

Artificial Intelligence and Democratic Values

Japan

AI National Strategy

Under the direction of former Prime Minister Shinzo Abe, Japan has emerged as a global leader for 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.”⁵³⁰

Earlier, in 2016, Prime Minister Abe called for the Japanese government to establish an “Artificial Intelligence Technology Strategy Council.”⁵³¹ The Council set out an Artificial Intelligence Technology Strategy and Industrialization Roadmap.⁵³² The Roadmap focuses on public-private collaboration along the AI “full pipeline from R&D to social implementation.” Priority areas include productivity; health, medical care, and long-term care; mobility; and 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 in parallel separate opportunities for examination of ethical aspects of AI technology, intellectual property rights, personal information protection, and promotion of open data, as cross-sectional items.⁵³³

⁵³⁰ 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

⁵³¹ Prime Minister of Japan, *Council for Science, Technology and Innovation* (Sept. 15, 2016), https://japan.kantei.go.jp/97_abe/actions/201609/15article2.html

⁵³² Strategic Council for AI Technology, *Artificial Intelligence Technology Strategy* (March 31, 2017), <https://www.nedo.go.jp/content/100865202.pdf>; MIC, *AI Strategy and Related Activities in Japan* (Oct. 25, 2017), <http://events.science-japan.org/dlai17/doc/MIC%20-%20France-Japan%20Symposium%2020171025.pdf>

⁵³³ Strategic Council for AI Technology, *Artificial Intelligence Technology Strategy* (Mar. 31, 2017), <https://www.nedo.go.jp/content/100865202.pdf> (top page 6)

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Japan's updated AI Strategy 2019⁵³⁴ "AI for Everyone: People, Industries, Regions and Governments" focuses on the measures that the Japanese government should immediately take in a concerted manner. It "establishes an integrated policy package for AI that encompasses educational reform, research and development (R&D) and social implementation in order to contribute to the world, overcome challenges, and ultimately improve Japan's industrial competitiveness."

The 2019 strategic objectives are: (1) to align human resources with the needs of the AI era; (2) to strengthen industrial competitiveness; (3) to achieve a sustainable society that incorporates diversity; (4) to build international research, education, and social infrastructure networks in the AI field, and (5) to accelerate AI-related R&D. The Strategy notes that it respects the basic principles set out by the government in the "Social Principles of Human-Centric AI."

AI R&D Guidelines

The Japanese AI R&D Guidelines influenced global AI policies. The Japanese government proposed international discussion on AI policy at the G-7 ICT Ministers' meeting in 2016 and presented the Guidelines to the G-7 Leaders meeting in Turin, Italy in 2017.⁵³⁵ 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 at the Leaders' Summit hosted at 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 centred on people, respects ethical and democratic values, is transparent, safe and accountable."

⁵³⁴ Prime Minister's Office, Japan, *AI Strategy 2019: AI for Everyone: People, Industries, Regions and Governments* (June 11, 2019),

https://www.kantei.go.jp/jp/singi/ai_senryaku/pdf/aistratagy2019en.pdf

⁵³⁵ Conference toward AI Network Society, *Draft AI R&D Guidelines* (July 28, 2017)

https://www.soumu.go.jp/main_content/000507517.pdf

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Social Principles of Human-Centric AI

Japan's 2019 "Social Principles of Human-Centric AI"⁵³⁶ were developed by the "Council for Social Principles of Human-centric AI" chaired by Professor Osamu Sudoh. 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.

The philosophy that underpins the Social Principles of Human-Centric AI consists of three basic principles: (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; (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 with regard to personal background, or to unfair treatment in terms of human dignity; and (7) Innovation.

⁵³⁶ 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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AI R&D Guidelines and AI Utilization Guidelines

The original AI R&D Guidelines are directed at developers.⁵³⁷ 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 more recent (2019) AI Utilization Guidelines⁵³⁸ provide practical guidance on matters to be considered by various stakeholders, including developers, end users, and data providers. Aimed to promote the benefits of AI and mitigate risk, the Guidelines aim to help AI service providers and business users to establish their own AI development and utilization guidelines, based on the Social Principles for Human-centric AI. The Guidelines set out ten principles to be considered, in full or in part, according to the purpose and social context of AI utilization: (1) proper utilization; (2) data quality; (3) collaboration; (4) safety; (5) security; (6) privacy; (7) human dignity and individual autonomy; (8) fairness; (9) transparency; and (10) accountability.

Data Free Flows with Trust

Prime Minister Abe also put forward the concept of Data Free Flows with Trust (DFFT) in a speech at the World Economic Forum in January 2019.⁵³⁹ 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

⁵³⁷ The Conference toward AI Network Society, *Draft AI R&D GUIDELINES for International Discussions* (July 28, 2017), https://www.soumu.go.jp/main_content/000507517.pdf

⁵³⁸ The Conference toward AI Network Society, *AI Utilization Guidelines Practical Reference for AI utilization* (Aug. 9, 2019), https://www.soumu.go.jp/main_content/000658284.pdf

⁵³⁹ 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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appropriate framework for protection and governance on data according to their sensitivity would allow higher freedom of data flow across borders.

At the 2019 G20 Summit in Osaka, OECD Secretary Gurría described Abe's vision for Data Free Flows with Trust as "ambitious and timely."⁵⁴⁰ The G20 Leaders adopted the concept at the 2019 Summit,⁵⁴¹ and reaffirmed the goal at the 2020 Summit in Riyadh.⁵⁴² The phrase "Data Free Flows with Trust" also appears, with emphasis, in the December 2020 Joint Communication from the European Communication, proposing a New US Agenda for Global Change.⁵⁴³

Public Participation

Japan organized a conference with public participation in advance of the 2016 G-7 Ministerial.⁵⁴⁴ The conclusions of the conference informed the 2016 Takamatsu Declaration.⁵⁴⁵ The G7 ICT Ministers agreed to promote ICT technology R&D for Artificial Intelligence. In October 2016, Japan⁵⁴⁶ 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

⁵⁴⁰ OECD, *2019 G20 Leaders' Summit - Digital (AI, data governance, digital trade, taxation), Remarks by Angel Gurría* (June 28, 2019), <https://www.oecd.org/g20/summits/osaka/2019-g20-leaders-summit-digital-osaka-june-2019.htm>

⁵⁴¹ The Japan Times, *Full text of the G20 Osaka leaders' declaration* (June 29, 2019), <https://www.japantimes.co.jp/news/2019/06/29/national/full-text-g20-osaka-leaders-declaration/>

⁵⁴² G20 Riyadh Summit, *Leaders' Declaration* (Nov. 21-22, 2020), https://g20.org/en/media/Documents/G20%20Riyadh%20Summit%20Leaders%20Declaration_EN.pdf

⁵⁴³ European Commission and High Representative of the Union for Foreign Affairs and Security Policy, *Joint Communication to the European Parliament, the European Council and the Council: A New EU-US Agenda for Global Changes*, (Dec. 2, 2020) (emphasis in the original), https://ec.europa.eu/info/sites/info/files/joint-communication-eu-us-agenda_en.pdf

⁵⁴⁴ The event was organized by the Institute for Information and Communications Policy (IICP) of the Ministry of Internal Affairs and Communications (MIC).

⁵⁴⁵ 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>

⁵⁴⁶ The event was organized by the Institute for Information and Communications Policy (IICP) of the Ministry of Internal Affairs and Communications (MIC).

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of AI.⁵⁴⁷ The AI Network Society conference, chaired by Dr. Osamu Sudoh,⁵⁴⁸ formulated the AI R&D Guidelines. The Japanese government presented AI R&D Guidelines to the G-7 meeting in Turin, Italy in 2017.⁵⁴⁹ A subsequent 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.”⁵⁵⁰

Japan’s AI R&D Guidelines and the AI Utilization Guidelines influenced the development of AI policy frameworks at the OECD and elsewhere. The Guidelines promoted the development of AI and addressed public concerns, with the goal of building trust in the technology. The Conference is continuously studying the safe, secure, and trustworthy implementation of AI in the society.⁵⁵¹

Data Protection

The Act on the Protection of Personal Information (APPI) governs data processing in the private sector. The 2020 amendments to the APPI bring the law closer to the EU’s General Data Protection Regulation (GDPR).⁵⁵² The amendments upgrade individuals’ rights, introduce the concept of pseudonymization, reinforce data breach reporting and increase penalties for offenders. The updated APPI also broadens the definition of personal data to capture facial recognition/biometric data. In January 2019,

⁵⁴⁷ Ministry of Internal Affairs and Communications, Japan, *The Conference toward AI Network Society—Release of 2020 Report* (July 21, 2020),

https://www.soumu.go.jp/main_sosiki/joho_tsusin/eng/pressrelease/2020/7/21_1.html

⁵⁴⁸ Professor at the Faculty of Global Informatics, Chuo University and Project Professor at the Graduate School of Interdisciplinary Information Studies, University of Tokyo.

⁵⁴⁹ The Conference toward AI Network Society, *Draft AI R&D GUIDELINES for International Discussions* (July 28, 2017),

https://www.soumu.go.jp/main_content/000507517.pdf

⁵⁵⁰ The Conference toward AI Network Society, *AI Utilization Guidelines Practical Reference for AI utilization* (Aug. 9, 2019),

https://www.soumu.go.jp/main_content/000658284.pdf

⁵⁵¹ Ministry of Internal Affairs and Communications, Institute for Information and Communications Policy, *The Conference toward AI Network Society—Release of 2020 Report* (July 21, 2020),

https://www.soumu.go.jp/main_sosiki/joho_tsusin/eng/pressrelease/2020/7/21_1.html

⁵⁵² https://www.ppc.go.jp/files/pdf/overview_amended_act.pdf - The 2020 Amendments will come into force on a date specified by a cabinet order, within two years after promulgation (June 12, 2020).

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the European Commission adopted an adequacy decision on Japan's APPI, allowing personal data to flow freely between the two economies.⁵⁵³

Two laws regulate data processing by government.⁵⁵⁴ The APPI also requires national and local governments to be “responsible for comprehensively formulating and implementing the necessary measures to ensure the proper handling of personal information in conformity with the purport of this Act.”

The Personal Information Protection Commission (PPC), established in 2016, supervises the implementation of the APPI. The members of the PPC exercise their official authority independently. The PPC also supervises the implementation of the My Number Act, which regulates the use numeric identifiers for social security and taxation.⁵⁵⁵

OECD/G20 AI Principles

Japan endorsed the OECD and the G20 Principles and is a member of the Global Partnership on AI (GPAI). Japan was also a catalyst for the adoption of the OECD AI Principles by the G20 Ministerial meeting in Tsukuba and the G20 Leader's Summit in Osaka, Japan, in 2019.⁵⁵⁶

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

⁵⁵³ Personal Information Protection Commission, *Amended Act on the Protection of Personal Information* (Feb. 2016) (tentative translation).

https://www.ppc.go.jp/files/pdf/280222_amendedlaw.pdf

⁵⁵⁴ 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; *Act on the Protection of Personal Information Held by Incorporated Administrative Agencies, etc., No 59* (May 30, 2003),

http://www.japaneselawtranslation.go.jp/law/detail_main?re=&vm=2&id=3397

⁵⁵⁵ 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>

⁵⁵⁶ 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/>

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provided with specific explanations on the reasons for the rejection of a request to conclude a loan agreement.⁵⁵⁷

Use of AI for policy decisions

The government is considering a data analysis system developed by Palantir for public agency decision-making, according to Japan Times.⁵⁵⁸ AI systems are also under consideration for defense, national security, trade management, and public health. The move complements the plans by the administration of Prime Minister Yoshihide Suga to accelerate digitalization.⁵⁵⁹

Facial Recognition

Japan has deployed facial recognition in several sectors, including transportation, banking (ATMs), police and immigration. According to Japan Times, Japan plans to use facial recognition technology, originally intended for security purposes, to prevent the spread of the novel coronavirus when it hosts the Tokyo Olympics and Paralympics in 2021.⁵⁶⁰ Osaka Metro Co. has developed automated ticket gates with facial recognition with a view to equip all metro stations in Osaka by 2024, ahead of the 2025 World Expo.⁵⁶² Likewise, the Japanese Ministry of Economy,

⁵⁵⁷ Official Journal of the European Union, *Commission Implementing Decision (EU) 2019/419 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* (March 19, 2019) (par. 93), <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L:2019:076:FULL&from=DE>

⁵⁵⁸ The Japan Times, *Japan considers using AI for speedy policy decisions* (Nov. 2, 2020), <https://www.japantimes.co.jp/news/2020/11/02/national/japan-ai-policy-government/>.

⁵⁵⁹ Analytics India Magazine, *Use Of Algorithmic Decision Making & AI In Public Organisations* (Nov 11, 2020), <https://analyticsindiamag.com/use-of-algorithmic-decision-making-ai-in-public-organisations/> - 13/11/2020

⁵⁶⁰ The Japan Times, *Facial Recognition*, <https://www.japantimes.co.jp/tag/facial-recognition>.

⁵⁶¹ Find Biometrics, *Japan to Pair Face Recognition with Mask and Temperature Detection During Tokyo Olympic* (Oct. 22, 2020), s <https://findbiometrics.com/japan-pair-face-recognition-mask-temperature-detection-during-tokyo-olympics-102209/>

⁵⁶² The Japan Times, *Osaka Metro unveils ticket gate with facial recognition tech* (Dec. 10, 2019), <https://www.japantimes.co.jp/news/2019/12/10/business/corporate-business/osaka-metro-facial-recognition/#:~:text=on%20Tuesday%20started%20testing%20a,around%201%2C200%20Osaka%20Metro%20employees>.

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Trade and Industry is testing facial recognition ticketing on driverless buses in several cities across the country.⁵⁶³

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 run 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.”⁵⁶⁴ The NPA manages and utilizes facial images under rules set by the National Public Safety Commission,⁵⁶⁵ as it does with fingerprints and DNA. 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 facial biometric data gathered from security cameras.⁵⁶⁶ Law enforcement is however exempt from this type of privacy regulations. The APPI also allows the use of anonymized facial recognition data beyond the intended purposes as long as such data is sufficiently protected from being restored to its original form.

⁵⁶³ 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/>

⁵⁶⁴ 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>

⁵⁶⁵ The National Public Safety Commission is a Japanese Cabinet Office commission which guarantees the neutrality of the police system by insulating the force from political pressure and ensuring the maintenance of democratic methods in police administration. It administers the National Police Agency, and has the authority to appoint or dismiss senior police officers.
[https://en.wikipedia.org/wiki/National_Public_Safety_Commission_\(Japan\)](https://en.wikipedia.org/wiki/National_Public_Safety_Commission_(Japan))

⁵⁶⁶ 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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Human Rights

Japan is signatory to many international human rights treaties. According to Freedom House, Japan rates among the top countries in the world for political rights and civil liberties.⁵⁶⁷

Evaluation

Japan is a pioneer in the field of AI policy and has endorsed the OECD/G20 AI Principles. The Conference toward AI Network Society, established in 2016, is broadly influential. The Japanese R&D Guidelines provided the basis for the OECD AI Principles. Japan also hosted the G20 Leaders' meeting in Osaka in 2019 at which time the G20 nations endorsed the OECD AI Principles. And 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, and the European Commission. However, concerns about the unregulated use of facial recognition remain. While there has been no express support for the Universal Guidelines for AI or the Social Contract for the Age of AI, Japan's policies reflect elements found in these documents

⁵⁶⁷ Freedom House, *Freedom in the World 2020 – Japan (2020)*, <https://freedomhouse.org/country/japan/freedom-world/2020>