

Digital Policy Hub – Working Paper

How Do Current AI Regulations Shape the Global Governance Framework?

Maral Niazi

Summer 2024 cohort

About the Hub

The Digital Policy Hub at CIGI is a collaborative space for emerging scholars and innovative thinkers from the social, natural and applied sciences. It provides opportunities for undergraduate and graduate students and post-doctoral and visiting fellows to share and develop research on the rapid evolution and governance of transformative technologies. The Hub is founded on transdisciplinary approaches that seek to increase understanding of the socio-economic and technological impacts of digitalization and improve the quality and relevance of related research. Core research areas include data, economy and society; artificial intelligence; outer space; digitalization, security and democracy; and the environment and natural resources.

The Digital Policy Hub working papers are the product of research related to the Hub's identified themes prepared by participants during their fellowship.

Partners

Thank you to Mitacs for its partnership and support of Digital Policy Hub fellows through the Accelerate program. We would also like to acknowledge the many universities, governments and private sector partners for their involvement allowing CIGI to offer this holistic research environment.



About CIGI

The Centre for International Governance Innovation (CIGI) is an independent, non-partisan think tank whose peer-reviewed research and trusted analysis influence policy makers to innovate. Our global network of multidisciplinary researchers and strategic partnerships provide policy solutions for the digital era with one goal: to improve people's lives everywhere. Headquartered in Waterloo, Canada, CIGI has received support from the Government of Canada, the Government of Ontario and founder Jim Balsillie.

Copyright © 2025 by Maral Niazi

The opinions expressed in this publication are those of the author and do not necessarily reflect the views of the Centre for International Governance Innovation or its Board of Directors.

Centre for International Governance Innovation and CIGI are registered trademarks.

67 Erb Street West
Waterloo, ON, Canada N2L 6C2
www.cigionline.org

Key Points

- Artificial intelligence's (AI's) rapid advancements offer unprecedented technological, social and economic opportunities but pose serious global challenges, including algorithmic biases, tech monopolies and environmental impacts. Countries have adopted varied AI strategies: For instance, the US Executive Order on Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence (2023) focused on voluntary corporate commitments, encouraging competition for tech dominance. China's top-down governance integrates AI into state policies, raising concerns about civil liberties. Meanwhile, Singapore and the United Kingdom favour multi-stakeholder models to balance innovation and oversight, exemplified by Singapore's AI Verify tool kit and the United Kingdom's AI Safety Institute.
- Bilateral and multilateral agreements attempt to harmonize standards and spur collaboration. The EU AI Act enforces a risk-sensitive approach with stricter rules for high-risk applications. Other regional initiatives, such as Africa's Digital Transformation Strategy and the Association of Southeast Asian Nations (ASEAN) Guide on AI Governance, reflect growing global consensus on ethical AI and data protection, but enforcement remains uneven.
- Existing frameworks excel at fostering innovation, capacity building and regional cooperation. However, limited enforcement, insufficient inclusivity and fragmented regulations undermine their effectiveness. They allow influential actors – governments or corporations – to shape AI policy in ways that are likely to sideline concern for human rights.
- It is crucial to have an agile model of AI governance anchored in risk-based, rights-based and rules-based principles. Proposed solutions include a universal AI convention enforced by a High Commission for AI and Human Rights, an Intergovernmental Panel on Climate Change-like panel for rigorous research and policy guidance and a global research consortium inspired by the European Organization for Nuclear Research (CERN) to ensure inclusive, transparent AI development and equitable benefit sharing.

Introduction

AI is at the forefront of technological innovation in the twenty-first century, presenting profound technological, societal and environmental opportunities. The advancement of large language models has been instrumental in scientific discoveries and technological innovation. However, AI has also introduced a variety of challenges, such as algorithms and data biases leading to racial discrimination. The domination of tech monopolies has widened the digital and economic divide and AI energy demands have resulted in increasingly negative environmental impacts due to the energy required to power and cool processors (Tallberg et al. 2023; Yu, Rosenfeld and Gupta 2023). For instance, AI data centres require huge amounts of energy – mostly from fossil fuels, which emit greenhouse gases. The International Energy Agency notes that a ChatGPT request uses 10 times the power of a Google search, and in Ireland, AI could push data centre energy consumption to almost 35 percent by 2026 (United Nations Environment Programme 2024). As such, the governance of AI is critically relevant to curtailing the threats posed by these emerging technologies. Engineering a comprehensive governance structure helps mitigate these challenges while creating a trustworthy ecosystem for harnessing

its opportunities (Erdélyi and Goldsmith 2022; Rawas 2024). A multilateral global governance framework is needed to implement assessment standards for measuring technical risks, legal norms for providing remedy and protection, and policies for securing public trust and safety (Habuka 2023; Natorski 2024; Schmitt 2022).

These challenges reveal the transnational impacts of AI, which are deepening existing global AI polarization at an unprecedented speed. Moreover, the development and deployment of AI involves a diverse group of stakeholders, including states, corporations, industries and civil societies. Each of these entities has opposing preferences, powers and priorities, making transnational interactions complicated and fraught (Leslie and Perini 2024; Radu 2021). These factors raise serious concerns about what governance mechanism would be most suitable to address these complex challenges. We need a global governance framework capable of harmonizing diverse technical standards. It must be supported by a meaningful and reasonable enforceable mechanism and grounded on common norms and values while promoting fair access to innovation in technological advancement and economic prosperity (Feijóo et al. 2020; Klein and Patrick 2024; Taeihagh 2021).

Establishing an international governance framework is a difficult task that requires a rigorous examination of existing AI governance regulations. This working paper begins with a brief overview of existing national and transnational AI governance initiatives, followed by a comparative analysis of their strengths and weaknesses. The next section discusses contributing factors to creating a global AI governance framework. Finally, this paper offers strategic recommendations to architect a global AI governance framework based on lessons learned from existing initiatives.

AI Governance: National and Transnational Initiatives

National Initiatives

As generative AI models reach the public domain with unpredictable consequences, many governments have made AI risk mitigation a priority. At the national level, AI governance often reflects a balance between states' economic ambitions, national security and civil rights protections. Depending on the state's priorities, policy makers adopt various regulatory standards to allocate capital, establish security measures and introduce safety policies (Ala-Pietilä and Smuha 2021; Robles and Mallinson 2023).

For instance, the United States' 2023 Executive Order on the Safe, Secure, and Trustworthy Development and Use of AI emphasized the development of trustworthy AI systems. However, this executive order allowed for the leading tech companies' voluntary participation, with no enforceable power on AI development. This leeway, in turn, prioritized tech innovation over public oversight. As a result, the US government ceded control to leading tech corporations such as Amazon, Google and Meta, all of which have the capital and the will to influence the government's decisions and policies.¹ Conversely, China's 2017 New Generation Artificial Intelligence

¹ This executive order has since been halted under the new Trump administration.

Development Plan for the next generation of AI outlines China's pathway to global AI leadership by 2030 (Webster et al. 2017). However, under this strategy, China's integration of AI tools into its public operations and policies, such as facial recognition and social credit systems, arguably violates fundamental human rights (including the rights to privacy and freedom of expression) (Cheng and Zeng 2023).

Despite having strong regulatory frameworks, countries such as Singapore and the United Kingdom recognize the limitations of their policy capacities in regulating emerging technology (Ng and Prestes 2023). In 2016, Singapore introduced the Infocomm Media Development Authority (IMDA)² to enhance its economic growth, industry innovation and investment capacity in AI, rather than adopting a centralized AI regulation. To build a trusted multi-stakeholder ecosystem, the IMDA launched AI Verify in 2020, which is an open-source AI governance testing framework and software tool kit. Similarly, the United Kingdom launched the AI Safety Institute³ in 2023 to establish a national and international multi-stakeholder partnership that informs policy making in AI functionality (Donelan 2024; Ng and Prestes 2023).

Transnational Initiatives

Transnational governance agreements involve either two (bilateral and exclusive) or multiple (multilateral and inclusive) actors to set common standards and pursue joint projects. International agreements aim to bridge the regulatory gaps between governments and foster diplomatic efforts and collaborations across nations (Kerry et al. 2021). For instance, in 2020, the United States⁴ and the United Kingdom⁵ forged a bilateral agreement to guide technological breakthroughs and advance the development of trustworthy AI systems that adhere to shared ethical standards (US Department of State 2020). The two nations will share their vision of promoting public-private partnerships in research and development, establishing evaluation methods for safe AI tools and systems, exchanging information and aligning their policies.

Multilateral agreements may be limited to a particular region, such as the North Atlantic Treaty Organization, or serve a certain socio-economic value or standard, such as the nations collectively known as BRICS (Brazil, Russia, India, China, South Africa, Egypt, Ethiopia, Indonesia, Iran and the United Arab Emirates [UAE]), or include all or majority nation-states, such as the United Nations. The most prominent international agreement on AI governance is the European Union's EU AI Act. Adopted in 2024, its purpose is "to improve the functioning of the internal market by laying down a uniform legal framework...to promote the uptake of human-centric and trustworthy artificial

2 The IMDA is a Singaporean government agency developing and regulating the country's media industry. The agency supports the growth of local media companies through capability building, technology adoption and talent development, essentially aiming to create a thriving media landscape in Singapore. See www.imda.gov.sg/about-imda/who-we-are; www.imda.gov.sg/about-imda/emerging-technologies-and-research/artificial-intelligence.

3 Supported by the United Kingdom's Department for Science, Innovation and Technology, the AI Safety Institute is assigned with the responsibility of researching and evaluating advanced AI systems to identify and evaluate potential risks of rapidly developing AI technology and introduce public safety measures. See www.aisi.gov.uk/.

4 See US Department of State (2020).

5 Ibid.

intelligence.”⁶ Taking a risk-based approach, the EU AI Act⁷ categorizes AI applications based on their impact on human safety and dignity. Higher-risk AI applications are subject to stricter oversight and compliance requirements designed to protect society from harm caused by AI systems (Veale, Matus and Gorwa 2023). The European Union’s AI policies, including the General Data Protection Regulation, have become de facto global standards due to Europe’s market power and regulatory reach (Bradford 2020).

Other regions, including Africa, South America and Southeast Asia, have also laid the groundwork for AI governance across their respective regions. The African Union’s Digital Transformation Strategy (2020–2030) aims “to harness digital technologies and innovation to transform African societies and economies to promote Africa’s integration, generate inclusive economic growth, stimulate job creation, break digital divides, and eradicate poverty” (African Union 2024b, 2). ASEAN has introduced the ASEAN Guide on AI Governance and Ethics to “design, develop, and deploy traditional AI technologies in commercial and non-military or dual-use applications” featuring seven core principles, among them “transparency, explainability, fairness and equity” (ASEAN 2024, 3). These principles are closely aligned with existing international approaches, such as the Organisation for Economic Co-operation and Development (OECD)’s AI Principles and the United Nations Educational, Scientific and Cultural Organization’s (UNESCO’s) Recommendation on the Ethics of Artificial Intelligence. Recognizing the threats and opportunities presented by rapidly evolving AI, these frameworks promote ethical AI use while fostering regional innovation and economic growth, providing guidelines on data privacy, AI transparency and accountability.

Notably, the OECD’s AI Principles from 2019 emphasize the need for trustworthy AI systems with respect to human rights and democratic values. These principles promote public and private investment in AI research, accessible AI ecosystems and international cooperation (Galindo, Perset and Sheeka 2023). In addition, the 2021 UNESCO Recommendation on the Ethics of Artificial Intelligence provides comprehensive guidelines for the ethical governance of AI, covering issues such as human rights, environmental sustainability and social justice (UNESCO 2022). These initiatives are valuable tools that offer regulatory guidelines for responsible development and use of AI and other emerging technologies worldwide.

A Comparative Analysis of Existing National and Transnational AI Governance Frameworks

A brief overview of the current regulatory frameworks reveals a diverse prioritization of political, economic and cultural interests while highlighting the strengths and limitations of these models. Identifying some of the key

⁶ See <https://digital-strategy.ec.europa.eu/en/factpages/eu-us-trade-and-technology-council-2021-2024>.

⁷ See EC, Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act), [2024] OJ, L 2024/1689, online: <<https://eur-lex.europa.eu/eli/reg/2024/1689/oj/eng>>.

lessons opens a pathway for establishing a comprehensive global AI governance structure to bridge the gap between these diverse bilateral and multilateral regulations. Such a framework could offer a common and clear set of standards that would be available worldwide to respond to transnational threats posed by these technologies (Wallach and Kaspersen 2023; Walter 2024).

Strengths

Innovation-Driven Policies and Economic Growth

National initiatives (such as China's 2017 Development Plan and Singapore's AI Verify program) and government entities (such as the UAE Artificial Intelligence Office⁸ and the Saudi Data & AI Authority⁹) demonstrate that they are boosting economic competitiveness and research and development in their respective countries. In the age of intangibles, these efforts highlight concrete governance frameworks and technological leadership for diplomatic and market advantages.

Collective Capacity Building

Bilateral partnerships (such as the US-UK Cooperation in AI Research and Development) as well as multilateral, regional initiatives (such as the African Union's Digital Transformation Strategy and ASEAN's Guide on AI Governance and Ethics) showcase how such agreements strengthen collective capacity building and pave the way to establishing harmonized policy objectives among like-minded actors (ICTworks 2024). Considering the similarity of their concerns and interests, these agreements institute a common ground within their respective regions for pooling the right resources, facilitating technical exchange and adopting shared ethical guidelines. They play a vital role in echoing the voice of smaller developing economies to participate in building a framework.

Weaknesses

Fragmented Enforcement Mechanism

Despite the presence of guiding principles (such as the OECD AI Principles or UNESCO's Recommendation on the Ethics of Artificial Intelligence), many frameworks lack robust enforcement mechanisms for non-compliance (Mökander et al. 2021; UNESCO 2022).¹⁰ While voluntary agreements encourage normative convergence, they fall short of setting clear legal obligations or imposing meaningful consequences. The resulting fragmentation creates an unreliable and uneven governance terrain, where influential actors, including corporations and states, favour the least restrictive regulatory environment and exacerbate a far wider digital divide (Bradford 2020; Reynolds 2020). A meaningful connection should be drawn between binding and non-binding regulation that creates a reasonable environment for technological innovation but not at the cost of violating fundamental rights, rules and values that protect the foundation of society, creating stability, trust and reliability.

8 See <https://ai.gov.ae/>.

9 See <https://sdaia.gov.sa/en/default.aspx>.

10 See www.oecd.org/en/topics/sub-issues/ai-principles.html.

Limited Inclusivity and Transparency

Initiatives such as the United Kingdom's AI Safety Institute and Singapore's IMDA prioritize an inclusive multi-stakeholder approach to empower government mechanisms in the digital age, serving various industries through enhancing research, investments and policy-making capacities. However, many national regimes remain opaque and predominantly influenced by economic domination or political rivalry or both (Kerry et al. 2021). Conversely, China's autocracy (by government) and the United States' AI-tocracy (by corporations) in developing and using AI have raised concerns about violating fundamental rights, including privacy, as they have demonstrated little concern for public trust and transparency (Cheng and Zeng 2023). Limited participation of diverse voices — particularly from civil society or marginalized communities — undermines the legitimacy and representativeness of AI policy processes (Klein and Patrick 2024).

Key Takeaways

Due to the transnational nature and reach of emerging technologies, creating a commonly accepted groundwork with clear standards helps minimize confusion in governance practices. It ensures consistency for societal norms and values across borders if and when necessary to make decisions and implement rules beyond national borders to mitigate AI risks (Veale, Matus and Gorwa 2023). A global framework could also exemplify a structured approach to categorizing AI systems into high-, medium- and low-risk tiers, each with tailored regulatory obligations to reduce their threats. In addition, regulators could prioritize oversight resources where societal stakes are highest (Taeihagh 2021). Such frameworks include:

- **Multi-stakeholder inclusion and engagement:** A fundamental lesson derived from multiple AI governance experiments — such as the co-regulatory aspects of the OECD AI Principles — is that inclusivity is critical for successful oversight. When public agencies, private sector companies, civil society organizations and academic experts collaborate, they collectively produce more nuanced and legitimate policy outcomes.¹¹ For example, UNESCO's recommendation emphasizes the need for broad consultation to ensure that AI rules mirror diverse ethical and cultural perspectives (UNESCO 2022). These engagements empower marginalized voices and generate robust, context-sensitive regulations, aligning with the rights-based foundation to safeguard individual liberties while guiding responsible innovation (Sheehan 2023). Within an agile governance AI model, multi-stakeholder dialogues serve as iterative feedback loops, allowing policy makers to adapt regulations promptly as new risks or technological opportunities emerge.
- **Enforceable compliance measures and accountability:** While voluntary guidelines and soft-law mechanisms (for instance, the OECD AI Principles) have proven valuable for promoting best practices, a consistent finding is that enforceable rules and accountability structures ultimately determine the efficacy of AI governance (Gasser and Almeida 2017; European Commission 2020). The absence of binding enforcement has resulted in varied levels of adoption and limited global uniformity (UNESCO 2022). Conversely, the European Union's push for mandatory conformity assessments

¹¹ See www.oecd.org/en/topics/sub-issues/ai-principles.html.

in high-risk AI systems has underscored the role of legally binding obligations in shaping compliance and assuring public trust.¹² For a rules-based global governance system, enforceability fosters predictability, encourages adherence to ethical norms and deters harmful practices.

- **Flexibility and adaptiveness in regulatory design:** Existing governance models — particularly those championing regulatory sandboxes (in Singapore and the United Kingdom, for instance) — underscore the need for flexible and adaptive regulations that can keep pace with rapid AI advancements (Floridi 2018; Ng and Prestes 2023; Schmitt 2022). Rigid policies, once codified, may prove slow to evolve, especially when they do not incorporate feedback loops or periodic reviews (Habuka 2023). Consequently, an agile governance model benefits from built-in mechanisms — such as best practices, iterative policy evaluations and dynamic compliance thresholds — that enable timely recalibration. This adaptability is essential for aligning AI oversight with the risk-based dimension, where the risk profile of emerging technology can shift quickly, rendering static policies inadequate (Feijóo et al. 2020; Papagiannidis et al. 2022).
- **Data governance and equitable access:** A final lesson relates to data governance — a cornerstone of AI development and use — and the imperative to address global inequalities in data capabilities. The African Union’s Digital Transformation Strategy and the Continental AI Strategy highlight how many low- and middle-income countries risk being relegated to “data colonies” if they lack frameworks that promote local data ownership and equitable AI benefits (African Union 2024a, 2024b; Muñoz 2024). Preventing these colonies aligns with a rights-based ethos, ensuring that personal data is protected and that marginalized communities benefit from AI-driven progress. It also correlates with a rules-based requirement for robust cross-border data flow regulations that prevent exploitation and protect privacy. By embedding data sovereignty provisions and inclusive data-sharing agreements into AI governance, stakeholders can correct power imbalances and foster a global innovation ecosystem that truly represents the diverse interests of humanity (Iazzolino and Stremlau 2024; UNESCO 2022).

Recommendations

Toward a Global AI Governance Framework Aligned with Agile Principles

In the face of rapid technological advancements, standards setting is critical in combatting the digital divide caused by unregulated competition and ensuring that the rights of individuals and communities are upheld through multilateral cooperation (von Ingersleben-Seip 2023). This legal framework should be adaptable and responsive to the evolving nature of technology, guaranteeing that it remains relevant in addressing emerging challenges. Establishing a globally integrated AI governance framework requires not only recognizing the transnational dimensions of AI but also embracing an agile model. Agile governance emphasizes iterative policy development, multi-

¹² See EC, *Artificial Intelligence Act*.

stakeholder collaboration and adaptive regulatory measures.¹³ By enabling real-time updates, evidence-based revisions and flexible enforcement mechanisms, this approach can reconcile local innovation agendas with universal rights obligations. Below is a revised three-pronged model — rooted in a risk-based, rights-based and rules-based foundation — that provides an agile path forward for global AI oversight.

Risk-Based Approach: The Independent International Scientific Panel on AI

To translate emerging scientific findings into actionable policy guidance, an independent international scientific body on AI would play a significant role in synthesizing peer-reviewed research, forecasting societal and economic impacts and offering calibrated policy recommendations to national and regional authorities (Habuka 2023). The Independent International Scientific Panel on AI was proposed at the 2025 AI Action Summit in the international AI safety report led by Yoshua Bengio (Bengio 2024; AI Action Summit 2025). This proposal is currently under review by the UN Office for Digital and Emerging Technologies. Such an organization would convene experts from academia, the private sector, civil society and government to establish a scientific consensus on AI risk assessments and potential mitigation strategies (Galindo, Perset and Sheeka 2023).

Rights-Based Foundation: A Universal Convention on AI for Humanity

The cornerstone of a rights-based approach to AI governance is the adoption of a universal convention on AI for humanity. This convention, administered by a “High Commission for AI and Human Rights,” would establish binding legal standards to prevent harmful AI applications, including mass surveillance, algorithmic discrimination and deepfake-fuelled misinformation (UNESCO 2022; Rawas 2024). By harmonizing ethical and human rights norms across jurisdictions, such a universal instrument safeguards individuals and communities against unacceptable or unpredictable high-risk AI scenarios (Habuka 2023). Technical features of a rights-based approach for agile implementation could include periodic review cycles, complaint-resolution mechanisms and data oversight and protection protocols.

Rules-Based Architecture

The role of international law cannot be overlooked in the establishment of a rules-based framework. Legal instruments must be developed to address the unique challenges posed by digital technologies, particularly in relation to data protection, privacy and intellectual property rights (Magomedova 2020; Su 2022). A comprehensive rules-based architecture is essential for safeguarding socio-economic interactions in the digital age. Supporting human rights with international institutions and law (both soft and hard) creates a much more resilient and agile framework to address the risks associated with digital colonialism (Abbott and Snidal 2000). This approach could democratize innovation in the digital geopolitical landscape and prevent the de-escalation of the global monopoly of a handful of corporations and states in the AI supremacy race (Larsen 2022; Lee 2018; Pavel et al. 2023). The

¹³ See www.oecd.org/en/topics/sub-issues/ai-principles.html.

preservation of public contributions to technological models is paramount, as it ensures that technology serves as a tool for empowerment rather than exploitation. As we navigate the complexities of the digital age, it is imperative that we prioritize the establishment of a rules-based framework that champions equity, justice and inclusivity in all technological endeavours (Corrêa et al. 2023; Floridi 2018).

Collaborative Research Ecosystem: A “International CERN for AI and Emerging Technologies”

A central tenet of these principles can be serviced by an oversight body inspired by the collaborative model of CERN (Klein and Patrick 2024). This body, focused on particle physics, is a dedicated, multilateral organization. As a collaborative global research and development body for AI and emerging technologies, this initiative would enable cross-national research and development on foundational AI architectures, long-term safety testing and ethical design methodologies (Krasodonski et al. 2024). This consortium would orchestrate large-scale experiments, host open-source data repositories and conduct feasibility studies on “frontier AI,” bridging the gap between advanced scientific research and socially beneficial applications.

Conclusion

This working paper underscores the urgency and complexity of establishing a globally coordinated framework for AI governance. AI technologies carry immense promise for driving innovation, economic growth and societal benefits; yet unregulated or poorly regulated development can deepen inequalities, erode civil liberties and intensify geopolitical competition. Existing national and transnational initiatives reveal valuable lessons: the importance of inclusive multi-stakeholder participation, enforceable compliance mechanisms and adaptable regulatory approaches that evolve with technological advancements. However, fragmentation persists, often fuelled by competing interests and insufficient accountability structures, leaving critical gaps in mitigating AI’s adverse effects on privacy, security and equity.

Building on this research, the next logical step is to operationalize the three-pronged model proposed herein — rooted in risk-based, rights-based and rules-based approaches — through concrete milestones. First, formal negotiations toward a Universal Convention on AI for Humanity should commence, ideally led by a dedicated High Commission for AI and Human Rights. Measurable indicators include the number of participating nations, draft articles produced and ratification timelines. Second, the creation of an Intergovernmental Panel on AI and Emerging Technologies will require establishing an international coordinating office, recruiting interdisciplinary experts and finalizing a publication schedule for evidence-based policy reports. Evaluating its impact can be measured by the uptake of the panel’s recommendations into national legislation and the frequency of cross-border research collaborations.

Lastly, the development of an “International CERN for AI and Emerging Technologies” can begin with pilot research programs and an open-source data repository, including benchmarks for funding, membership and project outputs. Establishing agile governance sandboxes, where regulatory bodies collaborate with industry and civil society, can further provide iterative feedback loops to refine global and local AI standards. These steps, taken in unison, will help ensure AI’s transformative potential is harnessed responsibly, sustainably and inclusively for the benefit of all.

Acknowledgements

I extend my deepest gratitude to Maroussia Levesque for her generous and outstanding support. My gratitude also goes to Dan Gorman and Jatin Nathwani for their invaluable and constructive feedback. I also would like to thank my peers at the Digital Policy Hub (DPH), particularly Madison Lee, for her generous support and input. Additionally, I am grateful to the DPH team, particularly Reanne Cayenne and Dianna English and incredible CIGI editor, Christine Robertson, for their unwavering dedication to producing high-quality research. Finally, I am immensely grateful to Jim Balsillie for his support of the DPH and for creating a unique opportunity for me and other scholars to do timely research on the societal impact of emerging technologies.

About the Author

Maral Niazi is a former Digital Policy Hub doctoral fellow and a Ph.D. student at the Balsillie School of International Affairs with a multidisciplinary background in political science, human rights, law and global governance. Her research with the Digital Policy Hub expanded on her doctoral research on the global governance of AI where she will examine the societal impacts of AI on humanity.

Works Cited

- Abbott, Kenneth W. and Duncan Snidal. 2000. "Hard and Soft Law in International Governance." *International Organization* 54 (3): 421–56. <https://doi.org/10.1162/002081800551280>.
- African Union. 2024a. "African Ministers Adopt Landmark Continental Artificial Intelligence Strategy, African Digital Compact to drive Africa's Development and Inclusive Growth." Press release, June 17. <https://au.int/en/pressreleases/20240617/african-ministers-adopt-landmark-continental-artificial-intelligence-strategy>.
- . 2024b. *The Draft Digital Transformation Strategy for Africa (2020–2030)*. Addis Ababa, Ethiopia: African Union. https://au.int/sites/default/files/newsevents/workingdocuments/37470-wd-annex_2_draft_digital_transformation_strategy_for_africa.pdf.
- AI Action Summit. 2025. *International AI Safety Report: The International Scientific Report on the Safety of Advanced AI*. January. https://assets.publishing.service.gov.uk/media/679a0c48a77d250007d313ee/International_AI_Safety_Report_2025_accessible_f.pdf.
- Ala-Pietilä, Pekka and Nathalie A. Smuha. 2021. "A Framework for Global Cooperation on Artificial Intelligence and Its Governance." In *Reflections on Artificial Intelligence for Humanity*, edited by Bertrand Braunschweig and Malik Ghallab, 237-65. https://doi.org/10.1007/978-3-030-69128-8_15.
- ASEAN. 2024. *ASEAN Guide on AI Governance and Ethics*. Jakarta, Indonesia: ASEAN. https://asean.org/wp-content/uploads/2024/02/ASEAN-Guide-on-AI-Governance-and-Ethics_beautified_201223_v2.pdf.
- Bengio, Yoshua. 2024. "The International Scientific Report on the Safety of Advanced AI." June 19. <https://yoshuabengio.org/2024/06/19/the-international-scientific-report-on-the-safety-of-advanced-ai/>

- Bradford, Anu. 2020. *The Brussels Effect: How the European Union Rules the World*. Oxford, UK: Oxford University Press.
- Cheng, Jing and Jinghan Zeng. 2023. "Shaping AI's Future? China in Global AI Governance." *Journal of Contemporary China* 32 (143): 794–810. <https://doi.org/10.1080/10670564.2022.2107391>.
- Corrêa, Nicholas Kluge, Camila Galvão, James William Santos, Carolina Del Pino, Edson Pontes Pinto, Camila Barbosa, Diogo Massmann et al. 2023. "Worldwide AI ethics: A review of 200 guidelines and recommendations for AI governance." *Patterns* 4 (10), 100857. <https://doi.org/10.1016/j.patter.2023.100857>.
- Donelan, Michelle. 2024. *A pro-innovation approach to AI regulation: government response*. Command Paper 1019, February 6. www.gov.uk/government/consultations/ai-regulation-a-pro-innovation-approach-policy-proposals/outcome/a-pro-innovation-approach-to-ai-regulation-government-response.
- Erdélyi, Olivia J. and Judy Goldsmith. 2022. "Regulating artificial intelligence: Proposal for a global solution." *Government Information Quarterly* 39 (4), 101748. <https://doi.org/10.1016/j.giq.2022.101748>.
- European Commission. 2020. "White Paper on Artificial Intelligence: A European approach to excellence and trust." February 19. https://commission.europa.eu/publications/white-paper-artificial-intelligence-european-approach-excellence-and-trust_en.
- Feijóo, Claudio, Youngsun Kwon, Johannes M. Bauer, Erik Bohlin, Bronwyn Howell, Rekha Jain, Petrus Potgieter et al. 2020. "Harnessing artificial intelligence (AI) to increase wellbeing for all: The case for a new technology diplomacy." *Telecommunications Policy* 44 (6), 101988. <https://doi.org/10.1016/j.telpol.2020.101988>.
- Floridi, Luciano. 2018. "Soft Ethics and the Governance of the Digital." *Philosophy & Technology* 31 (1): 1–8. <https://doi.org/10.1007/s13347-018-0303-9>.
- Gasser, Urs and Virgilio A. F. Almeida. 2017. "A Layered Model for AI Governance." *IEEE Internet Computing* 21 (6): 58–62.
- Galindo, Laura, Karine Perset and Francesca Sheeka. 2023. "An overview of national AI strategies and policies." OECD Going Digital Toolkit Notes. Paris, France: OECD. www.oecd.org/en/publications/an-overview-of-national-ai-strategies-and-policies_c05140d9-en.html.
- Habuka, Hiroki. 2023. "The Path to Trustworthy AI: G7 Outcomes and Implications for Global AI Governance." Center for Strategic and International Studies, June 6. www.csis.org/analysis/path-trustworthy-ai-g7-outcomes-and-implications-global-ai-governance.
- Iazzolino, Gianluca and Nicole Stremlau. 2024. "AI for social good and the corporate capture of global development." *Information Technology for Development* 30 (4): 626–43. <https://doi.org/10.1080/02681102.2023.2299351>.
- ICTworks. 2024. "Introducing ASEAN Guiding Principles for Ethical AI Governance." June 5. www.ictworks.org/asean-principles-ethical-ai-governance/.
- Kerry, Cameron F., Joshua P. Meltzer, Andrea Renda, Alex C. Engler and Rosanna Fanni. 2021. *Strengthening International Cooperation on AI: Progress Report*. Washington, DC: Brookings Institute. October. www.brookings.edu/wp-content/uploads/2021/10/Strengthening-International-Cooperation-AI_Oct21.pdf.

- Klein, Emma and Stewart Patrick. 2024. "Envisioning a Global Regime Complex to Govern Artificial Intelligence." Carnegie Endowment for International Peace, March 21. <https://carnegieendowment.org/research/2024/03/envisioning-a-global-regime-complex-to-govern-artificial-intelligence>.
- Krasodomski, Alex, Arthur Gwagwa, Brandon Jackson, Elliot Jones, Stacey King, Mira Lane, Micaela Mantegna et al. 2024. *Artificial intelligence and the challenge for global governance: Nine essays on achieving responsible AI*. Chatham House, June. www.chathamhouse.org/2024/06/artificial-intelligence-and-challenge-global-governance/02-cern-ai-what-might-international.
- Larsen, Benjamin Cedric. 2022. "The geopolitics of AI and the rise of digital sovereignty." Brookings Institute, December 8. www.brookings.edu/articles/the-geopolitics-of-ai-and-the-rise-of-digital-sovereignty/.
- Lee, Kai-Fu. 2018. *AI Superpowers: China, Silicon Valley, and the New World Order*. Boston, MA: Houghton Mifflin Harcourt.
- Leslie, David and Antonella Maia Perini. 2024. "Future Shock: Generative AI and the International AI Policy and Governance Crisis." *Harvard Data Science Review*. May 31. <https://hdr.mitpress.mit.edu/pub/yixt9mqu/release/2>.
- Magomedova, Olga. 2020. "Concept of international legal policy in foreign comparative legal studies." *Moscow Journal of International Law* (3): 27–43. <https://doi.org/10.24833/0869-0049-2020-3-27-43>.
- Mökander, Jakob, Maria Axente, Federico Casolari and Luciano Floridi. 2021. "Conformity Assessments and Post-market Monitoring: A Guide to the Role of Auditing in the Proposed European AI Regulation." *Minds and Machines* 32: 241–68. <https://doi.org/10.1007/s11023-021-09577-4>.
- Muñoz, Víctor. 2024. "Operation regulation: Strengthening Latin America's AI governance." Commentary, European Council on Foreign Relations. July 1. <https://ecfr.eu/article/operation-regulation-strengthening-latin-americas-ai-governance/>.
- Natorski, Michal. 2024. "Compromise in multilateral negotiations and the global regulation of artificial intelligence." *Democratization* 31 (5): 1091–116. <https://doi.org/10.1080/13510347.2024.2351583>.
- Ng, Charmaine and Edson Prestes. 2023. "It's time we embrace an agile approach to regulating AI." World Economic Forum, November 14. www.weforum.org/stories/2023/11/its-time-we-embrace-an-agile-approach-to-regulating-ai/.
- Papagiannidis, Emmanouil, Ida Merete Enholm, Christian Dremel, Patrick Mikalef and John Krogstie. 2022. "Toward AI Governance: Identifying Best Practices and Potential Barriers and Outcomes." *Information Systems Frontiers* 25: 123–41. <https://doi.org/10.1007/s10796-022-10251-y>.
- Pavel, Barry, Ivana Ke, Michael Spirtas, James Ryseff, Lea Sabbag, Gregory Smith, Keller Scholl and Dominique Lumpkin. 2023. "AI and Geopolitics: How Might AI Affect the Rise and Fall of Nations?" Rand Corporation. www.rand.org/pubs/perspectives/PEA3034-1.html.
- Radu, Roxana. 2021. "Steering the governance of artificial intelligence: national strategies in perspective." *Policy and Society* 40 (2): 178–93. <https://doi.org/10.1080/14494035.2021.1929728>.
- Rawas, Soha. 2024. "AI: the future of humanity." *Discover Artificial Intelligence* 4, 25. <https://doi.org/10.1007/s44163-024-00118-3>.

- Reynolds, Rebecca. 2020. "Book Review: Jan Dijk. (2020). The digital divide." *Journal of the Association for Information Science and Technology* 72 (1): 136–38. <https://doi.org/10.1002/asi.24355>.
- Robles, Pedro and Daniel J. Mallinson. 2023. "Artificial intelligence technology, public trust, and effective governance." *Review of Policy Research* 42 (1): 11–28. <https://doi.org/10.1111/ropr.12555>.
- Schmitt, Lewin. 2022. "Mapping global AI governance: A nascent regime in a fragmented landscape." *AI and Ethics* 2: 303–14. <https://doi.org/10.1007/s43681-021-00083-y>.
- Sheehan, Matt. 2023. "China's AI Regulations and How They Get Made." Carnegie Endowment for International Peace. July 10. <https://carnegieendowment.org/research/2023/07/chinas-ai-regulations-and-how-they-get-made>.
- Su, Anna. 2022. "The Promise and Perils of International Human Rights Law for AI Governance." *Law, Technology and Humans* 4 (2): 166–82. <https://doi.org/10.5204/lthj.2332>.
- Taeihagh, Araz. 2021. "Governance of artificial intelligence." *Policy and Society* 40 (2): 137–57. <https://doi.org/10.1080/14494035.2021.1928377>.
- Tallberg, Jonas, Eva Erman, Markus Furendal, Johannes Geith, Mark Klamberg and Magnus Lundgren. 2023. "The Global Governance of Artificial Intelligence: Next Steps for Empirical and Normative Research." *International Studies Review* 25 (3). <https://doi.org/10.1093/isr/viad040>.
- UNESCO. 2022. *Recommendation on the Ethics of Artificial Intelligence*. Paris, France: UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000381137>.
- United Nations Environment Programme. 2024. "AI has an environmental problem. Here's what the world can do about that." September 21. www.unep.org/news-and-stories/story/ai-has-environmental-problem-heres-what-world-can-do-about.
- US Department of State. 2020. "Declaration of the United States of America and the United Kingdom of Great Britain and Northern Ireland on Cooperation in Artificial Intelligence Research and Development: A Shared Vision for Driving Technological Breakthroughs in Artificial Intelligence." Washington, DC: US Department of State. <https://2017-2021.state.gov/declaration-of-the-united-states-of-america-and-the-united-kingdom-of-great-britain-and-northern-ireland-on-cooperation-in-artificial-intelligence-research-and-development-a-shared-vision-for-driving/>.
- Veale, Michael, Kira Matus and Robert Gorwa. 2023. "AI and Global Governance: Modalities, Rationales, Tensions." *Annual Review of Law and Social Science* 19: 255–75. <https://doi.org/10.1146/annurev-lawsocsci-020223-040749>.
- von Ingersleben-Seip, Nora. 2023. "Competition and cooperation in artificial intelligence standard setting: explaining emergent patterns." *Review of Policy Research* 40 (5): 781–810. <https://doi.org/10.1111/ropr.12538>.
- Wallach, Wendell and Anja Kaspersen. 2023. "Achieving an International Framework for the Governance of AI: Artificial Intelligence & Equality Initiative." Carnegie Council for Ethics in International Affairs, July 7. www.carnegiecouncil.org/media/article/achieving-an-international-framework-for-the-governance-of-ai.
- Walter, Yvonne. 2024. "Managing the race to the moon: Global policy and governance in Artificial Intelligence regulation – A contemporary overview and an analysis of socioeconomic consequences." *Discover Artificial Intelligence* 4, 14. <https://doi.org/10.1007/s44163-024-00109-4>.

Webster, Graham, Rogier Creemers, Elsa Kania and Paul Triolo. 2017. "Full Translation: China's New Generation Artificial Intelligence Development Plan." DigiChina, Stanford Cyber Policy Center, Stanford University. <https://digichina.stanford.edu/work/full-translation-chinas-new-generation-artificial-intelligence-development-plan-2017/>.

Yu, Danni, Hannah Rosenfeld and Abhishek Gupta. 2023. "The 'AI divide' between the Global North and the Global South." World Economic Forum Annual Meeting. January 16. www.weforum.org/stories/2023/01/davos23-ai-divide-global-north-global-south/.