Բանբեր Երևանի համալսարանի. Իրավագիտություն
2024, Vol. 15, No. 2(41), դեկտեմբեր, 158-172
https://doi.org/10.46991/BYSU:C/2024.15.2.158

AN OVERVIEW OF GLOBAL EFFORTS TOWARDS AI REGULATION

TATEVIK DAVTYAN[*]
Yerevan State University

Abstract. This article provides a global perspective on the efforts to regulate artificial intelligence (AI), a transformative force reshaping businesses, governments, and societies globally. It examines the different approaches various countries and international organizations take in response to the rapid advancements in AI technologies. As AI continues to transform, there is a growing need for comprehensive regulatory frameworks to address its complex ethical, social, and economic challenges. The article presents the AI regulatory strategies of key jurisdictions, including the U.S., UK, Canada, China, Japan, Singapore, Israel, India, and the European Union, influenced by their unique political, economic, and cultural contexts. It also explores the initiatives of international and intergovernmental organizations such as the United Nations, Council of Europe, G7, and OECD in establishing global standards and guidelines for AI's ethical and responsible use. This overview is a valuable resource for understanding the evolving landscape of AI governance. It provides a foundation for further research and policy development to balance innovation with protecting public interests, upholding human rights, and mitigating potential risks[**].

Key words: *Artificial Intelligence, Artificial Intelligence Regulation, Artificial Intelligence Governance, Artificial Intelligence Policy Frameworks, Responsible Artificial Intelligence, Ethical Artificial Intelligence*

[*] **Tatevik Davtyan –** PhD in Law, Associate Professor, Researcher of the Center for American Studies at YSU. Vice President and General Counsel of One Planet Group, a U.S.-based IT and media company.
Տաթևիկ Դավթյան – իրավաբանական գիտությունների թեկնածու, ԵՊՀ քաղաքացիական իրավունքի ամբիոնի դոցենտ, ԵՊՀ ամերիկյան հետազոտությունների կենտրոնի հետազոտող «One Planet Group» ընկերության փոխնախագահ և գլխավոր խորհրդական
Татевик Давтян – кандидат юридических наук, доцент кафедры гражданского права ЕГУ, научный сотрудник Центра американских исследований ЕГУ, Вице-президент и главный юрисконсульт One Planet Group
E-mail: davtyan.tatevik@gmail.com. ORCID: https://orcid.org/0000-0002-4382-2229.

Ստացվել է՝ 12.09.2024
Գրախոսվել է՝ 19.09.2024
Հաստատվել է՝ 15.12.2024

[**] **Disclaimer.** This article was funded through a Department of State Public Diplomacy Section grant, and the opinions, findings, and conclusions or recommendations expressed herein are those of the Author(s) and do not necessarily reflect those of the Department of State.
Սույն հոդվածը ֆինանսավորվել է ԱՄՆ պետքարտուղարության Հանրային դիվանագիտության գրասենյակի դրամաշնորհի շրջանակներում: Այս հոդվածում արտահայտված է հեղինակի դիրքորոշումը, որի համընկնումը ԱՄՆ պետքարտուղարության դիրքորոշման հետ պարտադիր չէ:

Introduction

The rapid advancement of artificial intelligence (AI) is significantly impacting businesses, governments, and societies worldwide. As technological innovations progress at an unprecedented pace, the regulatory landscape has struggled to keep up. Policymakers in emerging economies often emphasize the potential benefits of AI, including reducing poverty, improving healthcare, addressing climate change, increasing productivity, and enhancing education and governance. Their policy discussions often concentrate on the numerous opportunities AI offers for development without the need to regulate AI.[1] In contrast, policymakers in more developed regions prioritize the risks associated with AI, such as political interference, misinformation, algorithmic bias, mass surveillance, privacy breaches, job displacement, inequality, the spread of autonomous and nuclear weapons, cybersecurity threats, geopolitical tensions, and the potential risk of a "superintelligence" that could act contrary to human interests, driving efforts to regulate AI.[2] As AI technologies reached a broader audience through commercialization, the need for regulation to address these risks has become more urgent. The debate over AI regulation has intensified, particularly following a letter issued on May 30, 2023, by approximately 350 AI experts. This letter compared the risks posed by AI to global threats such as pandemics and nuclear war, highlighting the immediate need for regulatory action.[3] It significantly contributed to the worldwide dialogue on AI regulation and is now gaining considerable attention across various jurisdictions worldwide. Nevertheless, as a field of research, AI policy is still in the early stages. Only in the last few years have national governments formally considered and adopted policy frameworks explicitly discussing "Artificial Intelligence," making decisions about AI priorities and ambitions, and managing associated risks.[4] Unsurprisingly, countries are adopting varied approaches to AI, each shaped by their unique legal frameworks, cultural values, and traditions.[5]

Jurisdictions discussed in this article, such as the U.S., UK, Canada, China, Japan, Singapore, Israel, India, and the EU, have been chosen for their significant global influence and varied AI strategies. They offer perspectives from comprehensive regulatory frameworks to flexible, sector-specific guidelines shaped by diverse political, economic, and cultural contexts. Their leadership in AI innovation and active participation in international forums such as the G7, OECD, UN, and others underscore their essential role in shaping global AI governance trends.

European Union

In 2024, the European Union ("EU") adopted its landmark EU Artificial Intelligence

---

[1] See **Emma Klein** and **Stewart Patrick.** *Envisioning a Global Regime Complex to Govern Artificial Intelligence*—Carnegie Endowment for International Peace, March 21, 2024. [https://carnegieendowment.org/research/2024/03/envisioning-a-global-regime-complex-to-govern-artificial-intelligence?lang=en].

[2] See *Ibid.*

[3] See **Center for AI Safety,** *Statement on AI Risk. AI experts and public figures express their concern about AI risk*. [https://www.safe.ai/work/statement-on-ai-risk].

[4] See **Marc Rotenberg**, *AI Policy Sourcebook* (2019, 2020), see Artificial Intelligence and Democratic Values. Index 2023. Center for AI and Digital Policy [https://www.caidp.org/reports/aidv-2023/] ISBN 979-8-9857883-0-3. p. 49.

[5] See *Ibid* for comprehensive information on countries' AI regulatory frameworks; see also OECD AI Policy Observatory National AI policies & strategies section that provides a live repository of over 1000 AI policy initiatives from 69 countries, territories, and the EU, [https://oecd.ai/en/dashboards/overview].

Act[6] (“AI Act” or “Act”), the world’s first comprehensive regulatory framework for AI[7], an all-encompassing and legally binding AI regulatory framework. The Act mirrors its approach with the General Data Protection Regulation (GDPR), aiming to create a comprehensive, cross-sectoral regulatory framework that can serve as a global benchmark. The Act is integral to the European Commission's efforts to create a “Europe fit for the digital age.” It plays a significant role in the extensive regulatory landscape developed during the 2019–2024 term, which includes over ten significant digital regulations covering the data economy, cybersecurity, and platform governance.[8] The Act demonstrates the EU's proactive stance in developing a comprehensive digital regulatory framework alongside other significant regulations, like the Digital Markets Act and the Digital Services Act. [9]

The AI Act, often described as "horizontal," implements a risk-based framework to regulate AI applications, classifying them based on their potential risks. This tiered system of regulatory obligations is applied to a specifically enumerated list of AI technologies. For instance, AI tools such as deepfakes, chatbots, and biometric analysis must disclose their nature to affected individuals. Meanwhile, the Act imposes stricter rules on high-risk applications and completely bans AI systems that pose "unacceptable risks." These prohibited uses may include AI for social scoring, certain types of AI-enabled manipulative technologies, and, with several important exceptions, biometric identification by law enforcement in public spaces. The regulatory approach thus varies depending on the AI application's specific type and risk level.[10] The Act covers both single-purpose and general-purpose AI and sets standards for market entry, oversight, and governance to promote ethical AI development and maintain public trust. It encourages responsible and human-centric AI innovation while protecting democratic

---

[6] See Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonized rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act) (Text with EEA relevance) [http://data.europa.eu/eli/reg/2024/1689/oj].

[7] On March 13, 2024, the EU Parliament approved the EU AI Act, published in the Official Journal of the European Union on July 12, 2024. It came into force on August 2, 2024, initiating a phased implementation. By February 2, 2025, bans on AI systems with unacceptable risks, such as emotion recognition, social scoring, and biometric categorization, will take effect. Codes of conduct for AI will be implemented on May 2, 2025, followed by governance rules and obligations for general-purpose AI on August 2, 2025. The complete application of the AI Act, including high-risk AI provisions in Annex III, will commence on August 2, 2026, with the entire Act fully in effect by August 2, 2027, including regulations for high-risk AI systems in products covered by EU harmonization laws.

[8] See, e.g., **Deloitte**, *EU Artificial Intelligence Act. Deep Dive*. 2024. [https://www2.deloitte.com/content/dam/Deloitte/nl/Documents/deloitte-nl-digital-regulations-AI-Act-deep-dive.pdf], **Madiega, Tambiama**. *Artificial Intelligence Act: EU Legislation in Progress*. PE 698.792, European Parliamentary Research Service, September 2024, [Artificial intelligence act (europa.eu)]

[9] See **Vassilis Koutsoumpas**, *A Look Across the Pond: A Comparison of Regulatory Efforts Around AI and the Challenges Ahead*, April 5, 2024 [https://gppreview.com/2024/04/05/a-look-across-the-pond-a-comparison-of-regulatory-efforts-around-ai-and-the-challenges-ahead/]; **Vincenzo Tiani, Joe Jones** and **Isabelle Roccia.** *Global AI Governance Law and Policy*: *EU*, International Association of Privacy Professionals, One Trust. Article Series. 2024, [https://iapp.org/resources/article/global-ai-governance-eu/].

[10] See **Alex Engler,** *The EU and U.S. Diverge on AI Regulation: A Transatlantic Comparison and Steps to Alignment."* Brookings, April 25, 2023, [https://www.brookings.edu/articles/the-eu-and-us-diverge-on-ai-regulation-a-transatlantic-comparison-and-steps-to-alignment/#top2]. Engler, Alex. "

values, fundamental rights, and public health and safety. [11] Furthermore, the Act aims to standardize AI legislation across the EU, effectively manage AI risks and benefits, establish dedicated governance bodies, and improve AI literacy at all societal levels.

United States

The United States currently lacks a comprehensive federal law specifically governing AI. Instead, AI regulation in the U.S. revolves around two main strategies: federal agencies issuing guidelines and standards and relying on industry self-regulation. In contrast to the EU's comprehensive AI Act, the U.S. approach relies on voluntary compliance and sector-specific guidelines.[12] This approach is driven by the belief that AI technology needs room to grow and develop before broad, binding regulations become necessary. Several executive orders have been issued to shape federal policy and practice related to AI governance, with various agency regulations focused on government use of AI, leading to a fragmented regulatory landscape. Moreover, this decentralized approach enables federal agencies to use their current authorities to address AI-related issues, with agencies affirming that their current authorities extend to AI technologies.[13] Additionally, the flexibility in regulations allows individual states\ to propose or enact their AI laws.[14]

President Biden's Executive Order on Safe, Secure, and Trustworthy AI ("EO"), issued in October 2023, is the first centralized attempt to ensure that federal agencies' AI initiatives are aligned with best practices and standards in safe, ethical, and trustworthy AI. The EO builds on previous efforts, including combating algorithmic discrimination and obtaining safety commitments from major U.S. tech companies like Amazon, Google, Meta, Microsoft, and OpenAI.[15] Unlike the EU's detailed legal framework, the EO adopts a principles-based approach, encouraging responsible AI development through broad guidelines emphasizing safety, innovation, and ethical considerations. It outlines priorities such as enhancing AI safety and security, promoting innovation, and protecting privacy without detailing specific regulations. This reflects a more flexible regulatory environment, encouraging voluntary compliance and industry-led standards. It introduces new standards for AI safety and security, requiring developers to share safety test results and mandating government agencies to develop tools to ensure AI systems are safe and secure. The order also addresses cybersecurity by establishing a program to develop AI tools for identifying software vulnerabilities and enhancing national security measures. To protect privacy, the EO prioritizes the

---

[11] See, e.g., **Deloitte**, 2024; **KPMG International,** *Decoding the EU AI Act*., 2024 [https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2024/02/decoding-the-eu-artificial-intelligence-act.pdf].

[12] See **Müge Fazlioglu**, *Global AI Governance Law and Policy*, International Association of Privacy Professionals, One Trust. Article Series, May 2024, [https://iapp.org/media/pdf/resource_center/global_ai_governance_law_policy_series_us.pdf].

[13] See **Chopra, Rohit, Kristen Clarke, Charlotte A. Burrows, and Lina M. Khan**, *Joint Statement on Enforcement of Civil Rights, Fair Competition, Consumer Protection, and Equal Opportunity Laws in Automated Systems*. Consumer Financial Protection Bureau, April 2023, [https://www.eeoc.gov/joint-statement-enforcement-civil-rights-fair-competition-consumer-protection-and-equal-0].

[14] *Ibid.;* The U.S. has traditionally seen tech policy progress driven at the state level, as states can enact legislation more swiftly than the federal government. As a result, states will likely continue to lead AI regulation efforts without a federal law.

[15] See **Marcin Szczepański**. *European Parliamentary Research Service*. Members' Research Service, PE 757.605, January 2024, [https://www.europarl.europa.eu/RegData/etudes/ATAG/2024/757605/EPRS_ATA(2024)757605_EN.pdf].

development of privacy-preserving technologies and sets guidelines for federal data usage. It also focuses on equity and civil rights by guiding the prevention of AI-driven discrimination in housing, federal benefits, and criminal justice. For consumer protection, it promotes responsible AI use in healthcare and education. The EO supports workers by developing best practices to maximize AI's benefits and minimize labor market disruptions. Additionally, it aims to foster innovation and competition by boosting AI research and attracting skilled talent to the U.S. Internationally, the EO seeks to expand U.S. leadership in AI through global collaborations and promoting ethical AI standards. The order also enhances government use of AI by improving contracting processes and increasing the hiring of AI experts, with detailed implementation guidance provided by the Office of Management and Budget[16].

United Kingdom

The United Kingdom has adopted a light-touch, principles-based approach to AI regulation, distinct from the more comprehensive regulatory frameworks in the EU. The UK emphasizes flexibility and innovation, empowering existing sector-specific regulators to develop governance models tailored to their respective industries. This approach, outlined in the 2023 AI Regulation White Paper,[17] ("White Paper"), avoids rigid statutory regulation and promotes adaptability, allowing regulators to respond dynamically to rapid technological advancements. The UK's AI regulatory strategy is rooted in its National AI Strategy launched in 2021. This ten-year plan aims to position the country as a global AI superpower. This strategy focuses on long-term investments, ensuring AI benefits all sectors and regions, and establishing effective domestic and international governance. The UK has also engaged in global AI safety efforts, such as hosting the AI Safety Summit, which resulted in the Bletchley Declaration promoting international AI safety standards.[18] The White Paper and its subsequent response to public consultation feedback on February 6, 2024 (the "Response")[19], suggest that the UK does not plan to introduce comprehensive, cross-sectoral AI regulation soon. Instead, the UK government favors a "principles-based framework" that allows existing sector-specific regulators to adapt and apply AI guidelines within their authority areas.[20] However, shifting from this initially flexible stance, the King's Speech[21] on July 17, 2024, introduced plans for binding measures on AI, including legislation to regulate the development of the most advanced AI models. The Digital Information and Smart Data

---

[16] *Ibid.*

[17] See **Command Paper Number: 815**, Presented to Parliament by the Secretary of State for Science, Innovation, and Technology by Command of His Majesty on 29 March 2023. Crown copyright 2023, ISBN: 978-1-5286-4009-1 [https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/white-paper].

[18] See **Marcin Szczepański**, and **Lucille Killmayer**. *European Parliamentary Research Service*. Members' Research Service, PE 762.285, April 2024, [https://www.europarl.europa.eu/RegData/etudes/ATAG/2024/762285/EPRS_ATA(2024)762285_EN.pdf].

[19] See **Command Paper: CP 1019**, ISBN: 978-1-5286-4565-2, Unique Reference: E03019481 02/24 Presented to Parliament by the Secretary of State for Science, Innovation, and Technology by Command of His Majesty on 6 February 2024. [https://www.gov.uk/government/consultations/ai-regulation-a-pro-innovation-approach-policy-proposals/outcome/a-pro-innovation-approach-to-ai-regulation-government-response].

[20] See **White & Case LLP,** *AI Watch: Global regulatory tracker - United Kingdom*, 2024 [https://www.whitecase.com/insight-our-thinking/ai-watch-global-regulatory-tracker-united-kingdom].

[21] See *The King's Speech*, 2024 [https://www.gov.uk/government/speeches/the-kings-speech-2024].

Bill was also announced to include reforms in data-related laws to ensure the safe development and deployment of new technologies, potentially including AI.[22]

Canada

Canada's approach to AI regulation is currently focused on developing a federal framework through the proposed Artificial Intelligence and Data Act (AIDA), which is part of the broader Bill C-27. This bill also encompasses the Consumer Privacy Protection Act, the current federal privacy law update, and the Personal Information and Data Protection Tribunal Act. [23] While AIDA aims to establish federal standards for regulating AI, particularly for high-impact systems, it leaves many specifics to be determined through future regulations. The provinces have yet to introduce laws directly regulating AI, indicating that Canada's approach remains centralized mainly at the federal level. Introduced in June 2022, AIDA has progressed through its second reading and was referred to the Standing Committee on Industry Science and Technology in April 2023.[24] The initial draft lacked detailed substantive content, deferring main regulatory elements, including compliance obligations and the definition of "high-impact systems," to future rulemaking. In response to concerns, the Minister of Innovation, Science, and Industry proposed substantial amendments in November 2023. However, these amendments have not yet been adopted, and there is uncertainty about when AIDA will come into effect, with some doubt about its passage before the next federal election deadline in October 2025[25]. There have also been calls to remove AIDA from Bill C-27 and undertake a more comprehensive overhaul, reflecting ongoing debates about the best approach to AI governance in Canada.[26]

China

Between 2017 and 2020, the government took a cautious approach to AI, emphasizing its strategic importance and promoting industry self-regulation. During this time, the 2017 Plan of Next Generation AI Development[27] was released, and advisory committees were established, but there were no mandatory rules targeting AI technologies. From 2020 to 2022, China began introducing voluntary national standards to guide AI development, signaling the start of regulatory oversight. This period focused on finalizing key data protection laws, including the Personal Information Protection Law,[28] which set the stage for future AI-specific regulations. The Data Security Law

---

[22] See *The King's Speech background notes*, 2024 [https://assets.publishing.service.gov.uk/media/6697f5c10808eaf43b50d18e/The_King_s_Speech_2024_background_briefing_notes.pdf].

[23] See **White & Case LLP**, *AI Watch: Global regulatory tracker – Canada*, 2024 [https://www.whitecase.com/insight-our-thinking/ai-watch-global-regulatory-tracker-canada].

[24] See *C-27, Digital Charter Implementation Act*, 2022 [https://www.parl.ca/LegisInfo/en/bill/44-1/C-27].

[25] See **Alex LaCasse**, *Canadian Parliament's Bill C-27 hearing delves deeper into AIDA*, International Association of Privacy Professionals, 2023 [https://iapp.org/news/a/canadian-parliaments-bill-c-27-hearing-delves-deeper-into-aida/].

[26] *Ibid.*

[27] See **State Council of the People's Republic of China.** *Notice on the Development Plan of the New Generation of Artificial Intelligence*. No. 35, July 8, 2017 [https://www.gov.cn/zhengce/content/2017-07/20/content_5211996.htm].

[28] See **Rogier Creemers** and **Graham Webster**. *Personal Information Protection Law of the People's Republic of China: Translation*. DigiChina, August 20, 2021. Last revised: September 7, 2021.

2021[29] supplemented the Cybersecurity Law 2016,[30] which became effective on June 1, 2017. Since 2022, China has moved towards direct supervision of AI technologies, with the Cyberspace Administration of China implementing mandatory regulations. These include the 2021 Recommendation Algorithm Provisions[31], the 2022 Deep Synthesis Provisions[32], and the 2023 Generative AI Measures.[33] The Generative AI Measures are the country's first administrative regulation explicitly targeting the management of generative AI services. They aim to promote the responsible development and use of generative AI technology while protecting national interests and citizens' rights. These measures are part of a broader regulatory framework that includes laws on cybersecurity, data security, personal information protection, and scientific progress. They seek to balance innovation with security by encouraging AI development while mitigating risks such as manipulating public opinion and disseminating misleading information. They also address societal concerns like data breaches, fraud, privacy violations, and intellectual property issues. The measures establish oversight mechanisms, complaint procedures, and penalties for non-compliance, coordinating various stakeholders in the generative AI sector. Several key government bodies, including the Cyberspace Administration of China and the Ministry of Public Security, jointly released this regulation.

Japan

Japan's approach to AI governance is defined as "agile governance," focusing on flexibility and quick adaptation to evolving AI technologies. On April 19, 2024, the Japanese government released new AI Guidelines for Business Version 1.0[34], which consolidated previous guidelines to balance societal and individual rights while encouraging innovation.[35] Although not legally binding, these guidelines encourage voluntary compliance with recognized AI principles and a risk-based approach among developers, providers, and business users. The guidelines promote an iterative

[https://digichina.stanford.edu/work/translation-personal-information-protection-law-of-the-peoples-republic-of-china-effective-nov-1-2021/].

[29] See China Law Translate. *Data Security Law of the PRC*. June 10, 2021. [https://www.chinalawtranslate.com/en/datasecuritylaw/].

[30] See Rogier Creemers, Graham Webster, and Paul Triolo. *Cybersecurity Law of the People's Republic of China: Translation*. DigiChina, June 29, 2018. [https://digichina.stanford.edu/work/translation-cybersecurity-law-of-the-peoples-republic-of-china-effective-june-1-2017/].

[31] See the Internet Information Service Algorithmic Recommendation Management Provisions 2021 (effective 1 March 2022), [https://www.gov.cn/zhengce/zhengceku/2022-01/04/content_5666429.htm].

[32] See the Internet Information Service Deep Synthesis Management Provisions 2022 (effective 1 January 2023), [https://www.gov.cn/zhengce/zhengceku/2022-12/12/content_5731431.htm].

[33] See the Measures for the Management of Generative Artificial Intelligence Services 2023 (effective 15 August 2023), [https://www.cac.gov.cn/2023-07/13/c_1690898327029107.htm], see also **Yirong Sun** and **Jingxian Zeng.** *China's Interim Measures for the Management of Generative AI Services: A Comparison Between the Final and Draft Versions of the Text*, Future of Privacy Forum, April 22, 2024.

[34] See **Ministry of Internal Affairs and Communications Ministry of Economy, Trade and Industry.** *AI Guidelines for Business Ver1.0*, April 19, 2024, [https://www.soumu.go.jp/main_content/000943087.pdf].

[35] See **White & Case LLP,** *AI Watch: Global regulatory tracker – Japan*, 2024 [https://www.whitecase.com/insight-our-thinking/ai-watch-global-regulatory-tracker-japan]. See also, **Hiroki Habuka**, *Japan's Approach to AI Regulation and Its Impact on the 2023 G7 Presidency,* Center for Strategic and International Studies, February 14, 2023, [https://www.csis.org/analysis/japans-approach-ai-regulation-and-its-impact-2023-g7-presidency].

governance model involving continuous cycles of risk analysis, goal setting, system design, operation, and evaluation across various governance systems.[36] Japan's AI regulation is based on a human-centered approach, as highlighted in the 2019 Social Principles of Human-Centered AI[37], which emphasizes human rights, privacy, security, fairness, accountability, and transparency in AI development. The goal is to create an "AI-ready society" where AI supports a sustainable, human-centered environment. Japan mainly regulates AI through existing laws, such as the Copyright Act, Personal Information Protection Law, Unfair Competition Prevention Act, Antimonopoly Law, and Economic Security Promotion Act, rather than specific AI legislation.[38]

Japan has introduced the Hiroshima International Guiding Principles for Organizations Developing Advanced AI Systems to promote global standards for safe, secure, and trustworthy AI.[39] The AI Strategy Council, a government advisory body, was established to maximize AI's potential while mitigating risks. On May 22, 2024, the Council submitted draft discussion points on future AI regulation. Additionally, a working group has proposed the "Basic Act on the Advancement of Responsible AI," which would shift Japan's AI regulation from a "soft law" approach to a "hard law" framework. This proposed law would regulate specific generative AI foundation models, requiring government-designated AI systems and developers to adhere to strict vetting, operation, and reporting standards, with penalties for non-compliance. This marks a significant move towards more formal AI regulation in Japan.

Singapore

Singapore has taken a proactive stance with its National AI Strategy, which includes the 2019 launch of its Model AI Governance Framework (2019, updated in 2020),[40] which provides detailed guidance to private sector organizations to address key ethical and governance issues when deploying AI solutions. This framework is supported by an Implementation and Self-Assessment Guide for Organizations and a Compendium of Use Cases, which showcases practical examples of AI governance at the organizational level.[41] Singapore's approach to AI regulation emphasizes "soft law," using nonbinding guidelines and recommendations rather than formal regulations. Singapore has adopted a sectoral approach to AI regulation, with various ministries and regulatory bodies issuing industry-specific guidelines. Key initiatives include the Monetary Authority of Singapore's Veritas framework for fairness, ethics, accountability, and transparency in AI within the financial sector and the Ministry of Health's AI in Healthcare Guidelines, introduced in 2021 to ensure patient safety and trust.[42] In response to the rapidly evolving

---

[36] See **White & Case LLP**, *Ibid.*
[37] See **Hiroki Habuka,** *ibid.* [https://www.cas.go.jp/jp/seisaku/jinkouchinou/pdf/humancentricai.pdf].
[38] See *Ibid.*
[39] See **G7 2023 Hiroshima Summit**. *The Hiroshima Process International Code of Conduct for Organizations Developing Advancing AI Systems,* 2023 [https://www.mofa.go.jp/files/100573473.pdf].
[40] See **Info-Communications Media Development Authority and Personal Data Protection Commission.** *Artificial Intelligence Governance Framework Model*, Second Edition, 2020 [https://www.pdpc.gov.sg/-/media/Files/PDPC/PDF-Files/Resource-for-Organisation/AI/SGModelAIGovFramework2.pdf].
[41] See **Joe Jones** and **Darren Grayson Chng**, *Global AI Governance Law, and Policy: Singapore*, International Association of Privacy Professionals, One Trust. Article Series. 2024, [https://iapp.org/resources/article/global-ai-governance-singapore/], [https://www.pdpc.gov.sg/-/media/Files/PDPC/PDF-Files/Resource-for-Organisation/AI/SGIsago.pdf].
[42] See **Joe Jones** and **Darren Grayson Chng**, *Ibid.*

AI landscape, Singapore updated its national AI strategy in 2024, NAIS 2.0.[43] This strategy focuses on two main goals: advancing AI to maximize value creation and empowering stakeholders to use AI confidently and responsibly. A draft Model AI Governance Framework for Generative AI (2024 Framework) [44] was developed in light of the recent developments in generative AI. This new framework aims to build upon the 2020 Framework by tackling emerging challenges associated with generative AI and offering guidance on best practices for evaluating the safety of generative AI models. The framework includes nine dimensions: accountability, trusted data sources, transparency, security, and leveraging AI for societal benefit. This framework exemplifies Singapore's balanced approach to AI governance, ensuring innovation and safety in AI development.

Israel

Israel has chosen a dynamic approach to AI regulation, favoring a strategic policy framework based on existing regulatory structures, "soft law," and globally accepted principles over formal legislation**.** This approach harmonizes regulations across industries and activities, promoting responsible AI innovation while remaining adaptable to changing global standards.[45] On December 13, 2023, the Minister of Innovation, Science, and Technology officially endorsed a policy paper outlining AI principles, regulations, and ethics, marking Israel's first formal AI policy.[46] The policy emphasizes a sector-specific regulatory approach using non-binding ethical principles and voluntary standards. It allows for a potential shift to more comprehensive legislation if common challenges arise across sectors. Israel's strategic goal drives this flexible approach to maintain its position as a technological leader, leveraging its highly productive high-tech industry, which contributes 18% of the nation's GDP and accounts for 50% of all exports.[47] The policy aligns with international ethical AI principles and actively contributes to global AI standards.[48] The AI Policy has established a three-tiered regulatory structure comprising existing regulators, a centralized AI knowledge and coordination center, and a steering committee to manage AI governance. The knowledge center, formed under a government mandate in February 2023, is tasked with coordinating regulatory activities, fostering collaboration among regulators, advising the government, and leading Israel's participation in international AI standardization efforts. Although the center lacks direct decision-making authority, it is crucial in guiding regulators and ensuring a cohesive approach to AI governance. This structure allows Israel to adapt rapidly to technological advancements without the rigidity of formal

---

[43] See **Government of the Republic of Singapore***, Singapore National AI Strategy, AI for the Public Good for Singapore and the World, 2023* [https://file.go.gov.sg/nais2023.pdf].

[44] See **Info-Communications Media Development Authority** and **AI Verify Foundation,** *Proposed Model AI Governance Framework For Generative AI Fostering a Trusted Ecosystem*, 16 January 2024, [https://aiverifyfoundation.sg/downloads/Proposed_MGF_Gen_AI_2024.pdf].

[45] See **Dan Or-Hof**, *Proactive caution: Israel's Approach to AI Regulation*, International Association of Privacy Professionals, Opinion, 10 January, 2024 [https://iapp.org/news/a/proactive-caution-israels-approach-to-ai-regulation].

[46] See **Ministry of Innovation, Science, and Technology,** *Israel's Policy on Artificial Intelligence. Regulations and Ethics,* 2023. [https://www.gov.il/BlobFolder/news/most-news20231218/en/Israels%20AI%20Policy%202023.pdf].

[47] See **Israel Innovation Authority,** *2023 Annual Report, the State of the High-Tech* [https://innovationisrael.org.il/en/report/high-techs-contribution-to-the-economy/].

[48] See **Dan Or-Hof**, *Ibid.*

legislation, which could impose additional burdens on companies navigating international markets.

India

India's approach to regulating AI focuses on maintaining a balance between innovation and ethical considerations. It emphasizes utilizing guidelines and frameworks rather than strict laws. The NITI Aayog, India's primary public policy think tank, has played a significant role in developing the National Strategy for Artificial Intelligence (#AIForAll) since 2018, which targets key sectors like healthcare, agriculture, education, smart cities, and mobility.[49] This strategy aims to adapt AI technologies to India's unique needs, enhance human capabilities, and address challenges such as access, affordability, and skilled expertise shortages. In 2021, the NITI Aayog released two key documents: "Principles for Responsible AI[50]" and "Operationalizing Principles for Responsible AI,[51]" which set ethical guidelines and outline government and private sector actions to ensure responsible AI deployment. These documents emphasize regulatory and policy interventions, capacity building, and ethics by design. The Ministry of Electronics and Information Technology (MeitY) has further contributed by forming committees on AI to address development, safety, and ethical concerns and launching the "India AI" program to guide AI innovation and workforce development.[52] India's regulatory framework also includes the Digital Personal Data Protection Act of 2023, addressing privacy issues related to AI. On the international front, India is actively involved in the Global Partnership on Artificial Intelligence and collaborates with global bodies to align its standards with international best practices. The Bureau of Indian Standards (BIS) is developing AI standards for safety and interoperability, promoting alignment with global benchmarks like ISO standards. While India has taken a pro-innovation stance by developing policies and guidelines, it remains cautious about implementing rigid regulations. This flexible approach allows the country to prioritize workforce mobilization and adapt AI technologies to its unique cultural and economic context. By fostering a dynamic AI ecosystem, India aims to leverage AI for growth while preparing for comprehensive regulations in the future, addressing emerging concerns, and avoiding outdated or overly restrictive laws.[53]

In summary, the race to regulate AI is intensifying, with countries adopting different strategies influenced by their political systems, economic priorities, cultural attitudes,

---

[49] See **NITI Aayog**, *National Strategy for Artificial Intelligence*, June 2018 [https://www.niti.gov.in/sites/default/files/2023-03/National-Strategy-for-Artificial-Intelligence.pdf].

[50] See **NITI Aayog**, *Approach Document for India Part 1 – Principles for Responsible AI* February 2021, [https://www.niti.gov.in/sites/default/files/2021-02/Responsible-AI-22022021.pdf].

[51] See **NITI Aayog**, *Approach Document for India Part 2 - Operationalizing Principles for Responsible AI,* August 2021, [https://www.niti.gov.in/sites/default/files/2021-08/Part2-Responsible-AI-12082021.pdf].

[52] See **Rahul Kapoor, Shokoh H. Yaghoubi, Theresa T. Kalathil**, *AI Regulation in India: Current State and Future Perspectives*, Morgan Lewis, January 26, 2024, [https://www.morganlewis.com/blogs/sourcingatmorganlewis/2024/01/ai-regulation-in-india-current-state-and-future-perspectives?p=1].

[53] See, e.g., **Arjun Adrian D'Souza,** *India's foray into regulating AI*, International Association of Privacy Professionals 24 April 2024**,** [https://iapp.org/news/a/indias-foray-into-regulating-ai]; **Joshi, D.** (2024). AI governance in India – law, policy, and political economy. *Communication Research and Practice*, 1–12. [https://doi.org/10.1080/22041451.2024.2346428]; **Bharati, Rahul,** *Navigating the Legal Landscape of Artificial Intelligence: Emerging Challenges and Regulatory Framework in India* (July 14, 2024). Available at SSRN: [https://ssrn.com/abstract=4898536 or http://dx.doi.org/10.2139/ssrn.4898536].

and technological contexts. Some jurisdictions, such as the U.S. and the UK, follow a market-driven approach, relying on minimal state intervention and utilizing voluntary standards and light-touch regulations to encourage innovation and economic growth. In contrast, China exemplifies a state-driven approach, where significant government control and strict regulations align AI development with state objectives and maintain political stability. The European Union leads a rights-driven approach, protecting fundamental rights and mitigating risks through comprehensive regulations like the AI Act.

Democratic nations emphasize transparency and public involvement, resulting in inclusive policy frameworks that minimize social harm. These frameworks often employ a "risk-based" approach, tailoring regulations to mitigate risks to core values such as privacy, non-discrimination, and security. Some jurisdictions also recognize the diverse applications of AI by implementing sector-specific rules alongside broader, cross-sector regulations to address unique challenges across different industries. Cultural attitudes toward privacy and technology significantly influence these regulatory choices, with the EU strongly prioritizing data protection and individual rights, while other regions may adopt more relaxed approaches.

Despite these varied strategies, no single nation can effectively manage the potential risks of AI alone, much like the global challenges of climate change or pandemics. A unified global effort is necessary to ensure that AI development and deployment serve the public good, uphold human rights, and foster trust and safety in emerging technologies. Countries must collaborate nationally and internationally to enhance safety, prevent the proliferation of harmful AI applications, and establish clear boundaries against dangerous uses of AI.

Multilateral Initiatives

Along with national AI regulation efforts, international organizations and multilateral bodies have also stepped forward to address the challenges and opportunities presented by AI on a global scale. Their recognition of this technology's significant impact on human rights, economic development, and international security underscores the need for a responsible and ethical global use of AI. From the United Nations to the G7 and beyond, a growing awareness of AI risks since the mid-2010s has driven the establishment of frameworks, principles, and standards for guiding AI's ethical and responsible use worldwide. Prominent examples include the European Union's 2019 Ethics Guidelines for Trustworthy AI,[54] the Recommendation of the Council on Artificial Intelligence by the OECD in 2019 (updated in 2024),[55] and the Recommendation on the Ethics of Artificial Intelligence by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 2021.[56] These publications highlighted the necessity of aligning AI development with fundamental values like human rights, democracy, sustainability, and core principles such as fairness,

[54] See **High-Level Expert Group on AI.** *Ethics Guidelines for Trustworthy AI*. European Commission, April 8, 2019. **[**https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai]; **Hiroki Habuka**, *Ibid.*

[55] See **Organisation for Economic Co-operation and Development (OECD*),* ***Recommendation of the Council on Artificial Intelligence*** [https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449].

[56] See UNESCO Recommendation on the Ethics of Artificial Intelligence [https://unesdoc.unesco.org/ark:/48223/pf0000381137].

privacy, safety, security, transparency, and accountability. It's important to note that this article does not cover all organizations and initiatives related to AI governance; it is limited to the major ones.

United Nations

The United Nations (UN) adopted a landmark resolution on steering the use of artificial intelligence toward global good on March 21, 2024, entitled "Seizing the opportunities of safe, secure and trustworthy artificial intelligence systems for sustainable development" (document A/78/L.49),[57] which it adopted without a vote. The Assembly resolved to bridge the artificial intelligence (AI) and other digital divides between and within countries and promote safe, secure, and trustworthy AI systems to accelerate progress towards fully realizing the 2030 Agenda for Sustainable Development. The resolution encourages countries to safeguard human rights, protect personal data, and monitor AI risks on a non-legally binding basis, complementing the work of other UN bodies like the International Telecommunication Union (ITU), UNESCO, and the Human Rights Council. While the UN cannot pass laws or regulations on AI, the General Assembly can initiate studies and make recommendations to promote the development of international law.[58]

Council of Europe

On May 17, 2024, the Council of Europe (CoE**)** adopted the first-ever international treaty to ensure the respect of human rights, the rule of law, and democratic legal standards in the use of AI systems (the "AI Convention").[59] The AI Convention is intended as a "global legally binding instrument." It covers the entire AI lifecycle and is open to European and non-European countries. It emphasizes a risk-based approach, requiring transparency, oversight, and accountability in AI systems across public and private sectors. The AI Convention requires each CoE signatory to (i) take measures to ensure accessible and effective remedies for human rights violations resulting from the activities within the lifecycle of artificial intelligence systems and (ii) ensure that procedural guarantees, safeguards, and rights, under applicable domestic and international law, are available to affected individuals.". The AI Convention will be open for signature by the EU and countries on and from September 5, 2024[60].

G7

The G7 nations have advanced the Comprehensive Policy Framework for the Hiroshima AI Process. In May 2023, the Hiroshima AI Process was initiated during the G7 Hiroshima Summit under Japan's leadership to foster international dialogue. In

---

[57] See [https://documents.un.org/doc/undoc/ltd/n24/065/92/pdf/n2406592.pdf], [https://news.un.org/en/story/2024/03/1147831]; [https://press.un.org/en/2024/ga12588.doc.htm].

[58] See **White & Case LLP,** *AI Watch: Global regulatory tracker - United Nations***,** 2024 [https://www.whitecase.com/insight-our-thinking/ai-watch-global-regulatory-tracker-united-nations].

[59] See **Council of Europe***, Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law,* CETS No. 225, September 5, 2024 [https://rm.coe.int/1680afae3c]; see also [https://www.coe.int/en/web/portal/-/council-of-europe-adopts-first-international-treaty-on-artificial-intelligence]; [https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence].

[60] The CoE has several binding and non-binding instruments that influence AI system development and use. Key examples include the European Convention on Human Rights, the Guidelines on AI and Data Protection, the European Ethical Charter on AI in judicial systems, and the Convention for the Protection of Individuals regarding Automatic Processing of Personal Data.

December 2023, this culminated in the creation of the world's first global framework, the Hiroshima AI Process Comprehensive Policy Framework[61], which is based on four pillars: (i) the International Guiding Principles for Organizations Developing Advanced AI Systems (the "Guiding Principles")[62] (ii) the International Code of Conduct for Organizations Developing Advanced AI Systems (the "Code of Conduct")[63] designed to supplement the Guiding Principles and provide voluntary guidance to organizations developing Advanced AI systems; (iii) analysis of priority risks, challenges, and opportunities of generative AI; and (iv) project-based cooperation supporting the development of responsible AI tools and best practices. The Guiding Principles and the Code of Conduct are not legally binding, but they are expected to impact international politics significantly. The G7 does not have the authority to create laws related to AI or its implementation. However, the G7's AI Regulations state that its members must follow their obligations under international human rights law. Private sector activities should adhere to global frameworks such as the United Nations Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises.[64]

OECD

The **Organization for Economic Co-operation and Development** (**OECD)** has made significant progress in establishing principles and guidelines for AI's ethical development and use. The OECD's AI Principles[65], endorsed by numerous countries, highlighting the importance of transparency, accountability, and fairness in AI systems. These principles have laid the groundwork for various national and international AI strategies. The OECD's Recommendation of the Council on Artificial Intelligence[66], adopted by 46 governments as of July 2021, contains the OECD's AI Principles and Five recommendations to be implemented in the adherents' national policies and international cooperation for trustworthy AI. The adhering governments have committed to promoting, implementing, and adhering to the Recommendation. These Principles align with other AI initiatives, including the G7's Hiroshima AI Process Comprehensive Policy Framework.

In summary, creating a unified framework for AI governance poses challenges to international organizations and multilateral bodies due to AI technologies' complex and evolving nature. There is a collective effort to establish global standards for ethical and responsible AI use; however, it is challenging due to many factors, including aligning diverse geopolitical interests and regulatory philosophies. These efforts underscore the importance of continued international cooperation to address the multifaceted challenges posed by AI.

---

[61] See **G7 Hiroshima Summit**. *Hiroshima AI Process Comprehensive Policy Framework*. May 2023 [https://www.japan.go.jp/kizuna/_userdata/pdf/2024/spring2024/hiroshima_ai_process.pdf].

[62] See **G7 Hiroshima Summit**. *Hiroshima Process International Guiding Principles for Organizations Developing Advanced AI Systems*. October 30, 2023. [https://digital-strategy.ec.europa.eu/en/library/hiroshima-process-international-guiding-principles-advanced-ai-system].

[63] See *Ibid.*

[64] See **White & Case LLP**, *AI Watch: Global regulatory tracker - G7, 2024*, [https://www.whitecase.com/insight-our-thinking/ai-watch-global-regulatory-tracker-g7].

[65] See Principles for trustworthy AI**,** [https://oecd.ai/en/ai-principles].

[66] See Recommendation of the Council on Artificial Intelligence [https://legalinstruments.oecd.org/en/instruments/oecd-legal-0449].

Conclusion

The regulation of AI varies worldwide, with each country taking different approaches based on its priorities, legal traditions, and cultural values. As AI technology advances and has a more significant impact, countries work to balance promoting innovation and safeguarding public interests while managing potential risks. While some countries like the EU have established detailed and enforceable regulatory frameworks, others, including the U.S., the UK, and Israel, have adopted more flexible, industry-specific guidelines or non-binding principles to encourage innovation and development.

International organizations and multilateral bodies are becoming more involved in shaping the global AI governance landscape. They recognize technology's significant implications for human rights, economic development, and international security. Initiatives by the UN, Council of Europe, G7, and OECD highlight a collective effort to establish ethical standards and guidelines beyond national borders, promoting responsible and sustainable AI development worldwide.

While the rapid advancement of AI technologies underscores the importance of having consistent, flexible, and globally aligned regulatory frameworks, due to the complex nature of AI regulation, the involvement of diverse actors, and the geopolitical context, a unified global solution for AI governance is unlikely to be achieved. Most efforts to regulate AI and manage its opportunities and risks will occur nationally.

ՏԱԹԵՎԻԿ ԴԱՎԹՅԱՆ – *Արհեստական բանականության կարգավորման համաշխարհային ջանքերի ընդհանուր բնութագիրը.* – Սույն հոդվածում ուսումնասիրվում են տարբեր երկրների և միջազգային կազմակերպությունների կողմից կիրառվող մոտեցումները արհեստական բանականության (ԱԲ) տեխնոլոգիաների արագ զարգացումների համատեքստում: Քանի որ ԱԲ-ն շարունակում է արագ զարգանալ, կարևորվում է համապարփակ կարգավորող շրջանակների ձևավորումը՝ անդրադառնալու ԱԲ-ի էթիկական, սոցիալական և տնտեսական բարդ խնդիրներին: Հոդվածը ներկայացնում է ԱՄՆ-ի, Մեծ Բրիտանիայի, Կանադայի, Չինաստանի, Ճապոնիայի, Սինգապուրի, Իսրայելի, Հնդկաստանի և Եվրոպական Միության՝ ԱԲ ոլորտի կարգավորման ռազմավարությունները, որոնք ձևավորվում են նրանց քաղաքական, տնտեսական և մշակութային համատեքստերում: Բացի այդ, հոդվածն անդրադառնում է ՄԱԿ-ի, Եվրոպայի խորհրդի, G7-ի, ՏՀԶԿ-ի և համանման միջազգային և միջկառավարական կազմակերպությունների՝ ԱԲ-ի էթիկական և պատասխանատու օգտագործման գլոբալ չափանիշներ և ուղեցույցներ սահմանելու նախաձեռնություններին: Առաջադրվող խնդիրների վերլուծությունը կարևոր ռեսուրս է՝ հասկանալու ԱԲ ոլորտի կառավարման արագ զարգացող միջավայրը: Այն օգտակար կարող է լինել տարբեր երկրների քաղաքականության մշակման, բիզնեսների կողմնորոշման, ինչպես նաև ԱԲ կիրառող մասնագետների և հետազոտողների համար՝ աջակցելու հանրային շահերի պաշտպանությանը, մարդու իրավունքների պահպանմանը և հնարավոր ռիսկերը մեղմելուն:

Բանալի բառեր – *արհեստական բանականություն, արհեստական բանականության կարգավորումներ, արհեստական բանականության կառավարում, արհեստական բանականության քաղաքականության շրջանակներ, պատասխանատու արհեստական բանականություն, էթիկական արհեստական բանականություն*

ТАТЕВИК ДАВТЯН – *Обзор мировых усилий по регулированию искусственного интеллекта.* – Настоящая статья предоставляет глобальный взгляд на усилия по регулированию искусственного интеллекта (ИИ) — трансформирующей силы, которая меняет бизнес, правительства и общества по всему миру. В статье рассматриваются различные подходы, которые страны и международные организации применяют в ответ на быстрые достижения в области технологий ИИ. По мере развития ИИ возникает растущая потребность в комплексных нормативных рамках для решения сложных этических, социальных и экономических проблем, связанных с ИИ. В статье приводятся стратегии регулирования ИИ ключевых юрисдикций, таких как США, Великобритания, Канада, Китай, Япония, Сингапур, Израиль, Индия и Европейский союз, учитывающие их уникальные политические, экономические и культурные контексты. Также в статье анализируются инициативы международных и межправительственных организаций, таких как ООН, Совет Европы, G7 и ОЭСР, направленные на установление глобальных стандартов и руководящих принципов для этичного и ответственного использования ИИ. Статья является ценным ресурсом для понимания развивающегося ландшафта управления ИИ. Она служит основой для дальнейших исследований и разработки политики, направленной на баланс между инновациями, защитой общественных интересов, соблюдением прав человека и снижением потенциальных рисков.

Ключевые слова: *Искусственный интеллект, Регулирование искусственного интеллекта, Управление искусственным интеллектом, Рамки политики искусственного интеллекта, Ответственный искусственный интеллект, Этический искусственный интеллект*