

White Paper

Japan at the Crossroads of AI Governance –

The Current State of and Prospects for Japan's AI Legal System and Policies

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Abstract

This white paper explores the current state and future prospects of Japan’s legal and policy framework surrounding artificial intelligence (AI). As AI technologies rapidly advance and proliferate across sectors, the need for coherent, future-proof governance has become a central concern for policymakers worldwide. Japan’s response is shaped by its broader digital transformation goals, its commitment to human-centric values, and its position within international regulatory and technological ecosystems.

While the report examines Japan’s AI governance in historical, comparative, and policy terms, it also looks ahead to three priority areas for action. First, the need to accelerate legal reforms in fast-moving domains such as generative AI and automated driving, closing the “governance gap” while ensuring laws reflect Japan’s core principles of dignity, accountability, and trust. Second, the importance of fostering domestically developed large-scale language models (LLMs) and AI infrastructure through industry–academia collaboration, ensuring both technological sovereignty and alignment with Japanese cultural and ethical values. Third, the challenge of balancing ethics and innovation through flexible, risk-based frameworks that maintain high standards without stifling technological progress.

By analyzing these challenges and opportunities, this paper aims to provide domestic and international stakeholders with a comprehensive understanding of Japan’s AI policy trajectory and its potential role as an “Asian model of trust” in global AI governance.

Introduction

Artificial intelligence (AI) is rapidly becoming one of the most transformative forces in the global economy and in the daily lives of people worldwide. Its applications are advancing at unprecedented speed, creating both opportunities for innovation, and complex risks that demand careful governance. Around the world, governments, industry leaders, and civil society are grappling with how to create regulatory and ethical frameworks that can foster technological growth while safeguarding public trust, protecting rights, and preventing harm.

Over the past decade, major economies such as the European Union, the United States, and China have each developed distinct models of AI governance, reflecting differences in political systems, economic priorities, and cultural values. This global policy divergence is shaping the trajectory of AI development and international cooperation, making it crucial for policymakers and researchers to understand not only the technologies themselves but also the governance approaches behind them.

In this context, Japan's approach holds particular importance. As the one of the world's largest economies and a leading democratic power in Asia, Japan plays a dual role in the AI policy landscape, as an advanced industrial nation with strong technological capabilities, and as a bridge-builder in international governance forums. Understanding Japan's AI governance framework is essential for anticipating how global norms may evolve, identifying opportunities for international alignment, and recognizing the unique contributions Japan's human-centered, collaborative approach can bring to the global conversation.

To explore these topics in depth, we collected and scrutinized a wide range of primary sources, including policy documents and government reports and public documents from international organizations. The paper also takes a comparative approach, contrasting progress on AI governance in Japan with AI policies of major countries, including the U.S., EU, and China. From this analysis, the characteristics and limitations of Japanese policies, as well as the international role of Japan in this ecosystem are discussed.

Chapter 1 provides a historical overview of Japan's AI policy development to this date. It traces the evolution from early digital policy initiatives to more recent strategic frameworks. Chapter 2 examines Japan's current legal and institutional framework relevant to AI. It analyzes both general laws and recent legislative developments including the 2025 AI Promotion Law. Chapter 3 offers an international comparison between Japan and key global actors: the European Union, the United States, and China. It explores regulatory approaches, normative priorities, and mechanisms of implementation, highlighting areas of alignment and divergence. Chapter 4 analyzes the domestic implementation environment for AI in Japan. It discusses technological infrastructure, public-private initiatives, and sector-specific adoption in fields such as mobility, healthcare, and education. Chapter 5 synthesizes the findings and presents forward-looking recommendations for Japan's AI governance. It identifies remaining policy gaps and proposes directions for enhancing legal clarity, international coordination, and the alignment of innovation with societal values.

Chapter 1: The Historical Development of Japan's AI Policy

The development of AI policy in Japan began with a push to scale up information and communication technology (ICT) as a national strategy. Today, with AI as the core policy focus, efforts have progressed to the stage of utilizing AI for the society. This chapter reviews Japan's policy landscape, divided into three phases.

Budding Period (2000s-2015)

The first period, known as the budding period, is the period from the early 2000s to around 2015, when Japan's first IT-related laws were enacted and Japan's IT infrastructure was developed. The policy foundation of this period is the “e-Japan Strategy” formulated in 2001. The strategy aimed to develop Japan into “the world's most advanced IT nation” and set the (1) development of super high-speed networks, (2) realization of e-government, (3) human resource development, and (4) promotion of e-commerce as its four pillars. It, furthermore, specified 220 priority measures that the government should implement.⁷

Following this, in 2005, the “IT Policy Package 2005” aimed to create new value and drive structural reform through IT utilization. Specifically, the package set out to realize an “energetic, secure, inspiring, and convenient” society through IT, and emphasized the need to introduce ICT in public administration, healthcare, education, and other areas.⁸ Therefore, in order to further strengthen measures against cybercrime and cyber-terrorism, the government formulated a plan to promote measures against technological threats, such as botnets, and strengthen systems, such as international investigative cooperation, as well as to upgrade the Internet observation system. Furthermore, the “Next Generation Broadband Strategy 2010” (2006) set the goal of private-sector-led broadband deployment and the elimination of so-called “zero broadband areas,” and the development of nationwide ICT infrastructure began in earnest.⁹

During this period, linkages with robot technology were being explored. Industrial and service robots attracted attention as a way to address labour shortages and an aging society, and the creation of new industries through integration with ICT was considered.¹⁰

Growth period (2015-2020)

Following the budding period, the growth period can be defined as the period from around 2015 to 2020, when an important facilities and systems that rely on the newly established IT infrastructure were built. The turning point in this period was the new social vision of “Society 5.0” outlined within the “Fifth Science and Technology Plan” (2016). The vision depicted a “super-smart society” that balances economic growth and solutions to social issues by utilizing

⁷ MIC (2001), “e-Japan Strategy”

⁸ MIC (2005), “IT Policy Package 2005”

⁹ MIC (2006), “Next Generation Broadband Strategy 2010”

¹⁰ Robot Policy Study Group (2006) “Report of the Robot Policy Study Group: RT Revolution to Propel Japan Forward”

AI, IoT, Big Data, etc.; from this, a framework was put in place to realize the vision in policy terms.¹¹

Furthermore, during this time, the Strategic Council for Artificial Intelligence Technology was established in 2017 to strengthen the collaboration between industry, academia, and government in the field of AI. This council was responsible for overseeing research institutions under the jurisdiction of the Ministry of Internal Affairs and Communications, the Ministry of Education, Culture, Sports, Science and Technology, and the Ministry of Economy, Trade and Industry, and for promoting the research and development of AI technology and its implementation in society in an integrated manner.¹² In March 2017, the “Artificial Intelligence Technology Strategy” and its industrialization roadmap were formulated, and fields such as productivity, health, medicine, and nursing care, spatial mobility, and information security were selected as priority areas.¹³

Furthermore, this period also saw changes in education policy. The “Education and Human Resource Development Policy Package for the Realization of Society 5.0” emphasized the need to introduce inquiry-based learning and STEAM education in primary and secondary education and to develop infrastructure to eliminate digital disparities.¹⁴ In particular, it clearly positions the use of AI and digital technology as a means to overcome regional disparities and individual challenges.

Social Implementation Phase (2020～ present)

The results of the growth period have led to the recent social implementation phase, where Japan has begun to utilize AI in different fields for society. In this phase, AI is beginning to be used concretely in government, education, and industry, following the dramatic evolution and growth of AI worldwide. The “AI Strategy 2021,” released in 2021, presented specific guidelines and priority areas for the use of AI technology.¹⁵ In particular, the use of AI is being promoted in areas such as disaster countermeasures, medical DX, and educational support.

The 2021 AI strategy also established a multi-layered oversight structure to promote responsible adoption of generative AI, specifically. This structure includes the Advanced AI Utilization Advisory Board, the creation of a Chief AI Officers (CAIO) in each ministry or agency, and specialized desks for technical and ethical consultation. (Figure 1)

This focused attention on generative AI reflects its disruptive potential: GenAI not only accelerates productivity and creativity but also raises unique ethical, legal, and governance challenges—such as hallucination, deepfakes, and copyright concerns—that are not adequately addressed by earlier AI policy frameworks.

¹¹ Cabinet Office (2016) “The Fifth Science and Technology Basic Plan”

¹² Cabinet Office (2017), “Artificial Intelligence Technology Strategy Council”

¹³ Strategic Council for AI Technology (2017), “Artificial Intelligence Technology Strategy (Report of Strategic Council for AI Technology)”

¹⁴ Cabinet Office (2021), “Education and Human Resource Development Policy Package”

¹⁵ Cabinet Office (2021), “AI Strategy 2021”

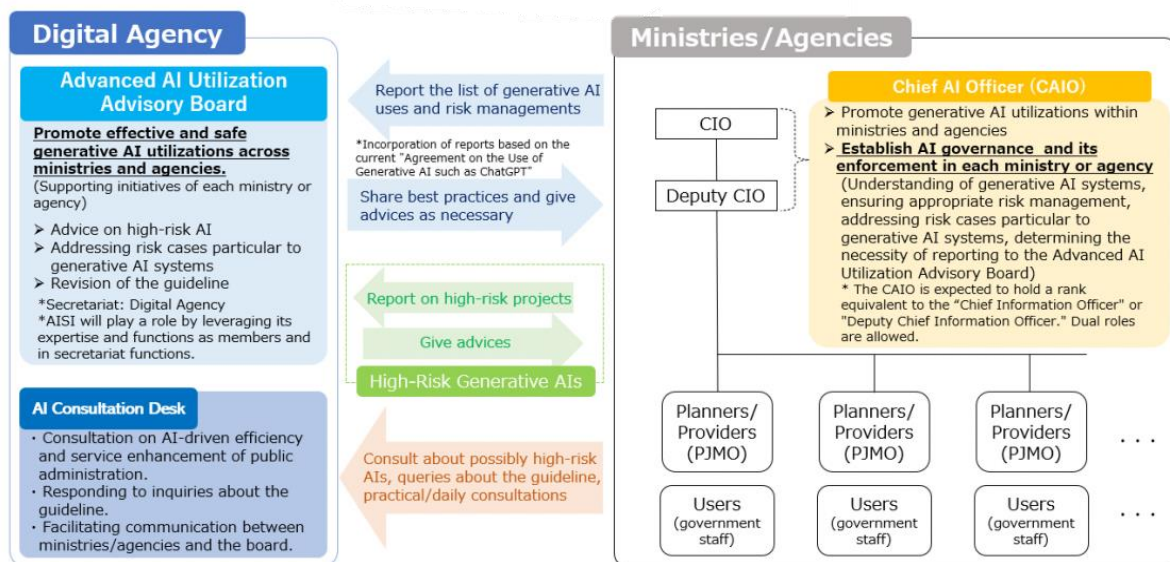


Figure 1: Governance structure for generative AI utilization (Cabinet Office, 2021) ¹⁶

In addition, policies on generative AI have been rapidly developed since 2023. The Ministry of Education, Culture, Sports, Science and Technology (MEXT) published “Guidelines for the Utilization of Generative AI in the Primary and Secondary Education Stage” (2023), providing key insights for using generative AI in classrooms and policies for its introduction. ¹⁷ Furthermore, in 2025, the Digital Agency presented the “Rules for Utilization of Generative AI Systems (Model Ver. 1.0)” to standardize the rules for procurement and operation of generative AI in administrative procedures. ¹⁸

In addition, regarding the use of generative AI in public administration, the same year's “Guidelines for the Procurement and Utilization of Generative AI for the Evolution and Innovation of Public Administration” clearly stated the perspectives of transparency during procurement, verification of the implementation process, and auditability of the algorithms. This has indicated the expectation that the use of generative AI will not only improve the efficiency of administrative operations but also contribute to improved accountability and fairness. ¹⁹

As described above, Japan's AI policy has evolved in stages from the development of information infrastructure to identifying impacts of, and solutions to, AI as it relates to social issues. In the recent years, legal and institutional responses to the use of generative AI have been particularly rapid. This historical development provides an overall picture of the principles underlying Japan's AI policy and its transition (Table 1).

¹⁶ Cabinet Office (2021), “AI Strategy 2021”

¹⁷ MEXT (2023), “Guidelines for the Utilization of Generative AI”

¹⁸ Digital Agency (2025), “Generated AI System Utilization Rules.”

¹⁹ Digital Agency (2025), “Guidelines for Procurement and Utilization of Generative AI for Evolution and Innovation in Public Administration”

Table 1: Key AI and IT Policy Milestones in Japan by Period

Period & Years	Key Policies / Strategies	Main Objectives & Features
<i>Budding Period</i> (ca. 2000–2015)	e-Japan Strategy (2001)	Make Japan the “world’s most advanced IT nation”; develop high-speed networks; promote e-government, human resource development, e-commerce
	IT Policy Package 2005	Use IT to drive structural reform and societal value; expand ICT in public administration, healthcare, and education
	Next Generation Broadband Strategy 2010 (2006)	Eliminate “zero broadband areas”; nationwide ICT rollout
	Cybersecurity Measures (mid-2000s)	Combat cybercrime, strengthen international cooperation, upgrade monitoring
	Early Robot–ICT Integration Initiatives	Address labor shortages and aging population through robotics
<i>Growth Period</i> (ca. 2015–2020)	Society 5.0 Vision – Fifth Science & Technology Basic Plan (2016)	Create a “super-smart society” balancing economic growth and social problem-solving via AI, IoT, Big Data
	Strategic Council for AI Technology (2017)	Coordinate AI R&D across ministries; promote societal implementation
	Artificial Intelligence Technology Strategy (2017)	Establish priority areas: productivity, health/medicine/nursing, mobility, cybersecurity
	Education & Human Resource Development Policy Package for Society 5.0 (2021)	Introduce STEAM and inquiry-based learning; reduce digital divide
<i>Social Implementation Phase</i> (ca. 2020–present)	AI Strategy 2021	Promote AI in disaster response, medical DX, education; create multi-layered GenAI governance
	MEXT Guidelines for Generative AI in Education (2023)	Promote safe and effective classroom use of GenAI
	Digital Agency Rules for Utilization of GenAI Systems (2025)	Establish procurement and operational rules for public administration use
	Guidelines for Procurement & Utilization of GenAI for Public Administration (2025)	Establish transparency, implementation verification, algorithm auditability

Chapter 2: The Current status of AI-related legal systems in Japan

In Japan, the regulation of AI has so far been carried out mainly through the interpretation and application of existing laws. However, with the rapid advancement of AI technologies, new legislative and policy frameworks are also being developed to address AI-specific challenges. This chapter provides an overview of Japan's current legal and institutional approach to AI, focusing on three key areas: (1) the application of existing laws and regulations to AI development and use, (2) the creation of new legislation specifically targeting AI, and (3) the evolution of AI-related ethics and governance frameworks.

Application of the Personal Protection Law and the Intellectual Property Basic Act

First, the “Personal Information Protection Law” is noteworthy in terms of the application of existing laws and regulations to the context of AI.²⁰ AI is a technology that makes use of vast amounts of data, and the handling of data containing personal information is a central issue. The Personal Information Protection Law (revised in 2022) specifies the purpose of data use, limits on provision to third parties, and handling of anonymized processed information, etc. Data utilization by AI should be in line with these provisions. As a guideline for data use and confidential information protection in companies, the Ministry of Economy, Trade and Industry's “Handbook for Protection of Confidential Information” (2017) is widely referenced in practice.²¹

In the area of “Intellectual Property Basic Act”²², copyright ownership of AI-generated content is also an important issue. According to discussions by the Agency for Cultural Affairs and the Cabinet Office, texts, images, sounds, and other output generated by AI may be subject to copyright protection in the same way as ordinary copyrighted works. However, in many cases, the subject and liability for infringement are unclear.²³

Passage of the AI Law

Recently, in February 2025, the government approved a cabinet decision to partially revise the “Act on Promotion of Information Processing” and the “Act on Special Accounts” in response to the rapid expansion of generated AI and the accompanying increase in demand for information processing.²⁴ The revised law establishes a new legal basis for public support for “designated high-speed information processing semiconductors” and “advanced information processing equipment” that can process extremely large amounts of information at high speed.

²⁰ MHLW (2003), “Personal Information Protection Law”

²¹ METI (2017), “Handbook for the Protection of Confidential Information”

²² Prime Minister's Office (2002), “Intellectual Property Basic Act”

²³ Cabinet Office (2023), “Generative AI and Copyright”

²⁴ METI (2025), Cabinet decision on the partial amendment bill of the Act on Promotion of Information Processing and the Act on Special Accounts

In addition, the Information-technology Promotion Agency, Japan (IPA) will oversee investing and will be able to select and support companies eligible for support.²⁵

In addition to the revising of the exiting law, the Japanese government ratified the “AI Law”²⁶, with the goal of “both promoting innovation and addressing risks,” formally establishes the “AI Strategic Headquarters” in the Cabinet and establishes a system to comprehensively and systematically promote measures based on the “AI Basic Plan” to be formulated by the government.

Furthermore, in order to improve the effectiveness of the legal system, the AI Institutional Study Group, which had been continuing since 2024, carefully examined the organization of AI risks such as copyright, privacy, discrimination, and security and the division of roles with existing laws, the results of which were largely reflected in the interim summary of the AI Promotion Law (February 2025) and the bill design.

Thus, the “AI Law” forms the backbone of Japan's AI policy system, working in a complementary manner with the existing “Act on Promotion of Information Processing” and the special accounting system, and serves as both the technical and institutional foundation.

In addition, a new special account was created to secure financial resources for the “AI/Semiconductor Industry Infrastructure Enhancement Framework,” which promotes public-private investment of over 10 trillion yen by FY2030. This established a system for transferring funds under the jurisdiction of the Ministry of Economy, Trade and Industry (METI), the Fiscal Investment and Loan Program, and the Energy Supply and Demand Account into the new account, thereby establishing a financial foundation for sustainable investment support. These institutional revisions are notable as a new framework for supporting Japan's AI infrastructure from the perspectives of both legal and fiscal systems.²⁷

In recent years, legal developments specific to distinct AI applications have been gradually progressing. For example, with regard to automated driving technology, the “Road Traffic Act” and the “Road Transport Vehicle Act” have been partially amended to provide the institutional foundation for automated driving level 3 and 4.²⁸ In its “Safety Technology Guidelines for Automated Driving Vehicles” (2018), the Ministry of Land, Infrastructure, Transport and Tourism has clarified design standards for AI-based driving control and the responsibility system in the event of an accident.²⁹

In addition, with the practical application of automated driving technology, the Road Trucking Vehicle Law and other laws have been revised to introduce a system design that assumes Level 4 automated driving. 2025, the “Mobility DX Strategy” jointly announced by METI and MLIT, guarantees safety and reliability of automated driving systems, a type certification system, management of software updates, and ensuring cyber security, among other multifaceted issues,

²⁵ METI (2025), “Summary of Amendments to the Law on Promotion of Information Processing and Special Account Law”

²⁶ Cabinet Office (2025), “Summary of AI Law”

²⁷ METI (2015) “AI/Semiconductor Industry Infrastructure Enhancement Framework”

²⁸ National Police Agency (2023) “Japan’s efforts to realize safe automated driving”

²⁹ MLIT (2018) “Safety Technology Guidelines for Automated Driving Vehicles”

are clearly stated.³⁰ Such legislation provides the legal foundation for advancing the use of AI systems on roads.

In the medical field, the PMDA (Pharmaceuticals and Medical Devices Agency) has established “Medical AI Guidelines” for the review of AI-based medical devices and has proposed approval criteria for diagnostic support tools using deep learning and other AI-based techniques.³¹

AI Ethics and Governance Guidelines

As the utilization of AI technologies progresses, the development of ethical frameworks and self-regulation mechanisms, to work alongside legal systems, is recognized as an important policy issue. The Japanese government has developed its own ethical guidelines in conformity with the OECD's “Human-Centered AI Principles”.³² For example, the Cabinet Office's “Study Council on Social Principles for Human-Centered AI” proposed ethical principles based on the pillars of privacy protection, transparency, accountability, and fairness, which are positioned as a code of conduct for AI developers and users to follow.³³ In response, the Ministry of Economy, Trade and Industry (METI) released the “Governance Guidelines for AI Principles in Practice” (2023), clearly outlining specific procedures and responsibility sharing in the design, development, and operation of AI. The guidelines present items that companies can put into practice, such as addressing the “black box problem,” in which the decision-making process of AI is opaque, and developing a risk management system for malfunctions.³⁴

In addition, private-sector-led guidelines have also emerged. The Japan Business Federation has published “AI Ethical Principles” and urges its member companies to comply with them voluntarily. (Figure 2) It outlines basic policies, such as “value creation,” “trust assurance,” and “accountability,” and explains the importance of AI ethics as part of corporate reputation management and CSR (corporate social responsibility).³⁵ These efforts integrate strategies from varying perspectives, including business, technical, and social frameworks. They propose that Japan's AI governance should be understood through these three frameworks, which enforces safety, inclusion and innovation-friendly deployment of AI technologies in the future.

However, these ethical guidelines created by various organizations are only “soft law” and not legally binding. Despite the seriousness of the social impact of AI, some argue that mere guidelines are not enough, but rather minimum mandates and penalties for violations need to be adopted. How to design the boundary between ethics and legal systems will be an important issue for AI policy in the future, especially as new problems such as deep fakes and algorithmic discrimination emerge.

³⁰ METI (2025), “Mobility DX Strategy 2025 Update”

³¹ PMDA (2020), “Report on AI-based Programmed Medical Devices”

³² Cabinet Office (2019) “Social Principles of Human-Centric AI”

³³ Cabinet Office (2022), “Report of Activities of the Study Council on Principles for a Human-Centered AI Society”

³⁴ METI (2023), “Governance Guidelines for AI Principles of Practice”

³⁵ Keidanren (2023), “Toward the Realization of Society 5.0 for SDGs through the Application of AI”

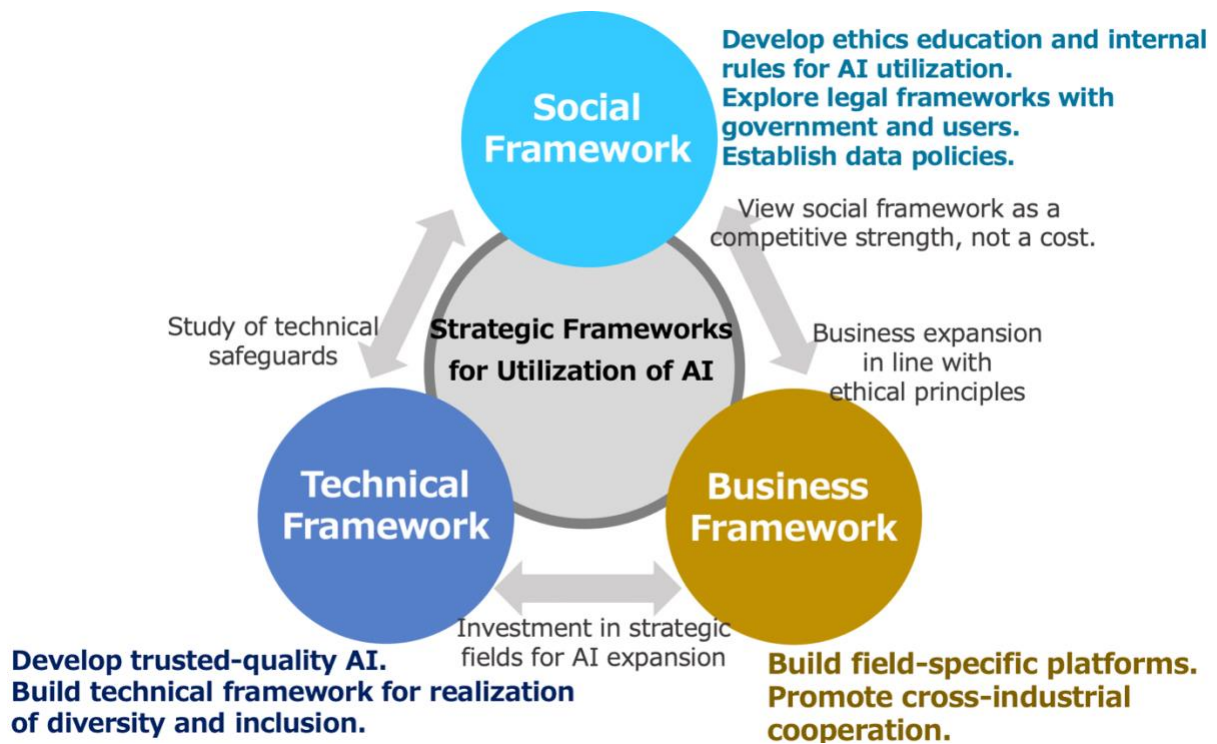


Figure 2: Strategic Frameworks for Utilization of AI ³⁶

³⁶ Keidanren (2023), “Toward the Realization of Society 5.0 for SDGs through the Application of AI”

Chapter 3: International Comparison and Cooperation

At the current stage, many issues related to the development and use of AI are being addressed through the application of existing laws, such as the Personal Information Protection Law and Intellectual Property Law, but with the emergence of new technologies such as generative AI, the limitations of conventional legal systems are also becoming clear. In addition, with the international proliferation of AI technologies, another important factor to consider is whether the Japanese legal system is consistent with international standards. It is also necessary to ensure consistency with the GDPR (EU General Data Protection Regulation) and the EU AI Law, while incorporating elements of “human-centeredness” and “social problem-solving orientation,” which are unique strengths of the Japanese market and society, into the institutional design.

In addition to the top-down legal system, the key will be the sharing and improvement of bottom-up operational guidelines in the field, since this is a field involving diverse stakeholders, including companies, local governments, research institutes, and the public. In the future, the question will be how to ensure the effectiveness of this multi-layered legal system and how to build a sustainable society that coexists with AI.

Due to this complex environment in which AI is being developed and used, it is important to understand how Japan’s approach fits into, and compares with, the international ecosystem. AI policy in Japan has been progressing in parallel with the development of domestic legal systems, while ensuring consistency with international trends. This chapter clarifies the international positioning of Japan’s AI policy and its challenges, focusing on comparisons with major countries, standardization activities, and international cooperation frameworks.

Comparison with EU, US, and China

In recent years, the European Union, the United States, and China have emerged as the three primary centers shaping both AI innovation and AI governance. Each of these actors has taken a distinct policy approach that reflects their political institutions, economic systems, and normative priorities.

EU has adopted a regulatory-driven model rooted in ethical and human rights considerations. Its landmark “Artificial Intelligence Act” introduces a risk-based framework that imposes stringent transparency, accountability, and oversight requirements for high-risk AI applications.³⁷ The EU’s approach reflects its broader commitment to digital sovereignty, data protection, and human-centric innovation. Scholars note that this regulatory paradigm provides legal clarity and ethical safeguards, but also raises concerns about slowing down innovation in emerging sectors.³⁸

In contrast, the United States pursues a market-driven approach that prioritizes innovation and private-sector leadership over formal regulation. Building to the “National Artificial Intelligence Initiative Act of 2020” led to the creation of the National AI Initiative Office,

³⁷ EU Artificial Intelligence Act (2024), High-level summary of the Act

³⁸ Al-Maamari (2025), Between Innovation and Oversight: A Cross-Regional Study of AI Risk Management Frameworks in the EU, U.S., UK, and China

which coordinates federal investment in AI research and infrastructure³⁹, the U.S. released “Winning the Race: America’s AI Action Plan” in July 2025. This plan outlines more than 90 policy actions across three pillars—accelerating AI innovation, building infrastructure, and advancing AI diplomacy—while repealing certain safety-oriented safeguards, streamlining semiconductor and data center permitting, and revising procurement rules to favor “ideology-neutral” large language models.⁴⁰ Rather than imposing binding rules, the U.S. strategy emphasizes public–private partnerships, sector-specific guidance, and state-level initiatives. This model allows for rapid technological development but has been criticized for a lack of central oversight and fragmented ethical standards.⁴¹

Meanwhile, China exemplifies a state-driven approach, where AI is deeply integrated into national industrial policy and strategic governance. Through centrally coordinated plans such as the “New Generation Artificial Intelligence Development Plan,” the Chinese government has promoted rapid AI development and deployment in fields ranging from surveillance to smart cities. Regulatory moves, such as the “Generative AI Management Measures” released in 2023 aim to maintain ideological control and minimize social risks. Scholars have pointed out that while this approach accelerates deployment, it raises serious concerns about transparency, privacy, and state overreach.⁴² Recently, in addition to the previous political movements, the government advanced its framework with the Global AI Governance Action Plan, unveiled at the July 2025 World AI Conference. This initiative promotes principles such as treating AI as an international public good, respecting sovereignty, ensuring safety and fairness, and fostering open cooperation.⁴³ It can be said that China is attempting to increase international presence in the world of AI, through announcing these international plans ahead of other nations.

Japan presents a unique intermediate model of AI governance. Rather than prioritizing either regulation or market-led approaches, Japan relies on industry–government–academia collaboration and phased, soft-law mechanisms. Industry associations such as Keidanren (Japan Business Federation) and JEITA (Japan Electronics and Information Technology Industries Association) have issued ethical AI guidelines that many companies voluntarily follow, often in advance of formal regulation. This bottom-up model has been supported by the government’s gradual issuance of strategic documents like the “Social Principles of Human-Centric AI and METI’s AI Governance Guidelines for Business”.⁴⁴

Meanwhile, the newly enacted “AI Law” in Japan also displays Japan’s uniqueness in AI governance. It functions as a basic law and clarifies the responsibilities of entities such as local governments, businesses, and research institutes, while linking them to individual laws by field. It is noteworthy that the Act is restrained to “minimum necessary intervention by new legislation,” rather than legally binding regulations, while first assuming voluntary efforts by business operators and the use of existing systems. This differs from the EU’s AI Regulation

³⁹ White House Office of Science and Technology Policy (2021), Announcement establishing the National AI Initiative Office under the National Artificial Intelligence Initiative Act

⁴⁰ White House (2025), Winning the Race: America’s AI Action Plan

⁴¹ Kulothungan, Gupta (2025), Towards AI Governance: Comparative Insights from U.S., EU, and Asia

⁴² Zou (2025), Navigating China’s regulatory approach to generative artificial intelligence and large language models

⁴³ State Council of the P.R.C (2025), Action Plan on Global Governance of Artificial Intelligence (Full Text)

⁴⁴ CSIS (2024), *Norms in New Technological Domains: Japan’s AI Governance Strategy in the G7 and Beyond*

Act and the U.S. Presidential Decree-type regulations and has attracted international attention as a Japanese-style balanced governance model.⁴⁵

Recent literature has characterized Japan’s model as one of adaptive governance, emphasizing transparency, trust-building, and flexibility while avoiding overregulation. It is informed by international frameworks such as the OECD AI Principles but tailored to Japan’s institutional culture, where trust in expert committees and cross-sectoral dialogue plays a significant role in shaping norms. Some scholars suggest that Japan’s hybrid model offers a potential pathway for balancing innovation and risk in AI governance, particularly for mid-sized democracies or countries seeking a middle ground between U.S. and EU approaches.⁴⁶ Reflecting these features, Japan is increasingly expected to contribute to the international community as an “Asian model of trust” in AI governance. Japan will be offering a culturally distinct but globally relevant approach to balancing ethics, innovation, and institutional legitimacy.

International Cooperation in AI Governance

The G7 Hiroshima AI Process (2023) provides a compelling example of Japan’s leadership in global AI governance. Against the backdrop of divergent global models—the EU’s prescriptive AI Act, the U.S.’s innovation-emphasizing stance, and China’s state-led industrial strategy—the Hiroshima Process introduced an internationally shared risk-based framework, emphasizing transparency, accountability, and cross-border data governance as guiding values.⁴⁷

What made the Hiroshima Process unique was its speed and substance: within seven months of launch, G7 members endorsed the International Guiding Principles and Code of Conduct, establishing policy frameworks that blend Japan’s human-centered AI philosophy with concrete operational expectations for developers. The initiative deliberately prioritized inclusivity, bridging diverse governance cultures while aligning with OECD norms.⁴⁸

Furthermore, AI cooperation between the U.S. and Japan and between the EU and Japan is also making progress. In the U.S.-Japan Digital Economy Partnership in 2023, cooperation on data governance with a focus on Data Free Flow with Trust (DFFT) was confirmed. Discussions were also held on securing semiconductor supply chains and cloud infrastructures.⁴⁹ Meanwhile, the EU and Japan are conducting joint research on AI ethics, sharing sandbox systems, and jointly promoting standardization projects.⁵⁰

Because of its strategic placement in the AI governance ecosystem and its distinctive governance style, many experts expect Japan’s AI policy to serve as a bridge between domestic institutions and international actors. Japan’s approach leverages science diplomacy,

⁴⁵ Takeyuki Matsuo (2025), “[Enactment in 2025] What is the New AI Law? A simple explanation of the law that promotes research, development, and utilization of AI!”

⁴⁶ Kulothungan, Gupta (2025) Towards AI Governance: Comparative Insights from U.S., EU, and Asia

⁴⁷ Cabinet Office (2024) The Hiroshima AI Process: Leading the Global Challenge to Shape Inclusive Governance for Generative AI

⁴⁸ OECD (2025) “OECD launches global reporting framework to monitor application of G7 Hiroshima AI Code of Conduct”

⁴⁹ EU-Japan BRT (2023) “Current Status of EU-Japan-U.S. Cooperation

⁵⁰ EU–Japan Digital Partnership Council (2025). *Joint Statement of the Third Meeting of the EU–Japan Digital Partnership Council*

emphasizing adaptability, soft-law norms, and multilateral engagement—positioning the country as a facilitator of consensus in areas ranging from the G7 Hiroshima AI Process to OECD and UN forums.⁵¹

⁵¹ Takemi (2025) Global AI Governance and Japan's Science Diplomacy: The G7 Hiroshima AI Process and Its Global Implications

Chapter 4: Challenges and Future Prospects

Japan's AI policy and legal system have been developed in a relatively cautious and gradual manner, but the rapid acceleration of technological innovation, including generative AI, has revealed delays in response and institutional voids. In this chapter, we clarify the major issues in Japan, and then specifically discuss the policy directions that are required in the future.

Startup and research support

First, there is a weak startup support system in Japan: the amount of funding for AI-related startups remains small compared to the U.S., China, and Europe, and support through public-private partnerships is far from sufficient. The Cabinet Secretariat and Cabinet Office data clearly identify the fragility of the entrepreneurial ecosystem, the small scale of university-launched ventures, and the uncertainty of regulatory compliance as barriers to support.⁵²

Strategic investment in next-generation technologies requires more emphasis in Japan. Government documents from the Ministry of Economy, Trade and Industry and the Cabinet Office have identified advanced infrastructure technologies such as quantum AI, edge AI, and AI chips as key pillars for maintaining global competitiveness.⁵³ In particular, the development of a domestic LLM has been positioned as a core national project, especially from the standpoint of economic security and technological sovereignty.⁵⁴

According to METI's FY2024 budget proposal, 161.7 billion yen has been earmarked for the "R&D Project for Strengthening Post-5G Information Communication System Infrastructure," 29.5 billion yen for the "Next-generation Edge AI Semiconductor R&D Project," 9.8 billion yen for the "Energy-saving Semiconductor-related Technology Development Project," and an additional 131.8 billion yen across two semiconductor production support initiatives. While these investments mark a significant increase from previous years, Japan's total AI and semiconductor-related public funding remains modest compared to that of the United States and the European Union when adjusted for population or GDP.

In the United States, the "CHIPS and Science Act of 2022" authorized approximately 52.7 billion US dollars in direct subsidies for semiconductor manufacturing, along with 13.2 billion dollars for R&D and workforce development.⁵⁵ Similarly, the European Union launched the "European Chips Act" in September 2023, aiming to mobilize over €43 billion in combined public and private investment to strengthen semiconductor production and technological sovereignty.⁵⁶ Meanwhile, broader EU AI funding strategies, such as the "Coordinated Plan on Artificial Intelligence and the AI Continent Action Plan" have been designed to channel funds into AI ecosystems over the coming decade, leveraging Horizon Europe, Digital Europe, national budgets, and private sector contributions.⁵⁷

⁵² Cabinet Office (2024), "Organizing Issues for Building an Innovation Ecosystem"

⁵³ METI (2024), "Reiwa Year 6 Budget Request Summary"

⁵⁴ Cabinet Office (2024), "AI/Semiconductor Strategy Council Briefing Materials"

⁵⁵ U.S. Government (2022), "CHIPS and Science Act of 2022"

⁵⁶ European Commission. (2023). "European Chips Act"

⁵⁷ European Commission (2025), "European Approach to Artificial Intelligence"

These comparisons highlight that, despite the ambition of Japan’s domestic initiatives, current investment levels may not be sufficient to ensure long-term leadership in foundational AI and semiconductor technologies. To close this gap, Japan may need to increase the scale of its investments or enhance the strategic focus of existing programs, particularly in support of domestic model development and research infrastructure.

Strategic investment in advanced technology is vital for Japan’s future competitiveness in AI-driven sectors. Government documents from METI and the Cabinet Office identify fields like quantum AI, edge AI, and semiconductor chip development as core strategic areas.⁵⁸ In particular, the domestic development of LLMs is positioned as a national economic security project, intended to reduce dependence on foreign infrastructure and ensure sovereignty over AI foundations.

In METI’s FY2025 budget proposal, 161.7 billion yen, is allocated to the Post-5G Infrastructure R&D Project; 29.5 billion yen to the Next-Generation Edge AI Semiconductor R&D Project; 9.8 billion yen to the Energy-Saving Semiconductor Technology Development Project; and more than 100 billion yen across two initiatives for semiconductor mass-production and design infrastructure support.⁵⁹

These R&D programs place particular emphasis on energy-efficient semiconductor innovation—such as quantum, optical, and brain-inspired chip architectures—to address AI’s high computing demands and power-consumption challenges.⁶⁰

From the standpoint of economic security, METI and the Cabinet Office have proposed to support domestic mass-production capacity—particularly Rapidus—via funding through the Information-technology Promotion Agency (IPA) under a revised information-processing law framework. These legislative and fiscal reforms demonstrate Japan’s ambition to strengthen its AI and semiconductor ecosystem for sustainable growth, while mitigating supply-chain vulnerability.⁶¹

Support for implementation, including local governments

The connection between regional development and AI utilization is also a new focus. In its “Digital City Nation Concept,” the government is promoting the deployment of AI and IoT solutions for region-specific issues such as agriculture, tourism, and healthcare. In particular, in supporting agricultural management, yield forecasting, price fluctuation forecasting, and smart farming are being introduced, and data analysis and AI are positioned as essential fundamental technologies.⁶²

To support such implementation at scale, the development of interoperable digital infrastructure is essential. In a conceptual framework, in which sector-specific data spaces are connected through a unified, cross-domain platform, these data spaces are supported by

⁵⁸ METI (2024) “Materials from the 15th Industrial Structure Council Industrial Technology and Environment Subcommittee”

⁵⁹ METI (2025) “Revised Edition of the Action Plan to Strengthen Industrial and Technological Basis for Economic Security”

⁶⁰ METI (2024) “Outline of Semiconductor Revitalization Strategy in Japan”

⁶¹ METI (2025) “Economic Security Policy Division: Action Plan Revision”

⁶² Cabinet Secretariat (2024), “Digital Rural City National Concept Comprehensive Strategy”

common standards, governance tools, and secure infrastructure, enabling seamless data exchange and fostering innovation across domains. At the same time, the system is designed to support a circular economy, allowing data to be certified, traced, and reused across the full lifecycle of product design, use, and recycling (Figure 3).

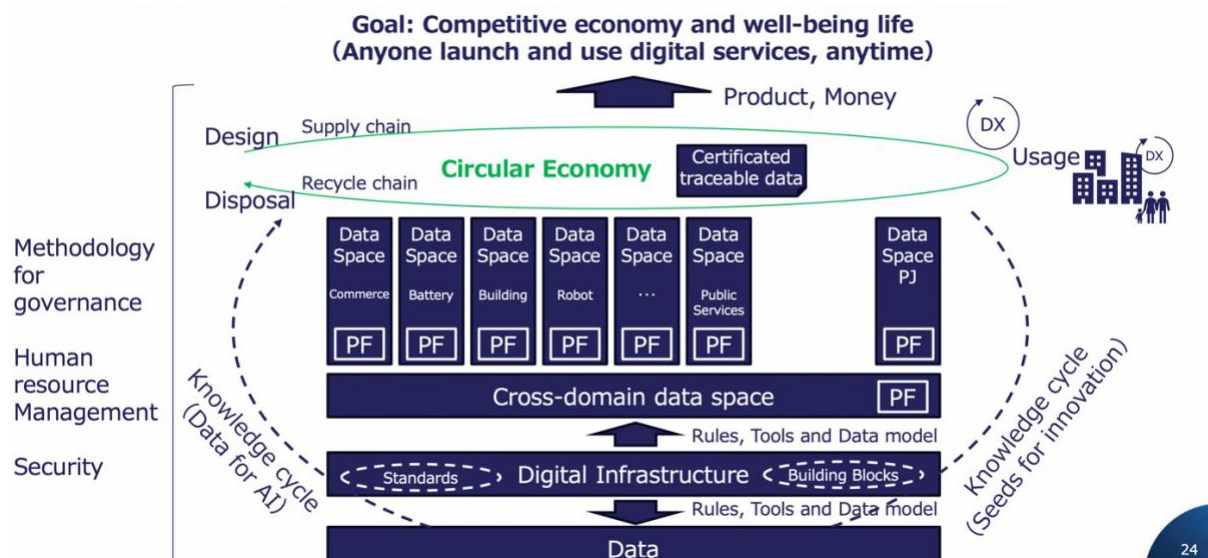


Figure 3: Cross-Domain Data Spaces and Circular Economy Framework⁶³

In addition, the systemic obstacles are also reflected in survey data. As shown in Figure 4, the most cited barriers were a lack of skilled staff, uncertainty about how to proceed, and no clear ideas or use cases. These findings show that many employees are undereducated in terms of using AI for their work, indicating the need for increased funding in education about AI usage and its usability.

Strengthening the support for implementation in society is crucial, such as frameworks that allows businesses and researchers to test new technologies or services in a controlled environment with relaxed regulatory requirements, enabling innovation while monitoring for risks. Under the current system, advanced demonstration experiments are being conducted in some local governments regarding AI-related projects, but it is necessary to expand the system to more fields and regions, as well as to provide institutional support at the national level. The government is seeking a hybrid institutional operation of a sandbox and this legal system for “speedy legal system development.”⁶⁴

⁶³ Source: METI, 2024 - IT Promotion Agency (2024) “Current Status and Initiative of AI in Japan”

⁶⁴ Cabinet Secretariat (2023), “Overview of the Regulatory Sandbox System”

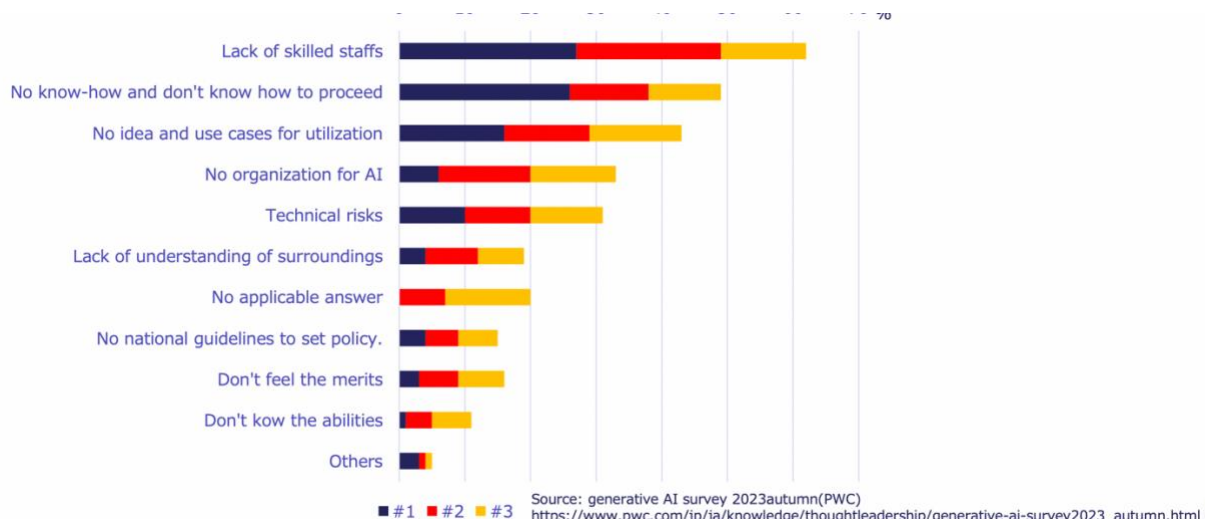


Figure 4: Top barriers to generative AI implementation in Japan⁶⁵

Future AI policy in Japan must adopt a comprehensive strategy that balances the development of a rapid and transparent legal system with the dual goals of economic innovation and human-centered, ethical AI. Specifically, the following three priorities should be promoted:

- (1) Establishment of new legal regimes, such as an AI security law and AI copyright law, to address emerging risks in content ownership, privacy, and algorithmic manipulation.
- (2) Support for domestic large language model (LLM) development through industry–academia collaboration and investment in compute and data infrastructure, to maintain international competitiveness.
- (3) Clarification and institutionalization of ethical and accountability frameworks that align with global standards, while also addressing the challenge of embedding fairness, inclusiveness, and transparency in AI systems deployed in diverse real-world contexts.

As AI becomes more embedded in decision-making processes across sectors, maintaining public trust and preventing bias and harm—especially to marginalized groups—will be vital for sustaining legitimacy and social acceptance.

To ensure its effectiveness, more active involvement in rule formation and stronger cooperation among government, industry, and research institutions will be essential. In addition, to enhance policy leadership in multilateral forums, there is a need to strengthen the ability to disseminate policies in English and to form an international network of policy makers and researchers.

Flexible and practical policy implementation that bridges the gap between rapid technological innovation and slower institutional response is essential for Japan to maintain relevance and contribute meaningfully to international AI governance. However, Japan’s goal is not merely to compete technologically. Rather, it aims to promote AI development that is aligned with its long-standing commitment to human-centered, inclusive, and ethically grounded principles. The key to achieving this lies in building a governance ecosystem through “co-creation”, which involves the private sector, academia, civil society, and cross-ministerial collaboration. This

⁶⁵ PwC (2023), “Survey on Generative AI Fall 2023”

approach allows Japan to both support innovation and uphold democratic values, serving as a normative model for AI governance that balances economic vitality with social responsibility.

Chapter 5: Conclusions and Recommendations

In this report, we have comprehensively analysed Japan's AI policy and legal system, including its historical development, status, international comparisons, and challenges. From this analysis, it is clear that the biggest challenges facing Japan are the rapid advancement of AI technologies and the parallel need to strengthen governance frameworks, human resources, and industrial infrastructure to support their safe and effective deployment.



*Figure 5: Basic Philosophies of Japanese AI policy*⁶⁶

The long-term vision for AI society that Japan should pursue is one that is human-centered, sustainable, and inclusive. This vision aligns with shared international values such as those of the OECD and the G7 Hiroshima AI Process, while also building on Japan's own strengths—precision technology, a deep concern for safety, and sensitivity to social impact.⁶⁷ As illustrated in Figure 5, this vision is grounded in three foundational principles: dignity, diversity & inclusion, and sustainability. As Japan incorporates AI to its society, it is necessary to ensure not only convenience and efficiency, but also fairness, reliability, and accountability. In the implementation of AI to the society, it is necessary to ensure not only convenience and efficiency, but also fairness, reliability, and accountability.

The following three policy recommendations are important for this purpose.

The first is to speed up the development of legislation: field-specific legislation such as the AI Security Law and the AI Copyright Law should be considered as soon as possible. In cutting-edge areas such as generative AI and automated driving, there is a noticeable “governance gap” in which systems have not kept pace with technological progress. A sandbox system should be

⁶⁶ MIC (2024), “AI Guidelines for Business Ver 1.0”

⁶⁷ Cabinet Office (2019) “Social Principles of Human-Centric AI”

utilized through cooperation between the public and private sectors, and guidelines should be legislated. Establishing responsive legal frameworks will help ensure that the development of AI technologies respects human dignity, strengthens accountability, and contributes to a fair and trustworthy digital society.

The second is to support the development of domestically produced LLMs by strengthening industry-academia collaboration. Currently, Japan's AI technology is dependent on foreign countries in terms of infrastructure, and there is an urgent need to create an environment for autonomous development of basic models. Through collaboration between universities, research institutions, and companies, and focused national investment, it will be possible to develop AI that is ethically and culturally compatible with Japanese society. This will promote technological sovereignty while supporting sustainability and diversity by ensuring that AI systems reflect local values and are accessible to a broad range of social actors.

Third, measures to balance ethics and innovation. It is important to design a flexible and effective system so that ethical guidelines do not become an impediment to innovation. For example, transparency and accountability requirements should be introduced in stages, and risk-based regulations should be adopted.

Through these efforts, Japan is expected to contribute to the international community as an “Asian model of trust” in AI governance. To this end, it is essential to design institutions that guarantee the effectiveness of policies and strengthen the ability to disseminate information internationally.

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