need for the international community to address the challenges and concerns raised by autonomous weapons systems," and mandated the UN Secretary-General to prepare a report, reflecting the views of member and observer states on autonomous weapons systems and ways to address the related challenges and concerns they raise from humanitarian, legal, security, technological and ethical perspectives and on the role of humans in the use of force. 6526

Human Rights

According to Freedom House 2024 report on Ukraine, the country is "Partly Free." This was already the case before the Russian invasion in February 2022, but the situation has deteriorated since then. According to the report, "the Russian armed forces has inflicted massive civilian and military casualties and destroyed civilian infrastructure. Millions of Ukrainians have been displaced from their homes, and Russian troops have engaged in extrajudicial executions, torture, and sexual violence against residents. In areas subjected to longer periods of occupation, Russian authorities have used intimidation, arbitrary detention, and torture to assert control over political expression, the education system, and many other aspects of civilian life."

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https://tls.mofa.go.kr/eng/brd/m_5674/view.do?seq=321057

 $\frac{https://www.reaim2024.kr/home/reaimeng/board/bbsDetail.do?shareBbsNo=163\&shareBbsMngNo=10264\&shareMenuId=11613\&shareTabMenuId=$

⁶⁵²³ Ministry of Foreign Affairs, Republic of Korea, *Outcome of the Responsible AI in the Military Domain (REAIM) Summit 2024* (Sept. 12, 2024),

⁶⁵²⁴ REAIM, Blueprint for Action (Sept. 11, 2024),

⁶⁵²⁵ UN Office for Disarmament Affairs, *High Contracting Parties and Signatories CCCW* (Updated Sept. 27, 2022), https://disarmament.unoda.org/the-convention-on-certain-conventional-weapons/high-contracting-parties-and-signatories-ccw/

⁶⁵²⁶ UN General Assembly First Committee, *Resolution L.56 on Lethal Autonomous Weapons Systems* (Oct. 2023), https://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com/23/resolutions/L56.pdf

⁶⁵²⁷ Freedom House, *Freedom in the World 2024: Ukraine* (2024), https://freedomhouse.org/country/ukraine/freedom-world/2024

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A number of civil liberties and freedoms have been curtailed as a result of the martial law in force.⁶⁵²⁸ Martial law was extended for a thirteenth time until February 2025.⁶⁵²⁹

As a result of Russia's invasion of Ukraine, an essential part of the Ukrainian Parliament Commissioner for Human Rights work in Ukraine is to assist citizens daily. Freedom House identifies deliberate Russian interference with online communication, indirect loss of access to online communications arising from the current conflict, and new domestic laws aimed at tackling online disinformation and the sharing of sensitive data as possible threats to online freedoms. Reports from Human Rights Watch Watch and Amnesty International voice similar concerns related to the humanitarian crisis in Ukraine. Amnesty International highlights the degradation of workers' rights and the disproportionate impact of the war on older people.

The Law About Electronic Communications,⁶⁵³⁴ which requires service providers to retain data relating to their users and to share that data with state authorities to facilitate the investigation and prosecution of offenses, could be used to limit citizens' speech even before the Russian invasion.

Ukraine's commitment to human rights is enshrined in its constitution. Article 9 incorporates international treaties as part of domestic legislation. An action plan for the National Human Rights Strategy 2021–23⁶⁵³⁵ re-asserts Ukraine's commitment to the principles of international human rights law, their implementation in domestic law and public institutions, and engagement with

6530 Ombudsman of Ukraine, *Ukrainian Parliament Commissioner for Human Rights* (Dec. 29, 2024), https://www.ombudsman.gov.ua/uk/prava-civilnih-osib-yaki-postrazhdali-vid-zbrojnogo-konfliktu/rozyasnennya-ta-infografiki

⁶⁵²⁸ Baker McKenzie, *Ukrainian Laws in Wartime: Guide for International and Domestic Businesses* (Mar. 5, 2024), https://www.bakermckenzie.com/en/insight/publications/guides/-media/files/insight/guides/2024/guide-to-ukrainian-laws-in-wartime-v14.pdf

⁶⁵²⁹ National Security and Defense Council of Ukraine, *Ukraine Extends Martial Law and Mobilisation until 7 February 2025* (Oct. 29, 2024),

https://www.rnbo.gov.ua/en/Diialnist/7035.html

⁶⁵³¹ Freedom House, Freedom in the World 2024: Ukraine (2024),

https://freedomhouse.org/country/ukraine/freedom-world/2024

⁶⁵³² Human Rights Watch, *World Report 2023: Ukraine* (2023), https://www.hrw.org/world-report/2023/country-

chapters/ukraine#:~:text=As%20of%20early%20January%202023,the%20actual%20figures%20 were%20higher

⁶⁵³³ Amnesty International, *Ukraine 2022* (2022), https://www.amnesty.org/en/location/europe-and-central-asia/ukraine/report-ukraine/

⁶⁵³⁴ Verkhovna Zada of Ukraine, *About Electronic Communications*, No 1089-IX (Dec. 16, 2020), https://zakon.rada.gov.ua/laws/show/1089-20

President of Ukraine, *Decree of the President of Ukraine No 119/2021* (Mar. 24, 2021), https://www.president.gov.ua/documents/1192021-37537

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international human rights bodies. Ukraine also committed to an annual internal review by a new Interagency Working Group. Ukraine expanded this commitment by continuing the annual review process, with the Interagency Working Group intensifying efforts to monitor and adapt the strategy to address evolving human rights challenges, especially in the context of digital rights and AI governance. 6536

Ukraine became a member of the United Nations in October 1945 and ratified the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights (ICCPR), and the International Covenant on Economic, Social and Cultural Rights. Collectively those three instruments constitute the UN International Bill of Human Rights. The UN reports that Ukraine has ratified 16 out of 18 key international human rights treaties. Following the full-scale invasion, Ukraine submitted a declaration with derogation from international obligations under the European Convention on Human Rights and the ICCPR.

The UN Human Rights Council periodic review of Ukraine's peace-time human rights position in 2018 remarked positively on the country's efforts in the field of judicial reform, discrimination, prevention of torture, gender equality, and the treatment of people with disabilities.⁶⁵³⁸ The UN Human Rights Council also noted the work being done to reform policing and tackle corruption. 190 recommendations were made to Ukraine and the government accepted 163 of those.

The UN Human Rights Council created an Independent International Commission of Inquiry on Ukraine to investigate all alleged violations and abuses of human rights and violations of international humanitarian law, and related crimes in the context of the Russian aggression against Ukraine. The Commission's report expressed concerns regarding "continuing patterns of violations of human rights and international humanitarian law" by Russia. 6539

OECD / G20 AI Principles

The OECD has been working in close partnership with Ukraine for more than 30 years to support its reform agenda. 6540 Ukraine is not a member of the

6536 European Commission, *Digital Public Administration Factsheet 2024: Ukraine*, https://interoperable-europe.ec.europa.eu/sites/default/files/inline-files/NIFO 2024%20DPAF Ukraine vFinal.pdf

ny.un.org/doc/UNDOC/GEN/G18/000/33/PDF/G1800033.pdf

⁶⁵³⁷ United Nations, *Status of Ratification: Interactive Dashboard*, https://indicators.ohchr.org/6538 United Nations, *Report of the Working Group on the Universal Periodic Review: Ukraine* (Jan. 3, 2018), https://documents-dds-12

⁶⁵³⁹ UN Human Rights Office of the High Commissioner, *Ukraine: UN Commission Concerned by Continuing Patterns of Violations of Human Rights and International Humanitarian Law* (Mar. 2024), https://www.ohchr.org/en/press-releases/2024/03/ukraine-un-commission-concerned-continuing-patterns-violations-human-rights

⁶⁵⁴⁰ OECD, The OECD's Work in Ukraine (2023), https://www.oecd.org/country/ukraine/

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OECD but endorsed the OECD AI Principles in 2019.⁶⁵⁴¹ Ukraine also committed to the updated OECD AI Principles.⁶⁵⁴² The 2020 Order of the Cabinet of Ministers of Ukraine expressed commitment to implement the OECD AI Principles.⁶⁵⁴³

The OECD Council recognized Ukraine as a prospective Member and opened an initial accession dialogue, following a request from the Government. 6544 The OECD and the Government of Ukraine later began implementing a four-year OECD-Ukraine Country Programme that supports Ukraine's agenda for reform, recovery, and reconstruction, and helps the country advance its ambitions to join the OECD and European Union. 6545

Ukraine is not a member of the Global Partnership on AI,⁶⁵⁴⁶ a multistakeholder initiative which aims to foster international cooperation on AI research and applied activities, and which is "built around a shared commitment to the OECD Recommendation on Artificial Intelligence."⁶⁵⁴⁷

The most recent OECD report on the state of implementation of the OECD AI Principles highlights that Ukraine's has a national AI strategy (2021–2030) that is designed to leverage the country's existing AI capabilities to achieve strategic national objectives. These objectives include "advancing Ukraine's digital economy, improving public administration efficiency, and enhancing the quality of life for its citizens." The OECD recognizes that this strategy prioritizes AI applications in education, defense, security, and key economic sectors. 6548

Council of Europe AI Treaty

Ukraine contributed as a Council of Europe Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy, and the Rule of Law. Ukrainian civil society with Observer

⁶⁵⁴¹ OECD, *Recommendation of the Council on Artificial Intelligence*, OECD/LEGAL/0449 (May 22, 2019), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449 (May 2024), 6542 OECD, OECD AI Principles Overview, Countries Adhering to the AI Principles (May 2024), https://oecd.ai/en/ai-principles

⁶⁵⁴³ Order of the Cabinet of Ministers of Ukraine, No. 1556-R On Approvement of the Concept for the Development of Artificial Intelligence in Ukraine (Dec. 2, 2020), https://zakon.rada.gov.ua/laws/show/1556-2020-p#Text

⁶⁵⁴⁴ OECD, *OECD Strengthens Support for Ukraine with Four-Year Country Programme* (2023), https://www.oecd.org/newsroom/oecd-strengthens-support-for-ukraine-with-four-year-country-programme.htm

⁶⁵⁴⁵ OECD, *The OECD's Work in Ukraine* (2024), https://www.oecd.org/country/ukraine/6546 OECD, *Recommendation of the Council on Artificial Intelligence* (2023),

https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449

⁶⁵⁴⁷ Global Partnership on Artificial Intelligence (GPAI), *Members* (2024), https://gpai.ai/community/

⁶⁵⁴⁸ OECD, *The State of Implementation of the OECD AI Principles Four Years On* (Oct. 2023), https://www.oecd.org/artificial-intelligence/the-state-of-implementation-of-the-oecd-ai-principles.pdf

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status also actively participated in these processes. However, Ukraine has not signed the legally binding international treaty. 6549

UNESCO Recommendation on AI Ethics

Ukraine has been a member of UNESCO since 1954⁶⁵⁵⁰ and along with 192 other member states it adopted the UNESCO Recommendation on the Ethics of Artificial Intelligence in November 2021.⁶⁵⁵¹ The UNESCO Recommendation is not explicitly referenced in Ukraine's current AI policy framework even though Ukraine's emerging policy framework reflects many of the concerns and priorities in the UNESCO recommendation.

Ukraine has also initiated alignment with the Recommendation by preparing to implement the UNESCO Readiness Assessment Methodology (RAM). The RAM helps countries assess their legal, social, cultural, scientific, educational, technical, and infrastructural capacities to implement AI responsibly.⁶⁵⁵² Ukraine is listed as "in preparation" for implementing the RAM on UNESCO's Global AI Ethics and Governance Observatory's Global Hub.⁶⁵⁵³

Evaluation

The Russian invasion of Ukraine caused severe human rights violations, especially on the territories currently under Russian occupation. In response to the invasion, Ukraine has imposed martial law and derogated its obligations under certain human rights treaties. Reacting to the rapid digitalization of warfare, Ukraine has become a field for the development and use of autonomous weapons, which raises serious concerns among Ukrainian and international civil society.

As Ukraine obtained the status of EU candidate country, the AI policy landscape will likely be strengthened by reforms designed to align Ukrainian legal frameworks with the corresponding EU laws, including the GDPR, the EU AI Act or the Digital Services Act. Ukraine has continued to make progress toward implementing the OECD AI Principles and UNESCO Recommendation as well as national AI legislation.

⁶⁵⁴⁹ Council of Europe Treaty Office, Chart of Signatures and Ratifications of Treaty 225 (Dec.

^{31, 2024), &}lt;a href="https://www.coe.int/en/web/Conventions/full-list/?module=signatures-by-treaty&treatynum=225">https://www.coe.int/en/web/Conventions/full-list/?module=signatures-by-treaty&treatynum=225

⁶⁵⁵¹ UNESCO, *Member States: Ukraine* (Dec. 29, 2024), https://www.unesco.org/en/countries 6551 UNESCO, *Recommendation on the Ethics of Artificial Intelligence* (Nov. 23, 2021),

https://unesdoc.unesco.org/ark:/48223/pf0000381137

6552 UNESCO Global AI Ethics and Governance Observatory, *Readiness Assessment Methodology* (2024), https://www.unesco.org/ethics-ai/en/ram

⁶⁵⁵³ UNESCO Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

United Arab Emirates

In 2024, the United Arab Emirates (UAE) released a charter for the development and use of artificial intelligence. The Cabinet also approved the country's official stance on participation in international AI policy, including the development of standards for AI sustainability. The UAE co-sponsored UN General Assembly Resolution on Seizing the Opportunities of Safe, Secure, and Trustworthy Artificial Intelligence Systems for Sustainable Development.

National AI Strategy

In 2017, the UAE became the first country in the world to appoint a Minister of State for Artificial Intelligence. H.E. Omar Al Olama was later appointed as Minister of State for Artificial Intelligence, Digital Economy and Remote Work Applications in July 2020.⁶⁵⁵⁴ The responsibilities of the Ministry included enhancing the government performance levels by investing in the latest technologies of artificial intelligence and applying them in various sectors.

The UAE Cabinet formed the UAE Council for Artificial Intelligence (AI) and Blockchain to facilitate the implementation of AI policies, and oversee AI integration in government departments and the education sector. The Council is tasked with proposing policies to create an AI-friendly ecosystem, encourage advanced research in the sector and promote collaboration between the public and private sectors, including international institutions to accelerate the adoption of AI. 6556

The UAE Government also launched the UAE Strategy for Artificial Intelligence (AI).⁶⁵⁵⁷ The strategy aligned with UAE Centennial 2071,⁶⁵⁵⁸ which has an ambitious goal to make the UAE the best country in the world by 2071. In the plan, AI will play a significant role in education, economy, government development, and community happiness through applications in various sectors, including energy, tourism, and education.

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⁶⁵⁵⁴ UAE Artificial Intelligence Office, *Omar Sultan Al Olama Has Been Appointed as Minister of State for Artificial Intelligence* (Oct. 20, 2017), https://ai.gov.ae/about/

⁶⁵⁵⁵ UAE Artificial Intelligence Office, *UAE Adopts Formation of Council for Artificial Intelligence* (Mar. 5, 2018), https://ai.gov.ae/ai_council/

⁶⁵⁵⁶ UAE Government Portal, *Artificial Intelligence in Government Policies* (Updated Sept. 9, 2024), https://u.ae/en/about-the-uae/digital-uae/digital-technology/artificial-intelligence-in-government-policies

⁶⁵⁵⁷ UAE Government Portal, *UAE Strategy for Artificial Intelligence* (Jan. 2, 2023), https://u.ae/en/about-the-uae/strategies-initiatives-and-digital-transformation/uae-strategy-for-artificial-intelligence
6558 UAE Government Portal, *UAE Centennial 2071* (Nov. 24, 2022), https://u.ae/en/about-the-uae/strategies-initiatives-and-awards/strategies-plans-and-visions/innovation-and-future-shaping/uae-centennial-2071

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The National AI Strategy outlines eight strategic objectives: 6559

- 1. Build a reputation as an AI destination.
- 2. Increase the UAE's competitive assets in priority sectors through the deployment of AI.
- 3. Develop a fertile ecosystem for AI.
- 4. Adopt AI across customer services to improve lives and government.
- 5. Attract and train talent for future jobs enabled by AI.
- 6. Bring world-leading research capability to work with target industries.
- 7. Provide the data and supporting infrastructure essential to become a test bed for AI.
- 8. Ensure strong governance and effective regulation."

The UAE AI guidelines center on AI governance, Data governance, Cybersecurity, and Bias.

Government entities, such as the Digital Dubai Authority (DDA) followed the plans of the National AI Strategy, with specific strategies and guidance on AI. The Dubai Digital Authority published an AI Ethical impact assessment framework and established a governing AI ethics board, comprised of government policy, academic, legal, and industry experts to oversee and guide the strategic development of the AI Ethics Guidelines.

The Dubai AI Ethics Guidelines describe the key principles of a fair, transparent, accountable, and explainable AI system. 6560 Launched in January 2019, the AI Principles and Guidelines for the Emirate of Dubai demonstrate Dubai's broader approach to ethical AI. Accompanying the Principles and Guidelines is an Ethical AI Self-Assessment Tool built to enable AI developers or operator organizations to evaluate the ethics level of an AI system.

The AI Ethics Guidelines provide an assessment (from proof of concept to production) of the ethical issues that may arise throughout the development process and how specific AI applications could be improved to ensure fairness, transparency, accountability, and explainability. The Ethical Toolkit also aims to ensure adoption of AI that optimizes the innovation potential and delivers economic and social value. The Executive Council of Dubai directed government entities to use the principles and guidelines when considering AI development, and entities including the Road and Transport Authority and the Dubai Police have formally acknowledged their adoption of the self-assessment tool when developing AI.6561

https://ai.gov.ae/strategy/

⁶⁵⁵⁹ UAE Artificial Intelligence Office, UAE National Strategy for AI 2031,

⁶⁵⁶⁰ Digital Dubai Authority, AI Principles & Ethics (2022),

https://www.digitaldubai.ae/initiatives/ai-principles-ethics

⁶⁵⁶¹ Digital Dubai Authority, Ethical AI Toolkit: Request for Information (May 18, 2020), https://www.digitaldubai.ae/knowledge-hub/blogs/ethical-ai-toolkit-request-for-information

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The Federal government set up the UAE National Program for Artificial Intelligence, 6562 which is a comprehensive set of resources on advances in AI and Robotics. The program encompasses free courses for UAE residents to raise awareness and understanding of AI technologies. The government has endeavored to upskill the student population and government employees by providing relevant trainings to them. 6564

Preceding the publication of the National AI Strategy, the UAE launched the Fourth Industrial Revolution (4IR) Strategy.⁶⁵⁶⁵ The strategy encompasses six pillars:

- 1. The Human of the Future
- 2. The Security of the Future
- 3. The Experience of the Future
- 4. The Productivity of the Future
- 5. The Frontiers of the Future
- 6. The Foundations of the Future

Innovations in robotics for healthcare are included in Pillar 1. Innovations in intelligent government services, intelligent cities, and next-gen mobility are in Pillar 3. 4IR policies and regulations to maintain the privacy and well-being of citizens and 4IR Values and Ethics are part of Pillar 6.

The UAE co-sponsored the UN General Assembly Resolution on Seizing the Opportunities of Safe, Secure and Trustworthy Artificial Intelligence Systems for Sustainable Development, 6566 which addresses the potential of AI in accelerating global development while also recognizing associated risks. The main objectives include bridging the AI and digital divides between and within countries; promoting safe, secure, and trustworthy AI systems; and accelerating progress towards achieving the 2030 Agenda for Sustainable Development. This resolution marks a significant step in global AI governance, aiming to harness the

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⁶⁵⁶² UAE Government Portal, *Artificial Intelligence in Government Policies* (Sept. 9, 2024), https://u.ae/en/about-the-uae/digital-uae/digital-technology/artificial-intelligence/artificial-intelligence-in-government-policies

⁶⁵⁶³ UAE Artificial Intelligence Office, *AI Summer Camp 6.0* (Dec. 26, 2024), https://ai.gov.ae/camp/

⁶⁵⁶⁴ UAE Artificial Intelligence Office, Learn AI (2022), https://ai.gov.ae/learn/

⁶⁵⁶⁵ UAE Government Portal, *The UAE's Fourth Industrial Revolution (4IR) Strategy* (Nov. 7, 2023), https://u.ae/en/about-the-uae/strategies-initiatives-and-awards/strategies-plans-and-visions/government-services-and-digital-transformation/the-uae-strategy-for-the-fourth-industrial-revolution

⁶⁵⁶⁶ United Nations General Assembly, *Seventy-Eighth Session, Agenda Item 13, Integrated and Coordinated Implementation of and Follow-up to the Outcomes of the Major United Nations Conferences and Summits in the Economic, Social and Related Field* (Mar. 11, 2024), https://documents.un.org/doc/undoc/ltd/n24/065/92/pdf/n2406592.pdf

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technology's potential for sustainable development while addressing associated challenges and risks.

The UAE AI Office later launched the Charter for Development and Use of AI,6567 stipulating 12 priorities, including strengthening Human-Machine Ties, safety, algorithmic bias, data privacy, transparency, human oversight, governance and accountability, technological excellence, human commitment, peaceful coexistence with AI, promoting AI awareness for an inclusive future, commitment to treaties and applicable laws. The charter aims to position the UAE as a global hub for AI innovation, ensure ethical and responsible AI development, protect privacy and data security, balance technological advancement with social values, and encourage innovation and support economic growth. The charter reflects the UAE's National Strategy for AI goal of becoming a leading AI nation by 2031.

The Dubai Electronic Security Centre (DESC) launched the Dubai AI Security Policy⁶⁵⁶⁸ to support AI development with the aim of protecting Dubai from cyber risks. This policy aims to bolster confidence in AI solutions and technologies, promote the growth and development of AI, and mitigate electronic security risks associated with AI. The policy was unveiled during DESC's participation as the official cybersecurity partner at the inaugural Dubai AI and Web3 Festival 2024 at Madinat Jumeirah.

The UAE and released a Framework Statement with the United States forging intergovernmental cooperation on AI governance. The statement was issued following a meeting between UAE President H.H. Sheikh Mohamed bin Zayed Al Nahyan and U.S. President Joseph R. Biden, Jr. The framework statement, endorsed by U.S. Assistant to the President for National Security Affairs Jake Sullivan and UAE National Security Advisor H.H. Sheikh Tahnoon bin Zayed Al Nahyan, outlines several key aspects of cooperation. The statement acknowledges the potential of AI to drive economic growth, transform various sectors, and promote sustainability. However, it also recognizes the challenges and risks associated with this emerging technology. The framework statement sets the stage for deeper cooperation between the two nations in AI governance, with potential implications for global standards and practices.

⁶⁵⁶⁸ Dubai Electronic Security Center, *Dubai Electronic Security Center Launces the Dubai AI Security Policy*, https://www.desc.gov.ae/dubai-electronic-security-center-launches-the-dubai-ai-security-policy/

⁶⁵⁶⁷ Government of United Arab Emirates, *The UAE Charter for the Development and Use of Artificial Intelligence* (Jun. 10, 2024), https://uaelegislation.gov.ae/en/policy/details/the-uae-charter-for-the-development-and-use-of-artificial-intelligence

⁶⁵⁶⁹ Biden White House Archives, *United States and United Arab Emirates Cooperation on Artificial Intelligence* (Sept. 23, 2024), https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2024/09/23/united-states-and-united-arab-emirates-cooperation-on-artificial-intelligence/

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The UAE Cabinet approved the country's official stance on AI policy internationally, 6570 marking a significant step in the UAE's commitment to global AI governance and development. This policy is built on six core principles and includes several key foreign policy initiatives: advancement, cooperation, community, ethics, sustainability, and security. This policy underscores the UAE's commitment to responsible AI development and its ambition to play a leading role in shaping the global AI landscape while balancing technological advancement with societal welfare."

Public Participation

The UAE has a robust system of information and services for the public. The UAE Strategy for Government Services, Unified Digital Platform Policy, the Digital Participation Policy, and the Digital Customer and Digital Government Service Policy, aim to provide access to digital services.

The UAE Digital Participation Policy⁶⁵⁷¹ establishes what can be posted on the public platforms, the conditions to facilitate a healthy environment for sharing information, and enabling meaningful discussion on topics concerning the services of the UAE Digital Government and life in the UAE in general. The Sharik.AE platform created in 2022 is an interactive interface to keep the UAE public informed and seek consultations on matters related to government activities. 6572 Sharik. AE includes an interface for input for the co-creation of public services, community engagement, and participatory budget.

The UAE, through the Ministry of Artificial Intelligence, launched the "Think AI" initiative to develop legislation, policies, and initiatives for a responsible and efficient adoption of artificial intelligence (AI) within the private sector. "Think AI" established to facilitate a series of roundtables, workshops, and panel discussions with the participation of more than 100 government officials, representatives from the private sector, and experts from local and international organizations. The dialogue aimed to support the UAE's efforts to accelerate the adoption of artificial intelligence in key sectors such as infrastructure, governance and legislation to strengthen the position as a global hub for artificial intelligence.6573

⁶⁵⁷⁰ Government of United Arab Emirates, UAE's International Stance on Artificial Intelligence Policy (Sept. 2, 2024), https://uaelegislation.gov.ae/en/policy/details/uae-s-international-stanceon-artificial-intelligence-policy

⁶⁵⁷¹ UAE Government Portal, Digital Participation Policy, https://u.ae/en/footer/digitalparticipation-policy

⁶⁵⁷² UAE Government Portal, Consultations Sharik.ae (2022),

https://u.ae/en/participate/consultations

⁶⁵⁷³ Nour Salman and Mohd Aamir, Emirates News Agency-WAM, UAE Government Launches "Think AI" Initiative (Mar. 6, 2019), http://wam.ae/en/details/1395302745072

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The Ministry of AI of the UAE ensures public awareness and digital participation through a variety of initiatives. The AI Camp 5.0 in 2023 attracted more than 8,000 participants aiming to develop their digital skills.⁶⁵⁷⁴ The AI Camp 6.0 in 2024 will cover seven main areas: the future of artificial intelligence; data science and machine learning; AI in education, healthcare, and finance sectors; web development and robotics; AI ethics and governance; cybersecurity; and virtual and augmented reality."6575

The Ministry of Human Resources & Emiratisation launched a public consultation on the use of AI and automated systems for contract completion in 2023 and 2024. 6576

At the emirate level, Digital Dubai has set a vision to make Dubai the happiest city on earth, through initiatives of government effectiveness, in G2C Government to Consumer and Government to Government (G2G) services⁶⁵⁷⁷. Dubai has a website with information about AI principles and ethics for public access. Dubai's Ethical AI Toolkit is particularly helpful for three main types of users: Government Entities, Private Sector Entities, and Individuals.⁶⁵⁷⁸ The Digital Dubai Authority (DDA) introduced new methods of e-participation for the public on various issues including AI Ethics work.⁶⁵⁷⁹

Data Protection

In November 2021, the UAE adopted sweeping legislative reforms, including the Personal Data Protection Law, and Federal Decree-Law on the Protection of Personal Data, modeled after the GDPR. The Personal Data Protection (PDD) Law has extraterritorial geographical effect and applies to data controllers and data processors within UAE or located outside of the UAE, processing personal data of UAE residents. ⁶⁵⁸⁰. The draft of the PDD Law had the

https://u.ae/en/participate/consultations/consultation?id=3343

https://www.digitaldubai.ae/initiatives/ai-principles-ethics

⁶⁵⁷⁴ Emirates News Agency-WAM, *The UAE AI Camp Witnessed the Participation of More than 8,000 Individuals* (Aug. 17, 2023), https://www.wam.ae/en/article/hszrhpqp-uae-camp-witnessed-the-participation-more-than

⁶⁵⁷⁵ Emirates News Agency-WAM, *UAE AI Camp Kicks Off Its Sixth Edition* (Jul. 28, 2024), https://www.wam.ae/en/article/b4e0s03-uae-camp-kicks-off-its-sixth-edition

⁶⁵⁷⁶ Ministry of Human Resources & Emiratisation, *Public Consultation on the Automated System for Contract Completion* (Nov. 24, 2023),

⁶⁵⁷⁷ Digital Dubai Authority, Vision (2023), https://www.digitaldubai.ae/

⁶⁵⁷⁸ Digital Dubai Authority, AI Principles and Ethics (2022),

⁶⁵⁷⁹ Digital Dubai Authority, *E-participation*, https://www.digitaldubai.ae/entities/e-participation
⁶⁵⁸⁰ Minister of State for Artificial Intelligence, Digital Economy & Remote Work Applications
Office, *Federal Decree Law No. 45/2021 on the Protection of Personal Data* (Nov. 2021),
https://ai.gov.ae/personal-data-protection-law/

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participation of 30 major technology companies and came into force in January 2022. ⁶⁵⁸¹ Four principles underpin the Law: ⁶⁵⁸²

- 1. Single Data Authority
- 2. Right for Consent
- 3. Incentivizing SMEs
- 4. Allows Cross Border Data Flow

Introduced by the Minister of AI as "the law with the lowest cost of compliance," the PDD Law is an integrated framework to ensure the confidentiality of information, protect the privacy of individuals, achieve proper governance for data management and data protection, in addition to defining the rights and duties of all concerned parties. The rights established in the PDD Law are the right of access to information, the right to request personal data portability, the right to rectification or erasure of personal data, right of processing and automated processing. The PDD Law also addresses Cross Border Data Transfer. The oversight is the responsibility of the UAE Data Office (DO), as the federal data regulator, overseeing policies, standards, and legislation, and responding to inquiries and complaints about the PDD Law. The DO affiliated with the Cabinet is responsible for a wide range of tasks that include: 6585

- 1. Preparing policies and legislations related to data protection,
- 2. Proposing and approving the standards for monitoring the application of federal legislation regulating this field,
- 3. Preparing and approving systems for complaints and grievances, and
- 4. Issuing the necessary guidelines and instructions for the implementation of data protection legislation.

Provisions of the law include the prohibition of processing of personal data without the consent of its owner, with noted exceptions of protection of public interest, legal procedures and rights, and previous knowledge by the data owner. The law defines the controls for the processing of personal data and sets the obligations of security, confidentiality, and privacy.

⁶⁵⁸¹ UAE Government, *Data Protection Laws* (Updated Oct. 22, 2024), https://u.ae/en/about-the-uae/digital-uae/data/data-protection-laws

⁶⁵⁸² Minister of State for Artificial Intelligence, Digital Economy & Remote Work Applications Office, *Federal Decree Law No. 45/2021 on the Protection of Personal Data* (Nov. 2021), https://ai.gov.ae/personal-data-protection-law/

⁶⁵⁸³ Emirates News Agency-WAM, *UAE Adopts Largest Legislative Reform in its History* (Nov. 27, 2021), https://www.wam.ae/en/details/1395302997239

⁶⁵⁸⁴ Minister of State for Artificial Intelligence, Digital Economy & Remote Work Applications Office, *Federal Decree Law No. 45/2021 on the Protection of Personal Data* (Nov. 2021), https://ai.gov.ae/personal-data-protection-law/

⁶⁵⁸⁵ UAE Government Portal, *UAE Data Office* (Mar. 2, 2023), https://u.ae/en/about-the-uae/digital-uae/data/data-protection-laws

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The law does not apply to government data, government authorities that control or process personal data, or personal data processed by the security and judicial authorities. The law also does not cover the processing of health, banking, and credit data that are subject to sector-specific legislation, and companies and institutions located in free zones that have specific data protection laws, such as the Dubai International Finance Centre (DIFC) and the Abu Dhabi Global Market (ADGM). Significant divergences with the GDPR include the limited legal basis, with a focus on consent as the primary legal basis, and less comprehensive transparency requirements. The data protection law also has less onerous transparency requirements (only certain limited information will be required before processing) than the GDPR and no specific privacy notice requirement.

Other UAE laws that provide general rights to privacy include:

- 1. The UAE Constitution: Addresses privacy in that freedom of communication by post or other means of communication and the secrecy thereof is guaranteed in accordance with the law⁶⁵⁸⁸
- 2. The UAE Penal Code: Prohibits those who have access to an individual's personal data from disclosing or publicizing that information⁶⁵⁸⁹
- 3. The Federal Decree-Law No.34 of 2021 on Combatting Rumors and Cybercrime: Article (6) criminalizes the misuse of the personal data of others⁶⁵⁹⁰

The DO has not yet sponsored the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence, the 2020 Resolution on Accountability in the Development and Use of Artificial Intelligence, the 2022

⁶⁵⁸⁹ Penal Code of UAE, Federal Law No. 3 of 1987, DataGuidance (Jan. 4, 2018),

https://www.dataguidance.com/legal-research/federal-law-no-3-1987-penal-code

Commissioners, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922_ICDPPC-40th_AI-Declaration_ADOPTED.pdf

⁶⁵⁸⁶ UAE Cabinet, *Art (2) 2 of the Federal Decree by Law No. (45) of 2021 Concerning the Protection of Personal Data* (Sept. 20, 2021), https://uaelegislation.gov.ae/en/legislations/1972 (Sept. 20, 2021), https://uaelegislation.gov.ae/en/legislations/1972 (Bec. 14, 2021), https://www.globalprivacyblog.com/legislative-regulatory-developments/uae-publishes-first-federal-data-protection-law/

⁶⁵⁸⁸ Constitute Project, United Arab Emirates's Constitution of 1971 with Amendments through 2004 (Apr. 27, 2022),

https://www.constituteproject.org/constitution/United Arab Emirates 2004.pdf

⁶⁵⁹⁰ Government of United Arab Emirates, *Federal Decree-Law No.34 of 2021, Article (6) Attack on Personal Data and Information* (2021), https://laws.uaecabinet.ae/ar/materials/law/1526 (6591 Global Privacy Assembly, International Conference of Data Protection & Privacy

⁶⁵⁹² Global Privacy Assembly, *Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-

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GPA Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology, 6593 or the 2023 GPA Resolution on Generative AI. 6594

Algorithmic Transparency

While the UAE regulations do not include a specific law on algorithmic transparency, Article 18 of the PDD Law, 6595 gives data subjects the right to object to automated decision-making that may impact them, including profiling, with some exceptions given by other UAE laws. 6596

Under the Charter for Development and Use of Artificial Intelligence the government intends to prioritize transparency for clear understanding of AI and how AI systems operate and make decisions. The government aims to foster trust and enhance responsibility and accountability in the use of AI technologies. 6597

The UAE's Artificial Intelligence Guide⁶⁵⁹⁸ issued by the Ministry of AI addresses the subject of AI transparency in several sections. Section 3.4 describes the principles established in the Ethical AI Toolkit of the Smart Dubai Office by which systems should be ethical, fair, accountable, transparent, explainable, safe, secure, and "serve to protect humanity." The AI Guide highlights the Smart Dubai ethical self-assessment tool for government companies, private firms, and individuals.

 $\underline{content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-\underline{AI-EN.pdf}}$

⁶⁵⁹³ Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁶⁵⁹⁴ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁶⁵⁹⁵ Minister of State for Artificial Intelligence, Digital Economy & Remote Work Applications Office, *Federal Decree Law No. 45/2021 on the Protection of Personal Data* (Nov. 2021), https://ai.gov.ae/personal-data-protection-law/

⁶⁵⁹⁶ Baker McKenzie, *Global Data Privacy & Security Handbook UAE* (2022), https://resourcehub.bakermckenzie.com/en/resources/global-data-privacy-and-cybersecurity-handbook/emea/uae

⁶⁵⁹⁷ Minister of State for Artificial Intelligence and Digital Economy and Remote Work Applications Office, *The UAE's Charter for Development and Use of Artificial Intelligence* (Jun. 10, 2024), https://uaelegislation.gov.ae/en/policy/details/the-uae-charter-for-the-development-and-use-of-artificial-intelligence

⁶⁵⁹⁸ Ministry of Artificial Intelligence, *UAE AI Guide* (2020), https://ai.gov.ae/wp-content/uploads/2020/02/AIGuide EN v1-online.pdf

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The UAE AI Guide includes a restatement of the focused efforts of the UAE in removing bias in the algorithms of AI systems. Section 3.5 includes examples and case studies to avoid the perpetuation of racial and gender bias. The recommendations include the implementation of evaluations of the decisionmaking process based on AI for fairness and posing the question "Should we build AI?" 6599

Facial Recognition

The UAE's digital transformation has led to the adoption of an AI-powered facial recognition system. In 2021, the UAE Government announced the enhancement of the UAE Pass, by adding biometric face recognition systems (Facial ID) to register users into the application. 6600 The integration of facial recognition was set to reduce the transaction time from 20 minutes to 5 minutes.

In November 2022, Abu Dhabi Airports replaced passport checks with facial recognition technology. 6601 Biometric data is used to check in travelers, clear immigration, access lounges, and board their flights. The first phase of the project took place at one of the terminals at Abu Dhabi International Airport at the United States Customs and Border Protection (CBP) facility. The Managing Director and CEO of Abu Dhabi Airports presented this innovation as the "first of its kind in the UAE and the world, to further enhance our passenger journey."6602 The country plans to implement the system across the entire airport in 2025.6603

The Railway Transport Agency (RTA) commenced the use of emotional AI for tram drivers. Drivers wear armbands to detect heart rate, speech patterns, and reaction times to determine driving style and deviations based on drivers' profiles. 6604 Dubai Police introduced Giath vehicles, equipped with a 360-degree

⁶⁶⁰⁰ Esraa Ismail and Tariq Alfaham, UAE Government to Employ Biometric Face Recognition to Register Customers under "UAE Pass" App, UAE Government Launches "Think AI" Initiative, Emirates News Agency-WAM (Apr. 7, 2021), https://wam.ae/en/details/1395302925206 6601 Khaleej Times, Abu Dhabi Airport to Replace Passport Checks with Facial Recognition Technology (Nov. 2, 2022), https://www.khaleejtimes.com/uae/abu-dhabi-airport-to-replacepassport-checks-with-facial-recognition-technology

⁶⁶⁰² Emirates News Agency-WAM, Abu Dhabi Airports Gears to Launch Advanced Biometric Technology with Touchless Boarding (Nov 2, 2022), http://wam.ae/en/details/1395303097484 ⁶⁶⁰³ Ana DeOliva, The Race to Become the World's First Document-Free Airport, CNN Travel (Aug. 7, 2024), https://www.cnn.com/travel/abu-dhabi-smart-travel-project/index.html 6604 Roads and Transport Authority, Using Emotional AI to Assess Tram Drivers in Real-Time (Oct. 30, 2022), https://www.rta.ae/wps/portal/rta/ae/home/news-and-media/allnews/NewsDetails/using-emotional-ai-to-assess- tram-drivers-in-real-time

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camera backed with facial and plate recognition technology. The system includes drones to extend surveillance outreach.⁶⁶⁰⁵

Plans are underway for the use of face biometric payments by Carrefour, the hypermarket chain operating in the UAE, in a partnership with the US-based biometric PopID. 6606 The Face Pay biometric system is set to be piloted in selected stores in Dubai. PopID presents this payment method as an innovation for "superior customer experience and [...] robust security protocols." Carrefour faced legal pushback in the EU because of the use of biometric data collection systems for payments at the register without user consent in 2020. 6607

Biometric Identification

The UAE Pass launched in 2018 is the first digital national ID for citizens and residents to access 6,000 government services and to sign documents digitally. The app was developed in a cooperation by Digital Dubai, Telecommunications and Digital Government Regulatory Authority (TDRA), and Abu Dhabi Digital Authority. By 2022 the number of people registered on the UAE Pass app was over 1.38 million, including 628,000 individuals with verified accounts. The system includes a digital vault that stores digital documentation and enhances the seamless completion of government transactions. The system has Blockchain technology to improve traceability and security.

The UAE Pass aligns with the protection of privacy and digital identity provisions outlined in the Federal Decree Law on Combatting Rumors and Cybercrime, 6609 and the Electronic Transactions and Trust Services Law. 6610

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⁶⁶⁰⁵ Eric Weiss, *Dubai Police Unveil Biometric Surveillance Cars*, Find Biometrics (Mar. 16, 2022), https://findbiometrics.com/dubai-police-unveil-biometric-surveillance-cars-031604/ ⁶⁶⁰⁶ Alessandro Mascellino, *PopID Announces Big Customer Deployment for Face Biometric Payments in the UAE* (Feb. 13, 2022), https://www.biometricupdate.com/202302/popid-announces-big-customer-deployment-for-face-biometric-payments-in-uae

⁶⁶⁰⁷ Luana Pascu, *Belgian Data Protection Authority Warns Supermarket Chain Carrefour about Biometric Data Collection* (Jan. 16, 2020), https://www.biometricupdate.com/202001/belgian-data-protection-authority-warns-supermarket-chain-carrefour-about-biometric-data-collection
⁶⁶⁰⁸ UAE Government Portal, *What Is the UAE Pass?* (2022), https://u.ae/en/about-the-uae/digital-uae/the-uae-pass-app

Emirates News Agency-WAM, Public Prosecution Explains Penalties of Fake E-mails,
 Websites, Online Accounts (Mar. 22, 2022), http://wam.ae/en/details/1395303032222
 Telecommunications and Digital Government Regulatory Authority, Electronic Transactions and Trust Services Law (Ara) (2021), https://tdra.gov.ae/-/media/About/LEGAL-REFERENCES/LAW/LAW-English/Electronic-Transactions-and-trust-sevices-law-AR.ashx

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Mass Surveillance

In 2017 the Dubai Police released the 2018-31 strategic plan for artificial intelligence.⁶⁶¹¹ The plan includes the use of AI techniques in criminal forensic investigation and in police operations to predict crimes. AI techniques were set to forecast crime, perform crowd management, enhance traffic safety and road security, and manage crises and disasters.

In 2018, Dubai Police announced the launch of Oyoon, an artificial intelligence surveillance program⁶⁶¹² that had the support of the government, semi-government, and private sector entities. The system intended to "provide a safer living experience." ⁶⁶¹³ The system operates through tens of thousands of cameras with facial recognition software and microphones to track and analyze the movements of suspected would-be thieves. The system would give verbal warnings before the commitment of the crime. ⁶⁶¹⁴

Abu Dhabi Monitoring and Control Center (ADMCC) released the Falcon Eye system in 2016. The Falcon Eye system operated with a live feed to thousands of cameras installed in key locations to "observe events and monitor and limit violations." ⁶⁶¹⁵

Human Rights Watch reported the use of advanced mass surveillance technologies "to pervasively monitor public spaces, internet activity, and even individuals' phones and computers, in violation of their right to privacy, freedom of expression, association, and other rights."

⁶⁶¹¹ Priyankar Bhunia, *Dubai Police Releases 2018–31 Strategic Plan for Artificial Intelligence*, OpenGovAsia (Dec. 21, 2017), https://opengovasia.com/dubai-police-releases-2018-31-strategic-plan-for-artificial-intelligence/

https://www.dubaipolice.gov.ae/wps/portal/home/search/!ut/p/z1/04_Sj9CPykssy0xPLMnMz0v MAfIjo8zi_T29HQ2NvA18LQJNTQwCPUIN_Hy8QowMTIz0w8EKDHAARwP9KEL6o1CVu Jt4OxkEuoZa-IX4-

 $\underline{BsZGBhBFeCxIjg1T78gN8Igy8RREQC7VCIU/?1dmy\&urile=wcm\%3apath\%3a/wps/wcm/con} \\ \underline{nect/DubaiPolice_en/DubaiPolice/Media-Center/News/A70}$

⁶⁶¹² Dubai Police General HQ, *Dubai Police Launch "Oyoon" AI Surveillance Programme* (Jan. 28, 2018),

⁶⁶¹³ Gulf Business, *Dubai Police Launches AI Surveillance Programme* (Jan. 28, 2018), https://gulfbusiness.com/dubai-police-launches-ai-surveillance-programme/

⁶⁶¹⁴ Human Rights Watch, *UAE*: Tolerance Narrative a Sham: Čensorship; Surveillance; Prison or Barred Entry for Critics (Oct. 1, 2021), https://www.hrw.org/news/2021/10/01/uae-tolerance-narrative-sham-0

⁶⁶¹⁵ Emirates News Agency-WAM, *Abu Dhabi Monitoring and Control Centre Launches* "Falcon Eye" System in Abu Dhabi (Jul. 13, 2016), http://wam.ae/en/details/1395297714914 ⁶⁶¹⁶ Human Rights Watch, *UAE: Events of 2022* (2023), https://www.hrw.org/world-report/2023/country-chapters/united-arab-emirates

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Environmental Impact of AI

The UAE has undertaken initiatives aimed at leveraging AI for environmental sustainability. The Dubai Electricity and Water Authority (DEWA) is using AI to enhance energy sustainability and efficiency through its Digital DEWA initiative, which seeks to use autonomous systems for renewable energy, storage, and delivery of water and electricity services.⁶⁶¹⁷

DEWA's AI-powered smart waste bins and waste-to-energy projects are revolutionizing waste management in the UAE.⁶⁶¹⁸ Additionally, the UAE's official stance on AI policy internationally aims to address environmental challenges such as climate change and energy efficiency in the AI development efforts. According to this policy, the UAE aims to participate in platforms that contribute to the development of international standards for AI sustainability.⁶⁶¹⁹

Lethal Autonomous Weapons

The UAE is one of 127 High-Contracting Parties in the Convention of Certain Conventional Weapons (CCW) and endorsed Protocol I (Non-detectable Fragments), III (Incendiary Weapons), and V (Explosive Remnants of War). 6620

As a member of the Non-Aligned Movement (NAM), the UAE supported the negotiation of a legally binding instrument on autonomous weapons systems to ensure that the weapons respect human rights and remain accountable. ⁶⁶²¹

Human Rights

The UAE has agreed to uphold the principles outlined in the Universal Declaration of Human Rights (UDHR). 6622 UAE has not ratified any binding agreements such as the International Covenant on Civil and Political Rights (ICCPR) or the International Covenant on Economic Social and Cultural Rights

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⁶⁶¹⁷ Dubai Electricity and Water Authority, *Digital DEWA* (Feb. 11, 2024), https://www.dewa.gov.ae/en/about-us/strategic-initiatives/digital-dewa

⁶⁶¹⁸ Dubai Electricity and Water Authority, *DEWA Employees Recycle over 7.1 Tonnes of Plastic Bottles and Aluminum Cans in 14 Months* (Mar. 3, 2024), https://www.dewa.gov.ae/en/about-us/media-publications/latest-news/2024/03/dewa-employees-recycle

⁶⁶¹⁹ Minister of State for Artificial Intelligence and Digital Economy and Remote Work Applications Office, *Public Policy Document UAE's International Stance on Artificial Intelligence Policy* (Sept. 2, 2024), https://uaelegislation.gov.ae/en/policy/details/uae-s-international-stance-on-artificial-intelligence-policy

⁶⁶²⁰ United Nations, Office for Disarmament Affairs, *High Contracting Parties and Signatories*, *CCCW* (Updated Jun. 25, 2024), https://www.un.org/disarmament/the-convention-on-certain-conventional-weapons/high-contracting-parties-and-signatories-ccw/

⁶⁶²¹ Non-Aligned Movement (NAM) Disarmament Database, *Country Profile: United Arab Emirates*, http://cns.miis.edu/nam/index.php/site/showProfile/111

⁶⁶²² United Nations, *Universal Declaration of Human Rights, History of the Declaration*, https://www.un.org/en/about-us/udhr/history-of-the-declaration

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(ICESCR)⁶⁶²³ nor withdrawn existing reservations or declarations. The Universal Periodic Review (UPR) of the UAE in 2018, noted the transparent and gradualist approach of the UAE to align legislative and administrative norms with the commitments to human rights protection.⁶⁶²⁴ Recommendations of the report related to the implementation of mechanisms, laws, and regulations to protect human rights in line with international developments. The UAE has made voluntary pledges⁶⁶²⁵ related to engagement with UN human rights agencies, formulating a national human rights plan, protecting labor rights, and pursuing SDGs.⁶⁶²⁶

Freedom House scored UAE 18/100 concerning political rights and civil liberties and rated the country "Not Free." ⁶⁶²⁷ Freedom House reports the ban of political parties in UAE and the concentration of all executive, legislative, and judicial authority with the hereditary Rulers of the seven emirates. Human Rights Watch raised concerns about the UAE's stark contrast between its carefully crafted progressive image and its actual practices of suppressing dissent, maintaining long-term detention of activists (particularly in the UAE94 case), ⁶⁶²⁸ and perpetuating systematic abuse of migrant workers who face both labor exploitation and heightened climate risks. ⁶⁶²⁹

⁶⁶²³ United Nations Human Rights Council, *Universal Periodic Review Third Cycle: United Arab Emirates*, Reference Documents (2018), https://www.ohchr.org/en/hr-bodies/upr/upr-united-arab-emirates-un-contributions-s29

⁶⁶²⁴ OHCHR, National Report Submitted in Accordance with Paragraph 15(A) of the Annex to Human Rights Council Resolution 5/1, United Arab Emirates (Nov. 13, 2017), https://documents-dds-

ny.un.org/doc/UNDOC/GEN/G17/338/81/PDF/G1733881.pdf?OpenElement

⁶⁶²⁵ Permanent Committee for Human Rights, Statement by National Human Rights Committee from its Fifth Meeting, on UAE Winning Membership on UN Human Rights Council for Third Time in its History (2022), https://pchr.gov.ae/en/news-details/statement-by-national-human-rights-committee-from-its-fifth-meeting

⁶⁶²⁶ United Nations: United Arab Emirates, *UN in UAE Working Together as One* (Nov. 3, 2022), https://unitedarabemirates.un.org/en/215053-un-uae-working-together-one

⁶⁶²⁷ Freedom House, *Freedom in the World 2024: United Arab Emirates* (2024), https://freedomhouse.org/country/united-arab-emirates/freedom-world/2024

⁶⁶²⁸ Amnesty International, *UAE: Nearly a Decade of Unjust Imprisonment for "UAE-94" Dissidents* (Jul. 2, 2021), https://www.amnesty.org/en/latest/news/2021/07/uae-nearly-a-decade-of-unjust-imprisonment-for-uae-94-dissidents-2/

⁶⁶²⁹ Human Rights Watch, *World Report 2024: UAE* (2024), https://www.hrw.org/world-report/2024/country-chapters/united-arab-emirates

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Al Safety Summit

The UAE participated in the first AI Safety Summit and endorsed the Bletchley Declaration. The UAE thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully [realize] their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible."

The UAE also participated in the second AI Safety Summit,⁶⁶³¹ which took place in Seoul, Korea.

OECD / G20 AI Principles

The UAE is not a member of the OECD and has not endorsed the OECD AI Principles.⁶⁶³² The UAE engages with the OECD as member of the Development Assistance Committee (DAC). UAE was the first participant of the DAC since July 2014 upon OECD's invitation.⁶⁶³³

The OECD.AI Observatory reports on the efforts of the UAE in governance through the enactment of the UAE National AI Strategy. The strategy addresses the OECD AI principles of (1) inclusive growth, sustainable development, and well-being; (2) fostering a digital ecosystem for AI, and (3) building human capacity and preparing for labor market transition. He OECD also acknowledges the AI Principles and Ethics for the Emirates of Dubai and the Federal Data Protection Law as actions of AI guidance and regulation mapping to OECD AI principles.

⁶⁶³⁰ UK Department for Science, Innovation & Technology, Foreign, Commonwealth & Development Office, Prime Minister's Office, *The Bletchley Declaration by Countries Attending the AI Safety Summit* (Nov. 1–2, 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

⁶⁶³¹ AI Seoul Summit, *Program Details*, *Participants* (May 21–22, 2024), https://aiseoulsummit.kr/program/?uid=9&mod=document&pageid=1

⁶⁶³² OECD, Forty-Two Countries Adopt New OECD Principles on Artificial intelligence (May 22, 2019), https://www.oecd.org/science/forty-two-countries-adopt-new-oecd-principles-on-artificial-intelligence.htm

⁶⁶³³ OECD, Development Co-Operation Directorate, *The United Arab Emirates Accepts Invitation to Become a Participant of the DAC* (Jul. 11, 2024), https://one.oecd.org/document/DCD/DIR(2014)11/en/pdf

⁶⁶³⁴ OECD.AI, National Strategies and Policies, *UAE National Strategy for AI* (Sept. 21, 2022, https://oecd.ai/en/dashboards/countries/UnitedArabEmirates

⁶⁶³⁵ OECD.AI, National Strategies and Policies, *AI Principles and Ethics for the Emirate of Dubai* (Sept. 21, 2022), https://oecd.ai/en/dashboards/countries/UnitedArabEmirates

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Council of Europe AI Treaty

As of December 2024, the UAE has not endorsed the COE Framework Convention on Artificial Intelligence and Human Rights, Democracy, and Rule of Law. 6636 The UAE did not participate in the drafting of the first international legally binding treaty on artificial intelligence.

UNESCO Recommendation on AI Ethics

The UAE has been a UNESCO member since 1972, only one year after their foundation as a country. UAE was among the member states that endorsed the UNESCO Recommendations on the Ethics of AI.⁶⁶³⁷ The pact promotes human rights and contributes to the accomplishment of the Sustainable Development Goals, encompassing chapters on data governance, education, culture, employment, health, and the economy, addressing issues of transparency, accountability, and privacy.⁶⁶³⁸

The UAE has not explicitly addressed implementation of the UNESCO Recommendations through actions such as completing the Readiness Assessment Methodology (RAM).

However, the 2020 UAE report about the National Strategy for AI shows some alignment with the Recommendations, which came after. AI oversight falls under two entities. (1) The Digital Dubai Authority (DDA) ensures the adoption of the Dubai AI Ethics Guidelines and the accompanying Ethical AI Self-Assessment Tool. He UAE Artificial Intelligence and Blockchain Council, overseeing the implementation of AI technology in society and across government.

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⁶⁶³⁶ Council of Europe, Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Nov. 14, 2024), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

⁶⁶³⁷ UNESCO, *UNESCO Member States Adopt the First Ever Global Agreement on the Ethics of Artificial Intelligence* (Nov. 25, 2021), https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence

⁶⁶³⁸ UNESCO, *Recommendation on the Ethics of Artificial Intelligence* (Nov. 23, 2021), https://unesdoc.unesco.org/ark:/48223/pf0000381137

⁶⁶³⁹ UAE National Program for Artificial Intelligence, *UAE National Strategy for Artificial Intelligence 2031* (2018), https://ai.gov.ae/wp-content/uploads/2021/07/UAE-National-Strategy-for-Artificial-Intelligence-2031.pdf

⁶⁶⁴⁰ Digital Dubai Authority, *Artificial Intelligence Principles & Ethics*, https://www.digitaldubai.ae/initiatives/ai-principles-ethics

G641 United Arab Emirates Minister of State for Artificial Intelligence, Digital Economy & Remote Work Applications Office, *AI Ethics Self-Assessment Tool*, https://ai.gov.ae/aiethics-self-assessment/

⁶⁶⁴² United Arab Emirates Minister of State for Artificial Intelligence, Digital Economy & Remote Work Applications Office, *UAE Council for Artificial Intelligence and Blockchain* (2022), https://ai.gov.ae/ai_council/

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The Dubai AI Ethics Guidelines, though not explicitly, maps the UNESCO recommendations, as follows:⁶⁶⁴³

- Policy Area 1: Ethical Impact Assessment Covered by the Dubai AI Ethics Guidelines (DAEG) and the accompanying Ethical AI Self-Assessment Tool by the DDA.
- Policy Area 2: Ethical Governance and Stewardship & Principles Accountable, explainable and transparent. All three are set out in the DAEG.
- AI Oversight Board AI Ethics Advisory Board created by the Dubai Digital Authority.

Evaluation

The UAE stands out as the first country with a Ministry of AI, signaling the country's foresight regarding the impact of artificial intelligence in the lives of its citizens. The release of the National Strategy for AI in 2017 and the establishment of an AI Council are concrete efforts toward AI governance. The Dubai AI Ethics Guidelines and the accompanying Ethical AI Self-Assessment Tool are pioneering tools, aligned with the UNESCO Recommendations on the Ethics of Artificial Intelligence. The UAE has a Personal Data Protection Law that regulates automated decision-making and a Data Protection Office, although the right to algorithmic transparency has not been adopted. Calls for reinforcing the safeguards for human rights are increasing and so are mass surveillance practices for which there is no proper regulation or oversight.

United Kingdom

In 2024, the UK deepened the government commitment to a proinnovation approach to AI regulation that includes safety. The national legislature introduced a bill to regulate automated decision-making tools in the public sector that will continue to be debated in 2025. The UK also signed the Council of Europe AI Treaty.

National AI Strategy

The United Kingdom (UK) National Artificial Intelligence (AI) Strategy⁶⁶⁴⁴ followed roadmaps including the National Data Strategy (2020), a Plan for Digital Regulation (2021), and the UK Innovation Strategy (2021). The UK is

⁶⁶⁴³ UNESCO, *Implementation of the Recommendation on the Ethics of Artificial Intelligence* (AI) (Oct. 7, 2022), https://unesdoc.unesco.org/ark:/48223/pf0000382931

⁶⁶⁴⁴ UK Government, National AI Strategy (Sept. 2021),

 $[\]frac{https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file_/1020402/National_AI_Strategy_-_PDF_version.pdf$

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ranked third in the world for research and innovation in AI but eleventh for their ability to realize innovation and impact from it. The AI Strategy sets out a ten-year plan with the vision, "to remain an AI and science superpower fit for the next decade." Recently, Prime Minister Keir Starmer announced a shift to the national AI strategy intended to cut costs and reduce government investments in industry, moving away from their previous commitments to global safety initiatives and towards more localized, efficient adoption of AI across the public sector. The anticipated plan has not yet been shared publicly. 6645

The UK AI Strategy has three main pillars: (1) investing and planning for the long-term requirements of the UK's AI ecosystem; (2) supporting the transition to an AI-enabled economy across all sectors and regions of the UK; and (3) ensuring that the UK gets the national and international governance of AI technologies right to encourage innovation and investment and to protect the public and the country's fundamental values. Regarding the third pillar, the government proclaimed its intention to develop the most trusted and proinnovation system for AI governance in the world, aiming to "harness the benefits of AI as we embed our values such as fairness, openness, liberty, security, democracy, rule of law, and respect for human rights."

The UK government updated an earlier AI Regulation Policy Paper, ⁶⁶⁴⁶ which subsequently commissioned a new AI Action Plan aiming to leverage AI for improved public service delivery and economic growth. ⁶⁶⁴⁷ The Department for Science, Innovation, and Technology published its response to A Pro-Innovation Approach to AI Regulation in February 2024. ⁶⁶⁴⁸ The updated AI Regulation Policy Paper, like the original, prioritizes the government's intention to develop regulations true to the core principles of "context-specific," "pro-innovation and risk-based," "coherent," and "proportionate and adaptable." ⁶⁶⁴⁹

⁶⁶⁴⁵ Reuters, *UK Reshapes Its AI Strategy under Pressure to Cut Costs* (Aug. 2024), https://www.reuters.com/world/uk/uk-reshapes-its-ai-strategy-under-pressure-cut-costs-2024-08-29/

⁶⁶⁴⁶ UK Government, A Pro-Innovation Approach to AI Regulation (Aug. 2023), https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/white-paper

⁶⁶⁴⁷ UK Government, AI Expert to Lead Action Plan to Ensure UK Reaps the Benefits of Artificial Intelligence (Jul. 2024), https://www.gov.uk/government/news/ai-expert-to-lead-action-plan-to-ensure-uk-reaps-the-benefits-of-artificial-intelligence

⁶⁶⁴⁸ UK Government, A Pro-Innovation Approach to AI Regulation: Government Response (Feb. 2024), https://www.gov.uk/government/consultations/ai-regulation-a-pro-innovation-approach-policy-proposals/outcome/a-pro-innovation-approach-to-ai-regulation-government-response
<a href="https://www.gov.uk/government/consultations/ai-regulation-a-pro-innovation-approach-policy-proposals/outcome/a-pro-innovation-approach-to-ai-regulation-government-response
<a href="https://www.gov.uk/government/consultations/ai-regulation-a-pro-innovation-approach-policy-proposals/outcome/a-pro-innovation-approach-to-ai-regulation-government-response
<a href="https://www.gov.uk/government/consultations/ai-regulation-a-pro-innovation-approach-policy-proposals/outcome/a-pro-innovation-approach-to-ai-regulation-government-response
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 $[\]underline{https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/white-paper}$

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These policy updates clarify that UK government departments would share oversight for AI systems and their consequences across the regulatory structures that exist within those departments. For example, healthcare-related AI systems would be regulated by the UK Department of Health & Social Care (DHSC), while broadcasting-related AI systems would be overseen by Ofcom, the UK's communications regulator. 6650 The policy paper highlights the role of a new regulatory advisory office, the Digital Regulation Cooperation Forum (DRCF), formed in July 2020 as a coordinating body convening regulators from the Information Commissioner's Office (ICO), the Competition and Markets Authority (CMA), the Financial Conduct Authority (FCA) and Ofcom, to ensure "coherence" across regulations. 6651

While strongly endorsing continued AI innovation and investment, the original Policy Paper emphasized, "the success of our AI ecosystem is in part down to the UK's reputation for the quality of its regulators and its rule of law. This includes the transparency of the UK's regulatory regime, the detailed scrutiny that proposed regulation receives and comprehensive impact assessments [...] To maintain our leading regulatory approach, we must make sure that the rules that govern the development and use of AI keep pace with the evolving implications of the technologies." ⁶⁶⁵² The updated AI Regulation White Paper and government response reiterate the importance of "high-quality regulators," the UK's "strong approach to the rule of law," and the critical nature of transparency and impact assessments.

The UK's cross-sectoral regulatory policies will continue to "be implemented on a non-statutory basis and implemented by existing regulators. This approach makes use of regulators' domain-specific expertise to tailor the implementation of the principles to the specific context in which AI is used." They

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⁶⁶⁵¹ UK Government, Digital Regulation Cooperation Forum: Plan of Work for 2021 to 2022 (Mar. 2021), https://www.gov.uk/government/publications/digital-regulation-cooperation-forum-plan-of-work-for-2021-to-2022

⁶⁶⁵² UK Government, Establishing a Pro-Innovation Approach to Regulating AI: AI Regulation Policy Paper (Jul. 2022), https://www.gov.uk/government/publications/establishing-a-pro-innovation-approach-to-regulating-ai-policy-statement

⁶⁶⁵³ UK Government, A Pro-Innovation Approach to AI Regulation (Aug. 2023), https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/white-paper

⁶⁶⁵⁴ UK Government, A Pro-Innovation Approach to AI Regulation: Government Response (Feb. 2024), https://www.gov.uk/government/consultations/ai-regulation-a-pro-innovation-approach-policy-proposals/outcome/a-pro-innovation-approach-to-ai-regulation-government-response

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will continue to work with regulators to detect any barriers to the implementation of the principles and monitor whether this "non-statutory framework" has the "desired effect."⁶⁶⁵⁵ As DCMS stated, "regulators will lead the process of identifying, assessing, prioritizing and contextualizing the specific risks addressed by the [stated] principles... These principles provide clear steers for regulators but will not necessarily translate into mandatory obligations. Indeed, we will encourage regulators to consider lighter touch options in the first instances—for example, through a voluntary or guidance-based approach for uses of AI that fall within their remit."⁶⁶⁵⁶

The updated policy paper and government response promise to build on "a strong foundation of regulatory coordination, via the DRCF's published vision for a joint approach to digital regulation and a "multi-agency advice service for digital innovators pilot underway, supported by government's Regulators' Pioneer Fund."6657the cross-sectoral, non-statutory governmental oversight of AI. The DCMS acknowledged, "Regulatory coordination will be important for our approach to work and to avoid contradictory or very different approaches across regulators [...] We will look for ways to support collaboration between regulators to ensure a streamlined approach. [...] We also need to ensure that UK regulators have access to the right skills and expertise to effectively regulate AI."6658

The UK AI Action Plan for its part updated progress that had been made regarding the three pillars of focus mentioned within the original National AI Strategy: long term investments in AI, ensuring AI benefits all sectors and regions, and governing AI effectively. 6659 The AI Action Plan described a variety of recent regulatory tools and initiatives in keeping with the UK's policy of cross-sectoral responsibility for AI oversight including:

⁶⁶⁵⁵ UK Government, *A Pro-Innovation Approach to AI Regulation* (Aug. 2023), https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/white-naner

⁶⁶⁵⁶ UK Government, Establishing a Pro-Innovation Approach to Regulating AI: AI Regulation Policy Paper (Jul. 2022), https://www.gov.uk/government/publications/establishing-a-pro-innovation-approach-to-regulating-ai-policy-statement.

⁶⁶⁵⁷ UK Government, A Pro-Innovation Approach to AI Regulation: Government Response (Feb. 2024), https://www.gov.uk/government/consultations/ai-regulation-a-pro-innovation-approach-to-ai-regulation-government-response
https://www.gov.uk/government/publications/establishing-a-pro-innovation-approach-to-regulating-ai-policy-statement.

⁶⁶⁵⁹ UK Government, *National AI Strategy: AI Action Plan* (Jul. 2022), https://www.gov.uk/government/publications/national-ai-strategy-ai-action-plan/national-ai-strategy-ai-action-plan.

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- "one of the world's first national algorithmic transparency standards to strengthen the UK's position as a world leader in AI governance" developed within the Cabinet office;
- an "AI Assurance Roadmap, to provide meaningful information about AI systems to users and regulators" developed by the UK Centre for Data Ethics and Innovation (CDEI);
- an "AI Standards Hub [...] to coordinate UK engagement in AI standardization globally" led by The Alan Turing Institute and supported by the British Standards Institution and the National Physical Laboratory;
- and a formal consultation on "reforming the UK's data protection regime" led by DCMS. 6660 Regarding the UK's coordination on AI governance with key international organizations, the AI Action Plan highlights collaboration between UK government regulators and the G7, OECD, Council of Europe, UNESCO, the Future Tech Forum, and the Global Partnership on AI. 6661

The DCRF published a workplan in 2024 to respond to many of these goals, mapping out activities that aim to promote responsible AI by working together in line with the government's AI framework and engage on a range of activities supporting prudent development of the AI auditing market."6662

The AI Action Plan provides additional regulatory updates with a clear ethical focus including:

- a policy statement from the Ministry of Defence (MOD), titled Ambitious, Safe, Responsible: Our Approach to the Delivery of AI-Enabled Capability, detailing how they will "augment [MOD's] robust and long-standing approach to legal, ethical and safety issues to address challenges related to the use of AI technology;"6663
- the UK government's Arts and Humanities Research Council, part of the UK Research and Innovation Agency (UKRI) launched "a major research program on AI ethics and regulation with its collaboration partner, the Ada Lovelace Institute: 6664

⁶⁶⁶⁰ Ibid

⁶⁶⁶¹ Ibid

⁶⁶⁶² Digital Regulation Cooperation Forum, Work Plan 24/25 (Apr. 2024), https://www.drcf.org.uk/siteassets/drcf/pdf-files/drcf-workplan-202425/?v=380412

⁶⁶⁶³ UK Government, Ambitious, Safe, Responsible: Our Approach to the Delivery of AI-enabled Capability in Defence (Jun. 2022), https://www.gov.uk/government/publications/ambitious-saferesponsible-our-approach-to-the-delivery-of-ai-enabled-capability-in-defence/ambitious-saferesponsible-our-approach-to-the-delivery-of-ai-enabled-capability-in-defence

⁶⁶⁶⁴ UK Research and Innovation, £8.5 Million Programme to Transform AI Ethics and Regulation (Jun. 2022), https://www.ukri.org/news/8-5-million-programme-to-transform-aiethics-and-regulation/

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the Department of Health and Social Care (DHSC) published a report in coordination with the Ada Lovelace Institute detailing ethical and governance issues related to personal data and algorithms within the healthcare context with advice to regulators within that domain. 6665

A 2022 Digital Regulation Cooperation Forum (DRCF) report detailed the challenges presented by algorithmic processing tools for regulators across government agencies. The report identified the UK government regulators' shared objectives to: "protect individuals from harm; uphold individual rights; enable participation in online markets; encourage consumer trust and innovation; promote effective competition; promote resilient infrastructure and systems."6666

In February, 2023, the UK Prime Minister's Office announced the creation of a dedicated Department for Science, Innovation and Technology, which would henceforth house the Office for Artificial Intelligence (formerly co-housed by DCMS and BEIS). 6667 This newly created department released a Science and Technology Framework, 6668 reiterating the government's commitment to "a system of regulation and standards that is pro-innovation, easy to navigate and facilitates widespread commercial science and technology applications. [...] Regulation covering critical technologies will be world-leading [...] We will play an active role in the WTO, G7, G20, OECD, NATO, Council of Europe, Commonwealth, and the UN [as an] author of international rules and conventions for critical technologies."6669 An updated Science and Technology Framework reiterated these goals and commitments. 6670

The Department of Science and Technology published a statement⁶⁶⁷¹ following the Chancellor of the Exchequer's announcement that the government's

⁶⁶⁶⁵ Ada Lovelace Institute, Algorithmic Impact Assessment: A Case Study in Healthcare (Feb. 2022), https://www.adalovelaceinstitute.org/report/algorithmic-impact-assessment-case-studyhealthcare/

⁶⁶⁶⁶ UK Digital Regulation Cooperation Forum, The Benefits and Harms of Algorithms: A Shared Perspective from the Four Digital Regulators (Sept. 2022),

https://www.gov.uk/government/publications/findings-from-the-drcf-algorithmic-processingworkstream-spring-2022/the-benefits-and-harms-of-algorithms-a-shared-perspective-from-thefour-digital-regulators#implications-for-regulators

⁶⁶⁶⁷ UK PM Office, Making Government Deliver for the British People (Feb. 2022), https://www.gov.uk/government/news/making-government-deliver-for-the-british-people

⁶⁶⁶⁸ UK Department for Science, Innovation and Technology, Science and Technology Framework (Mar. 2023), https://www.gov.uk/government/publications/uk-science-andtechnology-framework

⁶⁶⁶⁹ Ibid

⁶⁶⁷⁰ UK Government, The UK Science and Technology Framework (Feb. 2024), https://www.gov.uk/government/publications/uk-science-and-technology-framework/the-ukscience-and-technology-framework

⁶⁶⁷¹ UK Department for Science, Innovation and Technology, Government Commits Up to £3.5 Billion to Future of Tech and Science (Mar. 2023),

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new budget would commit £3.5 billion "to support the government's ambitions to make the UK a scientific and technologic superpower." The Department of Science and Technology reiterated the government's intention to provide "a new approach to AI regulation, focusing on the applications of AI rather than setting rigid rules for products with an AI component" and announced plans for the government "to begin working at pace to lead the way in clarifying the application of intellectual property law regarding generative AI."

However, a later speech by King Charles proposed more binding regulations on "those working to develop the most powerful artificial intelligence models." 6672

Public Participation

The UK government has a firmly established practice of making draft policies available to the public for consultation and of providing the public with access to the findings gleaned from consultation.⁶⁶⁷³ The UK Cabinet Office has pledged to "use more digital methods to consult with a wider group of people at an earlier stage in the policy-forming process. We will make it easier for the public to contribute their views, and we will try harder to use clear language and plain English in consultation documents."⁶⁶⁷⁴

Recently, the Secretary of State for Science, Innovation, and Technology announced plans to create "an ambitious AI opportunities action plan," including next steps for regulating frontier AI systems. The institution invited consultation "to harness the insights and expertise of the AI industry, academia, and civil society."6675

The ICO also launched a series of consultations on generative AI and data protection. The consultation informed a chapter series covering the "lawful basis for web scraping to train generative AI models," how to apply purpose limitation across the lifecycle of generative AI, "accuracy of training data and model

 $\underline{\text{https://www.gov.uk/government/news/government-commits-up-to-35-billion-to-future-of-tech-and-science}$

https://www.gov.uk/government/get-involved#engage-with-government.

⁶⁶⁷⁵ UK Parliament, AI Opportunities Action Plan (Jul. 2024),

https://hansard.parliament.uk/commons/2024-07-

 $\underline{26/debates/24072618000012/AIOpportunities Action Plan}$

⁶⁶⁷² UK Government, Oral Statement to Parliament the King's Speech 2024 (Jul. 2024), https://www.gov.uk/government/speeches/the-kings-speech-2024

⁶⁶⁷³ UK Government, Government Activity: Get Involved (Mar. 2023),

⁶⁶⁷⁴ UK Government Cabinet Office, *Consultation Principles: Guidance* (Jul. 2012), https://publications.parliament.uk/pa/ld201213/ldselect/ldsecleg/100/10004.htm

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outputs," how to engineer "individual rights into generative AI models," and how to allocate "controllership across the generative AI lifecycle." 6676

The recent consultation followed participation such as the earlier Online Harms White Paper. 6677 Consultation on the white paper resulted in "2400 responses ranging from companies in the technology industry including large tech giants and small and medium sized enterprises, academics, think tanks, children's charities, rights groups, publishers, governmental organizations and individuals." The government provided an overview of consultation responses and enumerated the links between the revised policy proposals and the input obtained during public consultation.6678

A revised Online Safety Bill⁶⁶⁷⁹ released to the public with key provisions aimed at preventing online exploitation, particularly of children and vulnerable adults, and to bolster responsible journalism. The Bill was granted Royal Assent and became the Online Safety Act. 6680

Following publication of the AI Regulation Policy Paper in July 2022, DCMS provided a ten-week period for "views and evidence" from stakeholders about "how the UK can best set the rules for regulating AI in a way that drives innovation and growth while also protecting our fundamental values."6681 Responses informed the AI Regulation White Paper a year later. 6682

The UK government is additionally attempting to engage members of its communities that have traditionally been excluded from participation in building artificial intelligence and playing a role in its governance through the Alan Turing Institute, created in 2015 as a "national institute for data science" and more recently adding "and artificial intelligence." The Turing Institute announced

https://bills.parliament.uk/bills/3137

⁶⁶⁷⁶ Information Commissioner's Office, ICO Consultation Series on Generative AI and Data Protection (Sept. 2024), https://ico.org.uk/about-the-ico/ico-and-stakeholder-consultations/icoconsultation-series-on-generative-ai-and-data-protection/

⁶⁶⁷⁷ UK Government, DCMS, Online Harms White Paper (Apr. 2019), https://www.gov.uk/government/consultations/online-harms-white-paper

⁶⁶⁷⁸UK Government, DCMS, Online Harms White Paper Consultations: Full Government Response (Dec. 2020), https://www.gov.uk/government/consultations/online-harms-whitepaper/outcome/online-harms-white-paper-full-government-response

⁶⁶⁷⁹ UK Department for Science, Innovation and Technology and DCMS, Online Safety Bill (Jan. 2023), https://www.gov.uk/government/collections/online-safety-bill

⁶⁶⁸⁰ UK Parliament, Online Safety Act 2023 (Aug. 19, 2024),

⁶⁶⁸¹ UK Government, Establishing a Pro-Innovation Approach to Regulating AI: AI Regulation Policy Paper (Jul. 2022), https://www.gov.uk/government/publications/establishing-a-proinnovation-approach-to-regulating-ai/establishing-a-pro-innovation-approach-to-regulating-aipolicy-statement

⁶⁶⁸² UK Government, A Pro-Innovation Approach to AI Regulation (Aug. 2023), https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/whitepaper

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funding for seven innovative projects to boost public engagement with data science and AI across the UK in 2022. 6683 The initiative aimed to attract members of underrepresented groups to "widen participation by inspiring members of the public who may not usually interact with science to take an interest and have a voice in AI and data science."6684

Data Protection

Data protection in the UK is governed by both the 2018 Data Protection Act (DPA)⁶⁶⁸⁵ and the UK GDPR.⁶⁶⁸⁶ The UK GDPR essentially mirrors the EU GDPR; the DPA updated this regulation with clarification regarding oversight and enforcement powers. 6687 The Information Commissioner's Office (ICO) was established as an "independent regulator for Data Protection and Freedom of Information" in accordance with the DPA, as it had previously been designated in accordance with the EU GDPR requirements. 6688 The ICO is a non-departmental public body that reports directly to the UK Parliament. It is sponsored by the Department of Science, Innovation, and Technology, emphasizing its role in overseeing data protection laws and promoting transparency in public bodies.

While the EU GDPR has extraterritorial applicability regardless of the organization's location, the UK GDPR primarily applies to organizations based in the UK or those outside the UK processing data of individuals in the UK.

Also, while each EU member state has its supervisory authority, coordinated by the European Data Protection Board (EDPB), the UK GDPR is enforced by a single entity, the Information Commissioner's Office (ICO). Importantly, the EU GDPR generally excludes personal data collected for national security and intelligence services from its scope. In contrast, the UK GDPR allows certain exceptions. Other important differences concern the age of consent for data processing practices and fines.

Despite these differences, and following Brexit, the UK is considered a "third country" by the EU. However, it benefits from an adequacy decision that allows free data flows between the EU and the UK.

⁶⁶⁸³ The Alan Turing Institute, Turing Funds Seven Innovative Projects to Boost Public Engagement with Data Science and AI (Aug. 26, 2022), https://www.turing.ac.uk/news/turingfunds-seven-innovative-projects-boost-public-engagement-data-science-and-ai

⁶⁶⁸⁵ UK Government, The Data Protection Act (Oct. 25, 2018), https://www.legislation.gov.uk/ukpga/2018/12/contents/enacted

⁶⁶⁸⁶ UK ICO, The UK GDPR, https://ico.org.uk/for-organisations/data-protection-and-theeu/data-protection-and-the-eu-in-detail/the-uk-gdpr/

⁶⁶⁸⁷ ICO, About the DPA 2018 (Mar. 2023), https://ico.org.uk/for-organisations/guide-to-dataprotection/introduction-to-dpa-2018/about-the-dpa-2018/#1

⁶⁶⁸⁸ UK Government, The Data Protection Act (May 2018), https://www.gov.uk/data-protection

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The UK remains an active member of the Council of Europe⁶⁶⁸⁹ and a signatory to the Council of Europe Convention 108+, requiring the safeguarding of rights pertaining to the automated processing of personal data including: the right to be informed; the right to not be subject to automated decision-making, the right to object, the right to remedy following violation of rights, and the right to assistance from a supervisory authority in exercising these rights. ⁶⁶⁹⁰ In a 2020 Recommendation to member States on the human rights impacts of algorithmic systems, the Council of Europe Committee of Ministers reaffirmed that "member States must ensure that any design, development and ongoing deployment of algorithmic systems occur in compliance with human rights and fundamental freedoms, which are universal, indivisible, inter-dependent and interrelated, with a view to amplifying positive effects and preventing or [minimizing] possible adverse effects." ⁶⁶⁹¹

The ICO has also clarified how to assess the risks to rights and freedoms that AI pose from a data protection perspective and the appropriate measures that can be implemented to reduce these risks. 6692 With respect to data protection, the updated guidance advises organizations building or integrating AI systems on the conduct of data protection impact assessments (DPIAs). 6693 "You should not see DPIAs as simply a box ticking compliance exercise. They can effectively act as roadmaps for you to identify and control the risks to rights and freedoms that using AI can pose. They are also an ideal opportunity for you to consider and demonstrate your accountability for the decisions you make in the design or procurement of AI systems."

The ICO has also mapped existing data protection principles to those purposed for regulating AI in response to a government request for key regulators to define their regulatory strategies in alignment with the UK's AI White Paper. 6694

6690 Council of Europe, *Convention 108 and Protocols* (Mar. 2023), https://www.coe.int/en/web/data-protection/convention108-and-protocol.

https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154

⁶⁶⁸⁹ Council of Europe, *Our Member States* (Mar. 2023), https://www.coe.int/en/web/about-us/our-member-states

⁶⁶⁹¹ Recommendation CM/Rec(2020)1 of the Committee of Ministers to Member States on the Human Rights Impacts of Algorithmic Systems (Apr. 8, 2020),

⁶⁶⁹² UK ICO, Guidance on AI and Data Protection (Mar. 2023), https://ico.org.uk/for-organisations/guide-to-data-protection/key-dp-themes/guidance-on-ai-and-data-protection/6693 UK ICO, Guide to Data Protection: What Are the Accountability and Governance

Implications of AI? (Mar. 2023), https://ico.org.uk/for-organisations/guide-to-data-protection/key-dp-themes/guidance-on-ai-and-data-protection/what-are-the-accountability-and-governance-implications-of-ai/#DPIA

⁶⁶⁹⁴ UK Government, Request for Regulators to Publish an Update on Their Strategic Approach to AI: Secretary of State Letter (Feb. 15, 2024),

https://www.gov.uk/government/publications/request-for-regulators-to-publish-an-update-on-

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The goal is to demonstrate how "the ICO already has active experience of implementing the aims and objectives of the AI Regulation White Paper principles.⁶⁶⁹⁵

Given that AI systems often process personal data, the ICO emphasizes that these systems fall under its regulatory remit. The ICO has been actively involved in AI regulation for over a decade, providing guidance on various applications such as biometric recognition technologies. To support innovation while ensuring compliance with data protection laws, it has established resources such as an AI risk toolkit and a regulatory sandbox.

The ICO's strategic approach represents a significant step in establishing a coherent framework for regulating AI in the UK. By aligning its efforts with existing data protection laws and working with other regulators, the ICO aims to foster innovation while addressing the inherent risks associated with AI technologies. Continued collaboration and updates to guidance will be crucial as developments unfold in this rapidly evolving landscape.

The ICO has been a member of the Global Privacy Assembly (GPA) since 2002 and co-sponsored the 2018 GPA Declaration on Ethics and Data Protection in Artificial Intelligence⁶⁶⁹⁶ and the 2023 GPA Resolution on Generative AI. George The ICO was one of the authors of both the 2020 GPA Resolution on AI Accountability⁶⁶⁹⁸ and the 2022 GPA Resolution on Facial Recognition Technology.

their-strategic-approach-to-ai-secretary-of-state-letters/letter-from-dsit-secretary-of-state-to-the-information-commissioners-office-html

⁶⁶⁹⁵ UK ICO, Regulating AI: The ICO's Strategic Approach (Apr. 30, 2024), https://ico.org.uk/media/about-the-ico/consultation-responses/4029424/regulating-ai-the-icos-

strategic-approach.pdf

6696 Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 23, 2018), https://globalprivacyassembly.org/wp-

content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf
6697 Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁶⁶⁹⁸ Global Privacy Assembly, Resolution on Accountability in the Development and Use of Artificial Intelligence (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/10/FINAL-GPA-Resolution-on-Accountability-in-the-Development-and-use-of-AI-EN-1.pdf.

⁶⁶⁹⁹ Global Privacy Assembly, Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

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Algorithmic Transparency

The UK government lays claim to being a global leader in establishing algorithmic transparency standards.⁶⁷⁰⁰ First, the UK remains a member of the Council of Europe and is a party to Convention 108+, which enshrines the right to algorithmic transparency.⁶⁷⁰¹ The 2020 Recommendation of the Council of Europe Committee of Ministers on human rights impacts of algorithmic systems⁶⁷⁰² addresses additional human rights impacts of AI technologies with guidance on obligations of states and responsibilities of companies. The Recommendation specifically emphasizes requirements on transparency, accountability, and effective remedies.

The Recommendation provides that "States should establish appropriate levels of transparency with regard to the public procurement, use, design and basic processing criteria and methods of algorithmic systems implemented by and for them, or by private sector actors. The legislative frameworks for intellectual property or trade secrets should not preclude such transparency, nor should States or private parties seek to exploit them for this purpose. Transparency levels should be as high as possible and proportionate to the severity of adverse human rights impacts, including ethics labels or seals for algorithmic systems to enable users to navigate between systems. The use of algorithmic systems in decision-making processes that carry high risks to human rights should be subject to particularly high standards as regards the explainability of processes and outputs." 6703

The Recommendation also clarifies contestability: "Affected individuals and groups should be afforded effective means to contest relevant determinations and decisions. As a necessary precondition, the existence, process, rationale, reasoning and possible outcome of algorithmic systems at individual and collective levels should be explained and clarified in a timely, impartial, easily readable and accessible manner to individuals whose rights or legitimate interests may be affected, as well as to relevant public authorities. Contestation should include an opportunity to be heard, a thorough review of the decision and the possibility to obtain a non-automated decision. This right may not be waived, and

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⁶⁷⁰⁰ UK Cabinet Office CDDO, *UK Government Publishes Pioneering Standard for Algorithmic Transparency* (Nov. 2021), https://www.gov.uk/government/news/uk-government-publishes-pioneering-standard-for-algorithmic-transparency.

⁶⁷⁰¹ Council of Europe, *Convention 108* +: *Convention for the Protection of Individuals with Regard to the Processing of Personal Data*, Article 9 c) (Jun. 2018), https://www.europarl.europa.eu/meetdocs/2014_2019/plmrep/COMMITTEES/LIBE/DV/2018/09-10/Convention 108 EN.pdf

⁶⁷⁰² Council of Europe, Committee of Ministers, *Recommendation CM/Rec(2020)1 of the Committee of Ministers to Member States on the Human Rights Impacts of Algorithmic Systems* (Apr. 8, 2020), https://search.coe.int/cm/pages/result_details.aspx?objectid=09000016809e1154 ⁶⁷⁰³ Ibid

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should be affordable and easily enforceable before, during and after deployment, including through the provision of easily accessible contact points and hotlines."6704

Algorithmic transparency is also provided for by the UK GDPR⁶⁷⁰⁵ and DPA. "Articles 13 and 14 of the GDPR give individuals the right to be informed of the existence of solely automated decision-making, producing legal or similarly significant effects; meaningful information about the logic involved; and the significance and envisaged consequences for the individual. Article 15 of the GDPR gives individuals the right of access to information on the existence of solely automated decision-making producing legal or similarly significant effects; meaningful information about the logic involved; and the significance and envisaged consequences for the individual." 6706

The concept of algorithmic transparency derived from the UK's data protection framework is addressed in some detail in the ICO AI Guidance. 6707 In addition to requiring transparency regarding the use of personal data within algorithmic systems, the purposes of this personal data use, the retention periods for that personal data, and information about anyone with whom it might be shared, the guidance requires that organizations contributing to decisions made via algorithmic systems offer transparent "explanations" for these systems. More explicitly, organizations using algorithmic system must make available: a rational explanation, "reasons that led to a decision delivered in an accessible and nontechnical way; a responsibility explanation, "who is involved in the development, management and implementation of an AI system, and who to contact for a human review of a decision; a data explanation, "what data has been used in a particular decision and how; a fairness explanation including, "steps taken across the design and implementation of an AI system to ensure that the decisions it supports are generally unbiased and fair; safety and performance explanation, "steps taken across design and implementation of an AI system to maximize the accuracy, reliability, security and robustness of its decisions and behaviors; and an impact explanation, "steps taken across the design and implementation of an AI system and its decisions to consider and monitor the impacts...[the] system and its decisions has or may have on an individual and on wider society.

⁶⁷⁰⁴ Ibid

⁶⁷⁰⁵UK ICO, *The Basics of Explaining AI: Legal Framework* (Mar. 2023), https://ico.org.uk/for-organisations/guide-to-data-protection/key-dp-themes/explaining-decisions-made-with-artificial-intelligence/part-1-the-basics-of-explaining-ai/legal-framework/
https://ico.org.uk/for-organisations/guide-to-data-protection/key-dp-themes/explaining-decisions-made-with-artificial-intelligence/part-1-the-basics-of-explaining-ai/legal-framework/

⁶⁷⁰⁷ UK ICO, *How Do We Ensure Transparency in AI?* (Mar. 2023), https://ico.org.uk/for-organisations/guide-to-data-protection/key-dp-themes/guidance-on-ai-and-data-protection/how-do-we-ensure-transparency-in-ai/

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The Centre for Data Ethics and Innovation (CDEI), formerly a government task force and now an arm of the Department for Science, Innovation and Technology,⁶⁷⁰⁸ published its review into bias in algorithmic decision-making.⁶⁷⁰⁹ The Center focused on the use of algorithms in significant decisions about individuals in four sectors (policing, local government, financial services and recruitment). Key recommendations include:

- 1. Government should place a mandatory transparency obligation on all public sector organizations using algorithms that have an impact on significant decisions affecting individuals.
- 2. Organizations should be actively using data to identify and mitigate bias. They should make sure that they understand the capabilities and limitations of algorithmic tools and carefully consider how they will ensure fair treatment of individuals.
- 3. Government should issue guidance that clarifies the application of the Equality Act to algorithmic decision-making. This should include guidance on the collection of data to measure bias, as well as the lawfulness of bias mitigation techniques (some of which risk introducing positive discrimination, which is illegal under the Equality Act).

The Office for Artificial Intelligence published the Ethics, Transparency, and Accountability Framework for Automated Decision-Making for public sector organizations on how to use automated or algorithmic decision-making systems in a safe, sustainable and ethical way.⁶⁷¹⁰ This guidance was built upon through the Cabinet Office's Central Digital and Data Office (CDDO) with the publication of a pioneering standard for algorithmic transparency and public sector bodies, following up on commitments made in the National AI and National Data Strategies.⁶⁷¹¹ The Cabinet Office announced that this "made the UK one of the first countries to develop a national algorithmic transparency standard, strengthening the UK's position as a world leader in AI governance."⁶⁷¹² CDDO developed the standard collaboratively through working with external experts and

https://www.gov.uk/government/organisations/centre-for-data-ethics-and-innovation/about 6709 UK Government, *CDEI Publishes Review into Bias in Algorithmic Decision-Making* (Nov. 27, 2020), https://www.gov.uk/government/publications/cdei-publishes-review-into-bias-in-algorithmic-decision-making

⁶⁷⁰⁸ UK Centre for Data Ethics and Innovation, About Us (Mar. 2023),

⁶⁷¹⁰ Gov.UK, Ethics, Transparency and Accountability Framework for Automated Decision-Making (Updated Nov. 29, 2023), https://www.gov.uk/government/publications/ethics-transparency-and-accountability-framework-for-automated-decision-making

⁶⁷¹¹ UK Cabinet Office CDDO, *UK Government Publishes Pioneering Standard for Algorithmic Transparency* (Nov. 2021), https://www.gov.uk/government/news/uk-government-publishes-pioneering-standard-for-algorithmic-transparency
⁶⁷¹² Ibid

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civil society groups. Also, it is informed by a public engagement study run by the Center for Data Ethics and Innovation and Britain Thinks.⁶⁷¹³

The CDEI and CDDO later updated the prior standard for public sector organizations and released this refined Algorithmic Transparency Recording Standard following a pilot phase. The revised standard aims to help public sector organizations provide clear information about the algorithmic tools they use and why they are using them. The guidance specifies that algorithmic transparency requires openness on how algorithmic tools support decision-making, which includes providing information on algorithmic tools and algorithm-assisted decisions in a complete, open, understandable, easily accessible, and free format. The standard is part of the Government's National Data Strategy, which includes a commitment to explore an appropriate and effective way to deliver greater transparency on algorithm-assisted decision-making in the public sector. The sector of the public sector of the public sector.

Data Scraping

The ICO and 16 of its international data protection and privacy counterparts released a follow-up joint statement laying out expectations for industry related to data scraping and privacy. The initial statement in August 2023 established that "[social media companies] and other websites are responsible for protecting personal information from unlawful scraping. The follow-up, which incorporates feedback from engagement with companies such as Alphabet (YouTube), X Corp (formerly Twitter), and Meta Platforms (Facebook, Instagram, WhatsApp), adds that organizations must "comply with privacy and data protection laws when using personal information, including from their own platforms, to develop AI large language models"; must regularly review and

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⁶⁷¹³ UK Centre for Data Ethics and Innovation, *Britain Thinks: Complete Transparency, Complete Simplicity* (Jun. 2021), https://www.gov.uk/government/publications/cdei-publishes-commissioned-research-on-algorithmic-transparency-in-the-public-sector

⁶⁷¹⁴ UK CDDO + CDEI, Guidance: Algorithmic Transparency Recording Standard for Public Sector Bodies (Jan. 2023), https://www.gov.uk/government/publications/guidance-for-organisations-using-the-algorithmic-transparency-recording-standard-guidance-for-public-sector-bodies

⁶⁷¹⁵ Data Guidance. *UK: CDEI and CDDO Update Algorithmic Transparency Recording Standard* (Jan. 9, 2023),

https://www.dataguidance.com/news/uk-cdei-and-cddo-update-algorithmic-transparency 6716 ICO, Global Privacy Authorities Issue Follow-Up Joint Statement on Data Scraping after Industry Engagement (Oct. 28, 2024), https://ico.org.uk/about-the-ico/media-centre/news-and-blogs/2024/10/global-privacy-authorities-issue-follow-up-joint-statement-on-data-scraping-after-industry-engagement/

⁶⁷¹⁷ Regulatory Supervision Information Commissioner's Office of the United Kingdom, *Joint Statement on Data Scraping and the Protection of Privacy* (Aug. 24, 2023), https://ico.org.uk/media/about-the-ico/documents/4026232/joint-statement-data-scraping-202308.pdf

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update privacy protection measures to keep pace with technological advances; and ensure that permissible data scraping, such as that for research, "is done lawfully and following strict contractual terms."⁶⁷¹⁸

Data scraping generally involves the automated extraction of data from the web. Data protection authorities are seeing increasing incidents involving data scraping, particularly from social media companies and the operators of other websites that host publicly accessible data. Scraped personal information can be exploited for targeted cyberattacks, identity fraud, monitoring, profiling and surveillance purposes, unauthorized political or intelligence gathering purposes, unwanted direct marketing or spam.

Al Grading Controversy

A widely reported controversy over the use of AI in the UK public sector erupted in the Summer of 2020 during the COVID-19 global pandemic.⁶⁷¹⁹ With students having completed their studies remotely, the UK Office of Qualifications and Examinations (Ofqual) applied an algorithm to estimate the exam results these students might have received given in-person assessments. Nearly 40 percent of students saw their grades reduced after the government reevaluated exams, known as A-levels.⁶⁷²⁰ The software model incorporated the school's past results and students' earlier results on mock exams. The calculations favored students from elite backgrounds.⁶⁷²¹ As the BBC explained, the algorithm "locks in all the advantages and disadvantages—and means that the talented outlier, such as the bright child in the low-achieving school, or the school that is rapidly improving, could be delivered an injustice."

As the Open Data Institute pointed out, a student would have received a high grade in math only because historically someone from her school had

⁶⁷¹⁸ ICO, Global Privacy Authorities Issue Follow-Up Joint Statement on Data Scraping after Industry Engagement (Oct. 28, 2024), https://ico.org.uk/about-the-ico/media-centre/news-and-blogs/2024/10/global-privacy-authorities-issue-follow-up-joint-statement-on-data-scraping-after-industry-engagement/

⁶⁷¹⁹ Karen Hao, *UK Exam Algorithm Can't Fix Broken System* (Aug. 2020), https://www.technologyreview.com/2020/08/20/1007502/uk-exam-algorithm-cant-fix-broken-system/

⁶⁷²⁰ Adam Satariano, *British Grading Debacle Shows Pitfalls of Automating Government,* New York Times (Aug. 20, 2020), https://www.nytimes.com/2020/08/20/world/europe/uk-england-grading-algorithm.html

⁶⁷²¹ Karla Adams, *The UK Used an Algorithm to Estimate Exam Results: The Calculations Favored Elites,* The Washington Post (Aug. 17, 2020),

https://www.washingtonpost.com/world/europe/the-uk-used-an-algorithm-to-estimate-exam-results-the-calculations-favored-elites/2020/08/17/2b116d48-e091-11ea-82d8-5e55d47e90ca story.html

⁶⁷²² Sean Coughlan, *Why Did the A-level Algorithm Say No?* BBC (Aug. 14, 2020), https://www.bbc.com/news/education-53787203

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received a high grade, even if the same student was predicted at B or C.⁶⁷²³ Wired UK reported that some researchers stated that "[rather than the algorithm getting it wrong, [...] it was simply the wrong algorithm."⁶⁷²⁴ However, others thought that the application of Article 22 of the GDPR (prohibition of decisions solely made by automated decision making) was at stake, albeit disputed by the governmental agency that suggested the computer generated score. Ultimately, protests in front of the British Parliament and a pending lawsuit led the government to withdraw the system.⁶⁷²⁵

Karen Hao, a reporter with MIT Technology Review, wrote "The problem began when the exam regulator lost sight of the ultimate goal—and pushed for standardization above all else." ⁶⁷²⁶

Facial Recognition

Human rights organizations have long criticized the UK government for the almost unparalleled deployment of CCTV.⁶⁷²⁷ Early in 2020, London's Metropolitan Police began deploying live facial recognition, an automated process using an AI-driven system to match faces against a database.⁶⁷²⁸ The Met reported its use of the controversial technology would be targeted to "specific locations where intelligence suggests we are most likely to locate serious offenders."⁶⁷²⁹ Silkie Carlo, the director of Big Brother Watch, called the move "an enormous expansion of the surveillance state and a serious threat to civil liberties in the UK." There is currently no law in the UK governing facial recognition. More worrisome,

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⁶⁷²³ Open Data Institute, *What Can We Learn from the Qualifications Fiasco?*, The ODI (Aug. 24, 2020), https://theodi.org/article/what-can-we-learn-from-the-qualifications-fiasco/

⁶⁷²⁴ Matt Burgess, *The Lessons We All Must Learn from the A-levels Algorithm Debacle*, WiredUK (Aug. 20, 2020), https://www.wired.co.uk/article/gcse-results-alevels-algorithm-explained

⁶⁷²⁵ Daan Kolkman, "F**k the algorithm"? What the World Can Learn from the UK's A-level Grading Fiasco, London School of Economic Blog (Aug. 26, 2020),

 $[\]underline{https://blogs.lse.ac.uk/impactofsocialsciences/2020/08/26/fk-the-algorithm-what-the-world-can-learn-from-the-uks-a-level-grading-fiasco/}$

⁶⁷²⁶ Karen Hao, *The UK Exam Debacle Reminds Us that Algorithms Can't Fix Broken Systems*, MIT Technology Review (Aug. 20, 2020),

https://www.technologyreview.com/2020/08/20/1007502/uk-exam-algorithm-cant-fix-brokensystem/

⁶⁷²⁷ Big Brother Watch, Stop Facial Recognition (2023),

https://bigbrotherwatch.org.uk/campaigns/stop-facial-recognition/

Reuters, *Police to Roll Out Live Facial Recognition Cameras in London* (Jan. 2020), https://www.reuters.com/article/us-britain-security-cameras/police-to-roll-out-live-facial-recognition-cameras-in-london-idUSKBN1ZN1H2

⁶⁷²⁹ Vikram Dodd, *Met Police to Begin Using Live Facial Recognition Cameras in London*, The Guardian (Jan. 24, 2020), https://www.theguardian.com/technology/2020/jan/24/met-police-begin-using-live-facial-recognition-cameras

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between 2016–2019, Met Police use of facial recognition technology was 93% inaccurate, with 3,000+ people wrongly identified by police.⁶⁷³⁰

In August 2020, the Court of Appeal ruled that the use of live facial recognition (LFR) by South Wales Police was unlawful as it violated privacy rates, data protection laws, and equality duties.⁶⁷³¹ The court found that there was no clear guidance or oversight on how LFR should be deployed, who should be included on watchlists, and how long the data should be retained. The court also noted that LFR had a disproportionate impact on ethnic minorities and women, who were more likely to be misidentified or discriminated against by the technology. Following this ruling, some police forces suspended their use of LFR until further legal clarity was provided. However, many, including the London Metropolitan Police, continued to use LFR with only slightly revised policies and procedures.⁶⁷³²

The ICO's Information Commissioner produced a formal opinion on the use of facial recognition technology in public places in 2021.⁶⁷³³ The report specifies that any deployment of facial recognition technology "must comply with all relevant parts of the UK GDPR and DPA 2018. This includes the data protection principles [...] including lawfulness, fairness, transparency, purpose limitation, data minimization, storage limitation, security, and accountability. [...] Together, these requirements mean that where LFR is used for the automatic, indiscriminate collection of biometric data in public places, there is a high bar for its use to be lawful."

Despite this published opinion, live facial recognition technology continues to be used across police departments throughout the country with no opportunity for members of the public to opt out, nor any meaningful efforts towards data minimization.⁶⁷³⁴ The House of Lords Justice and Home Affairs Committee has raised questions regarding the legality and regulatory framework of LFR technology. In January 2024, the committee expressed concerns about the

⁶⁷³⁴ Metropolitan Police, Facial Recognition (Mar. 2023),

 $\underline{https://www.met.police.uk/advice/advice-and-information/fr/facial-police.uk/advice/advice-and-information/fr/facial-police.uk/advice/advice-and-information/fr/facial-police.uk/advice/advice-and-information/fr/facial-police.uk/advice/advice-and-information/fr/facial-police.uk/advice-and-information/fr/facial-police.uk/advice-and-information/fr/facial-police.uk/advice-and-information/fr/facial-police.uk/advice-and-information/fr/facial-police.uk/advice-and-information/fr/facial-police.uk/advice-and-information/fr/facial-police.uk/advice-and-information/fr/facial-police.uk/advice-and-information/fr/facial-police.uk/advice-and-information/fr/facial-police.uk/advice-and-information/fr/facial-police.uk/advice-and-information/fr/facial-police.uk/advice-and-information/fr/facial-police.uk/advice-and-information/fr/facial-police.uk/advice-and-information/fr/facial-police.uk/advice-and-information/fr/facial-police.uk/advice-and-information/fr/facial-police.uk/advice-and-information/fr/facial-police.uk/advice-and-information/fr/facial-police-and-i$

recognition#:~:text=Live%20Facial%20Recognition&text=LFR%20is%20not%20a%20ubiquito us,order%20to%20keep%20London%20safe

⁶⁷³⁰ Big Brother Watch, *Stop Facial Recognition*, https://bigbrotherwatch.org.uk/campaigns/stop-facial-recognition/

⁶⁷³¹ Ada Lovelace Institute, *Facial Recognition Technology Needs Proper Regulation: Court of Appeal* (Aug. 2020), https://www.adalovelaceinstitute.org/blog/facial-recognition-technology-needs-proper-regulation/

⁶⁷³²Jane Croft and Siddharth Venkataramakrishnan, *Police Use of Facial Recognition Breaches Human Rights Law, London Court Rules* (Aug. 2020), https://www.ft.com/content/b79e0bee-d32a-4d8e-b9b4-c8ffd3ac23f4

⁶⁷³³ UK ICO, *The Use of Live Facial Recognition in Public Places* (Jun. 2021), https://ico.org.uk/media/2619985/ico-opinion-the-use-of-lfr-in-public-places-20210618.pdf

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lack of a clear legal foundation and consistent standards for LFR deployment, recommending the establishment of a legislative framework to regulate its use. 6735

The British Standards Institute (BSI) later released a code of practice titled Facial Recognition Technology: Ethical Use and Deployment in Video Surveillance-based Systems. This standard aims to guide organizations in the ethical deployment of FRT, emphasizing principles such as governance, accountability, privacy, and data protection. 6736

Automated Visa Application

In 2020, migrants' rights campaigners successfully challenged the automated decision-making system used by the Home Office to process visa applications. 6737 The algorithmic "streaming tool" was eliminated by the Home Office ahead of a judicial review by the Joint Council for the Welfare of Immigrants, which found the tool opaque and discriminatory toward applicants from certain nationalities and race groups. The Home Office committed to a "redesign of the process and the way in which visa applications are allocated for decision-making."6738

The introduction of eVisas, or online records of an individual's immigration status, was a significant development in this direction. This initiative aims to replace physical documents like biometric residence permits (BRPs) and biometric residence cards (BRCs) by 2025. The move to e-Visas is intended to enhance security, reduce fraud, and streamline the process of proving immigration status.6739

Lethal Autonomous Weapons

The UK's Ministry of Defense issued the following statement in the Defense AI Strategy in 2022: "The UK does not rule out incorporating AI within

⁶⁷³⁵ UK Parliament, Lords Committee Questions Legality of Live Facial Recognition Technology (Jan. 27, 2024), https://committees.parliament.uk/committee/519/justice-and-home-affairscommittee/news/199624/lords-committee-questions-legality-of-live-facial-recognitiontechnology/

⁶⁷³⁶ British Security Industry Association (BSIA), World First Code of Practice on Ethical Surveillance Launched (Nov. 7, 2024), https://www.bsia.co.uk/blogs/442/world-first-code-ofpractice-on-ethical-

⁶⁷³⁷ The Joint Council for the Welfare of Immigrants, We Won! Home Office to Stop Using Racist Visa Algorithm (Aug. 2020), https://www.jcwi.org.uk/news/we-won-home-office-to-stop-usingracist-visa-algorithm

⁶⁷³⁸ Henry McDonald, Home Office to Scrap Racist Algorithm for UK Visa Applicants (Aug. 2020), https://www.theguardian.com/uk-news/2020/aug/04/home-office-to-scrap-racistalgorithm-for-uk-visa-applicants

⁶⁷³⁹ UK Home Office, eVisa Rollout Begins with Immigration Documents Replaced by 2025 (Nov. 2, 2024), https://www.gov.uk/government/news/evisa-rollout-begins-with-immigrationdocuments-replaced-by-2025

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weapon systems. In practice, however, some concepts and capabilities may prove impossible to deliver in a safe and responsible manner—and we are very clear that there must be context-appropriate human involvement in weapons which identify, select and attack targets. This could mean some form of real-time human supervision, or control exercised through the setting of a system's operational parameters. We believe that AI can substantially augment the performance of our people and significantly enhance our capabilities. However, given concerns about the ethics and risks of delegating certain decisions to AI, it is also important to state that we do not believe that "more autonomous" necessarily means "more capable." We believe that Human-Machine Teaming delivers the best outcomes, in terms of overall effectiveness, optimal use of resources, the practicalities of integration and the ease with which we can address issues arising; it is therefore our default approach to AI adoption. The appropriate degree of system "autonomy" and type of "human control" need to be considered carefully on a case-by-case basis." ⁶⁷⁴⁰

In February 2023, the UK participated in the first global Summit on Responsible Artificial Intelligence in the Military Domain (REAIM 2023). Together with other government representatives, the United Kingdom agreed a joint call to action on the responsible development, deployment and use of artificial intelligence in the military domain. In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." The UK endorsed the resulting Political Declaration on Responsible Military Use of AI and Autonomy issued in November 2023.

The UK participated in the second REAIM summit in 2024, hosted by South Korea.⁶⁷⁴⁴

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⁶⁷⁴⁰ UK Ministry of Defence, *Our Approach to the Delivery of AI-enabled Capability in Defence* (Jun. 2022),

 $[\]frac{https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1082991/20220614-Ambitious_Safe_and_Responsible.pdf.$

⁶⁷⁴¹ Government of Netherlands, *Call to Action on Responsible Use of AI in the Military Domain* (Feb. 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action

⁶⁷⁴³ US Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy* (Feb. 12, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

⁶⁷⁴⁴ Republic of Korea, Ministry of Foreign Affairs, *Outcome of Responsible AI in Military Domain (REAIM) Summit 2024*, Press Releases (Sept. 10, 2024), https://overseas.mofa.go.kr/eng/brd/m 5676/view.do?seq=322676

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The UK has reaffirmed its commitment to international discussions on lethal autonomous weapon systems (LAWS). In response to a parliamentary question, the UK government confirmed its ongoing participation in United Nations discussions on LAWS through the Convention on Certain Conventional Weapons (CCW).⁶⁷⁴⁵

In response to a House of Lords Artificial Intelligence in Weapons System Committee Report, the government committed to ensuring meaningful human control and accountability throughout the lifecycle of AI-enabled military systems. However, the government fell short on the recommendation to adopt a specific operational definition for autonomous weapons systems.⁶⁷⁴⁶

Human Rights

According to Freedom House, the UK is "Free" with a score of 91/100 for political rights and civil liberties in 2024.⁶⁷⁴⁷ The country "is a stable democracy that regularly holds free elections and hosts a vibrant media sector." The Freedom House also notes that: "While the government enforces robust protections for political rights and civil liberties, recent years have featured new restrictions on the right to protest as well as rising Islamophobia and anti-immigrant sentiment." ⁶⁷⁴⁸

All UK AI initiatives must comply with the UK Human Rights Act of 1998. Post-Brexit, the UK remains a part of the European Convention on Human Rights and is subject to the jurisdiction of the European Court of Human Rights in Strasbourg. Therefore, even if the GDPR can no longer be enforced in the UK through judgments of the EU Court of Justice European Union in Luxembourg, the existence of structures like the UK's Information Commissioner's Office and, generally, the remnants of EU's *Acquis Communautaire* make it clear that the UK has in place a relatively robust system of human rights protection. 6749

As a member of the council of Europe, the UK abides by the 2020 Recommendation that states "must ensure that any design, development and ongoing deployment of algorithmic systems occur in compliance with human rights and fundamental freedoms, which are universal, indivisible, inter-dependent

⁶⁷⁴⁵ UK Defence Journal, *UK Committed to Global Discussion on Autonomous Weapons* (Oct. 24, 2024), https://ukdefencejournal.org.uk/uk-committed-to-global-discussion-on-autonomous-weapons/

⁶⁷⁴⁶ House of Lords Library, *AI in Weapon Systems Committee Report: Proceed with Caution* (Oct. 23, 2024), https://lordslibrary.parliament.uk/ai-in-weapon-systems-committee-report-proceed-with-caution/

⁶⁷⁴⁷ Freedom House, Fr*eedom in the World 2024: United Kingdom* (Feb. 2024), https://freedomhouse.org/country/united-kingdom/freedom-world/2024 6748 Ibid

UK ICO, *Overview: Data Protection and the EU*, https://ico.org.uk/for-organisations/data-protection-and-the-eu/overview-data-protectio

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and interrelated, with a view to amplifying positive effects and preventing or [minimizing] possible adverse effects."⁶⁷⁵⁰ The Alan Turing Institute also issued guidelines on AI and non-discrimination/human rights.⁶⁷⁵¹

Al Safety Summit

The UK is engaged internationally in the development of AI governance in line with the values of fairness, freedom and democracy. This engagement includes working with partners to shape AI governance under development including the EU AI Act and the Council of Europe legal framework.⁶⁷⁵²

In November 2023, the UK convened the first AI Safety Summit and endorsed the Bletchley Declaration.⁶⁷⁵³ The UK thus committed to participate in international cooperation efforts on AI "to promote inclusive economic growth, sustainable development and innovation, to protect human rights and fundamental freedoms, and to foster public trust and confidence in AI systems to fully [realize] their potential." Endorsing parties affirmed that for the good of all, AI should be designed, developed, deployed, and used, in a manner that is safe, in such a way as to be human-centric, trustworthy and responsible."

The UK established the AI Safety Institute (AISI) in late 2023. The AISI focuses on assessing the safety of advanced AI systems, aligning its evaluations with ethical standards such as those outlined by UNESCO.⁶⁷⁵⁴

The launch of an AI assurance platform designed to help businesses identify and mitigate AI-related risks furthered these interests. This initiative aims to build greater trust in AI technology and drive demand for the UK's AI assurance sector. 6755

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⁶⁷⁵⁰ Council of Europe, Recommendation CM/Rec (2020)1 of the Committee of Ministers to Member States on the Human Rights Impacts of Algorithmic Systems (Apr. 8, 2020), https://search.coe.int/cm?i=09000016809e1154

The Alan Turing Institute, AI for Human Rights, https://www.turing.ac.uk/ai-human-rights
6752 UK Government, Establishing a Pro-Innovation Approach to Regulating AI (Jul. 20, 2022), <a href="https://www.gov.uk/government/publications/establishing-a-pro-innovation-approach-to-regulating-ai/establishing-ai/establishing-

⁶⁷⁵³ UK Government, Prime Minister's Office, *The Bletchley Declaration by Countries Attending the AI Safety Summit* (Nov. 1, 2023), https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration-by-countries-attending-the-ai-safety-summit-1-2-november-2023

Department for Science, Innovation and Technology, *Introducing the AI Safety Institute* (Jan. 17, 2024), https://www.gov.uk/government/publications/ai-safety-institute

⁶⁷⁵⁵ Department for Science, Innovation and Technology, *Ensuring Trust in AI to Unlock £6.5 Billion Over Next Decade* (Nov. 6, 2024), https://www.gov.uk/government/news/ensuring-trust-in-ai-to-unlock-65-billion-over-next-decade

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OECD / G20 AI Principles

The UK is a member of the OECD and the G20 and has endorsed the OECDD AI Principles.⁶⁷⁵⁶ The OECD/G20 AI Principles are not referred to in the National AI Strategy. However, the UK is actively involved in the OECD's AI Governance Working Party. In this role, the UK promotes the practical application of trustworthy AI guidelines globally by contributing case studies on its AI Assurance Techniques to the OECD's Catalogue of Tools and Metrics.⁶⁷⁵⁷

The UK is a founding member of the Global Partnership on AI (GPAI)⁶⁷⁵⁸ and invested in GPAI's data trust research.⁶⁷⁵⁹ Additionally, UK defense has a strong record of collaborating with international partners and allies, including engagement with NATO supporting the AI Partnership for Defense. On the bilateral front, in September 2020 the UK and the U.S. signed to establish dialogue on their shared vision for driving technological breakthroughs in AI and to explore an AI R&D ecosystem that "promotes the mutual wellbeing, prosperity, and security of present and future generations." The Declaration mentions, as one objective, to protect "against efforts to adopt and apply these technologies in the service of authoritarianism and repression."

Council of Europe AI Treaty

The UK contributed as a Council of Europe Member State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of Law. During a conference of Council of Europe Ministers of Justice in Vilnius, Lithuania, the UK, along with other nations, signed the Framework Convention on Artificial Intelligence. This treaty

⁶⁷⁵⁶ OECD AI Policy Observatory, *OECD AI Principles Overview, Countries Adhering to the AI Principles* (Jan. 28, 2025), https://oecd.ai/en/ai-principles

⁶⁷⁵⁷ OECD AI Policy Observatory, *UK Case Studies: A Resource for Trustworthy AI* (Nov. 6, 2023), https://oecd.ai/en/wonk/uk-case-studies-resource-for-trustworthy-ai

⁶⁷⁵⁸ UK Government, Joint Statement from Founding Members of the Global Partnership on Artificial Intelligence (Jun. 15, 2020), https://www.gov.uk/government/publications/joint-statement-from-founding-members-of-the-global-partnership-on-artificial-intelligence.

6759 UK Government, National AI Strategy (Sept. 2021),

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1020402/National AI Strategy - PDF version.pdf.

⁶⁷⁶⁰ UK Government, OAI, *Declaration of the United States of America and the United Kingdom of Great Britain and Northern Ireland on Cooperation in AI Research and Development* (Sept. 25, 2020), https://www.gov.uk/government/publications/declaration-of-the-united-states-of-america-and-the-united-kingdom-of-great-britain-and-northern-ireland-on-cooperation-in-airesearch-and-development

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represents the first legally binding international agreement on AI, providing a comprehensive legal framework covering the entire lifecycle of AI systems.⁶⁷⁶¹

UNESCO Recommendation on Al Ethics

The UK endorsed the 2021 UNESCO Recommendation on the Ethics of AI.⁶⁷⁶² The UK has integrated UNESCO's ethical guidelines into its national AI policies. During a 2023 parliamentary debate, the government reaffirmed its commitment to the UNESCO framework, emphasizing its role in shaping the UK's approach to AI governance.⁶⁷⁶³

The UK has been a proactive participant in UNESCO's efforts to promote ethical AI. The UK contributed to the Global Forum on the Ethics of Artificial Intelligence held in Kranj, Slovenia. This forum brought together international experts and policymakers to discuss the implementation of UNESCO's Recommendation on the Ethics of AI, focusing on ethical governance and responsible AI development.⁶⁷⁶⁴

Evaluation

The UK continues to act as a global leader in AI, highlighted by a flourishing policy and legal framework, proactive government initiatives, growing economic investment, and international cooperation.

The UK continues to establish robust regulatory frameworks to ensure AI's safe and trustworthy development, driven by the consultation on the white paper detailing the Department for Science, Innovation, on the approach to AI

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⁶⁷⁶¹ Council of Europe, *Council of Europe Opens First-Ever Global Treaty on AI for Signature* (Sept. 5, 2024), https://www.gov.uk/government/news/uk-signs-first-international-treaty-addressing-risks-of-artificial-intelligence

⁶⁷⁶² UNESCO, *Recommendation on the Ethics of Artificial Intelligence* (Nov. 23, 2021), https://unesdoc.unesco.org/ark:/48223/pf0000381137

⁶⁷⁶³ Hansard, UK Parliament, *National AI Strategy and UNESCO AI Ethics Framework* (May 22, 2023), https://hansard.parliament.uk/Commons/2023-05-22/debates/34EFCE0F-79CE-444F-81BA-71AD13AA90BC/NationalAIStrategyAndUNESCOAIEthicsFramework

⁶⁷⁶⁴ UNESCO, *UNESCO Launches Artificial Intelligence Global Policy Portal with Partners* (Oct. 26, 2023), https://www.unesco.org/en/articles/unesco-launches-artificial-intelligence-global-policy-portal-partners

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regulation."⁶⁷⁶⁵ Upcoming AI⁶⁷⁶⁶ and Algorithmic Decision-making⁶⁷⁶⁷ bills could further solidify the UK's dedication to responsible AI governance.

The UK is also committed to international collaboration. Prime examples are the Memorandum of Cooperation signed with Singapore⁶⁷⁶⁸ and the U.S.,⁶⁷⁶⁹ as well as the UK's endorsement of the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law.⁶⁷⁷⁰

Following Brexit, the UK shifted from a legislative approach based on rights and obligations, such as that applied in the data protection field, to a regulatory approach to AI based on ethical standards and cross-ministerial coordination. From this perspective, the UK's development of a strong algorithmic transparency framework appears to be a corrective tool but not a safeguard against AI-based harm. The widespread use of live facial recognition across multiple UK law enforcement agencies in contradiction with the ICO's own guidance raises questions about the merits of a purely regulatory approach. In these circumstances, the resilience of the UK AI policy framework will be only as good as the virtues and merits of its oversight mechanisms.

United States

In 2024, U.S. government agencies provided guidance and processes to implement the 2023 Executive Order on Safe, Secure, and Trustworthy AI. The OMB Guidance on AI in the public sector is perhaps one of the most important. The United States introduced the UN Resolution on the Safe, Secure, and

https://www.gov.uk/government/consultations/ai-regulation-a-pro-innovation-approach-policy-proposals/outcome/a-pro-innovation-approach-to-ai-regulation-government-response

⁶⁷⁶⁵ Department for Science, Innovation & Technology, *A Pro-Innovation Approach to AI Regulation: Government Response* (Feb. 6, 2024),

⁶⁷⁶⁶ Parallel Parliament, *Public Authority Algorithmic and Automated Decision-Making Systems Bill [HL] 2024-26* (Sept. 9, 2024), https://www.parallelparliament.co.uk/bills/2024-26/publicauthorityalgorithmicandautomateddecisionmakingsystems-hl

⁶⁷⁶⁷ UK Parliament, *Public Authority Algorithmic and Automated Decision-Making Systems Bill [HL]* (Oct. 15, 2024), https://bills.parliament.uk/bills/3760

⁶⁷⁶⁸ UK Government, Ensuring Trust in AI to Unlock £6.5 Billion Over Next Decade, (Nov, 6, 2024), https://www.gov.uk/government/news/ensuring-trust-in-ai-to-unlock-65-billion-over-next-decade

⁶⁷⁶⁹ UK Government, Collaboration on the Safety of AI: UK-US Memorandum of Understanding (Apr. 2, 2024), https://www.gov.uk/government/publications/collaboration-on-the-safety-of-ai-uk-us-memorandum-of-understanding/collaboration-on-the-safety-of-ai-uk-us-memorandum-of-understanding

⁶⁷⁷⁰ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Jan. 28, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

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Trustworthy AI Systems and signed the Council of Europe Framework Convention on AI.

National AI Strategy

The United States promotes AI policies that seek to maintain American leadership and competitiveness for the protection of civil and human rights, to ensure technology is working for the American people, and to foster global alliances prioritizing democratic values and a collective defense. Speaking to the United Nations General Assembly in September 2021, President Biden reaffirmed the U.S. commitment to "work together with our democratic partners to ensure that new advances in areas from biotechnology, to quantum computing, 5G, artificial intelligence, and more are used to lift people up, to solve problems, and advance human freedom—not to suppress dissent or target minority communities."⁶⁷⁷¹ He urged the G7 nations to stand up for "democratic values."

In domestic AI policy, President Biden has underscored that seizing the benefits of AI requires the government to first mitigate its risks.⁶⁷⁷³ Discussing his administration's approach toward the industry, he stated, "First, the companies have an obligation to make sure their technology is safe before releasing it to the public. That means testing the capabilities of their systems, assessing their potential risk, and making the results of these assessments public. [...] Companies have a duty to earn the people's trust and empower users to make informed decisions."⁶⁷⁷⁴

The current U.S. position on AI comprises President Biden's 2023 Executive Order (14110) on the Safe, Secure, and Trustworthy Development and use of Artificial Intelligence, 6775 the 2024 Office of Management and Budget

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⁶⁷⁷¹ United States Mission to the United Nations, *Remarks by President Joseph R. Biden, Jr., Before the 76th Session of the United Nations General Assembly* (Sept. 21, 2021), https://usun.usmission.gov/remarks-by-president-joseph-r-biden-jr-before-the-76th-session-of-the-united-nations-general-assembly/

⁶⁷⁷² Biden White House Archives, Remarks by President Biden at the 2021 Virtual Munich Security Conference (Feb. 19, 2021), https://bidenwhitehouse.archives.gov/briefing-room/speeches-remarks/2021/02/19/remarks-by-president-biden-at-the-2021-virtual-munich-security-conference/

⁶⁷⁷³ Biden White House Archives, *Background Press Call on New Artificial Intelligence Announcements*, Press Briefings (May 4, 2023), https://bidenwhitehouse.archives.gov/briefing-room/press-briefings/2023/05/04/background-press-call-on-new-artificial-intelligence-announcements/

⁶⁷⁷⁴ Biden White House Archives, *Remarks by President Biden on Artificial Intelligence*, Speeches and Remarks (Jul. 21, 2023), https://bidenwhitehouse.archives.gov/briefing-room/speeches-remarks/2023/07/21/remarks-by-president-biden-on-artificial-intelligence/6775 Federal Register, Presidential Documents, *Executive Order 14110*, *Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence* (Oct. 30, 2023), https://www.govinfo.gov/content/pkg/FR-2023-11-01/pdf/2023-24283.pdf

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(OMB) Guidance on Advancing Governance, Innovation, and Risk Management for Agency Use of Artificial Intelligence (OMB AI Guidance), 6776 the 2022 Blueprint for an AI Bill of Rights published by the White House Office of Science and Technology Policy (OSTP),6777 the AI Risk Management Framework issued by the National Institute of Standards and Technology (NIST),6778 President Biden's Executive Order 14091,6779 2020 Presidential Executive Order (13960) by President Trump, ⁶⁷⁸⁰ the 2019 Executive Order (13859), ⁶⁷⁸¹ and various initiatives and programs established by the National Artificial Intelligence Initiative Act (NAIIA) of 2020.6782

The Biden White House also released a National Security Memorandum (NSM) on AI, providing comprehensive guidance for governing AI use in national security systems, including defense and intelligence agencies." 6783

6776 Biden White House Archives, Office of Management and Budget, Memorandum for the Heads of Departments and Agencies, Advancing Governance, Innovation, and Risk Management for Agency Use of Artificial Intelligence, M-24-10 (Mar. 28, 2024). https://bidenwhitehouse.archives.gov/wp-content/uploads/2024/03/M-24-10-Advancing-Governance-Innovation-and-Risk-Management-for-Agency-Use-of-Artificial-Intelligence.pdf

6777 Biden White House Archives, Blueprint for an AI Bill of Rights: Making Automated Systems Work for the American People (Oct. 2022), https://bidenwhitehouse.archives.gov/wpcontent/uploads/2022/10/Blueprint-for-an-AI-Bill-of-Rights.pdf

Intelligence in the Federal Government, 85 FR 78939, Federal Register, pp. 78939-78943 (Dec. 3, 2020), https://www.federalregister.gov/documents/2020/12/08/2020-27065/promoting-theuse-of-trustworthy-artificial-intelligence-in-the-federal-government

⁶⁷⁸¹ Trump White House Archives, Executive Order 13859: Maintaining American Leadership in Artificial Intelligence, 84 FR 3967, pp. 3967–3972 (Feb.11, 2019), https://trumpwhitehouse.archives.gov/ai/

⁶⁷⁸² William M. (Mac) Thornberry, National Defense Authorization Act for Fiscal Year 2021, Division E (National Artificial Intelligence Initiative Act) (Jan. 1, 2021), https://www.congress.gov/116/plaws/publ283/PLAW-116publ283.pdf

⁶⁷⁸³ The White House, Memorandum on Advancing the United States' Leadership in Artificial Intelligence; Harnessing Artificial Intelligence to Fulfill National Security Objectives; and Fostering the Safety, Security, and Trustworthiness of Artificial Intelligence (Oct. 24, 2024), https://bidenwhitehouse.archives.gov/briefing-room/presidential-

actions/2024/10/24/memorandum-on-advancing-the-united-states-leadership-in-artificialintelligence-harnessing-artificial-intelligence-to-fulfill-national-security-objectives-andfostering-the-safety-security/

⁶⁷⁷⁸ National Institute of Standards and Technology, Artificial Intelligence Risk Management Framework (NIST AI 100-1) (Jan. 2023), https://nvlpubs.nist.gov/nistpubs/ai/NIST.AI.100-1.pdf 6779 Joseph R. Biden, Executive Order 14091, Further Advancing Racial Equity and Support for Underserved Communities through the Federal Government, 88 FR 10825, Federal Register (Feb. 16, 2023), https://www.federalregister.gov/documents/2023/02/22/2023-03779/furtheradvancing-racial-equity-and-support-for-underserved-communities-through-the-federal ⁶⁷⁸⁰ Joseph R. Biden, Executive Order 13960: Promoting the Use of Trustworthy Artificial

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Federal laws have been passed in Congress either as standalone legislation or as AI-focused provisions in broader acts. These include the National Artificial Intelligence Initiative Act (NAIIA) of 2020,⁶⁷⁸⁴ the AI in Government Act of 2020, and the Advancing American AI Act of 2022.⁶⁷⁸⁵

In May 2023, Senate Majority Leader Chuck Schumer convened the Bipartisan Senate AI Working Group along with Senators Mike Rounds (R-S.D.), Todd Young (R-Ind.), and Martin Heinrich (D-N.M.).⁶⁷⁸⁶ The working group convened a series of "Insight Forums" to complement the traditional approach of committee hearings.⁶⁷⁸⁷ There were nine forums in the series with representation from tech companies, AI experts, civil society, think tanks, research, and academia. In his opening statement Sen. Schumer announced that the insight forums would build "a foundation for bipartisan AI policy that Congress can pass."⁶⁷⁸⁸ "More than 300 AI-related proposed bills were introduced in the 118th congressional session [beginning in January 2023]. They range all over the place, from controlling misinformation to how we can stimulate AI innovation and research."⁶⁷⁸⁹ However, no AI legislation was passed in the 118th Congress.

Executive Order 14110 on Safe, Secure, and Trustworthy Al

Executive Order 14110 on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence was issued for the purpose of harnessing AI for good and realizing its myriad benefits by mitigating its substantial risks. Executive Order 14110 builds on prior work to support the development of responsible AI technologies and policies, including the Office of Science and Technology Policy's (OSTP) Blueprint for an AI Bill of Rights and the National

https://www.congress.gov/bill/117th-congress/senate-bill/1353

⁶⁷⁸⁴ William M. (Mac) Thornberry, *National Defense Authorization Act for Fiscal Year 2021, Division E* (National Artificial Intelligence Initiative Act), Title LI, Sec. 5101 (Jan. 1, 2021), https://www.congress.gov/116/plaws/publ283/PLAW-116publ283.pdf

^{6785 117}th Congress (2021–2022), Advancing American AI Act, S.1353 (2022),

⁶⁷⁸⁶ Axios, *Bipartisan Senate Group Looks to Tackle AI Legislation* (May 18, 2023), https://www.axios.com/2023/05/18/ai-legislation-bipartisan-senate-group-schumer

⁶⁷⁸⁷ Tech Policy Press, *U.S. Senate AI "Insight Forum' Tracker* (Dec. 8, 2023), https://www.techpolicy.press/us-senate-ai-insight-forum-tracker/

⁶⁷⁸⁸ Senate Democrats, *Majority Leader Schumer Opening Remarks for the Senate's Inaugural AI Insight Forum* (Sept. 13, 2023), https://www.democrats.senate.gov/newsroom/press-releases/majority-leader-schumer-opening-remarks-for-the-senates-inaugural-ai-insight-forum

⁶⁷⁸⁹ Nicola Jones, *The U.S. Congress Is Taking on AI: This Computer Scientist Is Helping*, News Q&A, Nature (May 9, 2024), https://www.nature.com/articles/d41586-024-013544#:~:text=There%20have%20been%20more%20than,stimulate%20AI%20innovation%20and%20research

Executive Order 14110, Section 1, https://www.federalregister.gov/d/2023-24283/p-2

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Institute of Standards and Technology's (NIST) AI Risk Management Framework (AI RMF).⁶⁷⁹¹ The order has eight overarching policy areas:

- "Safety and security. The EO promotes the development and implementation of repeatable processes and mechanisms to understand and mitigate risks related to AI adoption, including with respect to biosecurity, cybersecurity, national security, and critical infrastructure.
- Innovation and competition. The EO compels actions to attract AI talent to the United States, understand novel intellectual property (IP) questions, protect inventors and creators, and promote AI innovation, including at startups and small businesses.
- Worker support. The EO states that AI adoption may be disruptive to the workforce and directs agencies to research and develop potential mitigations against such disruptions.
- Consideration of AI bias and civil rights. The EO states that AI models may perpetuate biases and their implementation may lead to civil rights violations. The E.O. includes a section on equity and civil rights considerations for use of AI in the criminal justice system and the administration of federal government programs and benefits.
- Consumer protection. The EO instructs agencies to enforce existing, technology-agnostic authorities in an effort to minimize harms to consumers, and to identify needed authorities related to AI.
- *Privacy.* The EO calls for the evaluation and mitigation of privacy risks potentially exacerbated by AI-associated with the collection, use, and retention of user data.
- Federal use of AI. The EO requires the Office of Management and Budget (OMB) to establish an interagency council to coordinate AI use by federal agencies and develop guidance on AI governance and risk management activities for agencies. It acknowledges the ubiquity of generative AI (GenAI) tools and directs agencies to move toward adoption with safeguards in place. The EO also calls for additional agency hiring and training activities to increase the AI workforce capacity across the federal government.
- International leadership. The EO declares that the United States should be a global leader in AI development and adoption by engaging with international allies and partners, leading efforts to develop common AI regulatory and

⁶⁷⁹¹ Congressional Research Service, Highlights of the 2023 Executive Order on Artificial Intelligence for Congress, pg. 1 (Apr. 3, 2024),

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accountability principles and advancing responsible global technical standards for AL."6792

The administration is tracking progress against the actions directed in the Executive Order and informs the public through published factsheets.⁶⁷⁹³ The White House reported that agencies had completed each 90-day, 120-day, and 150-day action on time.⁶⁷⁹⁴

The 2023 Executive Order (14091) builds on "previous equity-related Executive Orders by extending and strengthening equity-advancing requirements for agencies" and aims to "promote equity in science and root out bias in the design and use of new technologies, such as artificial intelligence." Section 4 of Executive Order 14091 provides for "embedding equity into government-wide processes" by directing agencies to design, develop, acquire, and use artificial intelligence and automated systems, consistent with applicable law, in a manner that advances equity. The order also provides for "affirmatively advancing civil rights" by directing agencies to "ensure that their respective civil rights offices are consulted on decisions regarding the design, development, acquisition, and use of artificial intelligence and automated systems." The order defines "algorithmic discrimination" as "instances when automated systems contribute to unjustified different treatment or impacts disfavoring people based on their actual or perceived race, color, ethnicity, sex (including based on pregnancy, childbirth, and related conditions; gender identity; intersex status; and sexual orientation),

⁶⁷⁹² Congressional Research Service, *Highlights of the 2023 Executive Order on Artificial Intelligence for Congress*, pg. 1 (Apr. 3, 2024), https://crsreports.congress.gov/product/pdf/R/R47843

⁶⁷⁹³ Biden White House Archives, *FACT SHEET: Biden-Harris Administration Announces New AI Actions and Receives Additional Major Voluntary Commitment on AI* (Jul. 26, 2024), https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2024/07/26/fact-sheet-biden-harris-administration-announces-new-ai-actions-and-receives-additional-major-voluntary-commitment-on-ai/">https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2024/07/26/fact-sheet-biden-harris-administration-announces-new-ai-actions-and-receives-additional-major-voluntary-commitment-on-ai/

⁶⁷⁹⁴ Biden White House Archives, *Biden-Harris Administration Announces Key AI Actions 180 Days Following President Biden's Landmark Executive Order*, Statements and Releases (Apr. 29, 2024), https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2024/04/29/biden-harris-administration-announces-key-ai-actions-180-days-following-president-bidens-landmark-executive-order/">https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2024/04/29/biden-harris-administration-announces-key-ai-actions-180-days-following-president-bidens-landmark-executive-order/">https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2024/04/29/biden-harris-administration-announces-key-ai-actions-180-days-following-president-bidens-landmark-executive-order/

⁶⁷⁹⁵ Joseph R. Biden, Executive Order 14091, Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, 88 FR 10825, Section 1, Federal Register (Feb. 16, 2023), <a href="https://www.federalregister.gov/documents/2023/02/22/2023-03779/further-advancing-racial-equity-and-support-for-underserved-communities-through-the-output-advancing-racial-equity-and-support-for-underserved-communities-through-the-output-advancing-racial-equity-and-support-for-underserved-communities-through-the-output-advancing-racial-equity-and-support-for-underserved-communities-through-the-output-advancing-racial-equity-and-support-for-underserved-communities-through-the-output-advancing-racial-equity-and-support-for-underserved-communities-through-the-output-advancing-racial-equity-and-support-for-underserved-communities-through-the-output-advancing-racial-equity-and-support-for-underserved-communities-through-the-output-advancing-racial-equity-and-support-for-underserved-communities-through-the-output-advancing-racial-equity-a

⁶⁷⁹⁶ Ibid, Section 4

⁶⁷⁹⁷ Ibid, Section 8

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religion, age, national origin, limited English proficiency, disability, veteran status, genetic information, or any other classification protected by law."6798

The 2019 Executive Order emphasized the need to maintain American leadership in Artificial Intelligence, and sets out a range of policies and practices, including funding, research, training, and collaboration. The 2020 Executive Order on Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government reflects earlier goals set in the 2019 Executive Order and established common guidance to encourage federal agencies to use AI, consistent with nine principles. The 2020 Executive Order states that "[t]he ongoing adoption and acceptance of AI will depend significantly on public trust." It also emphasizes the need to ensure that "the use of AI remains consistent with all applicable laws, including those related to privacy, civil rights, and civil liberties." Executive Order 13960 characterized Trustworthy AI as being lawful, respective of our civil rights, accurate, reliable, safe, understandable, responsible, transparent, accountable and regularly monitored. Understandable in the content of the properties of the properties of the properties of the properties.

OMB Guidance on Al

Following the 2023 Executive Order, the OMB released updated guidance for the regulation of artificial intelligence encapsulated in two key memoranda: Memorandum M-24-10⁶⁸⁰⁵ and Memorandum M-24-18.⁶⁸⁰⁶ These memoranda collectively aim to ensure that AI technologies are developed and used to protect public trust, promote innovation, and safeguard privacy and civil rights. The OMB

 $\underline{https://www.federalregister.gov/documents/2019/02/14/2019-02544/maintaining-american-leadership-in-artificial-intelligence}$

⁶⁷⁹⁸ Ibid, Section 10(f)

⁶⁷⁹⁹ Donald J. Trump, *Executive Order 13859*, *Maintaining American Leadership in Artificial Intelligence*, 84 FR 3967, Federal Register (Feb. 11, 2019),

⁶⁸⁰⁰ Ibid, p. 3967

⁶⁸⁰¹ Donald J. Trump, *Executive Order 13960, Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government*, 85 FR 78939, Federal Register (Dec. 3, 2020), https://www.federalregister.gov/documents/2020/12/08/2020-27065/promoting-the-use-of-trustworthy-artificial-intelligence-in-the-federal-government

⁶⁸⁰² Ibid

⁶⁸⁰³ Ibid, p. 78940

⁶⁸⁰⁴ Ibid

⁶⁸⁰⁵ OMB, Memorandum M-24-10 Advancing Governance, Innovation, and Risk Management for Agency Use of Artificial Intelligence (Mar. 28, 2024), https://bidenwhitehouse.archives.gov/wp-content/uploads/2024/03/M-24-10-Advancing-Governance-Innovation-and-Risk-Management-for-Agency-Use-of-Artificial-Intelligence.pdf

⁶⁸⁰⁶ OMB, *Memorandum M-24-18 Advancing the Responsible Acquisition of Artificial Intelligence in Government* (Sept. 24, 2024), https://bidenwhitehouse.archives.gov/wp-content/uploads/2024/10/M-24-18-AI-Acquisition-Memorandum.pdf

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outlined several key principles for AI regulation, including promoting transparency, accountability, and equity in AI systems. Federal agencies are directed to implement these principles while developing regulations and policies for AI to ensure that these technologies are used responsibly and ethically. The guidance also emphasizes the importance of risk-based approaches, encouraging agencies to focus their regulatory efforts on high-risk AI applications that could significantly impact safety, privacy, or civil liberties.

M-24-10 focuses on advancing governance, innovation, and risk management for agency use of AI. It provides a framework for agencies to enhance AI governance, encouraging the establishment of clear governance structures; integrating AI risk assessments into decision-making processes; and fostering responsible AI innovation aligned with public interests. The second memorandum (M-24-18) guides acquiring AI capabilities, emphasizing transparency, fairness, and the ethical use of AI in government procurement. It sets requirements for evaluating AI vendors, focusing on privacy, algorithmic transparency, and compliance with ethical standards to ensure that AI solutions acquired by federal agencies are trustworthy and align with federal values."

The Scope of the OMB AI Guidance is narrowly tailored to "a subset of AI risks as well as governance and innovation issues that are directly tied to agencies' use of AI."6807 The memorandum addresses risks that "result from any reliance on AI outputs to inform, influence, decide, or execute agency decisions or actions, which could undermine the efficacy, safety, equitableness, fairness, transparency, accountability, appropriateness, or lawfulness of such decisions or actions."6808

The 2024 OMB AI Guidance sets out the most comprehensive requirements for managing risks in government use of AI to date. The Guidance requires agencies to ensure minimum practices for safety-impacting and rights-impacting and provides a deadline for these practices to be implemented. All AI that matches the definitions of "safety-impacting AI" or "rights-impacting AI" must follow the minimum practices. Safety-impacting AI includes impacts on humans, climate or environment, infrastructure, and strategic assets or resources. Rights-impacting AI includes systems who impact civil rights and privacy, equal opportunities, and access to government resources and the ability

⁶⁸⁰⁷ Ibid, p. 2, Section 2

⁶⁸⁰⁸ Ibid, p. 2, Section 2

⁶⁸⁰⁹ Ibid, p. 14, Section 5

⁶⁸¹⁰ OMB AI Guidance, Section 6, p. 30

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to apply for them. ⁶⁸¹¹ The Guidance also defines uses automatically presumed to be rights-impacting or safety-impacting. ⁶⁸¹²

To protect these rights and safety, agencies are required conduct AI impact assessments, testing for performance in a real-world context, independently evaluations, ongoing monitoring, mitigation of emergent risks, ensuring adequate human training and assessment, establish human oversight and accountability measures, public notice and plain-language documentation mandates.⁶⁸¹³ Where AI systems are determined to be rights-impacting agencies are required to ensure additional minimum practices including equity, fairness impact assessments and mitigation of algorithmic discrimination, consultation with impacted communities, notifying negatively impacted individuals, human consideration and remedy processes, opt-out mechanisms for AI-enabled decisions.⁶⁸¹⁴

Memorandum M-24-10 stresses transparency and public access to data but does not explicitly address safeguards for personal data or indicate how such protections would align with the increased data access initiatives. Similarly, Memorandum M-24-18, which focuses on AI acquisition, encourages transparency in AI systems but lacks explicit guidelines on managing sensitive personal data that might be part of the procurement process.

Prior to the memoranda, in November 2020, OMB issued the Guidance for Regulation of Artificial Intelligence Applications, ⁶⁸¹⁵ which followed from the Executive Order on American Leadership in AI and stated that "when considering regulations or policies related to AI applications, agencies should continue to promote advancements in technology and innovation, while protecting American technology, economic and national security, privacy, civil liberties and other American values, including the principles of freedom, human rights, the rule of law, and respect for intellectual property." It is explicitly addressed to AI applications "developed and deployed outside of the federal government." ⁶⁸¹⁶

Joint Statement of Enforcement Agencies

Leaders from four agencies issued a Joint Statement on Enforcement Efforts Against Discrimination and Bias in Automated Systems. 6817 The statement

⁶⁸¹³ Ibid, p. 17–20, Section 5(c)(iv)

⁶⁸¹¹ OMB AI Guidance, Section 6, p. 29

⁶⁸¹² Ibid, p. 14, Section 5(b)

⁶⁸¹⁴ Ibid, p. 21–24, Section 5(c)(v)

⁶⁸¹⁵ OMB, Guidance for Regulation of AI Applications (Nov. 17, 2020),

 $[\]underline{https://trumpwhitehouse.archives.gov/wp\text{-}content/uploads/2020/11/M\text{-}21\text{-}06.pdf}$

⁶⁸¹⁶ Ibid

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⁶⁸¹⁷ Consumer Financial Protection Bureau; Justice Department, Civil Rights Division; Equal Employment Opportunity Commission; Federal Trade Commission, *Joint Statement on*

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does not create any new rights or liabilities but restates Agencies' existing enforcement authorities and their application to automated systems that contribute to unlawful discrimination and otherwise violate federal law. The statement uses the term "automated systems" broadly to mean software and algorithmic processes, including AI, that are used to automate workflows and help people complete tasks or make decisions. The statement identifies three sources of discrimination in automated systems: Data and Datasets, Modal Opacity and Access, and Design and Use. Balance of the statement identifies three sources of discrimination in automated systems: Data and Datasets, Modal Opacity and Access, and Design and Use.

The Department of Education, Department of Health and Human Services, Department of Homeland Security, Department of Housing, and Urban Development and Department of Labor later joined in the statement. 6820

Voluntary Commitments of Tech Companies

Ahead of the issuance of Executive Order 14110, tech companies developing and deploying advanced AI systems provided voluntary commitments to the Biden-Harris administration. The commitments were made to promote the safe, secure, and transparent development and use of generative AI (foundation) model technology. "The Biden Administration convened representatives from seven AI companies—Amazon, Anthropic, Google, Inflection, Meta, Microsoft, and OpenAI—and announced voluntary commitments from each of them [...] According to the Administration, the voluntary commitments 'are consistent with existing laws and regulations,' and 'companies intend these voluntary commitments to remain in effect until regulations covering substantially the same issues come into force.' Additionally, the Administration reportedly consulted on the voluntary commitments with other countries and has stated that it 'will work with allies and partners to establish a strong international framework to govern the development and use of AI." The Commitments are:6822

Enforcement Efforts against Discrimination and Bias in Automated Systems, https://www.justice.gov/crt/page/file/1581491/dl?inline

⁶⁸¹⁸ Ibid, p. 1

⁶⁸¹⁹ Ibid, p. 3

⁶⁸²⁰ Department of Justice, Five New Federal Agencies Join Justice Department in Pledge to Enforce Civil Rights Laws in Artificial Intelligence (Apr. 4, 2024),

https://www.justice.gov/opa/pr/five-new-federal-agencies-join-justice-department-pledge-enforce-civil-rights-laws

⁶⁸²¹ Congressional Research Services, Artificial Intelligence: Overview, Recent Advances, and Considerations for the 118th Congress, p. 11 (Aug. 4, 2023)

https://crsreports.congress.gov/product/pdf/R/R47644

⁶⁸²² Biden White House Archives, Voluntary AI Commitments (Sept. 2023),

https://bidenwhitehouse.archives.gov/wp-content/uploads/2023/09/Voluntary-AI-Commitments-September-2023.pdf

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- 1. Internal and external red-teaming of models or systems in areas including misuse, societal risks, and national security concerns, such as bio, cyber, and other safety Areas
- 2. Information sharing among companies and governments regarding trust and safety risks, dangerous or emergent capabilities, and attempts to circumvent safeguards
- 3. Investing in cybersecurity and insider threat safeguards to protect proprietary and unreleased model weights
- 4. Incentivizing third-party discovery and reporting of issues and vulnerabilities
- 5. Developing and deploying mechanisms that enable users to understand if audio or visual content is AI-generated, including robust provenance, watermarking, or both, for AI-generated audio or visual content
- 6. Publicly report model or system capabilities, limitations, and domains of appropriate and inappropriate use, including discussion of societal risks, such as effects on fairness and bias
- 7. Prioritizing research on societal risks posed by AI systems, including on avoiding harmful bias and discrimination, and protecting privacy
- 8. Developing and deploying frontier AI systems to help address society's greatest challenges

NIST Risk Management Framework

The National Institute of Standards and Technology (NIST) within the Department of Commerce plays a key role in implementing the actions under Executive Order 14110.

Before the EO, NIST released Version One of its Artificial Intelligence Risk Management Framework (AI RMF).⁶⁸²³ The AI RMF followed an initial mandate⁶⁸²⁴ by Congress in 2020 for NIST to lead the charge, which subsequently led to a request for information, a concept paper, two drafts, and three public workshops.⁶⁸²⁵

"The Framework is intended to be voluntary, rights-preserving, non-sector-specific, and use-case agnostic, providing flexibility to organizations of all sizes and in all sectors and throughout society to implement the approaches in the Framework." As an integral part of the framework, NIST highlights core

⁶⁸²³ NIST, Artificial Intelligence Risk Management Framework (AI RMF 1.0) (Jan. 2023), https://nvlpubs.nist.gov/nistpubs/ai/NIST.AI.100-1.pdf

⁶⁸²⁴ Congress, *National Defense Authorization Act for Fiscal Year 2022*, Public Law, pp. 116–283 (Jan. 1, 2022), https://www.congress.gov/116/plaws/publ283/PLAW-116publ283.pdf
⁶⁸²⁵ NIST, *AI RMF Timeline and Engagements*, https://www.nist.gov/itl/ai-risk-management-framework

⁶⁸²⁶ NIST, *Artificial Intelligence Risk Management Framework (AI RMF 1.0)*, NIST AI 100-1, p. 2 (Jan. 2023), https://nvlpubs.nist.gov/nistpubs/ai/NIST.AI.100-1.pdf

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functions such as governance, risk assessments and management and documentation, ranging from organizational roles and responsibilities to the AI system's knowledge limits. ⁶⁸²⁷

The "RMF describes four specific functions to help organizations address the risks of AI systems in practice. These functions—GOVERN, MAP, MEASURE, and MANAGE—are broken down further into categories and subcategories. While GOVERN applies to all stages of organizations' AI risk management processes and procedures, the MAP, MEASURE, and MANAGE functions can be applied in AI system-specific contexts and at specific stages of the AI lifecycle."6828 NIST launched the Trustworthy and Responsible AI Resource Center, which will facilitate implementation of and international alignment with the AI RMF in early 2023.

NIST has also responded to the rise of generative AI by publishing Artificial Intelligence Risk Management Framework: Generative Artificial Intelligence Profile (GenAI Profile) as a companion resource to the AI RMF. Additionally, NIST published "A Plan for Global Engagement on AI Standards," designed to drive the worldwide development and implementation of AI-related consensus standards, cooperation and coordination, and information sharing."6829 Specifically, the publication calls for "context-sensitive, performance-based, human-centered, and responsive to societal considerations."6830 Despite the role it plays in AI research and development, there are reports of NIST facing resource constraints due to budget cuts, to which some in the AI community worry that underfunding NIST makes it vulnerable to industry influence.⁶⁸³¹

Al Safety Institute

Coinciding with the AI Safety Summit and the Bletchley Park Declaration, the Biden-Harris Administration announced the establishment of the U.S. Artificial Intelligence Safety Institute (USAISI) to lead the U.S. government's efforts on AI safety and trust, particularly for evaluating the most advanced AI

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⁶⁸²⁷ Tech Policy Press, *Five Takeaways from the NIST AI Risk Management Framework* (Jan. 26, 2023), https://techpolicy.press/five-takeaways-from-the-nist-ai-risk-management-framework/6828 Ibid, p. 3

⁶⁸²⁹ NIST, A Plan for Global Engagement on AI Standards (Jul. 2024), https://www.nist.gov/publications/plan-global-engagement-ai-standards
⁶⁸³⁰ Jesse Dunietz, Elham Tabassi, Mark Latonero, Kamie Roberts, A Plan for Global Engagement on AI Standards, NIST Trustworthy and Responsible AI (Jul. 2024), https://doi.org/10.6028/NIST.AI.100-5

⁶⁸³¹ Cat Zakrzewski, *This Agency Is Tasked with Keeping AI Safe. Its Offices Are Crumbling*, Washington Post (Mar. 6, 2024), https://www.washingtonpost.com/technology/2024/03/06/nist-ai-safety-lab-decaying/

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models.⁶⁸³² The announcement states that "USAISI will facilitate the development of standards for safety, security, and testing of AI models, develop standards for authenticating AI-generated content, and provide testing environments for researchers to evaluate emerging AI risks and address known impacts." The USAISI is housed within NIST and focuses on the priorities assigned to to the institution under Executive Order 14110.⁶⁸³⁴

The Biden-Harris administration also announced the establishment of the AI Safety Consortium including 200 AI stakeholders to support the work of USAISI. The announcement stated that the consortium will "unite AI creators and users, academics, government and industry researchers, and civil society organizations in support of the development and deployment of safe and trustworthy artificial intelligence (AI)."6835 The U.S. Secretary of Commerce later announced collaboration wiht a network of AI Safety Institutes. This network serves strengthen and expand on USAISI's previously announced collaborations with the AI Safety Institutes of the UK, Japan, Canada, and Singapore, as well as the European AI Office and its scientific components and affiliates, and will catalyze a new phase of international coordination on Al safety science and governance.

Chief Digital and Artificial Intelligence Office (CDAO)

The Chief Digital and Artificial Intelligence Office (CDAO) was established through the consolidation of the Joint Artificial Intelligence Center (JAIC), Defense Digital Services (DDS), the Chief Data Officer, and the enterprise platform Advana. The CDAO's mission is to accelerate DoD adoption of data, analytics, and artificial intelligence from the boardroom to the battlefield to enable decision advantage.

6834 NIST, U.S. Artificial Intelligence Safety Institute, https://www.nist.gov/aisi

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⁶⁸³² U.S. Department of Commerce, *At the Direction of President Biden, Department of Commerce to Establish U.S. Artificial Intelligence Safety Institute to Lead Efforts on AI Safety,* Press Releases (Nov. 1, 2023), https://www.commerce.gov/news/press-releases/2023/11/direction-president-biden-department-commerce-establish-us-artificial ⁶⁸³³ Ibid

⁶⁸³⁵ National Institute of Standards and Technology, *Biden-Harris Administration Announces First-Ever Consortium Dedicated to AI Safety*, News (Feb. 8. 2024), https://www.nist.gov/news-events/news/2024/02/biden-harris-administration-announces-first-ever-consortium-dedicated-ai-6836 U.S. Department of Commerce, *U.S. Secretary of Commerce Gina Raimondo Releases*

Strategic Vision on AI Safety, Announces Plan for Global Cooperation Among AI Safety Institutes, Office of Public Affairs (May 21, 2024), https://www.commerce.gov/news/press-releases/2024/05/us-secretary-commerce-gina-raimondo-releases-strategic-vision-ai-safety
⁶⁸³⁷ Chief Digital and Artificial Intelligence Office, Homepage, https://www.ai.mil/

⁶⁸³⁸ Ibid

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CDAO unveiled its Data, Analytics, and AI Adoption Strategy in collaboration with other DOD offices in 2023 to accelerate the adoption of analytics, data, and artificial intelligence to speed up the decision-making process on the battlefield. The strategy outlines an agile AI adoption approach aimed at expanding five key benefits: battlespace awareness and understanding, adaptive force planning and application, fast, precise, and resilient kill chains, resilient sustainment support, and efficient enterprise business operations. 68339

EU-U.S. Trade and Technology Council (TTC)

In June 2021, the U.S. and the European Union established the EU-U.S. Trade and Technology Council (TTC) to "strengthen global cooperation on technology, digital issues, and supply chains" and "with the aim of promoting a democratic model of digital governance." The TTC outlined areas of U.S.-EU cooperation, including "responsible stewardship of trustworthy AI." Since 2021, the U.S. has made progress in support of the TTC's goals at the policy and agency level, 6841 announced a joint roadmap on "evaluation and measurement tools for trustworthy Artificial Intelligence," 1842 launched a joint report on the economic impact of AI-driven technology on the workforce.

1/1/DOD DATA ANALYTICS AI ADOPTION STRATEGY.PDF

Democratic Renewal (Dec. 9, 2021), https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2021/12/09/fact-sheet-announcing-the-presidential-initiative-for-democratic-renewal/; Biden White House Archives, US and UK to Partner on Prize Challenges to Advance Privacy-Enhancing Technologies (Dec. 8, 2021),

https://bidenwhitehouse.archives.gov/ostp/news-updates/2021/12/08/us-and-uk-to-partner-on-a-prize-challenges-to-advance-privacy-enhancing-technologies/; United States Department of Justice Antitrust Division and the United States Federal Trade Commission, EU-U.S. Joint Technology Competition Policy Dialogue Inaugural Joint Statement between the European Commission (Dec. 7, 2021),

https://www.ftc.gov/system/files/documents/public_statements/1598739/euus joint dialogue statement 12721.pdf

⁶⁸⁴² U.S.-EU TTC, TTC Joint Roadmap on Evaluation and Measurement Tools for Trustworthy AI and Risk Management (Dec. 1, 2022),

 $\underline{https://www.nist.gov/system/files/documents/2022/12/04/Joint\ TTC\ Roadmap\ Dec 2022\ Final.}$

⁶⁸⁴³ Biden White House Archives, *The Impact of Artificial Intelligence on the Future of Workforces in the European Union and the United States of America* (Dec. 5, 2022), https://bidenwhitehouse.archives.gov/wp-content/uploads/2022/12/TTC-EC-CEA-AI-Report-12052022-1.pdf

⁶⁸³⁹ Department of Defense, *Data, Analytics, and Artificial Intelligence Adoption Strategy* (Jun. 27, 2023), https://media.defense.gov/2023/Nov/02/2003333300/-1/-

⁶⁸⁴⁰ Biden White House Archives, U.S.-EU Trade and Technology Council Inaugural Joint Statement (Sept. 29, 2021), https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2021/09/29/u-s-eu-trade-and-technology-council-inaugural-joint-statement/
⁶⁸⁴¹ Biden White House Archives, *Fact Sheet: Announcing the Presidential Initiative for*

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The U.S. and EU, in their joint statement following the fourth ministerial meeting. identified "Robust Transatlantic Cooperation Technologies" as one of the key outcomes. 6844 On AI specifically, the joint statement affirmed "their commitment to a risk-based approach to AI" and emphasized cooperation to promote "responsible AI innovation that respects rights and safety and ensures that AI provides benefits in line with our shared democratic values."6845 The joint statement also stated the decision to "add special emphasis on generative AI" and "complement the G7 Hiroshima AI process." 6846

At the fifth ministerial meeting, the TTC emphasized expanding transatlantic cooperation on artificial intelligence to promote "interoperability in emerging approaches to AI governance."6847 In the joint statement following the sixth ministerial meeting, the U.S. and EU confirmed their understanding that "transparency and risk mitigation are key elements to ensure the safe, secure, and trustworthy development and use of AI"6848 and their continued commitment to "multilateral initiatives such as the G7, the OECD, G20, Council of Europe, and UN processes to advance the responsible stewardship of AI."

The Council agreed to further cooperation on implementing the joint AI roadmap and promoting international standards for AI, making it easier for AI technologies to be deployed responsibly across both regions. The TTC also addressed concerns related to data flows and privacy and agreed to strengthen mechanisms for cross-border data transfers, ensuring compliance with GDPR and U.S. data protection regulations. This alignment is a significant step toward creating a trusted AI development and innovation environment. 6849

6846 Ibid

⁶⁸⁴⁴ Biden White House Archives, U.S.-EU Joint Statement of the Trade and Technology Council, Statements and Releases (May 31, 2023), https://bidenwhitehouse.archives.gov/briefingroom/statements-releases/2023/05/31/u-s-eu-joint-statement-of-the-trade-and-technologycouncil-2/

⁶⁸⁴⁵ Ibid

⁶⁸⁴⁷ U.S. Department of Commerce, Readout of U.S.-EU Trade and Technology Council Fifth Ministerial Meeting, Press Releases (Jan. 31, 2024), https://www.commerce.gov/news/pressreleases/2024/01/readout-us-eu-trade-and-technology-council-fifth-ministerial-meeting; OECD AI Policy Observatory, The United States Works with Domestic and International AI Communities to Establish Frameworks that Advance Trustworthy AI for All, The AI Wonk (Dec. 20, 2023), https://oecd.ai/en/wonk/united-states-ai-for-all-policy

⁶⁸⁴⁸ Biden White House Archives, U.S-EU Joint Statement of the Trade and Technology Council, Statements and Releases (Apr. 5, 2024), https://bidenwhitehouse.archives.gov/briefingroom/statements-releases/2024/04/05/u-s-eu-joint-statement-of-the-trade-and-technologycouncil-3/

⁶⁸⁴⁹ European Commission, Joint Statement EU-US Trade and Technology Council of 4-5 April 2024 in Leuven, Belgium, (Apr. 4, 2024),

https://ec.europa.eu/commission/presscorner/detail/en/statement 24 1828

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Public Participation

Several agencies launched requests for information (RFI) in 2024, showing a desire for enhanced public participation. First, the AI Safety Institute (AISI) released for public comment new technical guidelines to help AI developers manage the evaluation of misuse of dual-use foundation models."6850 The AISI has also sought insights from the public on current and future practices and methodologies for the responsible development and use of chemical and biological (chem-bio) AI models.6851

The Office of Critical and Emerging Technologies has sought public comment to provide a national AI capability for the U.S. Department of Energy (DOE).6852

Finally, the OMB has also requested public input on issues related to Federal agency collection, processing, maintenance, use, sharing, dissemination, and disposition of commercially available information (CAI) containing personally identifiable information (PII).6853 OMB also incorporated public comment to inform future action on federal procurement of AI to ensure that federal contracts align with OMB's AI guidance and address such issues as the protection of privacy, civil rights, and civil liberties. 6854

The 2024 opportunities followed a surge in request for public comments on AI related issues and rulemaking from 2022 onwards.6855 Civil society

https://www.federalregister.gov/documents/2024/09/12/2024-20676/notice-of-request-forinformation-rfi-on-frontiers-in-ai-for-science-security-and-technology-fasst

6854 Federal Register, Responsible Procurement of Artificial Intelligence in Government (Mar. 29, 2024), https://www.federalregister.gov/documents/2024/03/29/2024-06547/request-forinformation-responsible-procurement-of-artificial-intelligence-in-government

⁶⁸⁵⁰ U.S. Department of Commerce, Department of Commerce Announces New Guidance, Tools 270 Days Following President Biden's Executive Order on AI (July 26, 2024), https://www.commerce.gov/news/press-releases/2024/07/department-commerce-announces-newguidance-tools-270-days-following

⁶⁸⁵¹ Federal Register, Safety Considerations for Chemical and/or Biological AI Models (Oct, 4, 2024), https://www.federalregister.gov/documents/2024/10/04/2024-22974/safetyconsiderations-for-chemical-andor-biological-ai-models

⁶⁸⁵² Federal Register, Notice of Request for Information (RFI) on Frontiers in AI for Science, Security, and Technology (FASST) Initiative (Sept. 12, 2024),

⁶⁸⁵³ Federal Register, Request for Information: Executive Branch Agency Handling of Commercially Available Information Containing Personally Identifiable Information (Oct. 16, 2024), https://www.federalregister.gov/documents/2024/10/16/2024-23773/request-forinformation-executive-branch-agency-handling-of-commercially-available-information

⁶⁸⁵⁵ Katherine He, Shaurya Jadav, Miriam Huerta, Nicole Tian, Sophia Dai, Kien Lau, Tsion Agaro, Lorenss Martinsons, Alex McDonald, Daniel Mekuriaw, Owen Haywood, Abby Schnabel, Technology Policy Center, Yale Policy Institute in collaboration with the Center for AI and Digital Policy, The Public Voice in AI Policy: Evaluating Agency Engagement with Public Comment (Apr. 04, 2024), https://aire.lexxion.eu/article/AIRE/2024/3/10

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organizations in the United States actively participate in discussions and advocacy related to artificial intelligence (AI). The involvement of these organizations is important for promoting transparency, accountability, and ethical considerations in the development and deployment of AI technologies. Some of these organizations focus on specific aspects of AI, such as privacy, bias, accountability, and the impact of AI on various social issues. Examples of civil society organizations involved in AI-related discussions in the United States include the Center for AI and Digital Policy, the Center for Humane Technology, the AI Now Institute, Algorithmic Justice League, Public Citizen, Public Knowledge, the Allen Institute for AI, Data & Society, the Electronic Privacy Information Center, Leadership Conference on Civil Rights, Brennan Center for Justice, the Partnership on AI, Encode Justice, and Fidutam.

The United States has considered public comments in the development of AI Policy, strategies, priorities, research and innovation. The National Artificial Intelligence Research Resource Task Force launched in 2021 to "develop a roadmap to democratize access to research tools that will promote AI innovation and fuel economic prosperity"⁶⁸⁵⁶ is one example, along with the White House Office of Science and Technology Policy (OSTP) and the National Science Foundation (NSF) implementation plan for a National Artificial Intelligence Research Resource (NAIRR).⁶⁸⁵⁷

Comments submitted in response to a White House request for input on U.S. national priorities and future actions on AI informed the development of the AI Executive Order and other executive actions.⁶⁸⁵⁸

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 $\frac{https://bidenwhitehouse.archives.gov/ostp/news-updates/2021/06/10/the-biden-administration-launches-the-national-artificial-intelligence-research-resource-task-force/$

⁶⁸⁵⁶ Biden White House Archives, *The Biden Administration Launches the National Artificial Intelligence Research Resource Task Force* (Jun. 10, 2021),

⁶⁸⁵⁷ National Artificial Intelligence Research Resource Task Force, *Strengthening and Democratizing the U.S. Artificial Intelligence Innovation Ecosystem: An Implementation Plan for a National Artificial Intelligence Research Resource* (Jan. 2023), https://www.ai.gov/wp-content/uploads/2023/01/NAIRR-TF-Final-Report-2023.pdf

⁶⁸⁵⁸ NIST, Comments Received for RFI on NIST's Assignments under Executive Order 14110 on Safe, Secure, and Trustworthy Development and Use of AI (Feb. 2024),

 $[\]underline{\text{https://www.nist.gov/artificial-intelligence/executive-order-safe-secure-and-trustworthy-artificial-intelligence/comments}$

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Civil society has also participated in the development of and advocacy for state legislation. California Senate Bill 1047, the "Safe and Secure Innovation for Frontier AI models Act," provoked a heated debate over the future of AI regulation in the state, with both opposition and support from various stakeholders. Several civil society organizations such as Encode Justice⁶⁸⁵⁹ and CAIDP⁶⁸⁶⁰ voiced support for the bill. Although the bill initially passed Congress, the Governor vetoed it.

The United States government provides access to all final policy proposals concerning AI. Federal agencies have undertaken public rulemaking and requested public comment. However, the National Security Commission NSCAI attempted to keep its deliberations secret. A federal court later determined that the AI Commission had violated U.S. open government laws and was required to make both its records and its meetings open to the public. Oddly, the AI Commission initially made agency documents available on a proprietary platform rather than an agency website.

Data Protection

The United States does not have an overarching privacy law, such as the GDPR, nor is there a privacy agency. However, the United States has two members in the Global Privacy Assembly (GPA), the FTC (since 2010) and the recently accredited California Privacy Protection Agency (CPPA) (since 2022). Neither voting U.S. member has endorsed the GPA's key resolutions: the Declaration on Ethics and Data Protection in Artificial Intelligence, 6864 the

⁶⁸⁵⁹ Encode Justice, *EJ founder Sneha Revanur and Grey's Anatomy Star Jason George: Governor Newsom's Chance to Lead on AI Safety* (Sept. 27, 2024), https://encodejustice.org/governor-newsom-must-sign-sb-1047/

⁶⁸⁶⁰ CAIDP, *Update 6.33* (Aug. 27, 2024), https://www.caidp.org/caidp-update/volume-6-2024/6861 EPIC, *EPIC v. AI Commission, Seeking Public Access to the Records and Meetings of the NSCAI* (Mar. 19, 2021), https://www.epic.org/foia/epic-v-ai-commission/

⁶⁸⁶² National Security Commission on AI, *Interim Report and Third Quarter Recommendation* (Oct. 2020), https://irp.fas.org/offdocs/ai-commission.pdf

⁶⁸⁶³ Global Privacy Assembly, List of Accredited Members (2024),

https://globalprivacyassembly.org/participation-in-the-assembly/list-of-accredited-members/
6864 Global Privacy Assembly, *Declaration on Ethics and Data Protection in Artificial Intelligence* (Oct. 2018), https://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

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Resolution on Accountability in the Development and Use of Artificial Intelligence,⁶⁸⁶⁵ and the Resolution and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology,⁶⁸⁶⁶ and the latest Resolution on Generative Artificial Intelligence Systems.⁶⁸⁶⁷

Both the FTC and the CPPA have taken several steps to address data protection, along with action from other agencies. For example, he National Science Foundation (NSF) and DOE established a research network⁶⁸⁶⁸ dedicated to advancing the development, deployment, and scaling of privacy-enhancing technologies (PETs). Two OMB Requests for Information (RFIs) in 2024 also addressed privacy concerns. The first focused on federal agencies' handling of personally identifiable information (PII) contained within commercially available data. The second aimed to enhance the effectiveness of privacy impact assessments conducted by federal agencies, particularly considering emerging technologies like AI.

The U.S. still lacks a comprehensive federal privacy law and a dedicated federal privacy agency. There is no general law that establishes a right to algorithmic transparency. The draft American Data Privacy and Protection Act, which was introduced in the House of Representatives, provided for greater data privacy rights, as well as oversight and enforcement mechanisms, including protections against algorithms deemed to discriminate on the basis of race, color, religion, national origin, sex, or disability. 6869 After passing through committee, the act stalled in the Senate.

The Federal Trade Commission has been issuing business guidance since 2021 to put companies on notice about unlawful data and algorithmic practices. 6870

⁶⁸⁶⁵ Global Privacy Assembly, *Resolution on Accountability in the Development and Use of Artificial Intelligence* (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN.pdf

⁶⁸⁶⁶ Global Privacy Assembly, Resolution and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology (Oct. 2022),

 $[\]frac{https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf$

⁶⁸⁶⁷ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://www.edps.europa.eu/system/files/2023-10/edps-gpa-resolution-on-generative-ai-systems en.pdf

⁶⁸⁶⁸ National Science Foundation, *NSF and DOE Establish Research Coordination Network* (Feb. 26 2024), https://new.nsf.gov/news/nsf-doe-establish-research-coordination-network

^{6869 117}th Congress Second Session, *H.R.8152*, *American Data Privacy and Protection Act* (Jun. 21, 2022), https://www.congress.gov/bill/117th-congress/house-bill/8152/text/ih

⁶⁸⁷⁰ FTC, Aiming for Truth, Fairness, and Equity in your Company's Use of AI (Apr. 19, 2021), https://www.ftc.gov/news-events/blogs/business-blog/2021/04/aiming-truth-fairness-equity-your-

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In February 2023, following the widespread public awareness of GPT-4, the FTC warned, "false or unsubstantiated claims about [an AI] product's efficacy are our bread and butter [...] You don't need a machine to predict what the FTC might do when those claims are unsupported." In the May 2023 business guidance on consumer trust and generative AI tools, the FTC states that, "Design or use of a product can also violate the FTC Act if it is unfair." The FTC has also issued business guidance that would guide the downstream uses and integrations of LLM products. 6872

Apart from business guidance, since 2019, the FTC has proposed five disgorgement orders including against Cambridge Analytica and Amazon. In the 2023 Privacy and Security Report to Congress, the FTC stated: "The Commission has been leading efforts to ensure that AI and similar technologies are not deployed in harmful ways. In addition to obtaining orders against Rite Aid, Ring, and Amazon to ensure that companies are disincentivized from using data that was wrongfully collected or trained to develop AI, we have initiated a market study of social media and video streaming platforms on the use of AI, announced a public contest to develop new approaches to protect consumers from AI-enabled voice cloning harms, proposed rules to crack down on AI-fueled impersonator and fake review fraud, and issued numerous business guidance alerts." 6874

At the state level, the California Consumer Privacy Rights Act (CPRA) updated the state's privacy law (the CCPA), created a privacy protection agency (the CPPA), and established a right to limit algorithmic profiling.⁶⁸⁷⁵ The CPRA strengthens accountability measures by requiring companies to conduct privacy risk assessments and cybersecurity audits, and regularly submit them to regulators. In addition, it supplements the individual rights in the CCPA with new notification requirements, clarifies that individuals have the right to opt out of both the 'sale'

models-developed-from-data-unfairly-obtained/

https://privacy.ca.gov/about-us/about-the-cppa/

companys-use-ai; Center for AI & Digital Policy, U.S. FTC Requires Deletion of AI Models Developed from Data Unfairly Obtained, CAIDP Update 2.03 (Jan. 17, 2021), https://dukakis.org/center-for-ai-and-digital-policy/caidp-update-us-ftc-requires-deletion-of-ai-

⁶⁸⁷¹ FTC, *The Luring Test: AI and the Engineering of Consumer Trust* (May 1, 2023), https://www.ftc.gov/consumer-alerts/2023/05/luring-test-ai-and-engineering-consumer-trust https://www.ftc.gov/consumer-alerts/2023/05/luring-test-ai-and-engineering-consumer-trust https://www.ftc.gov/consumer-alerts/2023/05/luring-test-ai-and-engineering-consumer-trust https://www.ftc.gov/policy/advocacy-research/tech-at-ftc/2024/02/ai-other-companies-quietly-changing-your-terms-service-could-be-unfair-or-deceptive

⁶⁸⁷³ William Simpson, *AI Regulatory Enforcement Around the World*, IAPP News (Aug. 2, 2023), https://iapp.org/news/a/ai-regulatory-enforcement-around-the-world

⁶⁸⁷⁴ FTC, 2023 Privacy and Data Security Update, p. 1 (2023),

https://www.ftc.gov/reports/federal-trade-commission-2023-privacy-data-security-update 6875 California Privacy Protection Agency (CPPA), *About CPPA* (2025),

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and 'sharing' of personal information, and adds protections for a new category of 'sensitive data.'"6876

Virginia and Colorado followed the CPRA in 2021, bypassing the Virginia Consumer Data Protection Act ("VCDPA") and Colorado Privacy Act ("CPA"). The Virginia law took effect on January 1, 2023, and the Colorado law took effect on July 1, 2023. Utah also recently passed the Utah Consumer Privacy Act ("UCPA"), which closely follows the Virginia law and took effect on December 31, 2023.

Connecticut became the 5th U.S. State to enact comprehensive data privacy legislation with the Connecticut Data Privacy Act ("CTDPA"), which took effect on July 1, 2023. These state laws give consumers more control over their personal information by providing them with certain rights and mandating businesses to be transparent about their privacy practices. However, there are notable differences in applicability, consumer rights, and enforcement.

Utah became the first state to enact AI-specific consumer protection legislation in March 2024,.6877 The Artificial Intelligence Policy Act establishes liability for use of artificial intelligence (AI) that violates consumer protection laws if not properly disclosed.6878 The National Conference of State Legislatures summarized the state of play on AI legislation in 2023 as follows:

"In the 2023 legislative session, at least 25 states, Puerto Rico and the District of Columbia introduced artificial intelligence bills, and 18 states and Puerto Rico adopted resolutions or enacted legislation. Examples of the enacted legislation and adopted resolutions include:

• Connecticut required the state Department of Administrative Services to conduct an inventory of all systems that employ artificial intelligence and are in use by any state agency and, beginning Feb. 1, 2024, perform ongoing assessments of systems that employ AI and are in use by state agencies to ensure that no such system shall result in unlawful discrimination or disparate impact. Further, the legislation requires the Office of Policy and Management to establish policies and procedures concerning the development, procurement, implementation, utilization and ongoing assessment of systems that employ AI and are in use by state agencies.

https://www.brookings.edu/blog/techtank/2020/11/17/by-passing-proposition-24-california-voters-up-the-ante-on-federal-privacy-law/

https://le.utah.gov/~2024/bills/static/SB0149.html

6878 Ibid

⁶⁸⁷⁶ Cameron F. Kerry and Caitlin Chin, *By Passing Proposition 24, California Voters Up the Ante on Federal Privacy Law*, Brookings (Nov. 17, 2020),

⁶⁸⁷⁷ Utah State Legislature, S.B. 149, 2024 General Session (2024),

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- Louisiana adopted a resolution requesting the Joint Committee on Technology and Cybersecurity to study the impact of artificial intelligence in operations, procurement and policy.
- Maryland established the Industry 4.0 Technology Grant Program to assist certain small and medium-sized manufacturing enterprises with implementing new "industry 4.0" technology or related infrastructure. The definition of industry 4.0 includes AI.
- North Dakota enacted legislation defining a person as an individual, organization, government, political subdivision, or government agency or instrumentality, and specifying that the term does not include environmental elements, artificial intelligence, an animal or an inanimate object.
- Texas created an AI advisory council to study and monitor artificial intelligence systems developed, employed or procured by state agencies, with North Dakota, Puerto Rico and West Virginia also creating similar councils.

State lawmakers also are considering AI's benefits and challenges—a growing number of measures are being introduced to study the impact of AI or algorithms and the potential roles for policymakers."6879

Algorithmic Transparency

No laws guarantee a right to algorithmic transparency, though both the FTC and the CPPA have taken several steps to address algorithmic transparency. Guidance and actions from federal agencies such as OMB and FTC provide a measure of transparency and accountability and some access to contest decisions.

Federal and state legislatures previously introduced bills to provide algorithmic transparency and protect against harms from automated decision-making. California's legislation on Automated Decision Tools, for example, 6880 proposed privacy impact assessments to address algorithmic discrimination in the context of consequential decisions. 6881 Likewise, the U.S. Congress proposed the Algorithmic Accountability Act to conduct impact assessments to mitigate the harmful effects of automated decisions. 6882 Both failed.

More targeted state and local legislation has been more successful. For example, Illinois's Artificial Intelligence Video Interview Act requires that employers disclose whenever they use AI to analyze applicant-submitted

⁶⁸⁷⁹ National Conference of State Legislatures, *Artificial Intelligence 2023 Legislation* (Jan. 12, 2024), https://www.ncsl.org/technology-and-communication/artificial-intelligence-2023-legislation

⁶⁸⁸⁰ Digital Democracy, CalMatters, *AB 2930: Automated Decision Tools* (Aug. 31, 2024), https://digitaldemocracy.calmatters.org/bills/ca_202320240ab2930

⁶⁸⁸² United States Congress, *Algorithmic Accountability Act*, Sec. 3(b)(1) (Feb. 3, 2022), https://www.congress.gov/bill/117th-congress/house-bill/6580/text

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interview videos. The act also requires employers who rely solely on AI analysis of video interviews to make employment decisions to report demographic data annually to a state agency, and for the state agency to report whether the data discloses a racial bias from the use of AI. New York City's Local Law 144 requires bias audits on any automated employment decision tools and notice on the use of such tools to employees and job seekers. 6884

CAIDP Complaint and FTC Investigation into OpenAI

In March 2023, CAIDP filed a detailed Complaint with the Federal Trade Commission against OpenAI. 6885 CAIDP explained that OpenAI released a product GPT-4 for the consumer market that is biased, deceptive, and a risk to privacy and public safety. The CAIDP Complaint quoted extensively from the GPT-4 Technical Report, highlighted that the outputs of ChatGPT cannot be proven or replicated, and no independent assessment was undertaken prior to deployment. 6886 CAIDP's complaint was grounded on violations of Section 5 of the FTC Act, FTC's numerous Guidance for AI Products, and Rules for Governance of AI. CAIDP asked the Commission to begin an investigation of OpenAI and to prevent the release of further models until necessary guardrails are established.

In a supplement to the original complaint, CAIDP accused OpenAI of "unfair and deceptive practices." CAIDP outlined the numerous investigations from consumer agencies around the world since the original CAIDP complaint and sheds light on newly surfaced issues not fully captured in the initial complaint. 6887

Both the *New York Times* and the *Wall Street Journal* reported in 2023 that the FTC had launched the investigation sought by CAIDP. 6888 Subsequently, CAIDP filed a second supplement that urged the FTC to move forward the investigation and issue an order to establish safeguards and guardrails for

6887 Ibid

⁶⁸⁸³ State of Illinois, *Artificial Video Interview Act*, 820 Ill. Comp. Stat. 42 (2020), https://ilga.gov/legislation/ilcs/ilcs3.asp?ActID=4015&ChapterID=68

⁶⁸⁸⁴ New York City, *Local Law 2021/144, Automated Employment Decision Tools* (May 6, 2023), https://www.nyc.gov/site/dca/about/automated-employment-decision-

 $[\]frac{tools.page\#:\sim:text=Local\%20Law\%20144\%20of\%202021,audit\%20is\%20publicly\%20available\%2C\%20and}{\%2C\%20and}$

⁶⁸⁸⁵ CAIDP, Cases, In the Matter of OpenAI (2024), https://www.caidp.org/cases/openai/

⁶⁸⁸⁶ Ibid

⁶⁸⁸⁸ New York Times, FTC Opens Investigation Into ChatGPT Maker Over Technology's Potential Harms (Jul. 13, 2023), https://www.nytimes.com/2023/07/13/technology/chatgpt-investigation-ftc-openai.html; The Wall Street Journal, ChatGPT Comes Under Investigation by the Federal Trade Commission (Jul.13, 2023), https://www.wsj.com/articles/chatgpt-under-investigation-by-ftc-21e4b3ef

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ChatGPT.6889 However, no order has yet been issued by the FTC in this investigation.

Facial Recognition

There is growing opposition to the deployment of facial recognition technology in the United States. Still, as the National Academies of Sciences, Engineering, and Medicine report "With few exceptions, the U.S. does not currently have authoritative guidance, regulations, or laws to adequately address issues related to facial recognition technology use." 6890

The Facial Recognition Act of 2023⁶⁸⁹¹ introduced during the 118th Congress proposed limitations on the use of biometric surveillance systems including facial recognition technology by federal, state and local government entities. The bill and a related House act would have regulated law enforcement use of facial recognition technology within the Unites States of America, but it has not progressed beyond committee.

State and local governments have taken action to limit facial recognition technology. San Francisco, California became the first city in the U.S. to ban the use of facial recognition technology by city agencies in 2019.⁶⁸⁹² Other cities, including Cambridge, Massachusetts; Oakland, California; and Portland, Oregon followed suit.⁶⁸⁹³ California prohibited facial recognition technology in police body cameras.⁶⁸⁹⁴ However, the technology can be used in other ways, such as in

⁶⁸⁸⁹ CAIDP, Cases, In the Matter of OpenAI (2024), https://www.caidp.org/cases/openai/
https://www.caidp.org/cases/openai/
https://www.caidp.org/cases/openai/
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⁶⁸⁹¹ Ted Lieu Congressman for California's 36th District, *Facial Recognition Act of 2023* (Mar. 7, 2023), https://lieu.house.gov/sites/evo-subsites/lieu.house.gov/files/evo-media-document/facial-recognition-act-of-2023.pdf

⁶⁸⁹² Kate Conger, Richard Fausset and Serge F. Kovaleski, *San Francisco Bans Facial Recognition Technology* (May 14, 2019), https://www.nytimes.com/2019/05/14/us/facial-recognition-ban-san-francisco.html

⁶⁸⁹³ Innovation and Tech Today, *13 Cities Where Police Are Banned From Using Facial Recognition Tech* (2020), https://innotechtoday.com/13-cities-where-police-are-banned-from-using-facial-recognition-tech/

⁶⁸⁹⁴ California Legislative Information, *AB-1215 Law Enforcement: Facial Recognition and Other Biometric Surveillance* (Oct. 9, 2019),

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200AB1215

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stationary cameras, and the prohibition does not apply to federal agencies such as the FBI.⁶⁸⁹⁵

The same members of Congress who introduced a bill to ban the use of facial recognition by law enforcement agencies in 2022⁶⁸⁹⁶ urged federal agencies to end the use of Clearview AI Facial Recognition technology. In letters to the Department of Homeland Security (DHS), Department of Justice (DOJ), Department of Defense (DOD), Department of Interior (DOI), and Department of Health and Human Services (HHS), they wrote, "[f]acial recognition tools pose a serious threat to the public's civil liberties and privacy rights, and Clearview AI's product is particularly dangerous. We urge you to immediately stop the Department's use of facial recognition technology, including Clearview AI's tools."

State biometric privacy laws regulate the collection and use of facial recognition technology in the private sector. In October 2023, the Maryland General Assembly introduced legislation that would limit law enforcement use of facial recognition technology. The bill was introduced in passed by both chambers in April 2024. Among other provisions it would require the Governor's Office of Crime Prevention and Policy, on or before October 1 each year, to report to the General Assembly information reported by law enforcement agencies using facial recognition technology.

After multiple lawsuits alleging that Facebook had violated state and federal privacy laws as well as repeated recommendations to the FTC that the company's business practices, including the collection and use of facial images, violated a 2011 settlement with the Commission, Facebook announced it would shut down its facial recognition system and delete the face scans of more than one

6896 117th Congress, Facial Recognition and Biometric Technology Moratorium Act (2021), https://www.congress.gov/search?q=%7B%22source%22%3A%22legislation%22%2C%22search%22%3A%22%5C%22Facial%20Recognition%20and%20Biometric%20Technology%20Moratorium%20Act%5C%22%22%7D

Rachel Metz, *California Lawmakers Ban Facial-Recognition Software from Police Body Cams* (Sept. 13, 2019), https://www.cnn.com/2019/09/12/tech/california-body-cam-facial-recognition-ban/index.html

⁶⁸⁹⁷ Ed Markey, Senators Markey and Merkley and Reps. Jayapal & Pressley Urge Federal Agencies to End Use of Clearview AI Facial Recognition Technology (Feb. 9, 2022), https://www.markey.senate.gov/news/press-releases/senators-markey-and-merkley-and-reps-jayapal_pressley-urge-federal-agencies-to-end-use-of-clearview-ai-facial-recognition-technology ⁶⁸⁹⁸ Ibid

⁶⁸⁹⁹ Maryland General Assembly, *Criminal Procedure - Facial Recognition Technology - Requirements, Procedures, and Prohibitions,* SB 0182 cross-filed with HB0338, SB0192, (Oct.1, 2024), https://mgaleg.maryland.gov/mgawebsite/Legislation/Details/SB0182?ys=2024RS

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billion users it had gathered.⁶⁹⁰⁰ In February 2022, and after months of criticism by advocacy groups, the Internal Revenue Service announced that it would halt its program with identity verification company ID.me to use facial recognition technology to verify taxpayers' identities.⁶⁹⁰¹

The Federal Trade Commission (FTC) issued a press release, "FTC Recommends Best Practices for Companies That Use Facial Recognition Technologies," promoting consumer protection innovation and best practices guidance to companies developing and deploying facial recognition technologies. The statement included the release of a staff report, "Facing Facts: Best Practices for Common Uses of Facial Recognition Technologies," a product of the Commission's December 8, 2011, workshop, "Face Facts: A Forum on Facial Recognition Technology" and the Commission's March 2012 report, "Protecting Consumer Privacy in an Era of Rapid Change."

In May 2023, the FTC issued its Policy Statement on Biometric Information and Section 5 of the Federal Trade Commission Act. 6904In its policy statement, the FTC noted "facial recognition technology, may perform differently across different demographic groups in ways that facilitate or produce discriminatory outcomes." The FTC's Biometric Policy Statement serves as "warning that the increasing use of consumers' biometric information and related technologies, including those powered by machine learning, raises significant consumer privacy and data security concerns and the potential for bias and discrimination." 6906

⁶⁹⁰⁰ Kashmir Hill and Ryan Mac, Facebook, Citng Societal Concerns, Plans to Shut Down Facial Recognition System, New York Times (Nov. 2, 2021),

https://www.nytimes.com/2021/11/02/technology/facebook-facial-recognition.html

⁶⁹⁰¹ Alan Rappeport and Kashmir Hill, I.R.S. to End Use of Facial Recognition for Identity Verification: After a Bipartisan Backlash, the Agency Will Transition Away from Using a Service from ID.me, New York Times (Feb. 7, 2022),

https://www.nytimes.com/2022/02/07/us/politics/irs-idme-facial-recognition.html

⁶⁹⁰² FTC, FTC Recommends Best Practices for Companies That Use Facial Recognition Technologies (Oct. 22, 2022), https://www.ftc.gov/news-events/news/press-releases/2012/10/ftc-recommends-best-practices-companies-use-facial-recognition-technologies

⁶⁹⁰³ FTC, Face Facts: Best Practices for Common Uses of Facial Recognition Technologies (Oct. 2012), https://www.ftc.gov/sites/default/files/documents/reports/facing-facts-best-practices-common-uses-facial-recognition-technologies/121022facialtechrpt.pdf

⁶⁹⁰⁴ FTC, Policy Statement of the Federal Trade Commission on Biometric Information and Section 5 of the Federal Trade Commission Act (May 18, 2023),

 $[\]frac{https://www.ftc.gov/system/files/ftc_gov/pdf/p225402biometricpolicystatement.pdf}{^{6905}\ Ibid,\ p.\ 4}$

⁶⁹⁰⁶ FTC, FTC Warns About Misuses of Biometric Information and Harm to Consumers, Press Releases (May 18, 2023), https://www.ftc.gov/news-events/news/press-releases/2023/05/ftc-warns-about-misuses-biometric-information-harm-consumers

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In December 2023, the FTC filed a lawsuit against Rite Aid for using "facial recognition technology in its stores without taking reasonable steps to address the risks that its use would likely harm consumers due to false-positive match alerts, especially women consumers and consumers of color." In March 2024, the FTC filed its proposed stipulations and order requiring, among others, that "Rite Aid to discontinue using any such technology if it cannot control potential risks to consumers." 6908

In September 2023, the Government Accountability Office (GAO) reported that "Seven law enforcement agencies in the Departments of Homeland Security (DHS) and Justice (DOJ) reported using facial recognition services provided by commercial and nonprofit entities. GAO made ten recommendations to DHS and DOJ relating to safeguards for civil rights, training, and privacy related to their use of facial recognition technology to support criminal investigations. ⁶⁹⁰⁹

The 2024 report of the National Academies highlights that "FRTs are highly personal, uniquely powerful, and potentially extremely intrusive. Opting out of showing one's face is not a realistic option in most circumstances" This report has revived congressional action to regulate facial recognition technology. 6911

In response to the federal government's increasing use of facial recognition technology (FRT), the United States Commission on Civil Rights (USCCR) examined the Department of Justice (DOJ), Department of Homeland Security (DHS), and the Department of Housing and Urban Development (HUD)'s use of facial recognition technology and produced the 2024 Statutory Enforcement

⁶⁹⁰⁷ FTC, Coming Face to Face with Rite Aid's Allegedly Unfair Use of Facial Recognition Technology, Business Blog (Dec. 19, 2023), https://www.ftc.gov/business-guidance/blog/2023/12/coming-face-face-rite-aids-allegedly-unfair-use-facial-recognition-technology

⁶⁹⁰⁸ FTC, *Rite Aid Corporation, FTC v.*, Cases and Proceedings (Mar. 8, 2024), https://www.ftc.gov/legal-library/browse/cases-proceedings/2023190-rite-aid-corporation-ftc-v 6909 U.S. Government Accountability Office, *Facial Recognition Technology: Federal Law Enforcement Agency Efforts Related to Civil Rights and Training* (Mar. 8, 2024), https://www.gao.gov/products/gao-24-107372

⁶⁹¹⁰ National Academies of Sciences, Engineering, and Medicine, *Facial Recognition Technology: Current Capabilities, Future Prospects, and Governance*, p. 25 (2024), https://nap.nationalacademies.org/catalog/27397/facial-recognition-technology-current-capabilities-future-prospects-and-governance

⁶⁹¹ Politico, Washington Takes Aim at Facial Recognition (Jan. 19, 2024), https://www.politico.com/news/2024/01/19/washington-takes-aim-at-facial-recognition-00136498#:~:text=There%20are%20no%20federal%20regulations,several%20laws%20have%20 been%20introduced

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Report titled on the civil rights implications of facial recognition technology. 6912 The report provides recommendations to federal agencies on AI uses, concerns, and best practices.

Environmental Impact of AI

In a blog post on the OECD's AI Wonk platform, researchers from the Loughborough University warned about the growing environmental costs of AI, emphasizing that by 2026, computation for AI is projected to require a similar amount of annual electricity to countries like Austria and Finland. The researchers emphasize the need for sustainability-focused guidelines and increased awareness among AI practitioners about the environmental consequences of their work.⁶⁹¹³

The U.S. issued a first-ever report analyzing AI's near-term potential to support the growth of America's clean energy economy in 2024. 6914 The U.S. Department of Energy (DOE) also issued a report identifying opportunities in AI for energy over the next decade. The DOE also launched the Frontiers in AI for Science, Security, and Technology (FASST) initiative 6915 to harness AI for scientific discovery, national security, as well as energy and electric grid resilience. 6916 The U.S. Global Change Research Program has released the Fifth National Climate Assessment, outlining the country's dire climate status. The report discusses climate justice and emphasizes the critical need to proactively mitigate the environmental harms associated with rapid technological shifts. 6917

The Senate moved on legislation to regulate the environmental impact of AI systems with the Artificial Intelligence Environmental Impacts Act. The bill requires the Administrator of the Environmental Protection Agency to carry out a

⁶⁹¹² United States Commission on Civil Rights, *Civil Rights Implications of Facial Recognition Technologies* (Sept. 2024), https://www.usccr.gov/files/2024-09/civil-rights-implications-of-frt 0.pdf

⁶⁹¹³ OECD, Everyone Must Understand the Environmental Costs of AI (Oct. 4, 2024), https://oecd.ai/en/wonk/understand-environmental-costs

⁶⁹¹⁴ The White House, Fact Sheet: Key AI Accomplishments in the Year Since the Biden-Harris Administration's Landmark Executive Order (Oct. 30, 2024),

 $[\]frac{https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2024/10/30/fact-sheet-key-ai-accomplishments-in-the-year-since-the-biden-harris-administrations-landmark-executive-order/$

⁶⁹¹⁵ U.S. Office of Critical and Emerging Technologies, *Frontiers in Artificial Intelligence for Science, Security and Technology (FASST)*) (Updated Sept. 12, 2024), https://www.energy.gov/fasst

⁶⁹¹⁶ U.S. Department of Energy (DOE), *DOE Announces New Actions to Enhance America's Global Leadership in Artificial Intelligence* (Apr. 29, 2024),

 $[\]frac{https://www.energy.gov/articles/doe-announces-new-actions-enhance-americas-global-leadership-artificial-intelligence}{}$

⁶⁹¹⁷ U.S. Global Change Research Program, *Fifth National Climate Assessment* (2023), https://www.globalchange.gov/our-work/fifth-national-climate-assessment

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study on the environmental impacts of artificial intelligence, the Director of the National Institute of Standards and Technology (NIST) to convene a consortium on such environmental impacts, and the Director to develop a voluntary reporting system on the environmental impacts of artificial intelligence. ⁶⁹¹⁸

Lethal Autonomous Weapons

The United States are among the 161 countries that approved a draft resolution on lethal autonomous weapons systems (LAWS) at the 79th UN General Assembly. The resolution expressed concern over LAWS exacerbating existing conflicts and humanitarian crises and approved including discussions of LAWS in the next session. Countries that endorsed a joint statement on autonomous weapons systems at the UN General Assembly meeting. In this joint statement, States urge "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International Law, in particular International Humanitarian Law (IHL), including through maintaining human responsibility and accountability in the use of force. The United States also supported a later UN General Assembly Resolution on lethal autonomous weapons systems.

The United States participated in the first global Summit on Responsible Artificial Intelligence in the Military Domain (REAIM 2023) hosted by the government of The Netherlands. Government representatives, including the United States, have agreed a joint call to action on the responsible development,

⁶⁹¹⁸ Congress, *Artificial Intelligence Environmental Impacts Act of 2024* (Feb. 1, 2024), https://www.congress.gov/bill/118th-congress/senate-bill/3732/text

https://press.un.org/en/2024/gadis3756.doc.htm

⁶⁹¹⁹ United Nations, *In Nearly 50 Separate Recorded Votes, First Committee Approves 15 Drafts on Conventional Weapons, Divergent Approaches to Outer Space Security*, Meetings Coverage and Press Releases, GA/DIS/3756 (Nov. 5, 2024),

⁶⁹²⁰ UN General Assembly, Seventy-Ninth Session, First Committee, *A/C.1/79/L.77*, *General and Complete Disarmament: Lethal Autonomous Weapons Systems* (Oct. 18, 2024), https://documents.un.org/doc/undoc/ltd/n24/305/45/pdf/n2430545.pdf

⁶⁹²¹ United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee*, 77th United Nations General Assembly Thematic Debate – Conventional Weapons (Oct. 21, 2022),

 $[\]frac{https://estatements.unmeetings.org/estatements/11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm_en.pdf}{}$

⁶⁹²² United Nations, General Assembly Adopts \$3.59 Billion Budget for 2024, Establishes Funding for Peacebuilding, Concluding Main Part of Seventy-eighth Session, Meetings Coverage and Press Releases (Dec.22, 2023), https://press.un.org/en/2023/ga12578.doc.htm

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deployment and use of artificial intelligence (AI) in the military domain. ⁶⁹²³ In this joint call, States "stress the paramount importance of the responsible use of AI in the military domain, employed in full accordance with international legal obligations and in a way that does not undermine international security, stability and accountability." States also "stress the importance of a holistic, inclusive and comprehensive approach in addressing the possible impacts, opportunities and challenges of the use of AI in the military domain and the need for all stakeholders, including states, private sector, civil society and academia, to collaborate and exchange information on responsible AI in the military domain." ⁶⁹²⁴

At REAIM, the United States issued the Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy. The declaration sets out 10 guiding principles in the development, deployment, or use of military AI capabilities, including those enabling autonomous functions and systems. The declaration seeks to provide a normative framework addressing the use of these capabilities in the military domain. The declaration of the second states of the sec

The Department of State, in collaboration with the Department of Defense (DoD), convened the inaugural plenary meeting of States endorsing the Political Declaration to operationalize and implement this initiative in March 2024. 6928 49 states have endorsed the political declaration led by the United States. 6929

The DoD has continued to commit to developing and employing new and emerging technologies responsibly with an update to a 2023 policy directive on Autonomy in Weapons Systems. ⁶⁹³⁰ The Directive is valid for 10 years and supports existing documents such as the DoD AI Ethical Principles which were

⁶⁹²³ Government of Netherlands, *Call to Action on Responsible Use of AI in the Military Domain*, Press Release (Feb.16, 2023), https://www.government.nl/latest/news/2023/02/16/reaim-2023-call-to-action

⁶⁹²⁴ Responsible AI in the Military Domain Summit, *REAIM Call to Action* (Feb. 16, 2023), https://www.government.nl/documents/publications/2023/02/16/reaim-2023-call-to-action
⁶⁹²⁵ U.S. Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy* (Nov. 9, 2023), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy-2/
⁶⁹²⁶ Ibid

⁶⁹²⁷ U.S. Department of State, *Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy* (Mar. 19–20, 2024), https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/

⁶⁹²⁸ Ibid

⁶⁹²⁹ Ibid

⁶⁹³⁰ Congress, DoD Directive 3000.09, Defense Primer: U.S. Policy on Lethal Autonomous Weapon Systems (Feb. 1, 2024), https://crsreports.congress.gov/product/pdf/IF/IF11150

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instituted in 2020,⁶⁹³¹ the DoD Responsible AI Strategy and Implementation Pathway,⁶⁹³² and the DoD 2023 Data, Analytics, and Artificial Intelligence Adoption Strategy.⁶⁹³³ The directive also supported the United States Department of Defense Responsible AI Toolkit,⁶⁹³⁴ which is publicly available to demonstrate this commitment and to encourage transparency internationally.

Human Rights

The United States endorsed the Universal Declaration for Human Rights, published a detailed annual report on human rights, and has historically ranked high for the protection of human rights. But in its 2024 index, Freedom House reported "in recent years its democratic institutions have suffered erosion, as reflected in rising political polarization and extremism, partisan pressure on the electoral process, mistreatment and dysfunction in the criminal justice and immigration systems, and growing disparities in wealth, economic opportunity, and political influence." Freedom House scored the United States at 83/100 in 2024. 6936

Several initiatives aiming to enhance human rights protection were developed since the last AIDV. First, the Department of State, in close coordination with NIST and the U.S. Agency for International Development, elaborated the Risk Management Profile for AI and Human Rights, 6937 a list of recommended actions based on the NIST AI RMF for governments, the private sector, and civil society worldwide, to identify and manage risks to human rights arising from the design, development, deployment, and use of AI. Following President Biden's Executive Order on safe and trustworthy AI, the Justice Department, joined by five federal agencies, has also pledged to enforce civil

⁶⁹³¹ U.S Department of Defense, *DoD Adopts AI Ethical Principles for Artificial Intelligence* (Feb. 24, 2020), https://www.defense.gov/News/Releases/release/article/2091996/dod-adopts-ethical-principles-for-artificial-intelligence/

https://media.defense.gov/2022/Jun/22/2003022604/-1/-1/0/Department-of-Defense-Responsible-Artificial-Intelligence-Strategy-and-Implementation-Pathway.PDF

⁶⁹³⁵ Freedom House, *Freedom in the World 2024: United States (2024)*, https://freedomhouse.org/country/united-states/freedom-world/2024

https://freedomhouse.org/country/united-states

⁶⁹³² U.S Department of Defense, Department of Defense Responsible Artificial Intelligence Strategy and Implementation Pathway (Jun. 22, 2022),

⁶⁹³³ U.S. Department of Defense, *DoD 2023 Data, Analytics, and Artificial Intelligence Adoption Strategy* (Nov. 2, 2023), https://media.defense.gov/2023/Nov/02/2003333300/-1/-

<u>1/1/DOD_DATA_ANALYTICS_AI_ADOPTION_STRATEGY.PDF</u>

6934 U.S. Department of Defense, *Responsible AI Toolkit* (2024), https://rai.tradewindai.com/

⁶⁹³⁶ Freedom House, Freedom in the World 2024: United States

⁶⁹³⁷ U.S. Department of State, *Risk Management Profile for Artificial Intelligence and Human Rights* (Jul. 25, 2024), https://2021-2025.state.gov/risk-management-profile-for-ai-and-human-rights/

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rights laws in cases arising from AI and has stressed the government's commitment to holding accountable entities that fail to address unfair and discriminatory outcomes resulting from AI. 6938

Second, in relation to gender, child, and sexual abuse, the Gender Policy Council and Office of Science and Technology Policy (OSTP) issued a call to action to combat image-based sexual abuse, including synthetic content generated by AI,⁶⁹³⁹ which has emerged as one of the fastest growing harmful uses of AI to date.

The Justice Department has also taken unprecedented legal action against the misuse of generative AI for producing and distributing child sexual abuse material (CSAM), aligning with the UN's call to address emerging GenAI risks to human rights, especially when it concerns children. ⁶⁹⁴⁰

Relatedly, the U.S. launched a 15-country Global Partnership for Action on Gender-Based Online Harassment and Abuse with the aim to advance international policies to address online safety and spur new programs to prevent and respond to technology-facilitated gender-based violence, including through AL.⁶⁹⁴¹

Third, regarding risks related to deepfakes and facial recognition and their impact on human rights and marginalized populations, the FTC has proposed to extend protections against AI impersonation scams and deepfakes. ⁶⁹⁴² The U.S. Commission on Civil Rights also released a report on The Civil Rights Implications of the Federal Use of Facial Recognition Technology, highlighting

 $\underline{https://www.justice.gov/opa/pr/five-new-federal-agencies-join-justice-department-pledge-enforce-civil-rights-laws}$

 $\frac{https://bidenwhitehouse.archives.gov/ostp/news-updates/2024/07/22/biden-harris-administration-takes-actions-to-advance-kids-online-health-safety-and-privacy}{}$

⁶⁹³⁸ U.S. Department of Justice, *Five New Federal Agencies Join Justice Department in Pledge to Enforce Civil Rights Laws in Artificial Intelligence* (Apr. 4, 2024),

⁶⁹³⁹ Biden White House Archives, *Biden-Harris Administration Takes Actions to Advance Kids'* Online Health, Safety, and Privacy (Jul. 22, 2024),

⁶⁹⁴⁰ U.S. Department of Justice, *Man Arrested for Producing, Distributing, and Possessing Al-Generated Images of Minors Engaged in Sexually Explicit Conduct* (May 20, 2024), https://www.justice.gov/opa/pr/man-arrested-producing-distributing-and-possessing-aigenerated-images-minors-engaged

⁶⁹⁴¹ Biden White House Archives, *Biden-Harris Administration Commemorates the 30th Anniversary of the Violence against Women Act and Strengthens Commitment to Ending Gender-Based Violence* (Sept. 12, 2024), https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2024/09/12/fact-sheet-biden-harris-administration-commemorates-the-30th-anniversary-of-the-violence-against-women-act-and-strengthens-commitment-to-ending-gender-based-violence/">https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2024/09/12/fact-sheet-biden-harris-administration-commemorates-the-30th-anniversary-of-the-violence-against-women-act-and-strengthens-commitment-to-ending-gender-based-violence/

⁶⁹⁴² FTC, FTC Proposes New Protections to Combat AI Impersonation of Individuals (Feb. 15, 2024), https://www.ftc.gov/news-events/news/press-releases/2024/02/ftc-proposes-new-protections-combat-ai-impersonation-individuals

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concerns about potential discrimination and bias in AI systems used by federal agencies, especially for marginalized groups. 6943

Fourth, regarding risks specific to the use of AI in healthcare, the Department of Health and Human Services (HHS) has established an AI Safety Program to track harmful incidents involving AI's use in healthcare settings and evaluate mitigations for those harms. The HHS has also finalized a civil rights regulation that requires healthcare entities to take steps to identify and mitigate discrimination when they use AI for care. 6944

These initiatives build on prior developments. The Blueprint for an AI Bill of Rights furthered the "Biden-Harris Administration's work to hold big technology accountable, protect the civil rights of Americans, and ensure technology is working for the American people."⁶⁹⁴⁵ The White House indicated that the Blueprint is "fully consistent" with the OECD AI Principles and with Executive Order 13985 on Advancing Racial Equity and Support for Underserved Communities. ⁶⁹⁴⁶

Speaking at the UK AI Safety Summit, Vice President Harris stated: "to define AI safety, I offer that we must consider and address the full spectrum of AI risk—threats to humanity as a whole, as well as threats to individuals, communities, to our institutions, and to our most vulnerable populations." 6947

The U.S. strongly supported the United Nations resolution on Artificial Intelligence. Vice President Harris stated: "Too often, in past technological

⁶⁹⁴³ U.S. Commission on Civil Rights, *U.S. Commission on Civil Rights Releases Report: The Civil Rights Implications of the Federal Use of Facial Recognition Technology*, (Sept. 19, 2024), https://www.usccr.gov/news/2024/us-commission-civil-rights-releases-report-civil-rights-implications-federal-use-facial

Responsible Use of Artificial Intelligence in Automated and Algorithmic Systems by State, Local, Tribal, and Territorial Governments in the Administration of Public Benefits (Apr. 29, 2024), https://www.hhs.gov/about/news/2024/04/29/hhs-shares-plan-promoting-responsible-use-artificial-intelligence-automated-algorithmic-systems-state-local-tribal-territorial-governments-administration-public-benefits.html

⁶⁹⁴⁵ Biden White House Archives, *FACT SHEET: Biden-Harris Administration Announces Key Actions to Advance Tech Accountability and Protect the Rights of the American Public,* Press Release (Oct. 04, 2022), https://bidenwhitehouse.archives.gov/ostp/news-updates/2022/10/04/fact-sheet-biden-harris-administration-announces-key-actions-to-advance-tech-accountability-and-protect-the-rights-of-the-american-public/">https://bidenwhitehouse.archives.gov/ostp/news-updates/2022/10/04/fact-sheet-biden-harris-administration-announces-key-actions-to-advance-tech-accountability-and-protect-the-rights-of-the-american-public/

⁶⁹⁴⁶ Biden White House Archives, OSTP, *Blueprint for an AI Bill of Rights: Relationship to Existing Law and Policy*, https://bidenwhitehouse.archives.gov/ostp/ai-bill-of-rights/relationship-to-existing-law-and-policy/

⁶⁹⁴⁷ Biden White House Archives, *Remarks by Vice President Harris on the Future of Artificial Intelligence*, Speeches and Remarks (Nov. 1, 2023),

https://bidenwhitehouse.archives.gov/briefing-room/speeches-remarks/2023/11/01/remarks-by-vice-president-harris-on-the-future-of-artificial-intelligence-london-united-kingdom/

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revolutions, the benefits have not been shared equitably, and the harms have been felt by a disproportionate few. This resolution establishes a path forward on AI where every country can both seize the promise and manage the risks of AI."6948

OECD / G20 AI Principles

The United States fully supported the OECD AI policy process, endorsed the OECD AI Principles, and is a founding member of the Global Partnership on AI. The OECD notes that the United States has taken several steps to implement the AI Principles.

The United States continued its commitment to the OECD AI Principles with endorsement of the updated Principles in May 2024. 6949 The update addresses advancements in AI technologies, including general-purpose and generative AI. These updates focus on privacy, intellectual property rights, safety, and information integrity.

Representatives of the U.S. Department of Commerce have stated that the Blueprint for an AI Bill of Rights was largely inspired by the OECD AI Principles. Three agencies within the U.S. Department of Commerce – the National Institute of Standards and Technology (NIST), the National Telecommunications and Information Administration (NTIA), the International Trade Administration (ITA) participate in the OECD Working Party on AI Governance. Septiment of Commerce and Information (ITA) participate in the OECD Working Party on AI Governance.

The U.S. has consistently supported the G7 processes on artificial intelligence. It joined the leaders' statement on the Hiroshima AI Process which committed to "foster an open and enabling environment where safe, secure, and trustworthy AI systems are designed, developed, deployed, and used to maximize the benefits of the technology while mitigating its risks, for the common good worldwide, including in developing and emerging economies with a view to

⁶⁹⁴⁸ Biden White House Archives, *Statement from Vice President Harris on the UN General Assembly Resolution on Artificial Intelligence*, Statements and Releases (Mar. 21, 2024), <a href="https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2024/03/21/statement-from-vice-president-harris-on-the-un-general-assembly-resolution-on-artificial-intelligence/6949 OECD, *OECD Updates AI Principles to Stay Abreast of Rapid Technological Developments* (May 3, 2024), https://www.oecd.org/en/about/news/press-releases/2024/05/oecd-updates-ai-principles-to-stay-abreast-of-rapid-technological-developments.html

⁶⁹⁵⁰ OECD.AI, Elham Tabassi, Isabel Gates, Sam Schofield, *The United States Works with Domestic and International AI Communities to Establish Frameworks that Advance Trustworthy AI for All* (Dec. 20, 2023), https://oecd.ai/en/wonk/united-states-ai-for-all-policy ⁶⁹⁵¹ Ibid

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closing digital divides and achieving digital inclusion."6952 Subsequently the U.S.-Japan consultative committee issued a joint statement which states,

"We welcome progress under the Hiroshima AI Process, particularly the Hiroshima Process International Guiding Principles for Organizations Developing Advanced AI Systems and the Hiroshima Process International Code of Conduct for Organizations Developing Advanced AI Systems and affirm our determination to further advance the Hiroshima AI Process together with other G7 members." 6953

Council of Europe AI Treaty

The U.S. is not a member of the Council of Europe but signed and ratified the COE Convention on Cybercrime, 6954 as COE conventions are open for ratification by non-members states.

The U.S. was one of the non-member states of the COE intergovernmental drafting body on the Framework Convention on AI. During the diplomatic negotiations in Strasbourg to finalize the text of the Convention, there was considerable concern about the U.S. role in watering down the treaty. The Center for AI and Digital Policy led a coalition of civil society organizations and AI experts urging negotiators not to "Abdicate Our Rights."

The U.S. signed⁶⁹⁵⁸ the Council of Europe's Framework Convention on AI and Human Rights, Democracy, and the Rule of Law. Signing signals positive prospects for the United States as the country could become a ratifying party to the first multilateral treaty focused on artificial intelligence.

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⁶⁹⁵² Biden White House Archives, *G7 Leaders' Statement on the Hiroshima AI Process*, Statements and Releases (Oct. 30, 2023), https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2023/10/30/g7-leaders-statement-on-the-hiroshima-ai-process/6953 U.S. Department of State, https://joint.statement-of-the-japan-u-s-economic-policy-consultative-committee/

⁶⁹⁵⁴ Council of Europe, *Chart of Signatures and Ratifications of Treaty 185, Convention on Cybercrime* (Jul. 1, 2004), https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/185/signatures

⁶⁹⁵⁵ Council of Europe, *The Framework Convention on Artificial Intelligence* (2024), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

⁶⁹⁵⁶ Politico, *International AI Rights Treaty Hangs by a Thread* (Mar. 11, 2024), https://www.politico.eu/article/council-europe-make-mockery-international-ai-rights-treaty/6957 Center for AI and Digital Policy, *Open Letter to the Council of Europe* (Jan. 24, 2024), https://www.linkedin.com/feed/update/urn:li:activity:7155714415227465728/

⁶⁹⁵⁸ U.S Department of State, *The Council of Europe's Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law* (Sept. 2024), https://www.state.gov/the-council-of-europes-framework-convention-on-artificial-intelligence-and-human-rights-democracy-and-the-rule-of-law

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UNESCO Recommendation on AI Ethics

The United States rejoined UNESCO as a full member in 2023,6959 after the UNESCO Recommendation on the Ethics of AI were adopted. The Recommendation is applicable to all 194 member states of UNESCO.

While several countries are implementing the Readiness Assessment Methodology (RAM) to determine whether they are prepared to implement the Recommendation, the U.S. has not completed the RAM. 6960

Evaluation

The U.S. lacks a unified national policy on AI. Executive Order 14110 and the agency actions taken to implement it reflect a whole-of-government approach to guide the development of safe, responsible, and trustworthy AI. These actions resulted from White House consultations with tech CEOs, academic experts, civil society leaders, labor organizers, and agency heads. However, the nature of Executive Orders make them susceptible to political whims.

The United States has endorsed the OECD/G20 AI Principles. Successive administrations have issued Executive Orders on AI that reflect democratic values, and a federal OMB directive mandates that agencies adopt safeguards for AI. Several agencies such as the AI Safety Institute (AISI), Office of Critical and Emerging Technologies, and Office of Management and Budget have launched requests for information, showing a desire for enhanced public participation. States have made progress.

Despite encouraging steps in Congress with the introduction of bipartisan bills, the overall U.S. policy-making process remains opaque. The AI Insight Forums convened by Congress under the leadership of Sen. Schumer reflect these concerns. Congressional attention to AI should be welcome but the closed-door sessions raise concerns about public participation as does the lack of attention to developments in China and the EU. 6962

The Federal Trade Commission has failed to act on several pending complaints concerning the deployment of AI techniques in the commercial sector, including the CAIDP complaint regarding OpenAI.

⁶⁹⁵⁹ UNESCO, *The United States Becomes the 194th Member State of UNESCO*, Press Release (Jul. 11, 2023), https://www.unesco.org/en/articles/united-states-becomes-194th-member-state-unesco

⁶⁹⁶¹ Marc Rotenberg, *That Was the Week That Was*, Blog@CACM (Nov. 6, 2023), https://cacm.acm.org/blogcacm/that-was-the-week-that-was/

⁶⁹⁶⁰ UNESCO, Global Hub, Country Profiles (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

⁶⁹⁶² Marc Rotenberg, *Everything. Everywhere. All at Once: AI Policy When Congress Returns*, Blogs@CACM (Aug. 24, 2023), https://cacm.acm.org/blogcacm/everything-everywhere-all-at-once-ai-policy-when-congress-returns/

Uruguay

In 2024, Uruguay updated its National AI Strategy and the National Data Strategy. Uruguay also completed the UNESCO Readiness Assessment Methodology. However, concerns remain over the use of facial recognition technology.

National AI Strategy

Uruguay's revised AI Strategy, 2024–2030, aims to "promote the ethical, responsible, safe, critical, creative, and innovative development and use of artificial intelligence for the benefit of people and all sectors of society." The strategy was built on ten core principles:

- 1. AI for the good of people and sustainable development
- 2. Strengthening democracy
- 3. Respect for dignity and human rights
- 4. Equity and non-discrimination
- 5. Protection and privacy of personal data
- 6. Transparency and explainability
- 7. Responsibility and accountability
- 8. Trustworthiness and security
- 9. Responsible and safe innovation
- 10. Multiple stakeholders

The 2024–2030 AI Strategy also identifies various considerations across three pillars: Governance, AI Capacity, and Sustainable Development. Regulatory frameworks (Line 1.2) and international articulation (Line 1.3) under the Governance pillar and AI and society (Line 3.3) and Impacts of AI on employment (3.5) under Sustainable Development relate most closely to human rights and democratic values.

The updated strategy extends the application of earlier strategies, which focused on AI in the public sector, to include the private sector. The new strategy also represents the first comprehensive AI strategy. The previous version, called the Artificial Intelligence Strategy for Digital Government (AISDG) 2020, 6964 focused on AI development for the digital government. The Agency for the Development of Electronic Government and Information Society (AGESIC) led the preparation of the AISDG and the revised AI strategy.

⁶⁹⁶³ AGESIC, *Uruguay National Artificial Intelligence Strategy 2024–2030* (Nov. 19, 2024), https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-conocimiento/comunicacion/publicaciones/estrategia-nacional-inteligencia-artificial-uruguay-2024-2030/estrategia

⁶⁹⁶⁴ AGESIC, Artificial Intelligence Strategy for the Digital Government (Jan. 1, 2020), https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-conocimiento/comunicacion/publicaciones/estrategia-inteligencia-artificial-para-gobierno-digital/estrategia

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The AI strategies were part of Uruguay's Digital Agendas. Uruguay has published five digital government agendas (in 2008, 2010, 2015, 2020, and 2021). The issues associated with AI were considered in the 2020 Digital Government Plan, ⁶⁹⁶⁵ Digital Agenda 2020, ⁶⁹⁶⁶ and Digital Agenda 2021–2125. After publishing the most recent, called Digital Agenda 2025, Uruguay began to revise the national AI strategy in 2023. ⁶⁹⁶⁷

Uruguay's digital government strategies aim to advance implementation of the Declaration of Principles of the World Summit on the Information Society commitment "to build a people-centered, inclusive and development-oriented Information Society, where everyone can create, access, utilize and share information and knowledge, enabling individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life, premised on the purposes and principles of the Charter of the United Nations and respecting fully and upholding the Universal Declaration of Human Rights." 6968

Uruguay adopted the AISDG after a public consultation.⁶⁹⁶⁹ The general objective of the AISDG is to promote and strengthen the responsible use of AI in Public Administration. AISDG comprises nine general principles and four pillars, each with specific objectives and areas of action.

The general principles are:

- 1. Purpose: AI must enhance the capabilities of human beings, complementing them as much as possible, aiming to improve the quality of people's life, facilitating processes and adding value to human activity
- 2. General interest: AI-based solutions promoted by the State should be oriented toward protecting the general interest, guaranteeing inclusion and equity

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⁶⁹⁶⁵ Uruguay Government, AGESIC, *Digital Government Strategy 2020* (2020), https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-conocimiento/politicas-y-gestion/plan-gobierno-digital-2020

⁶⁹⁶⁶ Uruguay Government, AGESIC, *Agenda Uruguay Digital 2020* (May 2019), https://www.gub.uy/uruguay-digital/comunicacion/publicaciones/agenda-digital-2020-actualizacion-medio-termino

⁶⁹⁶⁷ Uruguay Government, Uruguay Digital, *Uruguay Digital Agenda 2025, 2023 Update* (Jun. 6, 2024), https://www.gub.uy/uruguay-digital/comunicacion/publicaciones/agenda-uruguay-digital-2025-actualizacion-medio-termino

⁶⁹⁶⁸ See Uruguay Digital Agenda 2008–2016 and World Summit on the Information Society, *Declaration of Principles: Building the Information Society: A Global Challenge in the New Millennium*, Geneva 2003–Tunis 2005, (Dec. 12, 2003), https://www.itu.int/net/wsis/docs/geneva/official/dop.html

⁶⁹⁶⁹ Uruguay Government, AGESIC, *Artificial Intelligence Strategy for Digital Government* (Jan. 1, 2020), <a href="https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-conocimiento/comunicacion/publicaciones/estrategia-inteligencia-artificial-para-gobierno-conocimiento/comunicacion/publicaciones/estrategia-inteligencia-artificial-para-gobierno-conocimiento/comunicacion/publicaciones/estrategia-inteligencia-artificial-para-gobierno-conocimiento/comunicacion/publicaciones/estrategia-inteligencia-artificial-para-gobierno-conocimiento/comunicacion/publicaciones/estrategia-inteligencia-artificial-para-gobierno-conocimiento/comunicacion/publicaciones/estrategia-inteligencia-artificial-para-gobierno-conocimiento/comunicacion/publicaciones/estrategia-inteligencia-artificial-para-gobierno-conocimiento/comunicacion/publicaciones/estrategia-inteligencia-artificial-para-gobierno-conocimiento/comunicacion/publicaciones/estrategia-inteligencia-artificial-para-gobierno-conocimiento/conoc

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- 3. Respect for human rights: Any technological solution that uses AI must respect human rights, individual freedoms, and diversity
- 4. Transparency: AI solutions used in the public sphere must be transparent and comply with the regulations in force
- 5. Responsibility: Technological solutions based on AI must have a clearly identifiable person responsible for the actions derived from the AI solution
- 6. Ethics: When the application and/or development of AI-based solutions present ethical dilemmas, they must be addressed and resolved by human beings
- 7. Added value: AI-based solutions should only be used when adding value to a process
- 8. Privacy by design: AI solutions should consider people's privacy from their design stage. Personal data-protection principles in force in Uruguay are considered strategic components
- 9. Security: AI developments must comply, from their design, with the basic principles of information security. The guidelines and regulations related to cybersecurity in force in Uruguay that apply to the development of AI are considered components of this strategy.

The four pillars of the Artificial Intelligence Strategy for the Digital Government are:

- 1. AI governance in public administration: Ensure that the principles and comply with the recommendations outlined in the strategy
- 2. Capacity development for AI: Should focus on training civil servants in different capacities related to AI
- 3. Use and application of AI: Implies generating technical guides for the good use of AI in public administration, promoting algorithm transparency and designing specific action plans in strategic sectors
- 4. Digital citizenship and AI: Prepare citizens to take advantage of opportunities and face the challenges that AI poses, as well as to generate the necessary confidence in people to develop and use new technologies

The 2022 OECD report assessing the use of AI in the public sector across Latin America and the Caribbean acknowledges that the AISDG is one of the few AI strategies in the region "to be fully dedicated to the public sector." Concerning implementation, the OECD notes that "Uruguay's strategy does not

⁶⁹⁷⁰ OECD Public Governance Reviews, *The Strategic and Responsible Use of Artificial Intelligence in the Public Sector of Latin America and the Caribbean*, chapter 1, subchapter "Public Sector Components of National Strategies" (Mar. 22, 2022), <a href="https://www.oecd-ilibrary.org/governance/the-strategic-and-responsible-use-of-artificial-intelligence-in-the-public-use-of-a

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always include measurable goals, leaving some actions open to interpretation"6971 and does "not generally include specific time frames." 6972

The Uruguay Government started to address these issues as part of a budget and funding law that formally assigned AGESIC the task of designing and developing a national data and artificial intelligence strategy based on international standards, covering both the public and private sectors. This law also mandated joint action with the Regulatory and Control Unit for Personal Data (URCDP) in all matters related to the processing of personal data.⁶⁹⁷³ The law, which includes provisions for controlled AI testing environments (sandboxes) to promote innovation, followed collaboration with UNESCO and the Development Bank of Latin America and the Caribbean (CAF) to review the AI strategy and create a data strategy. 6974

Uruguay established the Observatory of Artificial Intelligence in the State in 2024, ⁶⁹⁷⁵ realizing plans to promote transparency around the AI Strategy and to enhance trust and mitigate risks around the use of AI technologies. ⁶⁹⁷⁶ The Observatory will allow citizens to monitor and follow-up on action plans for the new AI and Data Strategies. 6977 As part of this effort, the AGESIC joined with the Personal Data Regulatory and Control Unit (URCDP) to publish Recommendations on Algorithmic Transparency. 6978

The Uruguayan government currently has projects for AI solutions in sectors including public education and public health in different stages of testing

https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-

conocimiento/comunicacion/publicaciones/observatorio-inteligencia-artificial-estado

⁶⁹⁷⁸ AGESIC, Recommendations on Algorithmic Transparency (Jul. 17, 2024),

https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-

conocimiento/comunicacion/publicaciones/recomendaciones-sobre-transparencia-algoritmica

⁶⁹⁷¹ Ibid, chapter 1, subchapter "Action Plans and Enablers for Success"

⁶⁹⁷² Ibid

⁶⁹⁷³ Uruguay Government, Law 20.212: Approval of Accountability and Budget Execution Balance Sheet, Fiscal Year 2022, Article 74 (Nov. 17, 2023), https://www.impo.com.uy/bases/leyes/20212-2023

⁶⁹⁷⁴ AGESIC, Process of Revision of the Artificial Intelligence Strategy and of Elaboration of National Data Strategy (Jul. 17, 2024), https://www.gub.uy/agencia-gobierno-electronicosociedad-informacion-conocimiento/politicas-y-gestion/proceso-revision-estrategia-inteligenciaartificial-elaboracion-estrategia

⁶⁹⁷⁵ AGESIC, Observatory of Artificial Intelligence in the State (Observatorio de Inteligencia Artificial en Estado) (Jul. 7, 2024), https://www.gub.uy/agencia-gobierno-electronico-sociedadinformacion-conocimiento/comunicacion/publicaciones/observatorio-inteligencia-artificialestado

⁶⁹⁷⁶ AGESIC, Observatory of the Use of AI in the State (Jun.1, 2022), https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacionconocimiento/comunicacion/publicaciones/observatorio-uso-inteligencia-artificial-estado ⁶⁹⁷⁷ AGESIC, Observatory of Artificial Intelligence in the State (Jul. 7, 2024),

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and implementation. These models include a predictive model to detect disengagement among high-school students, prepared jointly with the Public Education National Administration (ANEP).⁶⁹⁷⁹ The model for educational purposes was initially tested on a small scale to identify possible errors, and the teachers will be taught how to interpret the underlying information. ⁶⁹⁸⁰ The model is among cases of AI applied in the public sector that the Artificial Intelligence Observatory includes in a list with key information. An AGESIC official has acknowledged that a predictive model for cardiovascular disease, which is currently undergoing tests, involves the use of sensitive personal data and raises ethical challenges.⁶⁹⁸¹

Public Participation

Uruguay created both the Draft Data Strategy 2024–2030 and current Artificial intelligence Strategy through a participatory process and public consultations. The 11 Data Strategy proposals are published on the site and are currently under review. 6982

The current Artificial Intelligence Strategy for Digital Government (AISDG) resulted of a public consultation on a draft prepared by AGESIC. 6983 The revised AI Strategy (called the Uruguay Artificial Intelligence Strategy 2024–2030) was created after an extensive participatory process that gathered input from more than 300 individuals from various disciplines and fields and representing many organizations, including over 40 government institutions, 11 civil society organizations, 45 private sector organizations, academia, and other interest groups. CAF and UNESCO supported the consultation process. 6984

 $\underline{https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-}$

conocimiento/comunicacion/publicaciones/estrategia-nacional-inteligencia-artificial-2024-2030

^{9 . .}

⁶⁹⁷⁹ AGESIC, Observatory of Artificial Intelligence, File 25: Model Predicting Unenrollment in Education (Jul. 15, 2024), https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-conocimiento/comunicacion/publicaciones/ficha-25-modelo-predictivo-desvinculacion-educativa

⁶⁹⁸⁰ EL PAÍS, Artificial Intelligence: With Algorithms They Can Predict Which High School Students May Leave or Repeat and They Will Make Lists (Aug. 20, 2022), https://www.elpais.com.uy/que-pasa/inteligencia-artificial-con-algoritmos-predicen-que-liceales-pueden-abandonar-o-repetir-y-haran-listas

⁶⁹⁸¹ Ibid

⁶⁹⁸² Uruguay Digital Citizen Participation Platform, *Public Consultation on the National Data Strategy* (Nov. 4, 2024), https://plataformaparticipacionciudadana.gub.uy/processes/consulta-publica-estrategia-datos

⁶⁹⁸³ Uruguay Digital Citizen Participation Platform, *Public Consultation on the National Artificial Intelligence Strategy* (Nov. 4, 2024),

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As AGESIC explained when it announced the public consultation, "This new National Strategy is the cornerstone for the deployment of a national AI policy that involves the public sector, the private sector and all stakeholders, and that enhances the sustainable development of Uruguay in all its dimensions, contributing to economic growth, social inclusion, environmental sustainability of the country and the strengthening of its sovereignty." The 29 proposals AGESIC received during the consultation, including CAIDP's comments, are available on the public consultation site, along with a report on the consultation.

CAIDP participated in this public consultation, noting as part of its comments that "the draft Uruguay AI Strategy demonstrates alignment with regional and international ethical AI frameworks." CAIDP provided five key recommendations to the draft AI Strategy: 1) adopt a stronger human rights-based approach, 2) enhance explicit transparency and accountability measures, 3) require mandatory Ethical Impact Assessments, 4) prohibit high-risk applications, and 5) carry out continuous inclusive multi-stakeholder engagement. Of these recommendations, Uruguay adopted a strong human rights-based approach, improved the monitoring and review frameworks, and expanded access for multi-stakeholder participation. Of these recommendations.

Data Protection

The draft National Data Strategy will be "the cornerstone for the deployment of a national data policy" covering the private and public sector. [6989] International commitments such as the Universal Declaration of Human Rights, American Convention on Human Rights or Pact of San José de Costa Rica, and Council of Europe Convention 108 for the protection of individuals with regards to the Processing of Personal Data inform the legal framework for data protection

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⁶⁹⁸⁵ Uruguay Digital Citizen Participation Platform, *Public Consultation on the National Artificial Intelligence Strategy* (Nov. 4, 2024),

https://plataformaparticipacionciudadana.gub.uy/processes/consulta-publica-estrategia-ia 6986 AGESIC, Related Documents, *Report about the Public Consultation on the National Artificial Intelligence Strategy* (Accessed Dec. 16. 2024),

https://plataformaparticipacionciudadana.gub.uy/processes/consulta-publica-estrategia-ia
6987 AGESIC Public Consultation on the National Artificial Intelligence Strategy, Submission of
the Center for AI and Digital Policy (CAIDP) to the Agency for Development of Electronic
Government and Information Society (AGESIC) (Oct. 21, 2024),

 $[\]underline{https://plataformaparticipacionciudadana.gub.uy/processes/consulta-publica-estrategia-\underline{ia/f/418/proposals/684}}$

⁶⁹⁸⁸ CAIDP, CAIDP Update 6.48—AI Policy News (Dec. 16, 2024),

 $[\]frac{https://www.linkedin.com/posts/center-for-ai-and-digital-policy_caidp-update-648-ai-policy_news-dec-activity-7274415679728975873-f14o?utm_source$

⁶⁹⁸⁹ Uruguay Digital Citizen Participation Platform, *Public Consultation on the National Data Strategy* (Nov. 4, 2024), https://plataformaparticipacionciudadana.gub.uy/processes/consulta-publica-estrategia-datos

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in Uruguay. Article 72 of the Constitution and a law on Personal Data Protection and Habeas Data Action (LPDP)⁶⁹⁹⁰ provide legal protections.

Uruguay's data-protection system follows EU data-protection rules and has regulations that adapt to the General Data Protection Regulation (GDPR). The European Commission formally approved Uruguay's status as a country providing "adequate protection" for personal data within the meaning of the European Data Protection Directive. ⁵⁹⁹¹

Continuing with the process of full GDPR adaptation, Uruguay passed provisions relating to data protection that address, among others, the proactive responsibility principle (which supposes the implementation of appropriate technical and organizational measures such as privacy by design and privacy by default); the obligation to designate a data-protection officer, and data-breach notification rules. A follow-up decree⁶⁹⁹² regulates the implementation and enforcement of the provisions.

The Personal Data Protection and Habeas Data law established the Personal Data Regulatory and Control Unit (URCDP)⁶⁹⁹³ as the country's supervisory data-protection authority. The URCDP is an autonomous entity of the AGESIC.

As a member of the Ibero-American Network for the Protection of Personal Data (RIPD), which comprises 16 data protection authorities of 12 countries, the URCPD endorsed the General Recommendations for the Processing of Personal Data in Artificial Intelligence⁶⁹⁹⁴ and the accompanying Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects.⁶⁹⁹⁵ Both have been

https://www.impo.com.uy/bases/decretos/64-2020

G993 Uruguay Acts Register, *Law No. 18331: Law of Personal Data Protection*, Art. 31, (Aug. 18, 2008), https://www.impo.com.uy/bases/leyes/18331-2008

⁶⁹⁹⁴ Ibero-American Network for the Protection of Personal Data (RIPD), *General Recommendations for the Processing of Personal Data in Artificial Intelligence* (Jun. 2019), https://www.redipd.org/sites/default/files/2020-02/guide-general-recommendations-processing-personal-data-ai.pdf

⁶⁹⁹⁵ Ibero-American Network for the Protection of Personal Data (RIPD), *Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects* (Jun. 2019), https://www.redipd.org/en/document/guide-specific-guidelines-ai-projects-en.pdf

⁶⁹⁹⁰ Uruguay Acts Register, *Law No. 18331, Law of Personal Data Protection* (Aug. 18, 2008), https://www.impo.com.uy/bases/leyes/18331-2008

⁶⁹⁹¹ European Commission, Commission Implementing Decision [...] on the Adequate Protection of Personal Data by the Eastern Republic of Uruguay with Regard to Automated Processing of Personal Data, 2012/484/EU (notified under document C(2012) 5704), (Aug. 21, 2012), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32012D0484

⁶⁹⁹² Uruguay Acts Register, *Decree 64/020* (Feb. 21, 2020),

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framed in accordance with the RIPD Standards for Personal Data Protection for Ibero-American States. With the adoption of the Standards, a series of guiding principles and rights for the protection of personal data were recognized, that can be adopted and developed by the Ibero-American States in their national legislation to guarantee a proper treatment of personal data and to have homogeneous rules in the region. The guiding principles of personal data protection are legitimation, lawfulness, loyalty, transparency, purpose, proportionality, quality, responsibility, safety, and confidentiality. Controllers must also guarantee the exercise of the following rights by data subjects: right of access, right to correction, right to cancellation, right to opposition, right not to be subject to automated individual decisions, right to portability of personal data, and right to the limitation of treatment of personal data.

The RIPD data protection authorities initiated a coordinated action regarding ChatGPT in May 2023 on the basis that the service may entail risks for the rights and freedoms of users in relation to the regarding the risk of misinformation. The action stated: "ChatGPT does not have knowledge and/or experience in a specific domain, so the precision and depth of the response may vary in each case, and/or [the machine may] generate responses with cultural, racial, or gender biases, as well as false ones."6997

Uruguay has been an accredited member of the Global Privacy Assembly since 2009 and is represented by the Personal Data Regulatory and Control Unit. The 34th International Conference was hosted in Canelones, Uruguay in 2012.⁶⁹⁹⁸ The URCDP was among the co-sponsors of the 2022 GPA Resolution on Facial

 $\underline{https://www.redipd.org/sites/default/files/2022-04/standars-for-personal-data.pdf}$

⁶⁹⁹⁶ Ibero-American Network for the Protection of Personal Data (RIPD), *Standards for Personal Data Protection for Ibero-American States* (2017),

⁶⁹⁹⁷ Ibero-American Network for the Protection of Personal Data (RIPD), *Authorities from the Ibero-American Network for the Protection of Personal Data Initiate a Coordinated Action in Relation to the ChatGPT Service* (May 8, 2023), https://www.redipd.org/es/noticias/autoridades-red-iberoamericana-de-proteccion-de-datos-personales-inician-accion-chatgpt

⁶⁹⁹⁸ Global Privacy Assembly, *History of the Assembly* (2021),

 $[\]underline{https://global privacy assembly.org/the-assembly-and-executive-committee/history-of-the-assembly/$

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Recognition Technology⁶⁹⁹⁹ and the 2023 GPA Resolution on Generative AI Systems.⁷⁰⁰⁰

Algorithmic Transparency

Several provisions in Uruguay define a right to algorithmic transparency. Most recently, AGESIC and the Unit of Access to Public Information (UAIP) published Recommendations on Algorithmic Transparency⁷⁰⁰¹ as part of the State Observatory on AI. The recommendations promote transparency, access to information, and explainability to ensure the ethical and responsible use of AI systems while seeking to strengthen people's trust in the technology.

The new Recommendations build on international commitments and national strategies dating back to 2019. The RIPD Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects, which the URCDP endorsed, provide "The information provided regarding the logic of the AI model must include at least basic aspects of its operation, as well as the weighting and correlation of the data, written in a clear, simple and easily understood language." 7002

AGESIC published guidance for the preparation of Algorithmic Impact Studies as part of an earlier AI Strategy on Digital Government. According to the OECD, the Uruguayan Algorithmic Impact Study was designed "as a tool for analyzing automated decision support systems that use machine learning" to "identify key aspects of systems that merit more attention or treatment."⁷⁰⁰³

⁶⁹⁹⁹ Global Privacy Assembly, 44th Closed Session of the Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁷⁰⁰⁰ Global Privacy Assembly, *Resolution on Generative Artificial Intelligence Systems* (Oct. 2023), https://globalprivacyassembly.org/wp-content/uploads/2023/10/5.-Resolution-on-Generative-AI-Systems-101023.pdf

⁷⁰⁰¹ AGESIC, *Recommendations on Algorithmic Transparency* (Jul. 17, 2024), https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-conocimiento/comunicacion/publicaciones/recomendaciones-sobre-transparencia-algoritmica

Tool Thero-American Network for the Protection of Personal Data (RED), Specific Guidelines for Compliance with the Principles and Rights that Govern the Protection of Personal Data in Artificial Intelligence Projects, p.17 (Jun. 2019), https://www.redipd.org/en/document/guide-specific-guidelines-ai-projects-en.pdf

⁷⁰⁰³ OECD Public Governance Reviews, *The Strategic and Responsible Use of Artificial Intelligence in the Public Sector of Latin America and the Caribbean*, chapter 4, "Trustworthy AI and Alignment with the OECD AI Principles" (Mar.22, 2022), https://www.oecd-ilibrary.org/governance/the-strategic-and-responsible-use-of-artificialintelligence-in-the-public-sector-of-latin-america-and-the-caribbean 1f334543-en

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Uruguay also ratified Council of Europe Convention 108+, which includes a broad provision regarding algorithm transparency.⁷⁰⁰⁴

Use of AI in Public Administration

Uruguay has acted on its objective to "promote and support the ethical, responsible, safe, and trustworthy use" of artificial intelligence technology through various national and international frameworks, institutions, and tools. Uruguay's first AI Strategy (2020) focused on the use of AI in public administration. This strategy for digital government emerged from a two-decadelong tradition of digital government agendas (referred to as Digital Uruguay). Uruguay has published five digital government agendas with periodic revisions and subject to public consultations. The latest revision of the current digital government agenda was (Digital Agenda 2025). 7005

An AI Observatory formally launched in 2024 after public consultations provides public oversight for AI in public administration by documenting use cases.⁷⁰⁰⁶

In addition, AGESIC created the Public Sector Strategic Committee for Artificial Intelligence and Data⁷⁰⁰⁷ to collaborate in the process of creating and implementing the corresponding strategies. The Committee is chaired by AGESIC and composed of representatives from different Ministries.

The Uruguayan government currently has several projects to implement AI solutions in various sectors, including public education and public health. This includes a predictive model to identify those at risk of repeating in or dropping out of secondary education, prepared jointly with the Public Education National Administration (ANEP)⁷⁰⁰⁸ and a predictive model for cardiovascular disease, ⁷⁰⁰⁹

⁷⁰⁰⁴ Council of Europe, *Uruguay Ratifies Convention 108*+, Art. 9.1.c, Press Release (Aug. 9, 2021), https://www.coe.int/en/web/data-protection/-/uruguay-ratfies-convention-108-

⁷⁰⁰⁵ AGESIC, *Uruguay Digital* (Jun. 6, 2024), https://www.gub.uy/uruguay-

digital/comunicacion/publicaciones/agenda-uruguay-digital-2025-actualizacion-medio-termino AGESIC, *Use Cases of AI in the State* (Accessed Dec. 17, 2024),

https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-conocimiento/observatorio-inteligencia-artificial

AGESIC, Act No. 1/2024 of the Public Sector Strategic Committee for Artificial Intelligence and Data (May 16, 2024), https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-conocimiento/institucional/informacion-gestion/actas/acta-n-12024-0

⁷⁰⁰⁸ AGESIC, *File 25: Predictive Model for Education Unenrollment* (Jul. 15, 2024), https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-

conocimiento/comunicacion/publicaciones/ficha-25-modelo-predictivo-desvinculacion-educativa 7009 CENUR and UDU, Artificial Intelligence for the Early Prediction and Prevention of the Risks of Cardiovascular Disease, http://www.cup.edu.uy/index.php/94-noticias/ultimas-noticias/4904-inteligencia-artificial-para-prediccion-y-prevencion-temprana-de-los-riesgos-en-salud-cardiovascular.html

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which is currently undergoing tests, supported by a grant from the National Agency for Research and Innovation.⁷⁰¹⁰

Finally, as a member of the Latin American Centre for Development Administration (CLAD),⁷⁰¹¹ Uruguay approved the Ibero American Charter on Artificial Intelligence in Civil Service. The Charter aims to provide a roadmap and common framework for CLAD member states to adapt their AI policy strategies and laws for the challenges and opportunities involved in the implementation of AI in public administration. In addition to common principles, the Charter recommends specific tools for monitoring AI impact as well as a risk classification mechanism that outlines prohibited AI uses as well as guidelines for the guardrails in high-risk uses.

Facial Recognition

Uruguay's Data Protection Authority was among the co-sponsors of the 2022 GPA Resolution on Facial Recognition Technology, which set forth "principles and expectations for the appropriate use of personal information in facial recognition technology," including the need for lawful basis; reasonableness, necessity, and proportionality; protection of human rights; transparency; and accountability. 7012

Uruguay's Ministry of the Interior announced in 2024⁷⁰¹³ that it will apply an AI-based analytical system to video surveillance camera networks.⁷⁰¹⁴ The initiative consists of two thousand new cameras with software based on algorithms developed to recognize specific images and movements. By these means, the behavior and movements of people will be studied with the aim to detect and anticipate criminal patterns.

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 $\underline{https://www.gub.uy/ministerio-interior/comunicacion/noticias/ministerio-del-interior-presento-proyecto-analitica-inteligencia-artificial}$

⁷⁰¹⁰ ANII, Predictive Model for Risk of Cardiovascular Disease for Early Prevention Using Artificial Intelligence (May 1, 2023),

https://www.anii.org.uy/proyectos/FMV_3_2022_1_172786/modelado-predictivo-de-riesgos-de-enfermedades-cardiovasculares-para-prevencion-temprana-usando-inteligencia-artificial/

⁷⁰¹¹ CLAD, *Ibero American Charter on Artificial Intelligence in Civil Service* (2024), https://clad.org/wp-content/uploads/2024/03/CIIA-EN-03-2024.pdf

⁷⁰¹² Global Privacy Assembly, 44th Closed Session of the Global Privacy Assembly, *Resolution on Principles and Expectations for the Appropriate Use of Personal Information in Facial Recognition Technology* (Oct. 2022), https://globalprivacyassembly.org/wp-content/uploads/2022/11/15.1.c.Resolution-on-Principles-and-Expectations-for-the-Appropriate-Use-of-Personal-Information-in-Facial-Recognition-Technolog.pdf

⁷⁰¹³ Uruguay Presidency, *Interior Presents Video Surveillance Project Based on Artificial Intelligence* (Sept. 11, 2024), https://www.gub.uy/presidencia/comunicacion/noticias/interior-presento-proyecto-videovigilancia-basado-inteligencia-artificial

⁷⁰¹⁴ Ministry of the Interior, *The Ministry of the Interior Presented an Analytical and Artificial Intelligence Project for Video Surveillance Cameras* (Sept. 11, 2024),

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Even if the systems recently acquired by the Ministry of the Interior for surveillance purposes reportedly allow for a rapid response to criminal acts and even prevent them, there is no available information or assessment on Uruguay has no regulation related to the police use of AI.

Uruguay began developing a facial-identification database for public-safety purposes under the Ministry of the Interior in 2020. The system was approved as an "omnibus law" through the National Budget Act, meaning tight deadlines prevented proper discussion. The Ministry of the Interior is responsible for developing the database based on the database for issuing identification cards currently under the control of the National Directorate of Civil Identification. The database will include facial images of adults, first and last names, sex, date of birth, nationality, and identification card number, as well as issue and expiration dates. The Ministry of the Interior has already purchased automated facial recognition software and currently has a system of 8,433 cameras distributed in the country in the 19 departments, in addition to private surveillance systems. The national government has admitted that the intended use of this facial-identification database is automated surveillance using facial-recognition algorithms.

Environmental Impact of AI

Uruguay is a recognized regional leader in renewable energy usage. The International Energy Agency found that 91.1% of the country's electricity in 2022 came from renewable sources. Although Uruguay has no specific policy to address the environmental impact of AI, the General Environmental Protection Law includes environmental impact assessments among the tools for protecting the environment. To 19

⁷⁰¹⁶ Government of Uruguay, *Law No. 19.924*, Article 192 (Dec. 18, 2020),

https://www.impo.com.uy/bases/leyes/19924-

 $\underline{2020\#:}{\sim:}text=El\%20Presupuesto\%20Nacional\%20para\%20el,\%22Recursos\%22\%2C\%20Tomo\\\underline{\%20V\%20\%22}$

⁷⁰¹⁵ DATYSOC, Civil Society and Academic Organizations Express their Concern over Facial Recognition in Uruguay's Budget Bill (Nov. 17, 2020),

https://datysoc.org/2020/11/17/organizaciones-de-la-sociedad-civil-y-academicas-expresan-su-preocupacion-por-reconocimiento-facial-en-el-proyecto-de-ley-de-presupuesto-de-uruguay/

⁷⁰¹⁷ DATYSOC, *Uruguay: Toward a Population under Surveillance with Facial Recognition* (Jan. 11, 2021), https://indela.fund/uruguay-hacia-una-poblacion-bajo-vigilancia-con-reconocimiento-facial/ and https://indela.fund/uruguay-hacia-una-poblacion-bajo-vigilancia-con-reconocimiento-facial/ and https://indela.fund/uruguay-hacia-una-poblacion-bajo-vigilancia-con-reconocimiento-facial/ and https://indela.fund/uruguay-hacia-una-poblacion-bajo-vigilancia-con-reconocimiento-facial-en-el-proyecto-de-ley-de-presupuesto-de-uruguay/

⁷⁰¹⁸ International Energy Agency, *Energy System of Uruguay* (Nov. 5, 2024), https://www.iea.org/countries/uruguay

⁷⁰¹⁹ Uruguay Acts Register, *Law 17.283 on Environmental Protection* (Dec. 12, 2000), https://www.impo.com.uy/bases/leyes/17283-2000

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The Ministry of Environment authorized a Google data center project in Canelones in 2024, representing more than \$850 million in investment. After an environmental impact assessment, the Ministry required provisions to reduce water usage and integrate renewable energy.

Lethal Autonomous Weapons

Uruguay co-authored several documents submitted during the 7th Meeting of Governmental Experts (GGE) on Lethal Autonomous Weapons Systems (LAWS) in 2022. These included a Working Paper on emerging technologies in the area of lethal autonomous weapons systems,⁷⁰²¹ setting considerations for the future work of the GGE, including the acknowledgment of the "centrality of the human element in the use of force" and the "urgent need for adequate rules and limits on the development, deployment, and use of autonomous weapon systems to ensure sufficient human involvement and oversight."

Uruguay contributed to a joint commentary to the UN calling for a legally binding instrument on autonomous weapon systems⁷⁰²² and a proposal for a roadmap towards new protocol on autonomous weapons systems.⁷⁰²³ The group submitted a revised draft version of a protocol VI to the Convention on Certain Convention Weapons containing updates and revisions based on ongoing discussions and proposals.⁷⁰²⁴ A proposed ban includes autonomous weapon systems that violate international humanitarian law. The treaty would require

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⁷⁰²⁰ Reuters, *Google to Open Second Data Center in Latin America, to Invest Over \$850 Million* (Aug. 30, 2024), https://www.reuters.com/technology/google-open-second-data-center-latin-america-invest-over-850-mln-2024-08-30/

⁷⁰²¹ Argentina, Austria, Belgium, Chile, Costa Rica, Ecuador, Guatemala, Ireland, Kazakhstan, Liechtenstein, Luxembourg, Malta, Mexico, New Zealand, Nigeria, Panama, Peru, the Philippines, Sierra Leone, Sri Lanka, State of Palestine, Switzerland, and Uruguay, *Working Paper Submitted to the 2022 Chair of the Group of Governmental Experts (GGE) on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems (LAWS)* (May 2022), https://documents.unoda.org/wp-content/uploads/2022/05/2022-GGE-LAWS-joint-submission-working-paper-G-23.pdf

⁷⁰²² UN, Written Commentary by the Delegations of Argentina, Costa Rica, Ecuador, Guatemala, Kazakhstan, Nigeria, Panama, Peru, the Philippines, Sierra Leone, State of Palestine, Uruguay, Calling for a Legally Binding Instrument on Autonomous Weapon Systems (2022), https://documents.unoda.org/wp-content/uploads/2022/05/20220309-G13-Written-Submission.docx

⁷⁰²³ Argentina, Costa Rica, Guatemala, Kazakhstan, Nigeria, Panama, Philippines, Sierra Leone, State of Palestine, Uruguay, *Proposal: Roadmap Towards New Protocol on Autonomous Weapons Systems* (May 2022), https://documents.unoda.org/wp-content/uploads/2022/05/20220311-G10-proposal-legally-binding-instrument.docx

⁷⁰²⁴ United Nations General Assembly, *Lethal Autonomous Weapons Systems Report*, p.22 (A/79/88) (Jul. 1, 2024), https://docs-library.unoda.org/General Assembly First Committee - Seventy-Ninth session (2024)/A-79-88-LAWS.pdf

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countries to regulate other autonomous weapon systems to ensure "meaningful human control is retained" throughout their entire life cycle. 7025

Human Rights

Freedom House ranked Uruguay as "free" with a score of 96/100 points for 2024.⁷⁰²⁶ Freedom House acknowledges that Uruguay has "a historically strong democratic governance structure and a positive record of upholding political rights and civil liberties while also working toward social inclusion," even though "there are still disparities in treatment and political representation of women, transgender people, Uruguayans of African descent, and the Indigenous population."

Uruguay is among the countries with a very high level of formal adherence to the international human rights protection system, as it has ratified practically all existing international instruments. However, according to some reports, Uruguay has serious shortcomings when it comes to effective compliance with such standards. 7027 Likewise, a 2013 report by the Office of the United Nations High Commissioner for Human Rights mentions the debts that the country maintains related to certain human-rights categories contained in the treaties ratified by Uruguay.7028

Impunity for crimes against humanity committed during the military dictatorship (1973-1985) persists and is still an open issue. In 2020, Uruguayan NGO Peace and Justice Service (SERPAJ) reported that "35 years after the democratic transition, the scenario of denial of justice for the victims of crimes against humanity of the dictatorship of Uruguay shows how the country is still far from developing and implementing satisfactory and successful public policies regarding the search for justice for serious human rights violations."7029

OECD's 2022 report assessing the use of AI in the public sector across Latin America and the Caribbean notes that at the end of 2013 the Uruguayan

⁷⁰²⁵ CAIDP, Artificial Intelligence and Democratic Values Index 2023, p. 1063 https://www.caidp.org/reports/aidv-2023/

https://freedomhouse.org/country/uruguay/freedom-world/2024

http://www.serpaj.org.uy/destacados/presentacion-del-informe-anual-2020-de-serpaj-derechoshumanos-en-el-uruguay-2020/

⁷⁰²⁶ Freedom House, Freedom in the World 2024: Uruguay (2024),

⁷⁰²⁷ Institute of Legal and Social Studies of Uruguay (IELSUR) and United Nations Development Program in Uruguay (PNUD), Study on the Legislative Harmonization of the Human Rights Treaties Ratified by Uruguay or Other Legal Norms with Binding Norms 35 (2006), https://archivo.presidencia.gub.uy/ web/noticias/2006/09/ARMONIZACION.pdf

⁷⁰²⁸ United Nations, General Assembly, Human Rights Council, National Report Submitted in Accordance with Paragraph 5 of the Annex to Human Rights Council Resolution 16/21, Uruguay, A/HRC/WG.6/18/URY/2 (2018), https://digitallibrary.un.org/record/3877948 ⁷⁰²⁹ SERPAJ, *Human Rights in Uruguay, Report 2020*, p. 22 (Dec. 14, 2020),

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government acquired Predpol, an "AI-enabled policing software to predict the potential for crimes in different areas of the country." While the system "offered predictions based on data collected by the Ministry of the Interior," concerns remain over the possibility that historical biases in the criminal justice system could lead to decisions that disproportionately harm people from marginalized groups. Knowledge about the model design was not made public, undermining efforts to explain its decisions, although, according to public information, the machine learning algorithm relied on four variables: type of crime, location, date and time." ⁷⁰³¹

Uruguay's deployment of Predpol raised human rights concerns. A study on the deployment of algorithms and AI solutions in Latin America, including Predpol, suggested that "these models generate a feedback loop: a greater police presence in a given area makes it more likely for crime to be detected. The more crimes recorded in an area, the more likely that police forces will be deployed. According to HRDAG, this means officers will be repeatedly sent to the same areas of the city, usually those where minorities are concentrated, regardless of the true crime rate in that area." ⁷⁰³²

The study reported that Human Rights organization SERPAJ expressed similar concerns about PredPol in 2017, warning of a vicious cycle, "Basically legitimizing arbitrary police behavior, which translates into police abuse, and is often the product of racism or classism." 7033

The project was discontinued after an evaluation by the Uruguayan Ministry of Interior concluded it did not perform better than "a more traditional annual retrospective reporting system based on statistical tools created by the Police's Tactical Information Directorate."⁷⁰³⁴

⁷⁰³² Juan Ortiz Freuler and Carlos Iglesias, *Algorithms and Artificial Intelligence in Latin America: A Study of Implementation by Governments of Argentina and Uruguay* (Sept. 2018), http://webfoundation.org/docs/2018/09/WF AI-in-LA Report Screen AW.pdf

⁷⁰³⁰ OECD Public Governance Reviews, *The Strategic and Responsible Use of Artificial Intelligence in the Public Sector of Latin America and the Caribbean*, chapter 3 (Mar. 22, 2022), https://www.oecd-ilibrary.org/governance/the-strategic-and-responsible-use-of-artificial-intelligence-in-the-public-sector-of-latin-america-and-the-caribbean_1f334543-en
⁷⁰³¹ Ibid

⁷⁰³³ Ibid. See also: SERPAJ, *Derechos Humanos en Uruguay: Informe 2017* (2017), pp. 176–177, https://sitiosdememoria.uy/sites/default/files/publicaciones-completas/2021-02/derechos-humanos-en-el-uruguay-2017.pdf

⁷⁰³⁴ Juan Ortiz Freuler and Carlos Iglesias, *Algorithms and Artificial Intelligence in Latin America: A Study of Implementation by Governments of Argentina and Uruguay*, p. 4 (Sept. 2018), http://webfoundation.org/docs/2018/09/WF AI-in-LA Report Screen AW.pdf

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An AI-enabled facial recognition surveillance system proposed by the Ministry of Interior raises similar human rights concerns. 7035

OECD / G20 AI Principles

Uruguay has not endorsed and is not listed among countries formally adhering to the OECD AI Principles. However, Uruguay formalized its adherence to the OECD Council Recommendation on Artificial Intelligence in late 2024. The OECD Recommendation "incorporates the OECD AI principles and establishes guidelines for the development and deployment of AI systems, promoting innovation and trust in this technology, while ensuring respect for human rights and democratic values." 7037

Further, OECD's 2022 report assessing the AI use in the public sector across Latin America and the Caribbean analyzed the consistency of the Uruguayan AI strategy for the public sector (AISDG) with the OECD AI principles. For instance, OECD found that "Uruguay's 'General Interest' principle aligns with OECD principles 1 and 2. The first part of the principle sets a social goal, namely, protecting the general interest, and guaranteeing inclusion and equity. The second part states that 'work must be carried out specifically to reduce the possibility of unwanted biases in the data and models used that may negatively impact people or favor discriminatory practices.'"⁷⁰³⁸

OECD also noted that the AISDG and complementary tools such as the Algorithmic Impact Study (EIA) allow for interpretations that provide for transparency and explainability. The OECD further takes note of the fact that "Uruguay's AI principles include a requirement that technological solutions based on AI must have a clearly identifiable person responsible for the actions derived from the solutions." The object of the actions derived from the solutions.

⁷⁰³⁵ Uruguay Presidency, *Interior Presents Video Surveillance Project Based on Artificial Intelligence* (Sept. 11, 2024), https://www.gub.uy/presidencia/comunicacion/noticias/interior-presento-proyecto-videovigilancia-basado-inteligencia-artificial

⁷⁰³⁶ OECD AI Policy Observatory, OECD AI Principles Overview, *Countries Adhering to the AI Principles* (Dec. 17, 2024), https://oecd.ai/en/ai-principles

⁷⁰³⁷ OECD, *Recommendation of the Council on Artificial Intelligence* (May 3, 2024), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449#dates

⁷⁰³⁸ OECD Public Governance Reviews, *The Strategic and Responsible Use of Artificial Intelligence in the Public Sector of Latin America and the Caribbean*, chapter 4, subchapter "Fairness and Mitigating Bias" (Mar. 22, 2022), https://www.oecd-ilibrary.org/governance/the-strategic-and-responsible-use-of-artificial-intelligence-in-the-public-sector-of-latin-america-and-the-caribbean 1f334543-en

⁷⁰³⁹ Ibid, chapter 4, subchapter "Transparency and explainability"

⁷⁰⁴⁰ Ibid, chapter 4, subchapter "Accountability"

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Uruguay is not a member of the Global Partnership on AI. However, it is a member of Digital Nations, 7041 the Open Government Partnership, 7042 and the Electronic Government Network of Latin America and the Caribbean. 7043 Uruguay also has endorsed the Digital Agenda for Latin America and the Caribbean 7044 in the context of the Seventh Ministerial Conference on the Information Society in Latin America and the Caribbean. 7045 OECD assesses these memberships favorably in terms of international cooperation.

Council of Europe Convention on Al

Uruguay contributed as an Observer State in the negotiations of the Council of Europe Framework Convention on AI, Human Rights, Democracy and the Rule of Law. However, Uruguay has not signed the treaty.⁷⁰⁴⁶

UNESCO Recommendation on AI Ethics

Uruguay has endorsed the UNESCO AI Recommendation⁷⁰⁴⁷ and completed the UNESCO Readiness Assessment Methodology (RAM).⁷⁰⁴⁸ The RAM supports effective implementation of the Recommendation by helping countries and UNESCO identify and address any institutional and regulatory gaps.⁷⁰⁴⁹

https://www.opengovpartnership.org/our-members/

⁷⁰⁴¹ AGESIC, *Uruguay in Digital Nations* (Nov. 15, 2021), https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-conocimiento/politicas-y-gestion/uruguay-digital-nations

⁷⁰⁴² Open Government Partnership, *Members* (Dec. 17, 2024),

⁷⁰⁴³ Red de gobierno electrónico de América Latina y el Caribe (REDGEALC) (Electronic Government Network of Latin America and the Caribbean), *Countries: Uruguay*, https://www.redgealc.org/

⁷⁰⁴⁴ Presidency of Uruguay, *Agenda Uruguay Digital 2025 and the Digital Agenda for Latin America and the Caribbean 2022* (eLAC2022) (Nov. 18, 2022), https://www.gub.uy/uruguay-digital-para-america-latina-caribe-2024

⁷⁰⁴⁵ Seventh Ministerial Conference on the Information Society in Latin America and the Caribbean, *Digital Agenda for Latin America and the Caribbean (eLAC2022)* (Nov. 26, 2020), https://hdl.handle.net/11362/46440

⁷⁰⁴⁶ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Nov. 5, 2024), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

⁷⁰⁴⁷ UNESCO, *UNESCO Member States Adopt the First Ever Global Agreement on the Ethics of Artificial Intelligence* (Nov. 2021), https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence

⁷⁰⁴⁸ UNESCO, *RAM Report on Uruguay* (2024), https://www.unesco.org/ethics-ai/en/uruguay UNESCO Global AI Ethics and Governance Observatory, *Readiness Assessment Methodology* (2024), https://www.unesco.org/ethics-ai/en/ram

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Uruguay also signed the Santiago Declaration to Promote Ethical Artificial Intelligence. The Santiago Declaration aligns with the UNESCO Recommendation and establishes fundamental principles that should guide public policy on AI. These include proportionality, security, fairness, non-discrimination, gender equality, accessibility, sustainability, privacy and data protection. The High Authorities from Latin America and the Caribbean who established the Santiago Declaration committed to collaborating with CAF and UNESCO to implement the Recommendations for AI Ethics across the region as part of a regional council.

Uruguay presented the RAM report at the Second Ministerial Summit on the Ethics of Artificial Intelligence, the realization of the regional council. The RAM report found that Uruguay has a solid enabling regulatory framework that establishes the bases for the development of AI in the country. In addition, the RAM identified an integrated vision of AI and data, which facilitates a more cohesive implementation of strategies in this area. The connectivity and coverage indicators are very good, highlighting 100% coverage in educational institutions, which is a key factor for the deployment and development of the Ceibal Plan, a Uruguayan initiative to provide each child with a laptop. Total

In terms of areas to be improved, the RAM report points to the lack of indicators and impact measurement tools, which makes it difficult to effectively evaluate the initiatives implemented.

Leaders at the Ministerial Summit also agreed to the Montevideo Declaration⁷⁰⁵⁵ and approved a Roadmap for Ethical Artificial Intelligence for

 $\underline{https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-electronico-sociedad-infor$

 $\underline{conocimiento/comunicacion/noticias/presentacion-del-informe-metodologia-ram-uruguay}$

https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-conocimiento/comunicacion/noticias/aprobacion-declaracion-montevideo

⁷⁰⁵⁰ Forum of Ministerial and High Authorities of Latin America and the Caribbean, *Santiago Declaration* "*To Promote Ethical Artificial Intelligence in Latin America and the Caribbean*" (Oct. 2023), https://minciencia.gob.cl/uploads/filer_public/40/2a/402a35a0-1222-4dab-b090-5c81bbf34237/declaracion_de_santiago.pdf

Tobis UNESCO, UNESCO and Leading Ministry in Santiago de Chile Host Milestone Regional LAC Forum on Ethics of AI (Dec. 5, 2023), https://www.unesco.org/en/articles/unesco-and-leading-ministry-santiago-de-chile-host-milestone-regional-lac-forum-ethics-ai?hub=387

⁷⁰⁵² UNESCO, *CAF and UNESCO Will Create a Council to Review Ethical Criteria for Artificial Intelligence in Latin America and the Caribbean* (Jun. 23, 2022),

 $[\]underline{\text{https://www.unesco.org/en/articles/caf-and-unesco-will-create-council-review-ethical-criteria-artificial-intelligence-latin-america-and}$

⁷⁰⁵³ AGESIC, Presentation of the Report of the RAM in Uruguay (Oct. 4, 2024),

⁷⁰⁵⁴ Ceibal, What Is Ceibal?, https://ceibal.edu.uy/en/what-is-ceibal/

 $^{^{7055}}$ AGESIC, Approval of the Declaration of Montevideo (Oct. 4, 2024),

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Latin America and the Caribbean 2024–2025.⁷⁰⁵⁶ The Roadmap defines five lines of action: Governance and Regulation, Skills and the future of work, Protection of vulnerable groups, Environment, Sustainability and Climate Change, and Infrastructure.

Evaluation

Uruguay initially focused its policies on digital government, and it did well. Proof of this achievement is the Digital Government of the United Nations (UN) 2020 global-index report, which ranks Uruguay as the Latin American regional leader and places the country 26th globally. The OECD also acknowledged the soundness of Uruguay's AI strategy for the public sector.

Uruguay's data protection legal regime, which is largely aligned with the GDPR, presents a promising view of the future for the country's AI regulation. Uruguay also has mechanisms in place to promote algorithmic transparency, especially in the public sector.

Uruguay moved from its initial approach on AI in the public sector to a more comprehensive one. Uruguay revised the AI strategy and elaborated on its data strategy with support by UNESCO and the CAF. Both draft strategies, were created through an open, participatory process. The AI Strategy has been approved and published. The Data Strategy is expected by the end of 2024.

As stated in the RAM report, "Uruguay is committed to the implementation of the UNESCO Recommendation on the Ethics of AI as part of the need to update its current AI strategy [...] and aims to align the country with international ethical principles, a human rights framework, technical standards, and technological developments, as well as address its growing challenges and opportunities." As part of the alignment with international standards, Uruguay committed to the OECD Recommendations in July 2024.⁷⁰⁵⁸

Venezuela

In 2024, Venezuela continued advocating internationally for a ban against lethal autonomous weapons.

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⁷⁰⁵⁶ Latin American and Caribbean Summit for Ethical Artificial Intelligence, *Roadmap for Ethical Artificial Intelligence for Latin America and the Caribbean 2024-2025* (Oct. 2, 2024), https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-conocimiento/files/documentos/noticias/ENG_IA%20Roadmap%20approved.pdf
Total Caribbean 2024-2025 (Oct. 2, 2024), https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-conocimiento/files/documentos/noticias/ENG_IA%20Roadmap%20approved.pdf
Total Caribbean 2024-2025 (Oct. 2, 2024), https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-conocimiento/files/documentos/noticias/ENG_IA%20Roadmap%20approved.pdf

https://publicadministration.un.org/egovkb/en-us/Data/Country-Information/id/185-Uruguay/dataYear/2024

⁷⁰⁵⁸ UNESCO, *RAM Report on Uruguay*, p. 10 (2024), https://www.unesco.org/ethics-ai/en/uruguay

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National AI Strategy

The Venezuelan government has not articulated a comprehensive national AI Strategy. However, the government has used AI in various sectors, including citizen surveillance and control. For example, Venezuela has used AI in biometric systems to track citizens' activities.⁷⁰⁵⁹

According to reports collected by Global Information Society Watch (GIS),⁷⁰⁶⁰ there are laws that regulate the use and management of emerging technologies, such as:

- Organic Law of Science, Technology and Innovation
- Reform of the Organic Law of Science, Technology and Innovation
- National Science, Technology and Innovation Plan
- Law of the Government
- National Plan of Information Technologies for the State
- Telecommunications Law
- Law Against Computer Crimes
- Law on Data Messages and Electronic Signatures
- Law on the Simplification of Administrative Procedures 7061

The use of technology is also included in the following development plans and programs:

- The Second National Economic and Social Development Plan 2013–2019
- The Homeland Plan 2019–2025
- The Economic Recovery Program for Growth and Prosperity
- The Plan for the Country's Future, which was created by the political opposition

Public Participation

Venezuela has experienced continued and wide-ranging restrictions to civic and democratic spaces thus hindering public participation. The Office of the High Commissioner for Human Rights (OHCHR) observed cases of stigmatization, criminalization, and threats against dissenting voices, civil society, media, and trade unionists that affect their capacity to effectively carry out their legitimate duties. ⁷⁰⁶² While the report by the United Nations High Commissioner

⁷⁰⁵⁹ Antonio Garrastazu and Beatriz de Anta, *The AI Revolution Is Coming for Latin America. Is It Ready?*, Americas Quarterly (Aug. 3, 2023), https://www.americasquarterly.org/article/the-ai-revolution-is-coming-for-latin-america-is-it-ready/

⁷⁰⁶⁰ Global Information Society Watch, *Venezuela*, https://giswatch.org/country/venezuela
⁷⁰⁶¹ Ibid

⁷⁰⁶² Report of the United Nations High Commissioner for Human Rights, *Situation of Human Rights in the Bolivarian Republic of Venezuela* (2022), https://reliefweb.int/report/venezuela-

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for Human Rights observed some willingness by the government to open dialogue with civil society organizations following two high level meetings between the government and Foro Civico (a group of civil society organizations) in April 2022, the above challenges persist.⁷⁰⁶³

The Report of the United Nations High Commissioner for Human Rights further observes that reforms relating to public participation must be supported by genuine engagement with civil society actors through meaningful, inclusive, genuine consultation. "A favourable environment for work by civil society must be strengthened allowing zero tolerance for attacks against human rights defenders and journalists implementing preventive policies and ensuring effective accountability mechanisms." 7064

There is currently no consultation process in the field of AI but should Venezuela develop a national AI strategy, the drafting would benefit from citizen insights.

Data Protection

There is no specific regulation regarding data privacy. However, Article 28 of the Constitution (CRBV) defines the Habeas Data as a ground for individual complaints before the Constitutional Court: "Anyone has the right of access to the information and data concerning him or her or his or her goods which are contained in official or private records, with such exceptions as may be established by law, as well as what use is being made of the same and the purpose thereof, and to petition the relevant court for the updating, correction or destruction of any records that are erroneous or unlawfully affect the petitioner's right. He or she may, as well, access documents of any nature containing information of interest to communities or groups of persons."⁷⁰⁶⁵ Article 60 establishes a right to the "protection of their honor, private life, intimacy, self-image (*propia imagen*), confidentiality, and reputation" and extends legal protections to electronic information.⁷⁰⁶⁶

<u>bolivarian-republic/situation-human-rights-bolivarian-republic-venezuela-report-united-nations-high-commissioner-human-rights-ahrc5059-advance-unedited-version</u>

7064 Ibid n 12

⁷⁰⁶³ Ibid

⁷⁰⁶⁵ Bolivarian Government of Venezuela, Ministry of Communication and Information, Fundamental Laws, *Constitution of the Bolivarian Republic of Venezuela*, p. 165 (1999), https://conatel.gob.ve/wp-content/uploads/2024/08/Constitucion-de-la-Republica-Bolivariana-de-Venezuela.pdf

⁷⁰⁶⁶ Ibid, p. 181–182

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The e-Government law (*ley de Infogobierno*) also provides in its Article 75 for the right to information about automated data collection. Also of relevance are the 1991 Law on the Protection of the Privacy of Communications, the 2001 Special Law Against Computer Related Crimes, and the 2018 Regulation for the Protection of the Rights of Users in the Provision of Telecommunications Services.

Supreme Court decisions establish arguments for data principles such as informed consent, legal collection, data quality, use limitation, security, and confidentiality.⁷⁰⁷¹

Despite the fact that these laws exist, there are reports of challenges in implementation due to the lack of an independent data protection oversight authority. Further, there are concerns of government surveillance and counterintelligence activities through the introduction of public digital ID programs such as Carnet de la Patria as well as the mobile app VeQR-Somos that requires vast amounts of personal data that can be used to track both personal data and location. Total

Use of AI in Public Administration

As a member of the Latin American Centre for Development Administration (CLAD), Venezuela approved the principles in the Ibero American Charter on Artificial Intelligence in Civil Service in late 2023.⁷⁰⁷⁴ The guiding

antent/unloads/2024/08/Parlamenta Pract Sary ndf

content/uploads/2024/08/Reglamento-Prest-Serv.pdf

⁷⁰⁷¹ Constitutional Chamber of the Supreme Court, *Case No. 1318* (Aug. 4, 2011), https://vlexvenezuela.com/vid/german-jose-mundarain-hernandez-311569838

⁷⁰⁷² Freedom House, *Freedom on the Net 2022: Venezuela* (2022), https://freedomhouse.org/country/venezuela/freedom-net/2022

⁷⁰⁷³ Ibid

⁷⁰⁶⁷ Bolivarian Government of Venezuela, Ministry of Communication and Information, Relevant Laws, *e-Government Law* (Oct. 10, 2013), https://conatel.gob.ve/wp-content/uploads/2024/08/PDF-Lev-de-Infogobierno.pdf

⁷⁰⁶⁸ Bolivarian Government of Venezuela, Ministry of Communication and Information, Relevant Laws, *Law on the Protection of the Privacy of Communications* (Dec. 16, 1991), https://conatel.gob.ve/wp-content/uploads/2024/08/ley-sobre-proteccion-a-la-privacidad-de-las-comunicaciones.pdf

⁷⁰⁶⁹ Bolivarian Government of Venezuela, Ministry of Communication and Information, Relevant Laws, *Special Law Against Computer Related Crimes* (Sept. 4, 2001), https://conatel.gob.ve/wp-content/uploads/2024/08/PDF-Ley-Especial-contra-los-Delitos-Informaticos.pdf

⁷⁰⁷⁰ Bolivarian Government of Venezuela, Ministry of Communication and Information, Relevant Laws, *Regulation for the Protection of the Rights of Users in the Provisions of Telecommunications Services* (2018), https://conatel.gob.ve/wp-

⁷⁰⁷⁴ Latin American Centre for Development Administration (CLAD), *Ibero American Charter on Artificial Intelligence in Civil Service* (Nov. 2023), https://clad.org/wp-content/uploads/2024/03/CIIA-EN-03-2024.pdf

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principles include: human autonomy; transparency, traceability and explainability; accountability, liability and auditability; security and technical robustness; reliability, accuracy, and reproducibility; confidence, proportionality, and prevention of damage; privacy and protection of personal data; data quality and safety; fairness, inclusiveness, and non-discrimination; human-centering, public value, and social responsibility; and sustainability and environmental protection.

The Charter recommends that member states require assessment of the impact of AI systems on human rights and freedoms and registration algorithms to "anticipate risks, prevent undesirable effects and ensure its proper implementation." The Charter also proposes a risk classification mechanism that would require guardrails for middle-risk uses and prohibitions against highrisk applications. Prohibited uses include facial recognition systems; systems aimed at behavior and cognitive manipulation of specific individuals or vulnerable groups (children or the elderly); and social ranking systems based on certain personality traits, individual behaviors, socio-demographic features or economic status.

Deepfakes and Computational Propaganda

According to experts, deepfakes are the latest tool used in disinformation campaigns promoting Venezuela. In 2023, short Youtube videos have been circulating with fake hosts of a seemingly Western news broadcast to spread propaganda. The purported journalists on screen are artificial intelligence avatars created by a company called Synthesia that for just \$30 a month will say whatever the buyer wants. President Maduro disregarded criticism of the AI-generated propaganda, calling it "popular intelligence" and "revolutionary intelligence."

According to the 2023 Freedom on the Net Report, "progovernment propaganda generated by AI was viewed widely on social networks."⁷⁰⁷⁹ Journalists in Venezuela also started employing AI as a tool for circumventing

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⁷⁰⁷⁵ Ibid, p. 10

⁷⁰⁷⁶ Ibid, p. 21

⁷⁰⁷⁷ Maria Luisa Paul, '*Noah' and 'Daren' Report Good News about Venezuela: They're Deepfakes* (Mar. 2, 2023), https://www.washingtonpost.com/nation/2023/03/02/deepfake-videos-venezuela-disinformation/

⁷⁰⁷⁸ Osmary Hernandez, "Yo soy un robot," ironizó Maduro al responder a las denuncias de uso de la inteligencia artificial para desinformar en Venezuela ["I Am a Robot," Said Maduro Ironically when Responding to Complaints about the Use of Artificial Intelligence to Spread Misinformation in Venezuela]," CNN (Feb. 24, 2023),

 $[\]frac{https://cnnespanol.cnn.com/2023/02/24/soy-robot-maduro-denuncias-uso-inteligencia-artificial-desinformar-venezuela-orix/\#0$

⁷⁰⁷⁹ Carl Miller, *Venezuelan Deepfakes and Propaganda*, BBC News (May 20, 2023), https://www.bbc.co.uk/sounds/play/w3ct5d92

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government repression and censorship in 2024.⁷⁰⁸⁰ This effort, named Operación Retuit, has been used anonymously by Venezuelan journalists to spread content that the AI generated journalistic personas refer to as "real, verified, high-quality and created by journalists."⁷⁰⁸¹ According to LatAm Journalistic Review (LJR), "Operación Retuit is [verified] information from independent media, except we have to use avatars to protect the identity and integrity of journalists/activists."⁷⁰⁸²

Environmental Impact of AI

Venezuela does not currently have specific environmental law and policies dealing with the impact of AI technologies on the environment. Nonetheless, Venezuela's use of AI may have environmental implications because of the energy and natural resources generally involved in AI operations. For example, data centers supporting AI may require considerable electricity, which if sourced from fossil fuels, would contribute to carbon emissions. As AI adoption grows, cooling needs for data systems also intensify water usage—a substantial issue in regions already facing water scarcity. 7083

Lethal Autonomous Weapons

Venezuela is a High Contracting Party to the Convention on Certain Conventional Weapons (CCW),⁷⁰⁸⁴ which aims to prohibit or restrict the use of certain types of weapons that are considered to cause unnecessary or unjustifiable suffering to combatants or to affect civilians indiscriminately. The CCW does not specifically address lethal autonomous weapons, but the topic has been discussed in CCW meetings, and some countries have called for a ban on their development, production, and use.

Venezuela endorsed, together with 69 other countries, a joint statement on autonomous weapons systems at the UN General Assembly meeting in October 2022. In this joint statement, States urged "the international community to further their understanding and address these risks and challenges by adopting appropriate rules and measures, such as principles, good practices, limitations and constraints. We are committed to upholding and strengthening compliance with International

 $\underline{https://latamjournalismreview.org/articles/journalists-in-venezuela-facing-persecution-are-protecting-themselves-by-having-ai-avatars-present-the-news/}$

⁷⁰⁸² Ibid

⁷⁰⁸⁰ Katherine Pennacchio, *Journalists in Venezuela Protect Themselves with AI Avatars That Present the News*, Latin American Journalism Review (Aug. 26, 2024),

⁷⁰⁸¹ Ibid

⁷⁰⁸³ United Nations Environment Programme (UNEP), *Artificial Intelligence (AI) End-to-End:* The Environmental Impact of the Full AI Lifecycle Needs to be Comprehensively Assessed, Issue Note (Sept. 2024), https://wedocs.unep.org/handle/20.500.11822/46288

⁷⁰⁸⁴ United Nations, *The Convention on Certain Conventional Weapons* (Dec. 21, 2001), https://www.un.org/disarmament/the-convention-on-certain-conventional-weapons/

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Law, in particular International Humanitarian Law, including through maintaining human responsibility and accountability in the use of force."⁷⁰⁸⁵

Venezuela endorsed, along with more than 30 other Latin American and Caribbean states, the Belén Communiqué, 7086 which calls for "urgent negotiation" of a binding international treaty to regulate and prohibit the use of autonomous weapons to address the grave concerns raised by removing human control from the use of force.

In May 2024, Venezuela and 21 peers from the Ibero-American Summit of Heads of State and Government, sent a joint reply to the United Nations General Assembly regarding Lethal Autonomous Weapons Systems. The joint reply acknowledged the need for further action to "collaborate to promote the urgent negotiation of a legally binding international instrument containing prohibitions and regulations on autonomy in weapons systems, in order to ensure compliance with international law, including international humanitarian law and international human rights law, and ethical perspectives, as well as the prevention of the social and humanitarian impact that autonomy in weapons systems entails."

Human Rights

In 2024, Freedom House scored Venezuela as "not free" (15/100).⁷⁰⁸⁸ The 2023 Report by Freedom House on digital rights and the status of human rights on the net in Venezuela gives the country a 29 out of 100 score.⁷⁰⁸⁹ The report highlights cases of lack of access and blockage of the Internet by the government, violations of right to privacy, and surveillance among other violations of digital rights. The score increased slightly in 2024 to 30, though concerns remain over censorship, disinformation, and harassment of dissenters.⁷⁰⁹⁰

7085 United Nations (UN) General Assembly, First Committee, *Joint Statement on Lethal Autonomous Weapons Systems First Committee, 77th United Nations General Assembly Thematic Debate – Conventional Weapons* (Oct. 21, 2022),

 $\underline{\text{https://estatements.unmeetings.org/estatements/}11.0010/20221021/A1jJ8bNfWGlL/KLw9WYcSnnAm \ en.pdf}$

https://www.rree.go.cr/files/includes/files.php?id=2261&tipo=documentos

⁷⁰⁸⁷ United Nation's Digital Library, *Lethal Autonomous Weapons Systems: Report of the Secretary-General*, p. 20 (May 2024), https://digitallibrary.un.org/record/4059475?v=pdf&ln=en (2024), Freedom House, *Freedom in the World 2024: Venezuela* (2024),

 $\underline{https://freedomhouse.org/country/venezuela/freedom-world/2024}$

⁷⁰⁸⁹ Freedom House, Freedom on the Net 2023: Venezuela (2023),

https://freedomhouse.org/country/venezuela/freedom-net/2023

https://freedomhouse.org/country/venezuela/freedom-net/2024

⁷⁰⁸⁶ Latin American and the Caribbean Conference of Social and Humanitarian Impact of Autonomous Weapons, *Communiqué* (Feb. 24, 2023),

⁷⁰⁹⁰ Freedom House, *Freedom on the Net 2024: Venezuela* (2024),

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The United Nations Human Rights Council put in place the Independent Fact-Finding Mission for Venezuela to investigate allegations of human rights violations. The report released in September 2022 indicated continued human rights violations, including acts of torture, sexual violence, and mass surveillance by the Venezuelan government to repress dissenting voices. Following this report, the United Nations Human Rights Council extended the mandate of the fact-finding mission for an additional 2 years. According to Amnesty International's latest report, the government continues to use repression and intimidation to silence dissent and maintain its grip on power with widespread human rights abuses committed by security forces and pro-government armed groups.

OECD / G20 AI Principles

Venezuela is not a member of the $OECD^{7094}$ and has not endorsed the OECD AI principles.

Council of Europe AI Treaty

Venezuela has not endorsed the Council of Europe's Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law. 7095

UNESCO Recommendation on AI Ethics

Venezuela is a member state of UNESCO having joined on September 25, 1946. 7096 Venezuela endorsed the UNESCO Recommendation on the Ethics of AI in November 2021. 7097

Venezuela has participated in regional initiatives to implement the UNESCO Recommendation, including the Regional Council developed through

Togal United Nations Human Rights Council, *Independent International Fact-Finding Mission on the Bolivarian Republic of Venezuela* (2019), https://www.ohchr.org/en/hr-bodies/hrc/ffmv/index (2019), https://www.ohchr.org/en/hr-bodies/hrc/ffmv/index (2019), https://www.ohchr.org/en/hr-bodies/hrc/ffmv/index (2019), https://www.ohchr.org/en/hr-bodies/hrc/ffmv/index (2019), https://www.ohchr.org/en/hr-bodies/hrc/ffmv/index (2019), https://www.ohchr.org/en/hr-bodies/hrc/ffmv/index (2019), https://www.ohchr.org/en/hr-bodies/hrc/ffmv/index (2019), https://www.ohchr.org/en/hr-bodies/hrc/ffmv/index (2019), https://www.ohchr.org/en/hr-bodies/hrc/ffmv/index (2019), https://www.ohchr.org/en/hr-bodies/hrc/ffmv/index (2019), https://www.ohchr.org/en/hr-bodies/hrc/ffmv/index (2019), https://www.ohchr.org/en/hr-bodies/hrc/ffmv/index (2019), https://www.ohchr.org/en/hr-bodies/hrc/ffmv/index (2019), https://www.ohchr.org/en/hr-bodies/hrc/ffmv/index (2019), https://www.ohchr.org/en/hr-bodies/hrc/ffmv/index (2019), https://www.ohch

⁷⁰⁹³ Amnesty International Report 2021/22, *The State of the World's Human Rights* (Jan. 28, 2023), https://www.amnesty.org/en/documents/pol10/4870/2022/en/

⁷⁰⁹⁴ OECD AI Observatory, *Policies, Data and Analysis for Trustworthy Artificial Intelligence* (2024), https://oecd.ai/en/

⁷⁰⁹⁵ Council of Europe, *The Framework Convention on Artificial Intelligence, List of Signatories* (Dec. 11, 2024), https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence

⁷⁰⁹⁶ UNESCO, *Member States List* (Dec. 11, 2024), https://www.unesco.org/en/countries
⁷⁰⁹⁷ UNESCO, *UNESCO Member States Adopt the First Ever Global Agreement on the Ethics of Artificial Intelligence* (Nov. 25, 2021), https://www.unesco.org/en/articles/unesco-member-states-adopt-first-ever-global-agreement-ethics-artificial-intelligence

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collaboration with CAF, the development bank of Latin America, and UNESCO. 7098

Venezuela signed the 2023 Santiago Declaration to Promote Ethical Artificial Intelligence, which emerged from the first Regional Forum on AI Ethics. The Declaration aligns with the UNESCO Recommendation and establishes fundamental principles that should guide public policy on AI. These include proportionality, security, fairness, non-discrimination, gender equality, accessibility, sustainability, privacy and data protection.

Beyond this endorsement, Venezuela has taken little action to implement the Declaration. For example, Venezuela is not among the countries that have implemented or are in the process of implementing the Readiness Assessment Methodology (RAM).⁷¹⁰¹

Evaluation

Venezuela has neither an AI strategy nor a data protection law with an independent supervisory authority. In a country deemed "not free," the use of AI to maintain the power in place and reinforce authoritarian practices is a major concern. However, Venezuela's endorsement of the UNESCO Recommendations on the Ethics of AI, the Ibero-American Charter on AI in the Civil Service, 7102 and the Santiago Declaration to Promote Ethical AI7103 could prove useful in taming the risks posed by AI and its misuse.

5c81bbf34237/declaracion_de_santiago.pdf

palabras-a-los-hechos-y-derechos/

https://www.unesco.org/ethics-ai/en/global-hub

⁷⁰⁹⁸ Ángel Melguizo and Gabriela Ramos, *Ethical and Responsible Artificial Intelligence: From Words to Actions and Rights*, Somos Ibero-America (Feb. 1, 2023), https://somosiberoamerica.org/tribunas/inteligencia-artificial-etica-y-responsable-de-las-

⁷⁰⁹⁹ Ministerial Forum of High Authorities from Latin America and the Caribbean, *Declaration of Santiago "To Promote Ethical Artificial Intelligence in Latin America and the Caribbean"* (Oct. 24, 2023), https://minciencia.gob.cl/uploads/filer-public/40/2a/402a35a0-1222-4dab-b090-

⁷¹⁰⁰ UNESCO, *UNESCO* and Leading Ministry in Santiago de Chile Host Milestone Regional LAC Forum on Ethics of AI (Dec. 5, 2023), https://www.unesco.org/en/articles/unesco-and-leading-ministry-santiago-de-chile-host-milestone-regional-lac-forum-ethics-ai?hub=387 ⁷¹⁰¹ UNESCO, Global AI Ethics and Governance Observatory, *Global Hub* (Oct. 2024),

⁷¹⁰² Latin American Centre for Development Administration (CLAD), *Ibero American Charter on AI in Civil Service* (Nov. 20. 2023), https://clad.org/declaraciones-consensos/ibero-american-charter-on-artificial-intelligence-in-civil-service/

⁷¹⁰³ Ministerial Forum of High Authorities from Latin America and the Caribbean, *Declaration of Santiago "To Promote Ethical Artificial Intelligence in Latin America and the Caribbean"* (Oct. 24, 2023), https://minciencia.gob.cl/uploads/filer_public/40/2a/402a35a0-1222-4dab-b090-5c81bbf34237/declaracion_de_santiago.pdf

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Vietnam

In 2024, Vietnam introduced a draft personal data protection law for public consultation and voluntary guidelines with principles for the research and development of responsible AI systems. However, the expanded use of AI systems, including facial recognition, for national identification raises concerns about surveillance, especially given the lack of a guarantee of algorithmic transparency.

National AI Strategy

The Prime Minister's Office for the Socialist Republic of Vietnam published the government's National Strategy on R&D and Application of Artificial Intelligence in 2021. The Strategy outlines Vietnam's AI ambitions projected through 2030, with specific, measurable, and incremental targets by 2025 and 2030.⁷¹⁰⁴ The bulk of the Strategy focuses on planned investments in education, innovation, and infrastructure, aimed at helping Vietnam become a leading hub for AI technologies within the Association of Southeast Asian Nations (ASEAN).

The Strategy proclaims AI as "the background technology for the Fourth Industrial Revolution," pledging to align the nation's AI development and applications with socio-economic development and to "strengthen national defense and security, develop science and technology; unlock the potential of the entrepreneurs, effectively mobilize all resources; gradually receive, master and then upgrade technology transfer."7105 Vietnam's AI strategy additionally outlines the government's commitment to creating a legal framework and policies for AI aimed at "developing and applying AI with people and entrepreneurs at the center, avoiding technology abuse and infringement upon legitimate rights and interests of organizations and individuals."7106

The strategy assigns to Vietnam's Ministry of Public Security a lead role in "develop[ing] and supplement[ing] additional legal documents on privacy protection, human rights, security related to the development and application of AI and in ensuring network security for AI-related activities."⁷¹⁰⁷

In keeping with principles of digital inclusivity, the Strategy commits to applying AI toward elevating public services, pledging to "improve the

⁷¹⁰⁴ Socialist Republic of Viet Nam, Government News, *National Strategy on R&D and Application of Artificial Intelligence* (Mar. 17, 2021), https://en.baochinhphu.vn/national-strategy-on-rd-and-application-of-artificial-intelligence-11140663.htm

⁷¹⁰⁵ Ibid, I

⁷¹⁰⁶ Ibid, III(1)

⁷¹⁰⁷ Ibid, IV(4)

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operational efficiency of the public administrative management system in social resources allocation and mobilization, social management and urban planning, especially in big cities such as Hanoi and Ho Chi Minh City and Da Nang."⁷¹⁰⁸

Vietnam's AI strategy also forecasts plans to design AI applications in military and defense, including to modernize equipment and weapons and to develop operational plans and to deploy AI systems in "national security systems, immigration management systems, high-tech crime control systems, and [to] develop proactive technical solutions to prevent crimes using scientific achievements on AI."7109

Vietnam's strategy does not mention creating AI aligned with the principles of fairness and accountability. However, the Prime Minister's Decision on the National Strategy suggests plans that AI systems can promote greater transparency for consumers with the pledge to "Promote AI applications in agricultural hi-tech production, in order to improve intelligence, automate production processes, improve productivity and quality of agricultural products, ensure transparent production process, origin, and clean food supply for consumers." 7110

Public Participation

Vietnam's AI strategy does not mention any structured process for public participation in the development of AI policy. As noted, the strategy tasks the Ministry of Public Security with devising a legal structure that places "people and entrepreneurs at the center," yet there has been no indication of a formal opportunity for the public to give feedback on potential AI regulations since the release of the strategy. AI policies and updates are accessible to the public on the Ministry of Information and Communications' "Document" and "Data, Reports" pages, including a section on draft legal documents open for consultation. Titl Vietnam's Ministry of Science and Technology leads the annual Vietnam Artificial Intelligence Day (AI4VN), a forum for sharing AI research and innovations that support sustainable development. AI4VN promotes discussions on how AI can drive Vietnam's digital transformation. The venue aligns with Vietnam's AI development plan (2018-2025), which aims to boost economic growth through AI innovation, produce "Made-in-Vietnam" AI products, and build a skilled technical workforce, especially in AI.

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⁷¹⁰⁸ Ibid, II(1)(c)

⁷¹⁰⁹ Ibid, IV(3–4)

⁷¹¹⁰ Socialist Republic of Vietnam Government News, *National Strategy on R&D and Application of Artificial Intelligence* (Mar. 17, 2021), https://en.baochinhphu.vn/national-strategy-on-rd-and-application-of-artificial-intelligence-11140663.htm

⁷¹¹¹ Ministry of Information and Communication, *Consulting People on Draft Legal Documents*, https://mic.gov.vn/van-ban-phap-luat/y-kien-nguoi-dan.htm

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Public consultation opportunities have been more visible in data protection laws. A draft Personal Data Protection Bill was issued for public consultation on February 9, 2021. 7112 The ratified data protection law, Decree No. 53, which aimed to boost cybersecurity in Vietnam, went into effect on October 1, 2022; yet no evidence was available regarding whether or how public participation meaningfully contributed to the recent data privacy legislation. The first draft of a new Law on Personal Data Protection and was open for public consultation for nearly three months in 2024. The

Data Protection

While Vietnam has not yet enacted a comprehensive data protection law, the country's constitution includes provisions identifying rights pertaining to personal data. As per article 21 of the Constitution of Vietnam, "everyone is entitled to the inviolability of personal privacy, personal secrecy, and familial secrecy and has the right to protect his or her honor and prestige." Several related laws and regulations also exist.

The Vietnamese government ratified a Law on Cybersecurity, Decree No. 53/2022/ND-CP ("Decree 53/2022") inAugust 2022 which became fully effective inOctober 2022.⁷¹¹⁶ In keeping with OECD Principle 1.4 on "robustness, security, and safety," the law prescribes measures aimed at shoring up data security and restricting illegal activities, in part via a "data localization" requirement mandating that foreign entities store certain categories of data pertaining to users in Vietnam within the country's borders. However, there is insufficient infrastructure to prevent cybersecurity and digital rights violations of Vietnamese

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 $\underline{https://rouse.com/insights/news/2022/vietnam-s-personal-data-protection-decree-recent-developments-and-what-to-expect}$

⁷¹¹² Yen Vu and Eunjung Han, *Vietnam's Personal Data Protection Decree: Recent Developments & What to Expect* (March 10, 2022),

⁷¹¹³ Viet Nam Government Portal, *Elaborating a Number of Articles of the Law on Cybersecurity in Viet Nam* (Aug. 15, 2022), https://thuvienphapluat.vn/van-ban/EN/Cong-nghe-thong-tin/Decree-53-2022-ND-CP-elaborating-the-Law-on-cybersecurity-of-Vietnam/527750/tieng-anh.aspx

⁷¹¹⁴ Government Electronic Information Portal, *Draft Law on Personal Data Protection* (Sept. 24, 2024), https://chinhphu.vn/du-thao-vbqppl/du-thao-luat-bao-ve-du-lieu-ca-nhan-6957

⁷¹¹⁵ International IDEA, *The Constitution of the Socialist Republic of Vietnam* (2013), Unofficial Translation from Vietnamese,

 $[\]underline{https://constitutionnet.org/sites/default/files/tranlation} \underline{of} \underline{vietnams} \underline{new} \underline{constitution} \underline{enuk} \underline{2.p} \underline{df}$

⁷¹¹⁶ Socialist Republic of Vietnam, *Decree: Elaborating a Number of Articles on the Law on Cybersecurity of Vietnam* (Nov. 7, 2022), https://thuvienphapluat.vn/van-ban/EN/Cong-nghe-thong-tin/Decree-53-2022-ND-CP-elaborating-the-Law-on-cybersecurity-of-Vietnam/527750/tieng-anh.aspx

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citizens.⁷¹¹⁷ Also, as indicated in this report, there is State-sponsored espionage and surveillance that infiltrates the digital real estate of Vietnamese citizens.⁷¹¹⁸ Citizens of Vietnam remain both a source and victim of cyberattacks. In 2019, Kaspersky, a leading cybersecurity firm declared Vietnam the "second most cyber-attacked country in the world."7119 In 2018, over 992,952 cyberattacks originated in Vietnam.⁷¹²⁰

Data protection norms have additionally been developed through other laws, notably the 2016 Law on Network Information Security ("LNIS"). 7121 This law assigns organizations the responsibility of protecting the personal data to which they are given access and identifies legal consequences for individuals and organizations that violate these provisions. Section 2 of the law stipulates a requirement of consent from individuals when organizations collect personal information (Article 17), and explicitly requires the deletion of personal data upon accomplishment of the purpose (Article 18). Sanctions punishing violations of personal data use can also be found in other regulations. For example, Vietnam's 2020 Decree No.15/2020/ND-CP assigns fines for infringements of personal information and privacy including email, postal and telephonic spam. 7122

None of these data protection rules apply to the state itself. While the new law requiring data localization may indeed strengthen cybersecurity, it also provides the Vietnamese government with additional authoritarian leverage, cementing restrictions on residents' access to international media, social media, and other applications.⁷¹²³

Vietnam's landscape of data governance is a collage of legal instruments variously reflected in the country's constitution, criminal code, civil code, and a raft of sectoral and procedural regulations. The Ministry of Public Security's

https://asiasociety.org/sites/default/files/inline-

files/ASPI RaisingStandards report fin web 0.pdf

⁷¹¹⁷ Elina Noor and Mark Bryan Manantan, Raising Standards: Data and Artificial Intelligence in Southeast Asia, Asia Society Policy Institute (July 2022),

⁷¹¹⁸ Ibid

⁷¹¹⁹ Anh, Vietnam Both Victim and Source of Massive Cyberattacks, VN Express International (Jan. 23, 2019), https://e.vnexpress.net/news/news/vietnam-both-victim-and-source-of-massivecyber-attacks-3872863.html

⁷¹²⁰ Ibid

⁷¹²¹ Institute for Democracy and Electoral Assistance, The Constitution of the Socialist Republic of Vietnam (2013),

https://constitutionnet.org/sites/default/files/tranlation of vietnams new constitution enuk 2.p

⁷¹²² Tran Luu, Vietnam to Impose Heavy Sanctions to Protect Personal Data (Feb. 21, 2022), https://www.sggpnews.org.vn/science_technology/vietnam-to-impose-heavy-sanctions-toprotect-personal-data-97448.html

Freedom House, Freedom in the World 2022: The Global Expansion of Authoritarian Rule (Nov. 10, 2022), https://freedomhouse.org/country/vietnam/freedom-world/2022

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(MPS) much-anticipated Draft Decree on Personal Data Protection ("draft PDPD") and the Draft Decree on Sanctions against Administrative Violations in Cybersecurity ("draft cybersecurity decree") constitute the Vietnamese government's ambitious effort at consolidating its numerous regulations into one comprehensive law.

The Vietnamese Government issued Resolution 13 to formally approve all the Personal Data Protection Decree (PDPD) formulation dossier, including the draft decree's content, as well as to seek appraisal comments from the National Assembly Standing Committee (NASC) on the draft decree. Resolution 13 signifies the upcoming issuance of the PDPD.⁷¹²⁴

One of the significant developments out of Resolution 13 is that until then the Vietnamese law, including the prior published version of the Draft PDPD, had never used the terms "data controller," "data processor," or "parties controlling and processing personal data." According to Tilleke & Gibbins, 7125 the inclusion of these terms suggests that the latest version of the Draft PDPD has adopted the GDPR-like concepts of "data controller" and "data processor." However, until the latest version of the Draft PDPD can be assessed, it is uncertain how these concepts are defined and whether they are fully in line with GDPR definitions, let alone rights and obligations. 7126

Vietnam does not have a dedicated data protection agency. On September 24, 2024, Vietnam issued the first draft of its new Personal Data Protection Law (Draft PDPL), which was open for public consultation until November 24, 2024. The draft is expected to be presented to the National Assembly before the end of 2024 and submitted for adoption in May 2025, with a tentative entry into force on January 1, 2026. The new draft recognizes new data protection services, aiming to build trust and provide sector-specific regulations on personal data protection. 7127

Algorithmic Transparency

Vietnam's AI strategy commits to the development of a legal infrastructure that will uphold "privacy protection, human rights, security related to the development and application of AI," yet there is no mention in either this or other

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⁷¹²⁴ Tran MH, *Vietnam: Latest Updates on the Draft Personal Data Protection Draft Decree*, via Connect Tech (Feb. 2023), https://www.connectontech.com/vietnam-latest-updates-on-the-draft-personal-data-protection-draft-decree/

⁷¹²⁵ Tilleke & Gibbins. *Vietnam's Personal Data Protection Decree Takes Important Step Toward Issuance* (Feb. 8, 2023), https://www.tilleke.com/insights/vietnams-personal-data-protection-decree-takes-important-step-toward-issuance/

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⁷¹²⁷ Government Electronic Information Portal, *Draft Law on Personal Data Protection* (Sept. 24, 2024), https://chinhphu.vn/du-thao-vbgppl/du-thao-luat-bao-ve-du-lieu-ca-nhan-6957

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official documents of a pledge to ensure algorithmic transparency. 7128 It remains to be seen what whether the final provisions of the PDPD will guarantee this right once adopted.

In June 2024, Vietnam's Ministry of Science and Technology introduced voluntary guidelines to set out general principles for the research and development of responsible AI systems, known as Decision No. 1290. Deputy Minister Bui The Duy noted these principles are a starting point and will require coordination with many other ministries. The Ministry developed the guidelines in the "spirit of cooperation, promoting innovation, transparency, controllability, safety, security, privacy, respect for human rights and dignity, and accountability."7129 The Decision lacks enforceable measures, so there is no legal obligation for transparency or accountability in algorithmic decisions impacting individuals. While Vietnam's 2021 National Strategy on AI supports human-centered, responsible AI, it does not guarantee public access to information on AI decisions or provide recourse for algorithmic harm.⁷¹³⁰

Based on the Freedom House Country Report on Vietnam, 7131 the government uses a variety of legislative machinery to acquire citizens' personal data and engineer sophisticated forms of mass surveillance. These include the Cybersecurity Law 2019, the Publishing Law, the Penal Code, the Law on Protection of State Secrets 2018, the Law on Information Security 2016, and a number of decrees. One notable example is Bluezone, a tracking application ostensibly introduced to control COVID-19. Freedom House reports that the application "shared user data with the government without disclosing that fact to users. The source code was not made available for external auditing. In late May 2021, the Ministry of Health issued an instruction to local governments that recommended sanctioning people who did not install Bluezone and other COVID apps before entering certain public places and facilities; local authorities were tasked with determining the specific sanction. As of May 2021, Bluezone had reached 31.88 million downloads." The report also cites examples of Statesupported phishing attacks to acquire the personal data of citizens, especially

https://en.baochinhphu.vn/national-strategy-on-rd-and-application-of-artificial-intelligence-11140663.htm

https://en.baochinhphu.vn/national-strategy-on-rd-and-application-of-artificial-intelligence-11140663.htm

⁷¹²⁸ Socialist Republic of Viet Nam, Government News, National Strategy on R&D and Application of Artificial Intelligence (Mar. 17, 2021),

⁷¹²⁹ Ministry of Science and Technology, Vietnam Makes Efforts to Promote Responsible AI Development (Aug. 8, 2024), https://most.gov.vn/en/news/881/vietnam-makes-efforts-topromote-responsible-ai-development.aspx
7130 Socialist Republic of Viet Nam, Government News, National Strategy on R&D and Application of Artificial Intelligence (Mar. 17, 2021),

⁷¹³¹ Freedom House, Freedom on the Net 2024: Vietnam (2024), https://freedomhouse.org/country/vietnam/freedom-net/2024

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dissidents and activists. No right to algorithmic transparency exists to allow citizens to obtain judicial redress, should it be a possibility.

Rice ATMs

In the early months of the COVID-19 lockdown in 2020, a business leader in Vietnam partnered with community organizations to deploy "rice ATMs" (automatic rice-dispensing machines) enabled with AI-facial recognition technology to ration food to people in need.⁷¹³² This program was widely publicized internationally, credited as an instance of applying advanced technology towards resolving basic human needs during this public health crisis.⁷¹³³ This popular program reportedly helped cement a benign view of AI and facial recognition technology within the country's population.⁷¹³⁴

Smart City Initiatives

Vietnam's "smart city" initiative began as a directive from the prime minister in 2018 to promote sustainable cities. The country's 2021 national AI strategy elaborated on this plan, promising substantial AI investments to upgrade and target resources in the country's most populous cities—namely Hanoi, Ho Chi Minh, Da Nang, and Can Tho—to benefit the quality of life and improve services ranging from energy distribution to traffic control to water supply to education. Vietnam's Ministry of Information and Communication released codified principles regarding the smart cities project, committing to "a people-centered approach [to] encourage the neutrality of technology [to] pilot new services with improvements based on the experience of users; [to] use open standards or open sources." The OECD AI Policy Observatory has identified the smart cities

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⁷¹³² Elina Noor and Mark Bryan Manantan, *Raising Standards: Data and Artificial Intelligence in Southeast Asia*, Asia Society Policy Institute (Jul. 2022),

https://asiasociety.org/sites/default/files/inline-

files/ASPI RaisingStandards report fin web 0.pdf

⁷¹³³ Tuyet-Ang Le, Kelly Vodden, Jianghua Wu, and Ghada Atiwesh, *Policy Responses to the COVID-19 Pandemic in Vietnam*, Int. J. Environ. Res. Public Health, p. 559 (Jan. 11, 2021), https://doi.org/10.3390/ijerph18020559

⁷¹³⁴ Klingler-Vidra, *Inclusive Innovation Policy for the Next Development Stage in Viet Nam*, United Nations Development Programme (UNDP) (Jul. 23, 2020),

 $[\]frac{https://www.undp.org/vietnam/publications/inclusive-innovation-policy-next-development-stage-viet-nam}{total vietnam/publications/inclusive-innovation-policy-next-development-stage-viet-nam}{total vietnam/publications/inclusive-innovation-policy-next-development-stage-viet-nam}{total vietnam/publications/inclusive-innovation-policy-next-development-stage-vietnam/publications/inclusive-innovation-policy-next-development-stage-viet-nam}{total vietnam/publications/inclusive-innovation-policy-next-development-stage-viet-nam}{total vietnam/publications/inclusive-innovation-policy-next-development-stage-viet-nam}{total vietnam/publications/inclusive-innovation-policy-next-development-stage-viet-nam}{total vietnam/publications/inclusive-innovation-policy-next-development-stage-viet-nam}{total vietnam/publications/inclusive-innovation-policy-next-development-stage-viet-nam}{total vietnam/publications/inclusive-innovation-policy-next-development-stage-viet-nam}{total vietnam/publication-policy-next-development-stage-viet-nam}{total vietnam/publication-policy-next-development-stage-vie$

⁷¹³⁵ Van Cuong, Nguyen, *The Emerging Legal Framework for Smart Cities in Vietnam*, Smart Cities in Asia. Springer, Singapore), pp. 79-90 (Nov. 11, 2022), https://link.springer.com/chapter/10.1007/978-981-19-1701-1

⁷¹³⁶ Viet Nam Government Portal, *ICT Reference Framework for Smart Urban Development* (Version 1.0) (May 31, 2019), https://thuvienphapluat.vn/van-ban/Xay-dung-Do-thi/Quyet-dinh-829-QD-BTTTT-2019-Khung-tham-chieu-ICT-phat-trien-do-thi-thong-minh-phien-ban-1-0-422873.aspx

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initiative as addressing its core principle 2.2, "Fostering a digital ecosystem for AI." Vietnam's smart city policies additionally echo OECD's core principle 1.1 pertaining to "inclusive growth, sustainable development, and wellbeing." Alongside these potentially vast benefits, however, there are credible reasons for concern that the smart cities project will include surveillance technologies that will further the government's capacity for authoritarian control.⁷¹³⁷

Aus4Innovation: Innovation Policy Exchange with Australia

In 2017, Australia and Vietnam announced an "innovation partnership" named "Aus4Innovation", aimed at building prosperity within Vietnam and furthering a strategic and economic partnership between the two countries. Currently overseen by CSIRO, the Australian Government agency responsible for scientific research, Aus4Innovation includes a notable "policy exchange", aimed at helping Vietnam "bring up the living standards of all of [its] citizens over the coming decades", while setting the stage for Australia to be a source of policy influence in establishing "an international best practice review based on expert input from Australia."⁷¹³⁸ The OECD AI Policy Observatory has identified Aus4Innovation as representing an instance of its core principle 2.5, "International cooperation for trustworthy AI."⁷¹³⁹ The Aus4Innovation Program also supported 2022 Vietnam Artificial Intelligence Day, (AIV4N), a conference that brings together government representatives, policymakers, and practitioners to discuss the latest development in Vietnam's AI landscape.⁷¹⁴⁰

The Australian Government's Aus4Innovation program was reported to have awarded A\$1.45 million to strengthen Vietnam's agriculture sector through advanced technologies in August 2024. Managed by CSIRO, the initiative funds three projects focusing on sustainable farming and climate resilience. The projects integrate artificial intelligence, geospatial tools, and digital traceability systems to boost agricultural productivity and market development. For example, the Griffith University and Hanoi University of Science & Technology are creating an AIdriven platform for carbon farming. Additionally, AI-powered certification

https://research.csiro.au/aus4innovation/activities/policy-exchange-program/

⁷¹³⁷ Freedom House, *Freedom in the World 2022: The Global Expansion of Authoritarian Rule* (Nov. 10, 2022), https://freedomhouse.org/country/vietnam/freedom-world/2022

⁷¹³⁸ CSIRO, Aus4Innovation Policy Exchange (Nov. 11, 2022),

⁷¹³⁹ OECD AI Policy Observatory, *Aus4Innovation (Australia and Vietnam)* (Jul. 4, 2024), https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faipo.oecd.org%2F2021-data-policyInitiatives-26842

⁷¹⁴⁰ Darmaraj, *Vietnam Ministry of Science and Technology Unveils AI4VN* (Sept. 26, 2022), https://opengovasia.com/vietnam-ministry-of-science-and-technology-unveils-ai4vn/

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systems by Griffith University and Vietnam's Commission of Standards aim to enhance sustainability and product traceability. 7141

Public Security and Identity Verification

Since April 2021, the Inspection Commissions of Party organizations at all levels in the People's Public Security Forces have been required to build action plans to realize the Party resolutions regarding digital technology, artificial intelligence, and the 4th Industrial Revolution, contributing to building elite and modern public security forces by 2030.⁷¹⁴²

In December 2022, Deputy Minister Luong Tam Quang asked the Immigration Department to deploy 37 level 4 public services related to entry and exit, perfect the issuance of electronic passports, and promote research and application of science and technology, artificial intelligence, and biometric identification to the management of entry and exit.⁷¹⁴³

Vietnam's Ministry of Public Security expanded biometric data collection for the national ID system, including iris scans, voice samples, and DNA, under the Amended Law on Citizen Identification (2023) to enhance national security. 7144 Vietnam has also trialed facial recognition for immigration, aiming to streamline identity verification for travelers, mandated by a 2024 directive on tourism and immigration. Additionally, facial recognition is used for digital payment verification as part of Vietnam's digital transformation efforts. However, limited privacy protections raise concerns about potential misuse or overreach in state surveillance.7145

Predictive Policing

In its July 2022 report on inclusive development and artificial intelligence in Southeast Asia, the Asia Society Policy Institute notes, if AI adoption is "nascent" in Vietnam, "the topic of ethics in relation to AI has barely begun to

⁷¹⁴¹ CSIRO, Australian-Vietnamese Collaborations Secure \$1.45 Million to Advance Agricultural Innovation (Aug. 8, 2024),

https://www.csiro.au/en/news/all/news/2024/august/australian-vietnamese-collaborations-securegrant-to-advance-agricultural-innovation

⁷¹⁴² Ministry of Public Security Of Socialist Republic of Vietnam, Deputy Minister Luong Tam Quang Attends Year-End Conference of the Immigration Department (Dec. 27, 2022), https://en.bocongan.gov.vn/news-events/deputy-minister-luong-tam-quang-attends-year-endconference-of-the-immigration-department-t9637.html

⁷¹⁴³ Ibid

⁷¹⁴⁴ Socialist Republic of Viet Nam Government News, Viet Nam to Collect Biometric Information for Identification in July (Feb. 19, 2024), https://en.baochinhphu.vn/viet-nam-tocollect-biometric-information-for-identification-from-july-111240219111759363.htm

⁷¹⁴⁵ Lien Hoang, Vietnam Requires Facial Recognition for Digital Payments, Nikkei Asia (Jul. 12, 2024), https://asia.nikkei.com/Business/Technology/Vietnam-requires-facial-recognition-fordigital-payments

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percolate in the country."⁷¹⁴⁶ The institute highlights with particular concern Vietnam's stated plans to use AI applications in policing and immigration, "to proactively prevent crimes," with the implication that Vietnam intends to apply surveillance technologies in developing predictive policing. The Asia Society Policy Institute report summarizes, "While there is some degree of recognition in Vietnam of the importance of AI ethics, their formulation and application remain underexplored."

EdTech and Children Tracking

Human Rights Watch conducted an analysis of education technology (EdTech) products between March and August 2021 on the prevalence and frequency of tracking technology embedded in each product. This report is a global investigation of EdTech products endorsed by 49 governments for children's online education learning during the Covid-19 pandemic. Vietnam was one of the 49 countries analyzed.

Of 65 EdTech products built or financed by governments, the majority—56, or 86 percent—were found transmitting children's data to AdTech companies, according to a report. Included in the 56 government-built EdTech products is Vietnam's OLM, which was also noted to have failed to offer any privacy policy at all, thus keeping students in the dark about how the government was handling their personal data and privacy.⁷¹⁴⁷

Environmental Impact of AI

There is no evidence that Vietnam has developed or introduced new regulations aimed at governing the environmental impacts of emerging technologies, including AI. The National AI Strategy includes the management of environmental and natural resources among potential applications for AI systems but does not acknowledge the environmental impact of developing and deploying such systems.⁷¹⁴⁸

https://asiasociety.org/sites/default/files/inline-

files/ASPI RaisingStandards report fin web 0.pdf

⁷¹⁴⁶ Elina Noor and Mark Bryan Manantan, *Raising Standards: Data and Artificial Intelligence in Southeast Asia*, Asia Society Policy Institute (Jul. 2022),

⁷¹⁴⁷ Human Rights Watch, *How Dare They Peep into My Private Life* (May 25, 2022), https://www.hrw.org/report/2022/05/25/how-dare-they-peep-my-private-life/childrens-rights-violations-governments#6693

⁷¹⁴⁸ Socialist Republic of Viet Nam, Government News, National Strategy on R&D and Application of Artificial Intelligence, 1(3), 1V(14) (Mar.

 $[\]frac{_{17,\,2021),}}{https://en.baochinhphu.vn/national-strategy-on-rd-and-application-of-artificial-intelligence-11140663.htm}$

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Human Rights

Vietnam has been designated as "Not Free" by Freedom House, scoring 19 out of 100 in the think tank's "freedom in the world" metrics, with particularly low marks (4 out of 40) for "political rights", and a low score (15 out of 60) for metrics pertaining to "civil liberties." As the most recent Freedom House global report elaborates, "freedom of expression, religious freedom, and civil society activism are tightly restricted" within Vietnam, with leaders having increasingly "cracked down on citizens' use of social media and the internet to voice dissent and share uncensored information." Vietnam's data protection laws, requiring "data localization" within the country's borders for a range of applications, additionally restricts residents' ability to access information and media from abroad. Freedom House further ranks Vietnam 22 out of 100, "Not Free," in its Freedom on the Net Report for 2024. This was attributed primarily to State restrictions over content access and its escalation of digital surveillance and harassment of digital activists. 7150

OECD / G20 AI Principles

Although Vietnam endorsed the 2019 OECD AI Principles, it has not yet endorsed the 2024 OECD AI Principles. For example, OECD AI Principle 1.2, "AI systems should be designed in a way that respects the rule of law, human rights, democratic values, and diversity and should include appropriate safeguards to ensure a fair and just society." The Vietnam AI Strategy endorses "developing and applying AI with people... at the center, avoiding technology abuse and infringement upon legitimate rights and interests of organizations and individuals," and pledges to "develop and supplement additional legal documents on privacy protection, human rights, security related to the development and application of AI and on ensuring network security for AI-related activities."

Vietnam most robustly endorses a version of OECD AI principle 2.1, "Governments should facilitate public and private investment in research and development to spur innovation in trustworthy AI."⁷¹⁵³ Vietnam's AI Strategy

https://freedomhouse.org/country/vietnam/freedom-net/2024

⁷¹⁵² OECD AI Policy Observatory, *OECD AI Principles* (Dec. 5, 2024),

https://oecd.ai/en/dashboards/ai-principles/P6

⁷¹⁴⁹ Freedom House, Freedom in the World 2024: Vietnam (2024),

https://freedomhouse.org/country/vietnam/freedom-world/2024 7150 Freedom House, *Freedom on the Net 2024: Vietnam* (2024),

⁷¹⁵¹ OECD AI Policy Observatory, *OECD AI Principles Overview, Countries Adhering to the AI Principles* (Dec. 5, 2024), https://oecd.ai/en/ai-principles

⁷¹⁵³ OECD AI Policy Observatory, *Investing in AI research and development (Principle 2.1)* (Nov. 4, 2022), https://oecd.ai/en/dashboards/ai-principles/P10

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document mirrors this language in its pledge to establish "national innovation centers for AI; increasing the number of innovative AI startups and total investment in the AI sector in Vietnam...[to] focus the public investment in forming mutually used, shared and open administrative databases."

The OECD AI Policy Observatory report on Vietnam's AI policies highlights the country's investment in Ho Chi Minh as a Smart City beginning in 2017 as marking the implementation of OECD AI Principle 2.2, "Fostering a digital ecosystem for AI: Governments should foster accessible AI ecosystems with digital infrastructure and technologies, and mechanisms to share data and knowledge." The report elaborates, "Ho Chi Minh (HCM) City is being transformed into a smart city and will develop blockchain infrastructure to minimize potential risks...to help the City deal with problems such as rapid population growth and inadequate healthcare, education, and transport services....; to ensure sustainable economic growth, taking the City towards a digital, knowledge-based economy and attracting investments."

Additionally, the OECD AI Policy Observatory has identified Vietnam's partnership with Australia, which includes a significant policy exchange component, as an instance of its core principle 2.5 pertaining to "international cooperation for trustworthy AI." 7156

UNESCO Recommendation on AI Ethics

Vietnam endorsed the UNESCO Recommendation on the Ethics of AI, together with other UNESCO member states.⁷¹⁵⁷ However, there is no evidence so far that Vietnam has developed policies or oversight mechanisms to support the implementation of the UNESCO Recommendation beyond data protection. However, as of October 2024, Vietnam is in the process of implementing UNESCO macro-tool, AI Readiness Assessment Methodology (RAM).⁷¹⁵⁸

Fvaluation

In March 2021, the Prime Minister's Office released its formal AI strategy for the next decade. The government of Vietnam pledged that the nation would

⁷¹⁵⁴ OECD AI Policy Observatory, *Fostering a digital ecosystem for AI (Principle 2.2)*, (Nov. 4, 2022), https://oecd.ai/en/dashboards/ai-principles/P11

⁷¹⁵⁵ OECD AI Policy Observatory, *Ho Chi Minh Smart City* (Nov. 7, 2022), https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faipo.oecd.org%2F2021-data-policyInitiatives-26957

⁷¹⁵⁶ OECD AI Policy Observatory, *Aus4Innovation* (Nov. 12, 2022), https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faipo.oecd.org%2F2021-data-policyInitiatives-26843

⁷¹⁵⁷ UNESCO Recommendations on Ethics of AI (2021) https://en.unesco.org/artificial-intelligence/ethics

⁷¹⁵⁸ UNESCO Global AI Ethics and Governance Observatory, *Global Hub: Readiness Assessment Methodology* (Oct. 2024), https://www.unesco.org/ethics-ai/en/global-hub

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become an innovation leader in AI technology within the ASEAN nations, promising to apply AI towards the betterment of its citizens and to devise a system of laws and regulations that would prevent "abuse and infringement upon legitimate rights and interests of organizations and individuals," as well as pledging to develop "legal documents on privacy protection, human rights [...] for AI-related activities."7159 Since then, Vietnam has continued to invest in programs within the country, including international partnerships aimed at improving its technological leadership and promoting the industry both domestically and abroad. However, there is little evidence that the country has made progress in establishing a framework that would protect human rights with respect to this rapidly advancing technology. Perhaps the most salient risk is that AI may be used to further authoritarian rule. As Freedom House reported recently in the designation of Vietnam as "Not Free," "authorities have increasingly cracked down on citizens' use of social media and the internet to voice dissent and share uncensored information."7160 The Asia Society Policy Institute notes, Vietnam's commitment to applying AI to "proactively prevent crimes' begs further discussion about the implications of surveillance technologies, algorithmic processes, and quality of datasets for predictive policing purposes."⁷¹⁶¹ Freedom House reports that Vietnam has imprisoned human rights defenders and citizens for their internet use while restricting access to information.⁷¹⁶² In these circumstances, it remains to be seen which concrete steps Vietnam will take to implement the UNESCO Recommendation on AI Ethics beyond the Readiness Assessment.

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⁷¹⁵⁹ Socialist Republic of Viet Nam, Government News, *National Strategy on R&D and Application of Artificial Intelligence* (Mar. 17, 2021), https://en.baochinhphu.vn/national-strategy-on-rd-and-application-of-artificial-intelligence-11140663.htm

⁷¹⁶⁰ Freedom House, *Freedom in the World 2024: Vietnam* (2024), https://freedomhouse.org/country/vietnam/freedom-world/2024

⁷¹⁶¹ Elina Noor and Mark Bryan Manantan, *Raising Standards: Data and Artificial Intelligence in Southeast Asia* (July 2022), https://asiasociety.org/sites/default/files/inline-files/ASPI RaisingStandards report fin web 0.pdf

⁷¹⁶² Freedom House, Freedom on the Net 2024: Vietnam (2024),

https://freedomhouse.org/country/vietnam/freedom-net/2024

COUNTRY EVALUATIONS

Evaluation Grid

Country	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Score	Tier
Argentina	Υ	Р	Υ	Υ	Р	Р	Υ	Р	Υ	N	Υ	Υ	9.0	П
Australia	Υ	Р	Υ	Υ	Υ	Υ	Υ	Р	Р	N	Р	Р	8.5	Ш
Austria	Υ	Р	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Р	N	N	9.0	П
Azerbaijan	N	N	Υ	N	N	N	N	N	N	N	N	N	1.0	V
Bahrain	N	N	Υ	Р	Р	Р	Р	N	N	N	N	N	3.0	V
Bangladesh	N	N	Υ	Р	Р	Υ	N	Υ	N	N	N	N	4.0	v
Belgium	Υ	Р	Υ	Υ	Υ	Υ	Р	Υ	Υ	Р	Р	Р	9.5	П
Brazil	Υ	Р	Υ	Υ	Υ	Υ	Р	Р	Р	N	Υ	N	8.0	Ш
Canada	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Р	Υ	Υ	Υ	11.5	ı
Chile	Υ	Р	Υ	Υ	Υ	Р	N	Υ	Р	N	Υ	N	7.5	Ш
China	Υ	Р	Υ	N	Р	Р	Р	Р	Υ	N	N	Р	6.0	IV
Colombia	Υ	Р	Υ	Υ	Υ	Υ	Υ	Υ	Р	N	Р	Р	9.0	II

Country	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Score	Tier
Costa Rica	, , , , , , , , , , , , , , , , , , ,		V	V		V				N.	V	N	7.5	
Costa Rica	Υ	Р	Υ	Υ	Р	Υ	Р	Р	Р	N	Υ	N	7.5	III
Czechia	Y	Р	Υ	Υ	Υ	Р	Υ	Υ	Р	Р	Р	N	8.5	Ш
Denmark	Υ	Р	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Р	N	N	9.0	П
Dominican Republic	N	Р	Υ	P	P	Р	P	P	N	N	P	N	4.5	V
Egypt	Υ	Р	Υ	N	N	Υ	N	Υ	Р	N	Р	N	5.5	IV
Estonia	Υ	Р	Υ	Υ	Υ	Υ	Υ	Р	Υ	Р	Р	N	9.0	II
Ethiopia	N	Р	Υ	Р	Р	N	Р	Р	Р	N	Р	Р	5.0	IV
Finland	Υ	Р	Υ	Υ	Υ	Υ	Υ	Р	Υ	Р	N	N	8.5	Ш
France	Υ	Υ	Υ	Υ	Р	Υ	Υ	Р	Υ	Р	Р	Р	9.5	II
Germany	Υ	Р	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Р	Р	Р	10.0	II
Ghana	N	Р	Υ	Υ	Р	N	Р	Р	N	N	Р	N	4.5	V
Hong Kong	N	Р	Υ	Р	Р	Υ	Υ	Υ	Υ	N	N	Р	7.0	III

Country	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Score	Tier
Hungary	Υ	Р	Υ	Р	Р	Υ	Р	Υ	Υ	Р	N	Р	8.0	III
India	Υ	Р	Υ	Р	Υ	Р	Р	Р	Р	N	Р	N	6.5	IV
Indonesia	N	Р	Υ	Р	Р	Υ	N	Υ	Р	N	Р	N	5.5	IV
Iran	N	N	Υ	N	N	Р	N	Р	N	N	N	N	2.0	V
Ireland	Υ	Р	Υ	Υ	Υ	Υ	Р	Р	Υ	Р	Р	Р	9.0	II
Israel	Υ	Р	Υ	Υ	Υ	Υ	Р	Р	Υ	Υ	N	Р	9.0	II
Italy	Υ	Р	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Р	Р	Р	10.0	II
Jamaica	N	Р	Υ	Υ	Р	Р	Р	Р	Υ	N	Р	N	6.0	IV
Japan	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Р	Υ	Υ	Υ	11.5	I
Kazakhstan	N	N	Υ	N	N	Р	N	Р	N	N	N	N	2.0	V
Kenya	N	Р	Υ	Р	Υ	Υ	Р	Р	Р	N	Р	N	6.0	IV
Korea	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Р	10.5	I

Country	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Score	Tier
Kuwait	N	N	Υ	Р	N	Р	N	Р	N	N	N	N	2.5	V
Lithuania	Υ	Р	Υ	Υ	Р	Υ	Υ	Υ	Υ	Р	Р	N	9.0	II
Luxembourg	Υ	Р	Υ	Υ	Υ	Υ	Р	Υ	Р	Р	Р	N	8.5	Ш
Malaysia	N	N	Υ	Р	Р	Υ	Р	Υ	N	N	Р	N	5.0	IV
Malta	Υ	Р	Υ	Υ	Р	Υ	Υ	Р	Υ	Р	N	Р	8.5	III
Mauritius	N	Р	Υ	Υ	Р	Р	Υ	Р	Υ	N	Р	N	6.5	IV
Mexico	Υ	Р	Υ	Р	Р	Р	Υ	Р	Υ	N	Υ	Р	8.0	Ш
Morocco	N	Р	Υ	Р	Р	N	Р	N	Υ	N	Υ	Р	5.5	IV
Myanmar	N	N	Υ	N	N	N	N	N	N	N	N	N	1.0	>
Netherlands	Υ	Р	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Р	Υ	Р	10.5	I
New Zealand	Υ	Р	Υ	Y	Р	Υ	Υ	P	Р	N	N	Р	7.5	III
Nigeria	N	Р	Υ	Р	Р	Υ	Р	Р	Υ	N	Р	N	6.0	IV

Country	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Score	Tier
Norway	Υ	Р	Υ	Υ	Р	Υ	Υ	Υ	Υ	Υ	N	Р	9.5	II
Pakistan	N	N	Υ	Р	Р	Υ	N	Р	N	N	N	N	3.5	V
Peru	Υ	Р	Υ	Р	Υ	Υ	Р	Р	Р	N	Р	N	7.0	III
Philippines	Υ	Р	Υ	Р	Υ	Υ	N	Υ	Υ	N	Р	Р	8.0	III
Poland	Υ	Р	Υ	Υ	Υ	Υ	Р	Р	Υ	Р	N	Р	8.5	III
Portugal	Υ	Υ	Υ	Υ	Υ	Р	Р	Υ	Υ	Р	Р	Р	9.5	II
Puerto Rico	Υ	Р	Υ	Υ	Υ	Р	N	N	N	Р	Р	N	6.0	IV
Qatar	N	N	Υ	Р	Р	Υ	Р	Р	Р	N	Р	N	5.0	IV
Russia	N	Р	Υ	N	N	Υ	Р	Р	Р	N	N	N	4.0	V
Rwanda	N	Р	Υ	N	Υ	Υ	Р	Р	Υ	N	Р	N	6.0	IV
Saudi Arabia	Υ	Р	N	N	Υ	Υ	Υ	Р	Υ	N	Υ	N	7.0	III
Senegal	Υ	N	Υ	Р	Р	Р	Р	N	Υ	N	Р	N	5.5	IV

Country	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Score	Tier
Serbia	Υ	Р	Υ	Р	Р	Υ	Υ	Р	Р	N	Р	N	7.0	Ш
Singapore	Υ	Р	Υ	Р	Υ	Υ	Р	Υ	N	N	N	N	6.5	IV
Slovenia	Υ	Р	Υ	Υ	Υ	Υ	Υ	Υ	Р	Р	Р	N	9.0	II
South Africa	Υ	Р	Υ	Υ	Υ	Υ	Υ	Р	Υ	N	Р	N	8.5	Ш
Spain	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Р	Р	N	10	II
Sweden	Υ	Р	Υ	Υ	Р	Υ	Υ	Υ	Р	Р	Р	N	8.5	Ш
Switzerland	Υ	Р	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	N	Р	9.0	II
Taiwan	N	Р	Υ	Υ	Υ	Υ	N	Υ	N	N	N	N	5.5	IV
Thailand	N	Р	Υ	Р	N	Р	N	Р	N	N	Р	N	3.5	V
Trinidad and Tobago	N	Р	Y	Y	P	Р	N	N	N	N	N	N	3.5	>
Tunisia	N	Р	Υ	N	Р	N	Υ	Р	Р	N	Р	N	4.5	V
Türkiye	Υ	Р	Υ	N	Р	Υ	Υ	Υ	Р	N	Р	N	7.0	III

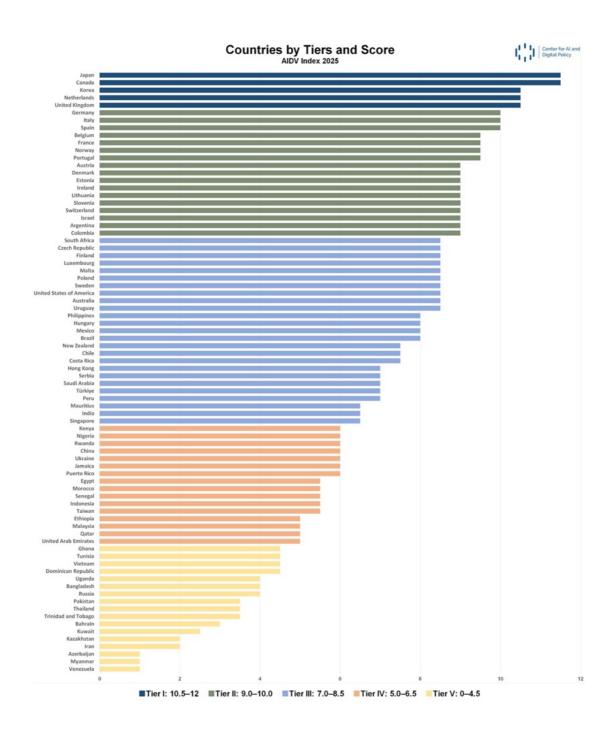
Country	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Score	Tier
Uganda	N	Р	Υ	N	Р	Р	Р	Р	N	N	Р	N	4.0	V
Ukraine	Υ	Р	Υ	Р	Р	Р	Р	Р	Р	N	Р	N	6.0	IV
United Arab Emirates	N	Р	Υ	N	Р	Υ	Р	Υ	N	N	Р	N	5.0	IV
United Kingdom	Υ	Р	Y	Υ	Υ	Υ	P	Υ	Υ	Υ	P	Υ	10.5	I
United States	Υ	Р	Υ	Υ	P	Υ	P	Υ	Р	Υ	P	N	8.5	III
Uruguay	N	Р	Υ	Υ	Υ	Υ	Υ	Р	Υ	N	Υ	Р	8.5	III
Venezuela	N	N	Υ	N	N	N	N	N	N	N	N	N	1.0	V
Vietnam	Р	Р	Υ	N	Р	Υ	N	N	Υ	N	N	N	4.5	V

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Country Rankings

	1		1	
TIER I	TIER 2	TIER 3	TIER 4	TIER 5
(High)		(Middle)		(Low)
Canada (11.5)	Germany (10.0)	Australia (8.5)	India (6.5)	Dominican Republic (4.5)
Japan (11.5) Korea (10.5)	Italy (10.0)	Czechia (8.5) Finland (8.5)	Mauritius (6.5)	Ghana (4.5)
Netherlands	Spain (10.0)	Luxembourg	Singapore (6.5)	Tunisia (4.5)
(10.5)	Belgium (9.5)	(8.5)	China (6.0)	Vietnam (4.5)
United Kingdom	France (9.5)	Malta (8.5)	Jamaica (6.0)	Bangladesh (4.0)
(10.5)	Norway (9.5)	Poland (8.5)	Kenya (6.0)	Russia (4.0)
	Portugal (9.5)	South Africa (8.5)	Nigeria (6.0)	Uganda (4.0)
	Argentina (9.0)	Sweden (8.5)	Puerto Rico	Pakistan (3.5)
	Austria (9.0)	United States of America	(6.0)	Thailand (3.5)
	Colombia (9.0)	(8.5)	Rwanda (6.0) Ukraine (6.0)	Trinidad and Tobago (3.5)
	Denmark	Uruguay (8.5)	Egypt (5.5)	Bahrain (3.0)
	(9.0)	Brazil (8.0)	Indonesia	Kuwait (2.5)
	Estonia (9.0)	Hungary (8.0)	(5.5)	Iran (2.0)
	Ireland (9.0)	Mexico (8.0)	Morocco (5.5)	Kazakhstan
	Israel (9.0)	Philippines (8.0)	Senegal (5.5)	(2.0)
	Lithuania (9.0)	Chile (7.5)	Taiwan (5.5) Ethiopia (5.0)	Azerbaijan (1.0)
	Slovenia (9.0)		Etinopia (5.0)	

Switzerland (9.0)	Costa Rica (7.5)	Malaysia (5.0) Qatar (5.0)	Myanmar (1.0)
	New Zealand (7.5)	United Arab Emirates (5.0)	Venezuela (1.0)
	Hong Kong (7.0)		
	Peru (7.0)		
	Saudi Arabia (7.0)		
	Serbia (7.0)		
	Türkiye (7.0)		

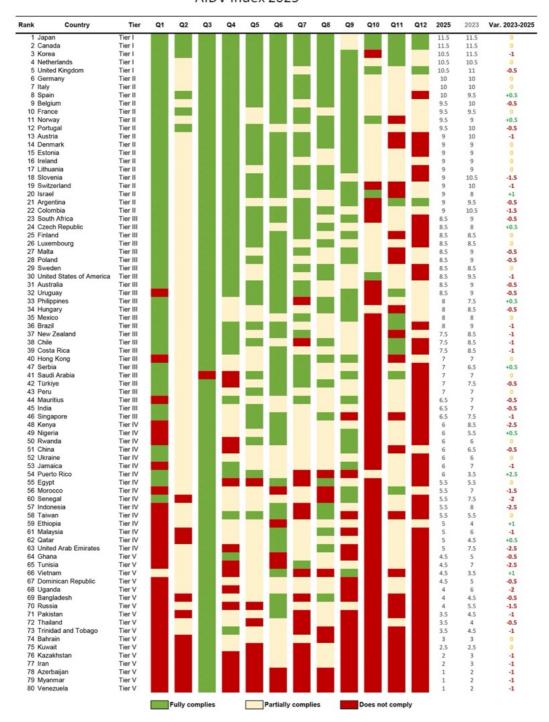


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Variations in Metric Scores 2023–2025



AIDV Index 2025



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Metrics

- Q1. Has the country endorsed the OECD AI Principles?
- Q2. Is the country implementing the OECD AI Principles?
- Q3. Has the country endorsed the Universal Declaration of Human Rights?
- Q4. Is the country implementing the Universal Declaration for Human Rights?
- Q5. Has the country established a process for meaningful public participation in the development of a national AI Policy?
- Q6. Are materials about the country's AI policies and practices readily available to the public?
- Q7. Does the country have an independent (agency/mechanism) for AI oversight?
- Q8. Do the following goals appear in the national AI policy: "Fairness," "Accountability," "Transparency," ("Rule of Law,") ("Fundamental Rights")? [implementation? = legal force? = enforcement?]
- Q9. Has the country by law established a right to Algorithmic Transparency? [GDPR? / COE+?]
- Q10. Has the country signed the Council of Europe AI Treaty?
- Q11. Is the country implementing the UNESCO Recommendation on the Ethics of AI?
- Q12. Has the country's Data Protection Agency sponsored the 2018 GPA Resolution on AI and Ethics, 2020 GPA Resolution on AI and Accountability, 2022 GPA Resolution on Facial Recognition, and 2023 GPA Resolution on Generative Artificial Intelligence Systems?

Response Codes

Y - Yes

N - No

P –Partly

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METHODOLOGY

Scope

We assessed the AI policies and practices of the top 40 countries by GDP. We looked at 40 additional countries we considered "high-impact" to make the AIDV Index representative of both the diversity and commonalities among countries worldwide in AI policies, issues encountered, and best practices. Our aim is to examine those countries likely to have the greatest policy impact in the AI field. We also considered influential intergovernmental organizations such as the European Union, Council of Europe, OECD, UNESCO, and G20. However, we did not attempt to evaluate these institutional AI policies.

Time Period

The research for the 2020 edition of the report was undertaken in late 2020 for publication in mid-December 2020. As the report has expanded, we have pushed publication later into year of release. For the 2021 edition of the report, published in mid-February 2022, we continued to gather information throughout 2021 and into early 2022. For the 2023 edition, information was gathered throughout 2022 and into early 2023. For AIDV 2025, we shifted the naming convention to reflect the year of publication. To the 2023 edition, we added information through 2023 and 2024, and activities in early 2025 that relate directly to metrics, such as endorsement of the Council of Europe AI Treaty.

Factors

We identified 12 factors to assess national AI policies and practices. The factors reflect well-known frameworks for AI policy (the OECD/G20 AI Principles, UNESCO Recommendation on the Ethics of AI, Council of Europe Framework Convention on AI), human rights (the Universal Declaration for Human Rights), and democratic decision-making (transparency, public participation, and access to policy documents). We also highlighted key themes for AI policy, including algorithmic transparency and accountability.

On certain factors, we deferred to well-established legal frameworks and well-known international organizations. For example, countries within the European Union are subject to the General Data Protection Regulation and the Data Protection Law Enforcement Directive, which provide certain rights to those who are subject to automated decision-making, including access to the underlying logic of an algorithm. The Council of Europe Modernized Convention 108 provides similar legal rights regarding AI. On general human rights assessments, we deferred to the reports of Freedom House, Human Rights Watch, and Amnesty

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International. We also recognized those countries that endorsed the resolution on AI and Ethics, the resolution on AI and Accountability, the resolution on facial recognition, and resolution on Generative AI adopted by the Global Privacy Assembly, the global association of leading privacy experts and officials.

On the issue of implementation, we recognize that it is difficult to assess empirically progress toward AI policy goals, particularly when the underlying objective is not measured in quantitative terms, as would be the case for research investment, papers published, or patents obtained. Nonetheless, we believe this must be a key component of the evaluation. We turned first to the OECD, which has begun a process to track implementation of the OECD AI Principles. The OECD published substantial reports on the state of implement of the OECD AI Principles in 2020, 2021,7163 and 2023.7164 The OECD has also encouraged member states to provide overviews on national AI strategies to the OECD AI Group of Experts. Many of these strategies and other AI-related documents and policies are accessible on the OECD AI Policy Observatory.

We looked next at national developments, both favorable and controversial, concerning the implementation of AI policy. We consulted official sources but also reviewed independent sources such as news sources, agencies, and think tanks not directly aligned with national governments for these assessments.

Finally, because AI policy is in the early days, there is far more information about what governments intend to do than what they have done. We encourage governments to establish independent agencies with annual public reporting requirements to provide information about progress toward national goals and compliances with international policy frameworks. Such reports could provide the basis for future comparative evaluations.

The Metrics

Q1. Has the country endorsed the OECD/G20 AI Principles?

The OECD/G20 AI Principles are the first global framework for AI policy. Endorsement of these principles provides a baseline to determine a country's compliance with international AI policy norms. Countries that have endorsed the OECD/G20 AI Principles fall into four categories: (1) OECD Member Countries, (2) Non-member OECD Countries that endorsed the OECD AI Principles, (3) G20

⁷¹⁶³ OECD, *State of Implementation of the OECD AI Principles* (Jun. 18, 2021), https://www.oecd.org/digital/state-of-implementation-of-the-oecd-ai-principles-1cd40c44-en.htm;

⁷¹⁶⁴ OECD, State of Implementation of the OECD AI Principles Four Years On (Oct. 27, 2023), https://www.oecd.org/en/publications/the-state-of-implementation-of-the-oecd-ai-principles-four-years-on 835641c9-en.html

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Member countries that subsequently endorsed the G20 AI Principles, which follow closely the original OECD AI Principles, ⁷¹⁶⁵ and (4) Members of the Global Partnership on Artificial Intelligence (GPAI), ⁷¹⁶⁶ which requires a commitment to the OECD AI Principles. ⁷¹⁶⁷

Determinations in this category are essentially binary: a country has either endorsed the OECD/G20 AI Principles or not.

Q2. Is the country implementing the OECD AI Principles?

Endorsement alone of the AI Principles is not sufficient to determine a country's AI practices. The OECD itself has begun a process to track implementation of the AI Principles, but the reporting to date is mostly anecdotal and inconclusive. We begin our analysis of implementation with the OECD reporting and then look to other sources, including government documents, news articles, and NGO reports to assess implementation.

Determinations in this category are more nuanced: some countries have called attention to their efforts to implement the OECD/G20 AI principles. Others have done so in practice without explicit references to the AI Principles. We have made reasonable efforts to identify national projects that implement the OECD/G20 AI Principles, based on reporting from the OECD, but information is often difficult to find. In some instances, we were able to acknowledge partial implementation (P). In 2020, we concluded that no country has fully implemented the OECD/G20 AI Principles and therefore no country received a Y determination. In 2021, we chose to recognize the leading role of four countries in the development and implementation of the OECD AI Principles – Canada, France, Korea, and Japan.

Q3. Has the country endorsed the Universal Declaration of Human Rights?

In the human rights field, the Universal Declaration of Human Rights is the most well-known and widely adopted legal framework for the protection of fundamental rights. Although the UDHR preceded the rise of Artificial Intelligence, we anticipated that many of the significant policy debates ahead will be grounded in principles set out in the Universal Declaration. For this reason, we propose endorsement of the UDHR as a second baseline to assess country AI policies and practices.

Determinations in this category are essentially binary: a country has either endorsed the UDHR or it has not. The one notable exception is Saudi Arabia,

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⁷¹⁶⁵ The G20 AI Principles directly restate the value-based principles in Part I of the OECD AI Principles

⁷¹⁶⁶ GPAI, Community (2024), https://gpai.ai/community/

⁷¹⁶⁷ OECD, Global Partnership on Artificial Intelligence (GPAI) (2024),

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which did not endorse the UDHR but is a member of the United Nations and has recognized, according to human rights organizations, certain human rights obligations.

Q4. Is the country implementing the Universal Declaration for Human Rights?

Like the question regarding implementation of the OECD AI Principles, measuring implementation of the UDHR is not a simple task. Several well-established international organizations, such as Freedom House and Human Rights Watch, have developed formal metrics to evaluate compliance with human rights norms. We defer to these organizations for the evaluation of general human rights practices, while also noting that several of these factors may be useful in future evaluation of AI practices.

Determinations in this category typically fell into two categories: Y, a country widely recognized for its defense of human rights as generally understood by reference to the UDHR, and P, a country in partial compliance with human rights obligations. In 2021, we made this determination more precise. Countries that Freedom House designated as "Free" received Y. A country designated "Partly Free" was designated P and countries designated "Not Free" were designated N.

We continue to defer to the Freedom House ratings while noting concerns with their methodology. For example, Freedom House evaluates human rights conditions in Israel separately from those in the Gaza Strip and West Bank.

Q5. Has the country established a process for meaningful public participation in the development of a national AI Policy?

Almost every country in our report has set out a national AI strategy or action plan. We have attempted to fairly summarize and present these initiatives. But we are also interested in the development of these policies. Was there an opportunity for public participation? Was there a formal consultation process? Do the national AI policies reflect the views of those who may be impacted by the deployment of AI techniques? And is there an ongoing mechanism for public participation as national AI policies evolve?

Determinations in this category were based on our ability to identify opportunities for meaningful public participation. The distinction between a Y and P in this category reflected the quality of the opportunity for public participation and evidence that governments engaged that participation meaningfully.

Q6. Are materials about the country's AI policies and practices readily available to the public?

Effective public participation requires public access to relevant documents. Has the national government taken steps to ensure that documents concerning AI policy are readily available, complete, and accurate? Are the

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materials available on the website of a public agency or are they maintained by a private company? Are there opportunities for future comment?

The determinations in this category often aligned with the determinations about public participation. We respect the practice of countries to publish reports and to seek public reports in the national language. We note, however, that the absence of an English translation may make independent evaluation of a country's AI policies and practices more difficult. We discuss the issue of Language in more detail below.

Q7. Does the country have an independent (agency/mechanism) for AI oversight?

All governments understandably seek to advance national AI priorities. And most governments have directed a science or industry ministry to lead national efforts. But the deployment of AI techniques also raises concerns about accountability, privacy and data protection, fairness, transparency, and equity. For these reasons, we look to determine whether countries have independent agencies, such as a data protection agency, a human rights commission, or an AI ethics commission, to protect fundamental rights.

Determinations in this category were based on the actual establishment of mechanisms to oversee or guide AI practices. Again, the difference between a Y and a P determination reflected the quality and breadth of the oversight mechanisms.

Q8. Do the following goals appear in the national AI policy: "Fairness," "Accountability," "Transparency," "Rule of Law," "Fundamental Rights"?

There are many themes in the AI policy realm. We identified these five goals as the most significant. They appear frequently in AI policy frameworks, and they are grounded in law. We recognize that countries that have endorsed the OECD/G20 AI Principles have, by implication, endorsed these goals. But this question asks whether countries have explicitly identified these goals in their national AI strategies.

Determinations in this category attempt to evaluate the extent to which a country has prioritized these AI policy goals. Full endorsement of all goals received a Y, partial endorsement a P.

 $Q9. \ Has \ the \ country \ by \ law \ established \ a \ right \ to \ Algorithmic \ Transparency?$

One of the most significant AI policy issues today is Algorithmic Transparency. We take the position that individuals should have the right to access the logic, factors, and data that contributed to a decision concerning them and the ability to meaningfully contest adverse decisions. This right is currently established in two legal frameworks: The General Data Projection Regulation of the European Union (Article 22) and the Council of Europe Convention 108+, the modernized Privacy Convention (Article 9). Countries that are within the EU

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and/or signatories to COE 108+ have therefore established this right. We have also considered whether countries, by national law, have established the right to algorithmic transparency.

For determinations in this category, we assigned a Y to those countries that are subject to the GDPR and/or the Council of Europe Convention or national legislation that explicitly grants these rights. In a subsequent review, we will investigate whether countries have *implemented* a right to algorithmic transparency. This will provide a more detailed assessment of this key metric.

Q10. Has the country endorsed the Council of Europe AI Treaty?

The Council of Europe Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law is the first legally binding international treaty on AI. We consider the AI Treaty, open for signature by all CoE member and non-member states a watershed moment in the development of AI policies. We substituted the CoE Treaty for the UNESCO Recommendation because 1) almost all countries have now endorsed the UNESCO Recommendation and 2) support for the AI Treaty will demonstrate a commitment to human rights, democracy, and the rule of law. For AIDV 2025, we wanted to highlight countries that made this commitment. We designated countries that signed as Y⁷¹⁶⁸ and EU member states that are party to the Convention through EU signature with P.⁷¹⁶⁹ In future editions, we will designate countries that have ratified the AI Treaty as Y and those that have signed as P.

[Note on Methodology: in AIDV 2020, we asked in Q11 whether countries supported the Social Contract for AI and in AIDV 2021, we asked in Q10 whether countries had endorsed the Universal Guidelines on AI. We described both as "aspirational goals for the Age of AI that go beyond the OECD/G20 AI Principles." In AIDV 2022 and AIDV 2023, our assessment asked whether countries supported the UNESCO Recommendation on AI Ethics. We recognize this change disrupts our year-over-year comparisons but it reflects our efforts to adapt to the rapid evolution of AI policy.]

Q11: Is the country implementing the UNESCO Recommendation on the Ethics of AI?

Endorsement alone of the UNESCO Recommendation is not sufficient to determine a country's AI practices. UNESCO itself has begun a process to track implementation of the Recommendation, but the reporting to date is limited to a

⁷¹⁶⁸ Council of Europe Treaty Office, *Chart of Signatures and Ratifications of Treaty 225* (Mar. 26, 2025), https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=225

⁷¹⁶⁹ Center for AI and Digital Policy, *Council of Europe AI Treaty* (Feb. 12, 2025), https://www.caidp.org/resources/coe-ai-treaty/

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few countries. We begin our analysis of implementation with UNESCO documents pertaining to planned partnerships and the 2022 UNESCO AI Needs Assessment Survey in Africa. 7170 However, we deepened the analysis by searching for statements made by countries pledging their commitment to implement the UNESCO Recommendation. We tracked preliminary announcements regarding implementation and monitoring mechanisms which shall be put into place. We then look to other sources, including regional organizations documents, news articles and NGO reports, to assess implementation.

Determinations in this category show that some countries have called attention to their efforts to implement the UNESCO Recommendation and help other countries to implement it. We also started to identify other countries that have done so in practice without explicit references to the Recommendation. We will proceed in the future with identifying national projects that implement the UNESCO Recommendation, based on future reporting from the UNESCO. Completion of the UNESCO Readiness Assessment Methodology (RAM) is one such project, indicating a country's commitment to develop and govern AI according to the Recommendation. Ethical Impact Assessments, including the tool developed by UNESCO, are another such project. In some instances, we were able to acknowledge partial implementation (P). We have also chosen to recognize the leading role of a few countries in the development and implementation of the UNESCO Recommendation (Y).

Q12: Has the country's Data Protection Agency endorsed the 2018 GPA Resolution on AI and Ethics, the 2020 GPA Resolution on AI and Accountability, the 2022 GPA Resolution on AI and Facial Recognition, and the 2023 GPA Resolution on Generative Artificial Intelligence Systems?

In the fall of 2018, the Global Privacy Assembly (then known as the International Conference of Data Protection and Privacy Commissioners), adopted a foundational Declaration on Ethics and Data Protection in Artificial Intelligence.⁷¹⁷¹ The 2018 Declaration emphasized fairness, vigilance, transparency and intelligibility, and measures to reduce unlawful bias and discrimination. In 2020, the GPA adopted a resolution on AI and

⁷¹⁷⁰ UNESCO, *UNESCO Launches the Findings of the Artificial Intelligence Needs Assessment Survey in Africa* (Sept. 28, 2022), https://www.unesco.org/en/articles/unesco-launches-findings-artificial-intelligence-needs-assessment-survey-

⁷¹⁷¹ ICPDPC, *Declaration on Ethics and Data Protection in Artificial Intelligence* (including list of authors and co-sponsors) (Oct. 23, 2018), http://globalprivacyassembly.org/wp-content/uploads/2018/10/20180922 ICDPPC-40th AI-Declaration ADOPTED.pdf

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Accountability.⁷¹⁷² That resolution sets out a dozen steps for AI accountability, including the preparation of human rights impact assessments. This Declaration was followed by three other key AI-related resolutions: the 2020 resolution on AI and Accountability, the 2022 resolution on AI and Facial Recognition, and the 2023 resolution on Generative Artificial Intelligence Systems.

We believe that support for these resolutions is an important indicator of a country's commitment to AI and data protection and effective implementation of AI policy goals. We checked to see which countries explicitly sponsored the resolutions. We will also consider other notable initiatives in future global surveys of AI policies and practices.

For determinations in this category, we assigned a Y to countries that sponsored the four resolutions, an N to countries that sponsored none of them (or are not represented at the GPA), and P to the countries that sponsored one, two, or three of the resolutions.

As an aside to the Global Privacy Assembly, we would recommend new mechanisms that would allow members to endorse resolutions concerning AI in subsequent years. We will update country ratings accordingly.

Hong Kong

Hong Kong constitutes a special case in our review of national AI policies and practices. Although Hong Kong, an Administrative Region of the People's Republic of China (HKSAR) is not a country, it ranks number 37 in the world for GDP, placing it within the top 40 countries we reviewed for the 2021 index. Hong Kong also has an active data protection agency that has contributed to the formulation of the AI policies endorsed by the Global Privacy Assembly. As Hong Kong is not a country it could not enter into international agreements, such as the OECD AI Principles. So, we treated commitments made by China to these policies as if they were made by Hong Kong. At the same time, we recognized variances in AI practices in the Region as well as the different ratings for compliance with the human rights norms, as determined by Freedom House.

Exemplars

In developing the methodology, we also created a list of exemplar countries for several metrics. For example, on Question 5, concerning meaningful public participation, we were struck by the high level of public engagement in Switzerland. On Question 6, concerning the availability of a countries AI policies

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⁷¹⁷² Global Privacy Assembly, *Adopted Resolution on Accountability in the Development and Use of Artificial Intelligence* (including list of main sponsors and co-sponsors) (Oct. 2020), https://globalprivacyassembly.org/wp-content/uploads/2020/11/GPA-Resolution-on-Accountability-in-the-Development-and-Use-of-AI-EN.pdf

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and practices, Germany's *Plattform Lernende Systeme* offers a map that shows, by region, AI developments across the country. And the multiple agencies in France, the CNIL and the Defender of Rights, provide a very good example of independent oversight for AI, highlighted by Question 7.

Scoring

We assigned a numeric value of 1.0 to each Y answer, 0.5 to each P answer, and 0.0 to each N answer. We then tallied the numbers, weighing each metric equally, and produced a total score. A top score would be 12, a bottom score is 0. We grouped countries by color gradation and then into tiers based on total scores.

Search Strategy

To locate relevant policy materials, we conducted extensive online searches. Key search terms, often used in combination with AI or Artificial Intelligence, included: Accountability, Algorithmic Transparency, Data Protection, Digital, Ethical, Ethics, Fairness, Governance, Law, Legislation, Policy, Privacy, Regulation, Strategy, and Technology.

Descriptive Summary

Each country report includes a descriptive summary labelled "Evaluation." The evaluation does not precisely track the metrics. It is intended to highlight the key findings in the country report and provide a general overview for the reader. For AIDV 2025, we included a brief introduction to highlight the most important developments in the country in 2024.

Language

Our research team has rapidly expanded and diversified, with language expertise in various languages such as English, French, German, Italian, Japanese, Korean, Mandarin, Russian, Spanish, Turkish, Uyghur, or Vietnamese. However, we preferred English publications, as they would be considered authoritative original sources or authoritative translations for the international community from the original sources. In instances where English was not available and the research team translated, we translated titles to English. In some instances, we translated text from non-English to English with a Machine Translation tool, such as DeepL Translate or Google Translate. In those cases, we included the original alongside the translation as possible or left the original language.

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Citation Format

We have continued the simplified citation format adopted for the *AI* and *Democratic Values Index 2022* in subsequent editions. Each citation includes the author and title of the publication. Where there are multiple authors, we provided the name of the institution if available. We include a date where there was a final publication date. Some citations to websites do not include dates. We included transparent, detailed URLs so the reader can quickly assess the source. In a paragraph where there may be multiple references to the same source, we cited to the source in the first instance, but not in subsequent instances unless there was an intervening reference to a different source.

Gender Balance and Diversity

In the development of the *AI and Democratic Values Index*, the selection of team members and reviewers, we strived to maintain gender balance. We have also tried to promote diversity and regional representation.

Bias

We did not explicitly examine the issue of bias in AI, although this is a widely discussed topic and the focus of extensive research, including the bias of data sets. Our view is that the most effective policy response to the problem of bias is the *explicit recognition of Fairness, Accuracy, and Transparency* in AI policy and the implementation of these principles in AI practices. Several questions in the *AI and Democratic Values Index* (Q1, Q2, Q7, Q9, Q10, Q11, Q12) make these factors key metrics for the evaluation of a nation's AI policies.

We also recognize the inherent bias in the construction of all surveys, including in the survey focus, framing of questions, and research methodology.⁷¹⁷³

Private Sector Practices

We did not attempt to review or evaluate the practices of private firms or organizations. The *AI and Democratic Values Index* attempts only to evaluate the policies and practices of national governments. We do believe that private firms must act in compliance with law and through democratic institutions, and that the evaluation of government policies must ultimately be the measure of private sector practices.⁷¹⁷⁴

⁷¹⁷³ Max Weber, *Objectivity of Social Science and Science Policy* (1904)

⁷¹⁷⁴ Further discussion of the methodology underlying the *AI Index* is presented in Marc Rotenberg, *Time to Assess National AI Policies*, Blog@CACM (Nov. 24, 2020), https://cacm.acm.org/blogs/blog-cacm/248921-time-to-assess-national-ai-policies/fulltext

