

Section 2 Responses to AI by country

In the midst of the rapid proliferation of AI, including generative AI, addressing the ethical and societal issues

that have arisen requires collaborative efforts not only domestically but also internationally.

1. Trends in international discussion

(1) Hiroshima AI Process

Discussions on the ethical and societal issues of AI have been intensifying since around 2015, and our country has been at the forefront of discussions in G7/G20 and the Organisation for Economic Co-operation and Development (hereinafter referred to as OECD), playing a significant role in formulating AI principles. In April 2016, at the G7 ICT Ministers' Meeting held in Takamatsu, Japan proposed discussions on the development principles of AI, leading to the agreement on AI principles at the OECD in May 2019, followed by the agreement on "G20 AI Principles" at the G20 Summit in June of the same year¹. From 2019 to 2020, there has been an international consensus forming around AI principles, and discussions have been transitioning to the formulation of specific institutional and regulatory frameworks to implement these principles in society. Furthermore, the rapid proliferation of generative AI in 2022 has led to an intensification of discussions on AI governance in international cooperation forums such as the G7 and within individual countries.

In April 2023, G7 Digital and Tech Ministers' Meeting in Takasaki, Gunma was held in Takasaki City, Gunma, where discussions were held on "Responsible AI and Global AI Governance" in light of the rapid proliferation and advancement of generative AI. At this meeting, the importance of interoperability between different AI governance frameworks among G7 members was con-

firmed, and a ministerial declaration consisting of six themes, including "Responsible AI and Global AI Governance," "Secure and Resilient Digital Infrastructure," and "Internet Governance," was compiled. This declaration was subsequently reflected in the discussions at the G7 Hiroshima Summit held in May, and the leaders' communiqué at the summit instructed the establishment of the Hiroshima AI Process for discussions on generative AI. Specifically, it was decided to collaborate with relevant organizations such as the OECD and the Global Partnership on AI (GPAI) and to advance investigations and deliberations in G7 working groups.

In September 2023, a ministerial-level meeting was held to discuss the development of advanced AI systems, including generative AI, based on reports drafted by the OECD in July and August. It was confirmed that transparency, disinformation, intellectual property rights, privacy, and personal information protection are priority issues. Subsequently, on October 30, the "G7 Leaders' Statement on the Hiroshima AI Process"² was issued, and International Guiding Principles and Code of Conduct for Organizations Developing Advanced AI Systems were first published. Furthermore, in December of the same year, a Comprehensive Policy Framework for the Hiroshima AI Process, including Project-Based Cooperation on AI, and Work Plan to advance Hiroshima AI Process were announced.

(2) Movements of the OECD/GPAI/UNESCO

A OECD

Many international organizations, including the OECD, the GPAI, and the UNESCO, are advancing the consideration of AI governance systems from a global perspective. Since the publication of the OECD AI Principles in May 2019, various OECD reports have been released, and projects have been promoted in collaboration with the G7, actively engaging in these activities. Additionally, in September 2023, the three organizations—the OECD, the GPAI, and the UNESCO—announced the "Global Challenge to Build Trust in the Age of Generative AI,"³ a global collaborative project aimed at advancing innovative solutions to social risks posed

by disinformation and deepfakes, based on the comprehensive framework of the G7.

At the OECD Ministerial Council Meeting held in May 2024, a side event on generative AI titled "Towards Safe, Secure, and Trustworthy AI: Promoting Inclusive Global AI Governance" was held, where Prime Minister KISHIDA announced the establishment of the "Hiroshima AI Process Friends Group,"⁴ a voluntary framework of countries and regions that support the spirit of the Hiroshima AI Process, with participation from 49 countries and regions.

B GPAI

The "Global Partnership on AI" (hereinafter referred

as to GPAI) was established in 2020 through a joint state-

¹ METI Study Group on Implementation of AI Principles, "AI Governance in Japan ver1.1", <https://www.meti.go.jp/shingikai/mono_info_service/ai_shakai_jisso/pdf/20210709_1.pdf> (accessed on March 4, 2024)

² Ministry of Foreign Affairs, "G7 Leaders' Statement on the Hiroshima AI Process" <https://www.mofa.go.jp/mofaj/ecm/ec/page5_000483.html> (accessed on March 4, 2024)

³ Global Challenge partners, "Global Challenge to Build Trust in the Age of Generative AI", <<https://globalchallenge.ai/>> (accessed on March 21, 2024)

⁴ https://www.kantei.go.jp/jp/101_kishida/statement/2024/0502speech2.html

ment by the OECD and the G7, based on a human-centered approach to realize the development and use of “Responsible AI.” The organization, with the OECD serving as its secretariat, is an international public-private partnership consisting of governments, international organizations, industries, and experts who share common values, with 29 countries currently participating. The GPAI has four working groups: “Responsible AI,”

“Data Governance,” “Future of Work,” and “Innovation and Commercialization,” where experts engage in discussions and practical research.

At the “GPAI Summit 2023,” the establishment of the GPAI Tokyo Expert Support Center, which is a new support center for the GPAI experts, was approved. This center is set to prioritize projects related to the investigation and analysis of generative AI.

C UNESCO

The United Nations Educational, Scientific and Cultural Organization (UNESCO) adopted the “UNESCO Recommendation on the Ethics of Artificial Intelligence”⁵ in 2021, supporting initiatives in various countries. In September 2023, the UNESCO published the “Guidance for Generative AI in Education and Research,”⁶ the first global guidance on generative AI in the fields of education and research. This document provides definitions and explanations of generative AI, ethical and policy is-

ssues, implications for the education sector, necessary steps for regulatory considerations, curriculum design, and learning. Given that most generative AI is primarily designed for adults, it suggests restricting its use in educational settings to those aged 13 and above. It also calls on governments to implement appropriate regulations, including data privacy protection, and to provide teacher training.

(3) AI Safety Summit

In May 2023, OpenAI announced the possibility of AI systems surpassing human expert skill levels within the next decade, naming this “Frontier AI.” Considering existential risks such as nuclear energy and synthetic biology, the company emphasized the need for international regulations rather than reactive measures. In response, the UK Prime Minister Sunak hosted the “AI Safety Summit”⁷ in Bletchley, the UK, on November 1 and 2, 2023. This summit was notable for its focus on “AI Safety,” aiming to prevent “Severe and Catastrophic Harm” caused by AI, beyond the traditional “AI Ethics” concerns of human rights and fairness.

The summit concluded with the adoption of the “Bletchley Declaration.”⁸ The UK also decided to establish the AI Safety Institute.

From May 21 and 22, 2024, the “AI Seoul Summit” was co-hosted by the Republic of Korea and the UK (with the leaders’ session held online on the 21st and the ministerial session held in person in Seoul on the 22nd). The summit deepened discussions on AI safety, promoted innovation in AI development, and addressed the equitable enjoyment of AI benefits. The summit resulted in the adoption of the “Seoul Declaration for Safe, Innovative, and Inclusive AI” and its appendix, the “Seoul Statement of Intent toward International Cooperation on AI Safety Science,” as leaders’ outcome documents. The ministerial outcome document, the “Seoul Ministerial Statement for Advancing AI Safety, Innovation and Inclusivity,” was also adopted. The next meeting is scheduled to be held in France in February 2025.

(4) Developments in the United Nations

In light of the growing interest in international governance frameworks for Frontier AI, the UK led discussions on AI at the United Nations Security Council in July 2023. In October of the same year, the UN Secretary-General António Guterres established a High-Level Advisory Body on AI, which includes Japanese members. On March 21, 2024, the UN General Assembly adopted by consensus the “Resolution Seizing the opportunities of safe, secure, and trustworthy artificial intelligence systems for sustainable development,”⁹ co-sponsored by Japan. This resolution is the first UN General Assembly resolution on safe, secure, and trustworthy AI. It promotes safe, secure, and trustworthy AI to

accelerate progress towards the “2030 Agenda for Sustainable Development” and to bridge the digital divide. The resolution encourages member states to develop and support regulatory and governance approaches related to safe, secure, and trustworthy AI. It also recommends that member states and stakeholders promote innovation for identifying, assessing, and mitigating risks during AI design and development, and establish, implement, and disclose risk management mechanisms for data preservation to ensure AI systems can address global challenges. Furthermore, it emphasizes that human rights and fundamental freedoms should be respected, protected, and promoted throughout the AI

⁵ UNESCO, “Recommendation on the Ethics of Artificial Intelligence”, <<https://unesdoc.unesco.org/ark:/48223/pf0000381137>> (accessed on March 13, 2024)

⁶ UNESCO, “Guidance for generative AI in education and research”, <<https://www.unesco.org/en/articles/guidance-generative-ai-education-and-research>> (accessed on March 13, 2024)

⁷ GOV.UK, “About the AI Safety Summit 2023”, <<https://www.gov.uk/government/topical-events/ai-safety-summit-2023/about>> (accessed on March 12, 2024)

⁸ GOV.UK, “The Bletchley Declaration by Countries Attending the AI Safety Summit, 1-2 November 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>> (accessed on March 12, 2024)

⁹ United Nations General Assembly, A/78/L.4 <<https://documents.un.org/doc/undoc/ltd/n24/065/92/pdf/n2406592.pdf?token=0e5FKl9eh5r1MmYPD3&fe=true>> (accessed on March 22, 2024)

system lifecycle.

This resolution reflects discussions from the Hiroshima AI Process, G7, G20, the OECD, and other forums, and although it does not have binding force under inter-

national law, its adoption by consensus signifies its political weight as the collective will of the international community.

2. Trends in creation of legal rules and guidelines by country

Currently, discussions on legal frameworks and international standards related to AI are actively taking place in various countries around the world. The year 2023 has become a significant milestone for AI policy, marked by the adoption of the EU AI Act by the European Parliament, the issuance of an executive order on AI safety in the US, and the publication of draft guidelines for AI-related businesses in Japan. Observing the regulatory movements concerning AI in each country and region,

(1) European Union (EU)

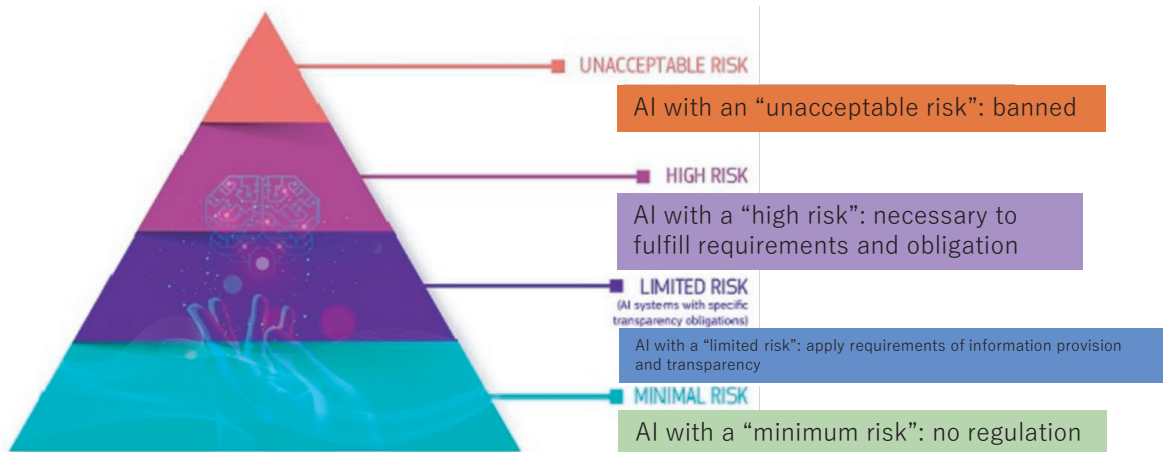
The EU, which lacks major Big Tech companies originating within its borders, has aimed to implement the strictest regulations ahead of other regions and has been discussing AI regulations since 2020. On May 21, 2024, the AI Act¹⁰, which is positioned as the world's first comprehensive AI regulation with legal binding force targeting businesses that develop, provide, and use AI systems in the European market, was established. This AI Act marks the first comprehensive AI regulation law to be established in major countries and regions, and it is expected to be gradually applied, with full implemen-

the rapid rise in interest in generative AI has necessitated a review of the governance systems that have been under consideration. In the establishment of regulations for rapidly evolving technologies, it is essential for governments to take the lead while also requiring voluntary efforts from AI businesses. This dual approach of public and private sector collaboration is currently being advanced.

tation anticipated around 2026.

The AI Act is based on a “Risk-based Approach,” which changes the regulatory content according to the level of risk¹¹. It classifies regulatory targets into four risk levels: (1) unacceptable risk; (2) high risk; (3) limited risk; and (4) minimal risk AI applications and systems, and imposes different regulations for each level. Businesses that violate these regulations may face fines of up to 35 million euros (approximately 5.6 billion yen) or 7% of their annual turnover for the most severe violations¹² (Figure 1-4-2-1).

Figure 1-4-2-1 Risk-based approach in the AI Act



(Source) Prepared based on the European Commission (2024)¹³

(2) The U.S.

The U.S., home to many Big Tech companies, has focused on protecting its own companies, prioritizing voluntary measures by the private sector over government regulations. The government steps in with regulations

only when necessary¹⁴.

In July 2023, seven leading AI development companies (including Google, Meta Platforms, and OpenAI)¹⁵ committed to voluntary measures for safe AI develop-

¹⁰ European Commission, “AI Act”, <<https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai>> (accessed on March 2, 2024)

¹¹ European Parliament, “Artificial intelligence act”, <[https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698792/EPRS_BRI\(2021\)29698792_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698792/EPRS_BRI(2021)29698792_EN.pdf)> (accessed on March 12, 2024)

¹² “EU regulates AI development and operation by law...Copyright protection of learning data, fines of 5.6 billion yen for violators”, “Yomiuri News” March 13, 2024 issue

¹³ European Commission, “AI Act”, <<https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai>> (accessed on March 15, 2024)

¹⁴ “AI legislation: Industry, government, and academia debate with the world” Ask an expert, “Nihon Keizai Shimbun Electronic Edition” January 1, 2024 issue

¹⁵ Amazon, Anthropic, Google, Inflection, Meta Platforms, Microsoft, OpenAI

ment. In September, an additional eight companies (including IBM, Adobe, and NVIDIA)¹⁶ agreed to these measures, as announced by the U.S. government¹⁷. These companies have established principles from the perspectives of safety, security, and reliability as part of their voluntary commitments¹⁸.

While the White House indicated that these companies would continue their efforts until mandatory regulations were introduced, President Biden announced the “Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence”¹⁹ on October 30, 2023. This executive order expands the scope of AI issues from ethical considerations to national security concerns. It includes not only Big Tech companies but also biotechnology firms and other businesses that could impact national security and the economy. The order mandates new safety assessments for AI, guidance on fairness and civil rights, and studies on AI’s impact on the labor market²⁰. It aims to establish new standards for AI safety and security, protect American privacy, and promote fairness and civil rights²¹.

Following the publication of the executive order, Vice President Harris announced the “New U.S. Initiatives to Advance the Safe and Responsible Use of Artificial Intelligence”²² at the UK AI Safety Summit in November 2023. This initiative includes the establishment of the U.S. AI Safety Institute (hereafter referred to as US AISI) within the National Institute of Standards and Technology (NIST). The US AISI, established within the National Institute of Standards and Technology (NIST),

develops guidelines, tools, benchmarks, and best practices to evaluate and mitigate harmful functionalities, conducts evaluations to identify and mitigate AI risks, including red team assessments. It also plans to develop technical guidance related to the authentication of human-generated content, electronic watermarking for AI-generated content, identification and mitigation of discrimination by harmful algorithms, ensuring transparency, and introducing privacy protection. This includes the collaboration with international counterparts such as the UK’s AI Safety Institute for information sharing and research cooperation, as well as potential partnerships with external experts from civil society, academia, and industry.

Meanwhile, the U.S. Congress is also discussing federal-level AI regulation bills. In June 2023, the Senate proposed the “SAFE Innovation Framework,” a comprehensive framework to address the rapid advancement of AI, and held nine thematic forums with industry representatives and experts by December 2023²³. The House of Representatives announced the establishment of a bipartisan task force on AI in February 2024, which will prepare a comprehensive report with principles and policy recommendations for AI policy²⁴. Although several bills regulating AI use in specific areas, such as elections, have been introduced in both chambers, none have yet passed. With the U.S. presidential election approaching in the fall of 2024, discussions on AI regulation are expected to intensify, particularly concerning issues like deepfake-driven information manipulation.

(3) The UK

The UK is considered one of the leading countries in AI research, following the U.S. and China. Although it fell to fourth place for the first time in 2023 due to the rise of Singapore in terms of private investment in the AI sector, it has maintained its position as the third in the world since 2019, following the U.S. and China²⁵. The

current Sunak administration is reluctant to implement legally binding AI regulations. Instead, it aims to promote the development of AI systems with safety considerations, thereby leading to economic growth. Consequently, it has expressed its intention not to establish strict new regulations like the EU’s AI Act for the time

¹⁶ Adobe, Cohere, IBM, NVIDIA, Palantir, Salesforce, Scale AI, Stability

¹⁷ The White House, “FACT SHEET: Biden-Harris Administration Secures Voluntary Commitments from Eight Additional Artificial Intelligence Companies to Manage the Risks Posed by AI”, <<https://www.whitehouse.gov/briefing-room/statements-releases/2023/09/12/fact-sheet-biden-harris-administration-secures-voluntary-commitments-from-eight-additional-artificial-intelligence-companies-to-manage-the-risks-posed-by-ai/>> (accessed on March 8, 2024)

¹⁸ (1) Ensuring Safety Before System Release: The companies commit to internal and external security testing of their AI systems before their release. The companies commit to sharing information across the industry and with governments, civil society, and academia on managing AI risks. (2) Building Systems that Put Security First: The companies commit to investing in cybersecurity and insider threat safeguards to protect proprietary and unreleased model weights. The companies commit to facilitating third-party discovery and reporting of vulnerabilities in their AI systems. (3) Earning the Public’s Trust: The companies commit to developing robust technical mechanisms to ensure that users know when content is AI generated, such as a watermarking system. The companies commit to publicly reporting their AI systems’ capabilities, limitations, and areas of appropriate and inappropriate use.

The White House, “FACT SHEET: Biden-Harris Administration Secures Voluntary Commitments from Leading Artificial Intelligence Companies to Manage the Risks Posed by AI”, <<https://www.whitehouse.gov/briefing-room/statements-releases/2023/07/21/factsheet-biden-harris-administration-secures-voluntary-commitments-from-leading-artificial-intelligence-companies-to-manage-the-risks-posed-by-ai/>> (accessed on March 8, 2024)

¹⁹ The White House, “Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence”, <<https://www.whitehouse.gov/briefing-room/presidential-actions/2023/10/30/executive-order-on-the-safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence/>> (accessed on March 4, 2024)

²⁰ “Thinking about AI governance (5) Different responses depending on social and cultural backgrounds”, “Nihon Keizai Shimbun” morning edition, February 8, 2024

²¹ The White House, “FACT SHEET: President Biden Issues Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence”, <<https://www.whitehouse.gov/briefing-room/statements-releases/2023/10/30/fact-sheet-president-biden-issues-executive-order-on-safesecure-and-trustworthy-artificial-intelligence/>> (accessed on March 10, 2024)

²² The White House, “FACT SHEET: Vice President Harris Announces New U.S. Initiatives to Advance the Safe and Responsible Use of Artificial Intelligence”, <<https://www.whitehouse.gov/briefing-room/statements-releases/2023/11/01/fact-sheet-vice-president-harris-announces-new-u-s-initiatives-to-advance-the-safe-and-responsible-use-of-artificial-intelligence/>> (accessed on March 10, 2024)

²³ “U.S. Senate Leader Schumer Announces Action Framework for Formulation of AI Bill”, “JETRO Business Bulletin” June 22, 2023 issue

²⁴ “U.S. House of Representatives establishes bipartisan task force on AI”, “JETRO Business Bulletin” February 28, 2024 issue

²⁵ Tortoise media, “The Global AI Index”, <<https://www.tortoisemedia.com/intelligence/global-ai/#rankings>> (accessed on March 21, 2024)

being, opting to handle matters flexibly within the existing framework. In line with this policy, the UK government published a policy document in March 2023 titled “A pro-innovation approach to AI regulation,”²⁶ which outlines the basic framework for AI regulation in the country. This document sets forth five principles from the perspectives of security, transparency, fairness, accountability, and contestability²⁷. When addressing AI governance, the approach is described as “pro-innovation, flexible, non-statutory, proportionate, trustworthy, adaptable, clear, and collaborative.” For the time being, the government plans to encourage the implementation

(4) Japan

While Japan shares the same stance as Western countries regarding democracy and fundamental human rights, cultural and social norms differ, leading to a unique societal perception of AI. Consequently, in terms of AI governance, Japan currently favors a soft law approach that emphasizes voluntary efforts by private businesses, rather than a cross-cutting legal regulatory approach. This contrasts with Europe, which aims for legally binding hard laws. The MIC and the METI have been at the forefront of these efforts. The “AI Development Guidelines”²⁸ by the MIC’s AI Network Society Promotion Council were published in 2017, followed by the “AI Utilization Guidelines”²⁹ in 2019. Additionally, in March of the same year, guidelines based on the “Human-Centric AI Social Principles”³⁰ decided by the Cabinet Office’s Integrated Innovation Strategy Promotion Council were formulated. In July 2021, the METI published the “Governance Guidelines for the Implementation of AI Principles” (revised in January 2022)³¹, which outlines action goals for AI businesses along with practical examples. These guidelines are organized by items such as environmental and risk analysis, system design, and operation, to serve as a reference for businesses developing and operating AI.

In May 2023, the government established the “AI Strategic Council” to discuss various themes such as addressing AI risks, optimal AI utilization, and measures to strengthen AI development capabilities. The council published the “Tentative Summary of AI Issues”³² and

of these principles within the industry under existing regulations through the collaboration of various government agencies. In the future, there may be an effort to make these principles mandatory.

Additionally, on November 27, 2023, the UK’s National Cyber Security Centre (NCSC) and the U.S.’ Cybersecurity and Infrastructure Security Agency (CISA) led a joint effort with 18 countries, including Japan, to publish the “Guidelines for secure AI system development.”²⁸ These guidelines compile the necessary actions to be taken at each stage of AI design, development, deployment, operation, and maintenance.

began work on integrating guidelines from various ministries. In September of the same year, the council presented a “New AI Business Operator Guidelines Skeleton (Draft)” that included governance for generative AI. In December, the government published the “AI Business Operator Guidelines Draft,” which outlines ten principles, including considerations for human rights and countermeasures against disinformation, and prohibits the development of AI that unjustly manipulates human decision-making, cognition, or emotions. However, unlike in the West, these guidelines do not have certain legal binding force. After a public comment period, the “AI Guidelines for Business Ver 1.0” were published on April 19, 2024.

Additionally, at the AI Strategic Council meeting in December 2023, Prime Minister Kishida announced the establishment of the “AI Safety Institute” (hereinafter referred as to AISI)³⁴ in Japan, similar to institutions in the US and UK, in response to the growing international concern over AI safety. On February 14, 2024, the AISI was established under the Information-technology Promotion Agency (IPA), which is under the jurisdiction of the METI. The AISI will collaborate with similar institutions in the UK, the US, and other countries to develop standards and guidance to improve the safety of AI development, provision, and utilization, conduct research on AI safety evaluation methods, and investigate technologies and case studies related to AI safety.

²⁶ GOV.UK, “AI regulation: a pro-innovation approach”, <<https://www.gov.uk/government/publications/ai-regulation-a-pro-innovationapproach>> (accessed on March 19, 2024)

²⁷ (1) Safety, Security, and Robustness: AI systems must be robust, secure, and safe throughout their lifecycle, and risks must always be identified, assessed, and managed. (2) Appropriate Transparency and Explainability: Developers and implementers of AI systems must provide sufficient information to stakeholders about when, how, and for what purpose the AI system is being used, and must offer adequate explanations of the AI system’s decision-making processes to stakeholders. (3) Fairness: AI systems must not infringe on the legal rights of individuals or entities throughout their lifecycle, and must not be used to unfairly discriminate against individuals or produce unfair commercial outcomes. (4) Accountability and Governance: An effective governance framework must be established to ensure the monitoring of the supply and use of AI systems, and clear accountability must be maintained throughout the AI system’s lifecycle. (5) Disputability and Redress: In cases where AI decisions or outcomes are harmful or involve significant risks, those affected must be provided with opportunities to appeal and seek redress.

²⁸ National Cyber Security Centre, “Guidelines for secure AI system development”, <<https://www.ncsc.gov.uk/collection/guidelinessecure-ai-system-development>> (accessed on March 12, 2024)

²⁹ MIC, “Publication of AI Network Society Promotion Council Report 2017”, <https://www.soumu.go.jp/menu_news/s-news/01iicp01_02000067.html>

³⁰ MIC, “Publication of AI Network Society Promotion Council Report 2019”, <https://www.soumu.go.jp/menu_news/s-news/01iicp01_02000081.html>

³¹ Cabinet Office, Integrated Innovation Strategy Promotion Council Decision, “Social Principles of Human-Centric AI”, <<https://www8.cao.go.jp/cstp/aigensoku.pdf>> (accessed on March 12, 2024)

³² METI, “Governance Guidelines for the Implementation of AI Principles ver. 1.1”, <https://www.meti.go.jp/shingikai/mono_info_service/ai_shakai_jisso/20220128_report.html> (accessed on March 12, 2024)

³³ Cabinet Office AI Strategic Council “Tentative Summary of AI Issues”, <https://www8.cao.go.jp/cstp/ai/ronnen_honbun.pdf> (accessed on March 12, 2024)

³⁴ AI Safety Institute, <<https://aisi.go.jp/>> (accessed on March 12, 2024)