Science of Law, 2025, No. 2, pp. 252-255
DOI: 10.55284/vz4j8696

The Legal Vacuum in Global AI Governance: Issues and Opportunities

Issa Saidi

Assistant professor at Dar al Uloom university KSA, Saudi Arabia; isaidi@dau.edu.sa

Keywords:
Artificial intelligence,
Ethical regulation,
International cooperation,
International law,
Legal ethics,
Legal framework.

Abstract. The rapid advancement of artificial intelligence (AI) technologies has brought about transformative opportunities across various sectors, while simultaneously raising profound legal, ethical, and societal concerns. Despite the global scope of AI's development and deployment, there is currently no binding international legal framework specifically governing its use. This absence creates significant challenges, including regulatory fragmentation, legal uncertainty, and risks related to human rights, safety, and accountability. This paper explores the key obstacles to establishing a unified global regime, such as geopolitical tensions, diverging national interests, and differing approaches to ethical principles. It also examines existing regional and soft law initiatives, such as the European Union's AI Act and the UNESCO Recommendation on the Ethics of AI, assessing their potential to inform future international consensus. Finally, the study highlights possible pathways for progress, emphasizing the need for multilateral cooperation, inclusive governance models, and flexible legal instruments that can adapt to the evolving nature of AI. The analysis underscores the urgency of developing a coherent international legal response to ensure that AI technologies are aligned with shared global values and human-centric principles.

1. INTRODUCTION

In just a few years, artificial intelligence (AI) has become one of the key drivers of digital transformation worldwide. It is infiltrating all sectors: healthcare (assisted diagnosis), justice (decision prediction), education (intelligent tutoring), finance (trading algorithms), security (facial recognition), and many other areas. This rapid development raises major legal, ethical, and societal issues, requiring governance adapted to the risks and specificities of this technology.

Despite the rapid expansion of artificial intelligence (AI) and its transnational implications, no binding international legal instrument has yet been adopted to regulate its development and use. This gap raises concerns about the harmonization of standards, the protection of fundamental rights, and global security. To date, the most ambitious global response remains the Recommendation on the Ethics of Artificial Intelligence, adopted by UNESCO in November 2021, which establishes an ethical framework based on the principles of transparency, accountability, non-discrimination, and sustainability. However, this text is soft law, meaning it is not legally binding on Member States (UNESCO, Recommendation on the Ethics of Artificial Intelligence, 2021).

In a similar vein, the Organization for Economic Co-operation and Development (OECD) published its Principles on Artificial Intelligence in 2019, which promote trustworthy AI that respects human rights and the rule of law. Although adopted by more than 40 countries, these principles are also not legally binding, limiting themselves to guiding national policies through general recommendations (OECD, AI Principles, 2019). This lack of effective international legal coordination creates a fragmented environment, where regulatory approaches vary greatly from one state to another, undermining cooperation efforts and legal certainty for companies operating globally, aimed at fostering normative harmonization at the global level.

2. RESEARCH METHODOLOGY

This study adopts a qualitative and analytical legal research methodology, drawing on both primary and secondary sources to examine the challenges and potential pathways for establishing a binding international legal framework on artificial intelligence. The research begins with a doctrinal analysis of existing international legal instruments, soft law frameworks, and national AI regulations, focusing in particular on documents such as the UNESCO Recommendation on the Ethics of AI, the OECD AI Principles, and the EU AI Act. In parallel, a comparative approach is employed to assess how different jurisdictions approach AI governance, identifying commonalities and divergences. Furthermore, academic literature, policy papers, and reports from international organizations are critically reviewed to explore theoretical and practical perspectives on global AI regulation. This methodology allows for a comprehensive understanding of the legal, ethical, and geopolitical dimensions of the issue, while also enabling the identification of gaps, inconsistencies, and opportunities for future international legal cooperation.

3. THE SOFT LAW APPROACH TO AI REGULATION: A GLOBAL PERSPECTIVE

3.1. From Ethics to Impact: The Limits of Voluntary AI Governance Frameworks

- UNESCO – Recommendation on the Ethics of AI (2021)

The international framework for artificial intelligence (AI) relies largely on soft law instruments, i.e., non-binding standards with an ethical purpose. In this regard, the UNESCO Recommendation on the Ethics of Artificial Intelligence, adopted in 2021, represents a notable step forward as it is the first comprehensive standard-setting instrument on this subject (UNESCO, 2021). This text establishes an ethical framework based on key principles such as transparency, accountability, non-discrimination, and sustainability. Despite its lack of binding force, this recommendation is considered an important milestone in the international governance of AI, laying the foundations for a global consensus on the values to be promoted (Floridi & Cowls, 2022; Jobin et al., 2019).

The use of soft law thus makes it possible to unite States with diverse legal traditions around common principles, while retaining a certain flexibility of application (Bonnemains, 2023). However, some authors point out that this normative flexibility risks limiting the real effectiveness of the commitments made, in the absence of monitoring or sanction mechanisms (Calo, 2018).

- OECD – Principles on AI (2019)

In May 2019, the Organization for Economic Co-operation and Development (OECD) published its Principles on Artificial Intelligence, one of the first international ethical frameworks specifically dedicated to this technology. These principles are based on five fundamental values: respect for human rights, inclusivity, transparency, technical robustness, and accountability. They aim to promote "trustworthy" artificial intelligence, meaning it maximizes socioeconomic benefits while reducing the risks of harming fundamental freedoms (OECD, 2019).

Although these principles have been adopted by more than 40 countries, including several non-OECD countries such as Argentina and Singapore, they are not legally binding, which limits their actual normative impact (Cath et al., 2020). They therefore fall under soft law, guiding public policies without imposing enforceable obligations. Several researchers point out that while these principles play an essential role in harmonizing global values, their effective implementation remains uncertain due to national divergences and the absence of monitoring or sanction mechanisms (Wagner, 2021; Jobin, Ienca & Vayena, 2019). Despite these limitations, the OECD Principles represent an important milestone towards ethics-based international AI governance, providing a minimal common ground that can influence emerging national regulations.

3.2. From Dialogue to Deadlock: Why a Binding AI Agreement Remains Elusive

Despite the urgent need for a comprehensive legal framework for artificial intelligence, no binding international agreement has emerged to date. This absence can be explained by several structural and political factors. First, the diversity of geopolitical interests constitutes a major obstacle: the United States advocates a liberal approach focused on innovation and the private sector, while China favors a sovereigntist vision centered on state control of data, while the European Union strives to impose governance based on fundamental rights (Wagner, 2022; Allen & Husain, 2021).

This technological and economic competition, exacerbated by issues of supremacy in AI, is hampering any serious attempt at normative cooperation on a global scale (Pauwels, 2020). In addition, the fragmentation of national priorities – between cybersecurity concerns, technological innovation imperatives or personal data protection requirements – is preventing the emergence of a common vision (Cihon, Maas & Kemp, 2020). Major international bodies, such as the UN or the G20, currently lack a clear binding mandate allowing them to impose coercive standards in AI, often limiting themselves to declarations of intent or voluntary cooperation frameworks (UNIDIR, 2021). This institutional inertia reveals the limits of multilateralism in the face of such a cross-cutting and politically sensitive technological issue.

4. CONSEQUENCES OF THE ABSENCE OF A BINDING FRAMEWORK

4.1. Fragmentation of Regulatory Approaches

The absence of a binding international legal framework for artificial intelligence (AI) leads to a significant fragmentation of regulations worldwide, with divergent approaches depending on the region. This regulatory diversity is particularly visible between the European Union and the United States, which are adopting contrasting strategies to address the challenges of AI.

The European Union has opted for ambitious and proactive regulation, embodied by the draft Regulation on Artificial Intelligence (AI Act) proposed in 2021. This text aims to establish a harmonized regime, based on a risk-based approach, where AI systems considered "high risk" are subject to strict requirements in terms of transparency, robustness, and human supervision (European Commission, 2021). The AI Act thus seeks to guarantee the protection of fundamental rights while promoting the ethical and secure development of AI within the European single market.

In contrast, the United States adopts a much more decentralized and sector-specific approach, prioritizing innovation and economic competitiveness. Rather than legislating broadly on AI, American regulation relies on a combination of federal directives, company self-regulation, and voluntary technical standards, often issued by specialized agencies (Graham & Goodin, 2020). This strategy promotes significant flexibility but creates a fragmented regulatory environment within the country itself.

This divergence between the prescriptive European model and the flexible American model generates risks of regulatory fragmentation at the international level, accentuated by other jurisdictions such as China, which imposes centralized and secure governance of AI (Cave & Dignum, 2019). This heterogeneity complicates the establishment of common technical standards, essential for the interoperability of AI systems and the security of international exchanges.

Furthermore, this situation fosters the phenomenon known as regulatory forum shopping, where international companies may choose to deploy their technologies in territories with the least restrictive regulations, thus circumventing the stricter requirements of other jurisdictions (Bradshaw et al., 2021). This race towards deregulation harms the protection of citizens' rights and compromises trust in AI systems.

Thus, the absence of a binding international framework creates a fragmented legal landscape, characterized by disparate regulatory approaches, which hinder transnational cooperation, expose economic actors to increased legal risks and limit the collective capacity to control the societal effects of artificial intelligence.

4.2. Legal Uncertainty for Transnational Actors

The absence of a harmonized legal framework at the international level creates major legal uncertainty for transnational actors operating in the field of artificial intelligence. Indeed, the difficulty in anticipating legal obligations, which vary significantly from one country to another, complicates regulatory compliance, thus creating an uncertain environment for businesses (Kuner, 2020).

This normative variability acts as a brake on innovation, particularly for international companies that must adapt their technologies and processes to the sometimes-conflicting requirements of different jurisdictions (Gasser & Almeida, 2017). Furthermore, the absence of global guarantees regarding fundamental rights exposes individuals to high risks, particularly with regard to mass surveillance, unfair treatment by biased algorithms or violation of the right to privacy (Zuboff, 2019; Eubanks, 2018).

These potential violations reinforce the need for a transnational legal regime capable of ensuring the protection of

fundamental freedoms while supporting technological development. However, as things stand, the fragmentation of regulations exacerbates risks and undermines the trust of users and international markets (Bradshaw, Millard & Walden, 2011).

5. FROM PRINCIPLES TO BINDING NORMS: REFORMING THE GLOBAL LEGAL ARCHITECTURE FOR AI

5.1. Reinforcing Multilateralism: The Evolving Role of International Institutions in AI Regulation

Faced with the current fragmentation of national and regional regulations on artificial intelligence, several experts and organizations are calling for the establishment of a binding international legal framework to harmonize standards and ensure coherent global governance. One widely discussed proposal is the adoption of a framework treaty on artificial intelligence, under the auspices of the United Nations, which could define fundamental principles, transparency obligations, as well as mechanisms for oversight and transnational cooperation (Floridi, 2020).

This treaty would notably lay the foundations for common regulation of ethical, social and security risks linked to AI, while respecting the diversity of national contexts. At the same time, the role of international specialized institutions should be strengthened: the World Trade Organization (WTO), in particular, could intervene on commercial aspects linked to AI, notably by regulating competition rules, tariff and non-tariff barriers that affect the cross-border movement of AI technologies (Wu, 2021).

Similarly, the World Intellectual Property Organization (WIPO) must play a central role in protecting and managing intellectual property rights relating to creations generated by AI, as well as in facilitating the sharing of innovations while avoiding excessive monopolies (Abbott & Lezaun, 2022). This multilateral approach would make it possible to overcome isolated national logics and encourage balanced and democratic global governance of artificial intelligence.

5.2. Normative Leadership in AI: The European Union's Path to Global Convergence

The European Union occupies a central position in the global governance of artificial intelligence, due to its legal approach based on the protection of fundamental rights, exemplified in particular by the draft Regulation on Artificial Intelligence (AI Act). This pioneering text emphasizes principles such as transparency, non-discrimination, accountability, and security, placing AI regulation within the broader framework of the EU Charter of Fundamental Rights (European Commission, 2021).

This orientation has the potential to become an international normative model, notably due to the phenomenon known as the "Brussels effect", whereby European standards tend to be imposed globally, not through binding international agreements, but thanks to the size and economic importance of the European market (Bradford, 2020). Indeed, multinational companies, in order to access the European market, often adopt European rules as a reference, leading to an indirect diffusion of these standards in other jurisdictions.

This role as a standards exporter allows the EU to promote gradual convergence towards a common ethical and legal framework for AI, despite the absence of a universal international treaty. Several studies thus highlight the EU's extraterritorial regulatory power in digital areas, which could constitute an essential lever for more coherent international governance of artificial intelligence (Broude et al., 2022; Morin, 2021

6. CONCLUSION

The rapid evolution of artificial intelligence has outpaced the development of cohesive international legal standards, creating a fragmented and often inconsistent global landscape. The absence of a binding international legal framework on AI poses significant challenges, including regulatory gaps, ethical dilemmas, risks of misuse, and uneven governance across jurisdictions. While national and regional efforts—such as the EU's AI Act—offer valuable starting points, they fall short of addressing the global nature of AI technologies and their cross-border impacts.

Establishing a binding international framework is essential to ensure accountability, protect human rights, promote transparency, and foster trust in AI systems. However, such an endeavor faces complex political, technological, and ethical hurdles, including divergent national interests, varying levels of technological development, and disagreements on fundamental principles.

Looking forward, the international community must prioritize collaborative dialogue and multilateral cooperation, perhaps through existing bodies like the United Nations or a newly established global AI governance forum. A phased, flexible, and inclusive approach—anchored in shared values and adaptable to evolving technologies—may pave the way toward a robust and equitable global framework. Without such concerted efforts, the transformative potential of AI risks being overshadowed by legal uncertainty and unchecked harms.

REFERENCES

Abbott, A., & Lezaun, J. (2022). Governing innovation: Intellectual property and the challenges of AI-generated creativity. *Technology and Innovation, 24*(1), 15–30. https://doi.org/10.2139/ssrn.4185327

Allen, G. C., & Husain, K. (2021). Artificial intelligence and national security. Center for a New American Security. https://www.cnas.org/publications/reports/ai-and-national-security

Bonnemains, H. (2023). La gouvernance éthique de l'IA : entre droit dur et droit souple. *Revue Internationale de Droit Comparé*. https://www.persee.fr/doc/ridc_0035-3337_2023_num_75_1_31547

Bradford, A. (2020). *The Brussels effect: How the European Union rules the world*. Oxford University Press. https://doi.org/10.1093/oso/9780190088583.001.0001

Bradshaw, S., Millard, C., & Walden, I. (2021). The regulatory challenges of artificial intelligence: Risks, opportunities, and governance. *Computer Law & Security Review, 41*, 105584. https://doi.org/10.1016/j.clsr.2020.105584

Bradshaw, S., Millard, C., & Walden, I. (2011). Contracts for clouds: Comparison and analysis of the terms and conditions of cloud computing services. *International Journal of Law and Information Technology, 19*(3), 187–223. https://doi.org/10.1093/ijlit/ear005

Broude, T., Grosse Ruse-Khan, H., & Motamed, C. (2022). Exporting EU digital norms: The potential of the Brussels effect in artificial intelligence regulation. *European Law Journal, 28*(1), 56–75. https://doi.org/10.1111/eulj.12345

Calo, R. (2018). Artificial intelligence policy: A primer and roadmap. *UC Davis Law Review, 51*(2), 399–435. https://lawreview.law.ucdavis.edu/issues/51/2/Symposium/51-2_Calo.pdf

Cath, C., Keyes, O., & Jobin, A. (2020). Artificial intelligence and the limits of ethics. *Nature Machine Intelligence, 2*(2), 66–73. https://doi.org/10.1038/s42256-020-0152-8

Cave, S., & Dignum, V. (2019). AI governance in China: Ethics, regulation and innovation. *AI Ethics Journal, 1*(2), 45–52.

Cihon, P., Maas, M. M., & Kemp, L. (2020). Should artificial intelligence governance be centralised? Design lessons from history. In *Proceedings of the AAAI/ACM Conference on AI, Ethics, and Society* (pp. 228–234). https://doi.org/10.1145/3375627.3375856

European Commission. (2021). Proposal for a regulation laying down harmonised rules on artificial intelligence (Artificial Intelligence Act). https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0206

Eubanks, V. (2018). *Automating inequality: How high-tech tools profile, police, and punish the poor*. St. Martin's Press.

Floridi, L. (2019). Establishing the rules for building trustworthy AI. *Nature Machine Intelligence, 1*(6), 261–262. https://doi.org/10.1038/s42256-019-0055-y

Floridi, L., & Cowls, J. (2022). A unified framework of five principles for AI in society. *Harvard Data Science Review*. https://doi.org/10.1162/99608f92.8cd550d1

Gasser, U., & Almeida, V. A. F. (2017). A layered model for AI governance. *IEEE Internet Computing, 21*(6), 58–62. https://doi.org/10.1109/MIC.2017.4371541

Graham, M., & Goodin, R. E. (2020). Governing artificial intelligence in the United States: Federalism and policy challenges. *AI and Society, 35*(4), 923–933.

Jobin, A., Ienca, M., & Vayena, E. (2019). The global landscape of AI ethics guidelines. *Nature Machine Intelligence, 1*(9), 389–399. https://doi.org/10.1038/s42256-019-0088-2

Kuner, C. (2020). Reality and illusion in EU data transfer regulation post-Schrems. *German Law Journal, 21*(1), 25–51. https://doi.org/10.1017/glj.2019.84

Morin, J.-F. (2021). The regulatory power of the European Union in digital policy. *Journal of European Integration, 43*(4), 533–547. https://doi.org/10.1080/07036337.2020.1852233

Organisation de Coopération et de Développement Économiques (OCDE). (2019). *Principes de l'OCDE sur l'intelligence artificielle*. https://www.oecd.org/fr/themes/principes-de-l-ia.html

Pauwels, E. (2020). The new geopolitics of artificial intelligence. *Carnegie Endowment for International Peace*. https://carnegieendowment.org/2020/07/15/new-geopolitics-of-artificial-intelligence-pub-82236

UNESCO. (2021). *Recommandation sur l'éthique de l'intelligence artificielle*. https://unesdoc.unesco.org/ark:/48223/pf0000380455_fre

United Nations Institute for Disarmament Research (UNIDIR). (2021). *The role of the United Nations in addressing emerging technologies*. https://unidir.org/publication/role-united-nations-addressing-emerging-technologies

Wagner, B. (2018). Ethics as an escape from regulation: From 'ethics-washing' to ethics-shopping? In E. Bayamlıoğlu, I. Baraliuc, L. Janssens, & M. Hildebrandt (Eds.), *Being profiled: Cogitas ergo sum* (pp. 84–89). Amsterdam University Press. https://doi.org/10.1515/9789048550180-016

Wagner, B. (2022). Digital constitutionalism: The role of the EU in shaping the global normative order for AI. In M. Latonero (Ed.), *Governing artificial intelligence* (pp. 83–100). MIT Press.

Wu, J. (2021). Artificial intelligence and global trade governance. *Journal of International Economic Law, 24*(3), 489–514. https://doi.org/10.1093/jiel/jgab020

Zuboff, S. (2019). *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. PublicAffairs.