

## 35. JURISPRUDENCE

### GLOBAL REGULATION OF ARTIFICIAL INTELLIGENCE WITHIN THE FRAMEWORK OF INTERNATIONAL LAW: CONTEMPORARY CHALLENGES, LEGAL FRAMEWORKS AND HARMONIZATION MECHANISMS

**Andrii Yakovliev**

Fourth Year Student Majoring for Bachelor Degree  
6779439@stud.kai.edu.ua

Department of International and European Law  
Faculty of Law and International Relations  
State University “Kyiv Aviation Institute”  
Kyiv, Ukraine

**Marharyta Liashenko**

Fourth Year Student Majoring for Bachelor Degree  
8077876@stud.kai.edu.ua

Department of International and European Law  
Faculty of Law and International Relations  
State University “Kyiv Aviation Institute”  
Kyiv, Ukraine

**Vasylyshyna Nataliia**

Dr.Sc. in Pedagogics, Professor,  
Professor of the Foreign Languages and Translation Department  
Scientific Secretary of the Academic Council  
of the Faculty of Law and International Relations  
nataliia.vasylyshyna@npp.kai.edu.ua  
Foreign Languages and Translation Department  
Faculty of Law and International Relations  
State University “Kyiv Aviation Institute”  
Kyiv, Ukraine

**Abstract.** This article investigates the systemic normative disruption caused by the rapid proliferation of artificial intelligence (AI) within the global legal order. It critically analyzes the fragmentation of international law arising from competing models of digital sovereignty and the limitations of traditional state-centric liability regimes. The study argues that the dichotomy between soft law and hard law is shifting towards a hybrid governance model. This model relies on the extraterritorial Brussels Effect of the EU, the strategic use of Free Trade Agreements, and the normative baseline of the Council of Europe’s

Framework Convention. The authors propose a layered regulation scenario to mitigate the risks of regulatory arbitrage and ensure human rights protection.

**Key Words:** artificial intelligence, international law, digital sovereignty, Brussels Effect, AI Act, strict liability, regulatory arbitrage, trade agreements, high-risk systems.

*Objective and Tasks of the Research.* The primary objective is to deconstruct the current geopolitical fragmentation in AI governance and propose a cohesive mechanism for legal harmonization. To achieve this, the following tasks are addressed: reinterpreting sovereignty in the context of transboundary data flows; evaluating the efficacy of the EU's risk-based approach versus market-driven models; identifying gaps in civil liability regarding autonomous systems; and developing a compliance interoperability scenario based on trade and technical standards.

*Issues in the Global Regulation of Artificial Intelligence.* The fundamental challenge facing international law today is the pacing problem where technological capability is accelerating exponentially, while legal adaptation remains linear. This disconnect creates a vacuum where digital sovereignty becomes a contested concept. As Roberts, Floridi, and Cowls argue, sovereignty is evolving from territorial control to a normative claim of authority over the digital ecosystem. They posit that digital sovereignty should be understood as a normative concept that centres on authority or legitimate control rather than mere technical capability [1, p. 3]. However, this leads to a paradox where states attempt to enforce local laws on global, decentralized AI models. This results in regulatory fragmentation, where a disjointed legal landscape encourages regulatory arbitrage, allowing corporations to migrate to jurisdictions with the weakest safety protocols. As noted by Lancieri et al., this creates a danger of regulatory capture, where powerful tech entities shape the rules to their advantage, bypassing democratic oversight [2, p. 14].

In this chaotic landscape, the European Union has emerged as a unilateral global regulator. Through the Brussels Effect, the EU AI Act de facto harmonizes global markets not through treaties, but through market access conditionality. Siegmann and Anderljung describe this as a Brussels Side-Effect, where global compliance is driven by corporate necessity to access the Single Market, potentially reducing the global governance gap [3, p. 648]. While this elevates safety standards, it risks creating a compliance gap for the Global South. Furthermore, distinct regulatory blocs are forming. As analyzed by Whaples, the EU's rights-based model contrasts sharply with the US innovation-first approach and China's state-security model, creating deep fault lines that complicate global cooperation [4, p. 334].

Malacka further emphasizes that while the EU focuses on market harmonization, instruments like the Council of Europe Convention prioritize ethical and social dimensions, necessitating a complex interplay between these frameworks to avoid legal conflicts [5, p. 124].

A critical legal lacuna exists in the realm of liability and accountability. Traditional tort law relies on foreseeability and direct causation – concepts that break down when applied to "black box" algorithms. Ruschemeier highlights that the emergence of artificial intelligence challenges existing legal frameworks, notably in civil liability, as current laws were not designed for autonomous decision-making [6, p. 362]. To address this, Madiega emphasizes the need for a strict liability regime for high-risk AI applications. Such a regime would ensure that operators are held liable for damage caused by autonomous systems regardless of fault, preventing a situation where victims are left without compensation due to the impossibility of proving human negligence in complex algorithmic processes [7, p. 5].

Regarding harmonization mechanisms, the research identifies that a single Global AI Treaty is geopolitically unlikely. Instead, a hybrid interoperability scenario is the most viable path. This involves a multi-layered approach. The first layer is the normative baseline established by the Council of Europe Framework Convention on AI, which obliges parties to adopt measures ensuring AI lifecycle activities are consistent with human rights [8]. The second layer involves economic instruments; as suggested by Aaronson, including AI governance clauses in Free Trade Agreements (FTAs) can enforce cross-border data flows and safety standards more effectively than abstract UN resolutions [9]. Finally, the third layer relies on soft law frameworks such as the OECD AI Principles, which provide a common vocabulary for trustworthy AI that facilitates policy convergence across borders before binding laws are fully enacted [10].

*Conclusions.* The global regulation of AI requires a fundamental shift from reactive fragmentation to proactive interoperability. The study concludes that, firstly, sovereignty must be redefined towards interoperable sovereignty, where national control is balanced with cross-border data harmonization. Secondly, to prevent organized irresponsibility, international private law must adopt strict liability for autonomous agents, ensuring that the burden of risk falls on developers rather than users. Finally, governance must be multi-stakeholder, relying on a regime complex where trade agreements, technical standards, and regional regulations reinforce each other to create a cohesive global framework.

## **REFERENCES:**

1. Roberts H., Floridi L., Cowls J. Digital sovereignty and artificial intelligence: a normative approach. *Ethics and Information Technology*. 2024. Vol. 26(4). URL: <https://link.springer.com/article/10.1007/s10676-024-09810-5>
2. Lancieri F., Edelson L., Bechtold S. AI Regulation: Competition, Arbitrage & Regulatory Capture. *Theoretical Inquiries in Law Journal*. 2025. URL: <https://scholarship.law.georgetown.edu/facpub/2647>
3. Siegmann C., Anderljung M. The Brussels Side-Effect: How the AI Act Can Reduce the Global Governance Gap. *German Law Journal*. 2024. Vol. 25,

- Issue 4. P. 646–663. URL: <https://www.cambridge.org/core/journals/german-law-journal/article/brussels-sideeffect-how-the-ai-act-can-reduce-the-global-reach-of-eu-policy/032C72AEC537EBB6AE96C0FD90387E3E>
4. Whaples A. AI Regulation Across Borders: Legal Challenges and Prospects for International Cooperation. *San Diego International Law Journal*. 2025. Vol. 26. P. 317–350. URL: <https://digital.sandiego.edu/ilj/vol26/iss2/2>
  5. Malacka M. AI Legislation, Private International Law and the Protection of Human Rights in the European Union. *European Studies*. 2025. Vol. 11(1). P. 122–151. URL: <https://reference-global.com/article/10.2478/eustu-2024-0006>
  6. Ruschemeier H. AI as a challenge for legal regulation – the scope of application of the artificial intelligence act proposal. *ERA Forum*. 2023. Vol. 23. P. 361–376. URL: <https://link.springer.com/article/10.1007/s12027-022-00725-6>
  7. Madiaga T. Artificial Intelligence and Civil Liability. *European Parliament Research Service*. 2020. URL: [https://www.europarl.europa.eu/RegData/etudes/STUD/2020/621926/IPOL\\_STU\(2020\)621926\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/621926/IPOL_STU(2020)621926_EN.pdf)
  8. Council of Europe. Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law. *Treaty Series No. 225*. 2024. URL: <https://www.coe.int/en/web/artificial-intelligence/cai>
  9. Aaronson S. A. Why Free Trade Agreements are the Best Bet in the Absence of Multilateral AI Governance Forums. *Tech Policy Press*. 2024. URL: <https://www.techpolicy.press/why-free-trade-agreements-are-the-best-bet-in-the-absence-of-multilateral-ai-governance-forums/>
  10. OECD AI Principles. *OECD.AI Policy Observatory*. 2024. URL: <https://oecd.ai/en/ai-principles>