The Role of International Law in Governing Global Artificial Intelligence and Its Implications for Indonesia

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Abstract

The rapid development of artificial intelligence (AI) has generated complex legal and ethical challenges at the global level, particularly concerning the protection of human rights. In the absence of a binding international treaty governing AI, international law has increasingly relied on soft law instruments and existing human rights frameworks to establish normative standards for AI governance. This article examines the role of international law in shaping global AI governance and analyzes its implications for Indonesia. Employing a normative juridical research method with statutory and conceptual approaches, this study analyzes the UNESCO Recommendation on the Ethics of Artificial Intelligence, the International Covenant on Civil and Political Rights, and the OECD Principles on Artificial Intelligence, supported by relevant legal scholarship. The findings show that international law functions as a normative foundation that legitimizes ethical principles, human rights safeguards, and state responsibility in AI governance. Furthermore, the study identifies normative and institutional challenges faced by Indonesia in aligning national legal frameworks with international AI governance standards.

1. Introduction

The accelerated development and deployment of artificial intelligence (AI) have significantly transformed governance structures, economic activities, and social relations at the global level. AI systems are increasingly used in public administration, digital governance, and decision-making processes, raising complex legal and ethical concerns related to accountability, transparency, and the protection of fundamental human rights. Existing scholarship highlights that the use of data-driven and algorithmic technologies has intensified risks to privacy, non-discrimination, and freedom of expression, particularly in the digital environment.[1]

The governance of AI presents unique regulatory challenges due to its rapid evolution, cross-border nature, and reliance on complex socio-technical systems. Traditional state-centric regulatory approaches are often inadequate to address these characteristics, prompting the emergence of international and transnational governance frameworks. In this context, scholars emphasize that AI governance has largely developed through soft law mechanisms and institutional coordination rather than binding international treaties.[2]

International organizations play a central role in shaping global AI governance norms. Through policy coordination, standard-setting, and agenda-setting functions, organizations such as the OECD and UNESCO contribute to the development of shared principles and ethical guidelines for AI governance. The OECD Principles

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[1] Jacopo Bellasio, Linda Slapakova, Fiona Quimbre, Sam Stockwell, and Erik Silfversten. *Human rights in the digital age*. RAND, 2021.
[2] Araz Taeihagh. "Governance of artificial intelligence." *Policy and society* 40, no. 2 (2021): 137-157.

on Artificial Intelligence, as analyzed by Yeung,[3] function as influential soft law instruments that promote trustworthy and human-centred AI while encouraging regulatory convergence among states. Similarly, UNESCO's institutional role in advancing ethical and human rights-based approaches to emerging technologies reflects the increasing reliance on international organizations in global governance processes.[4]

From a human rights perspective, AI governance has been closely linked to broader discussions on digital rights and state responsibility in the digital age. Studies underline that the protection of human rights in technologically mediated environments requires adaptive legal frameworks capable of responding to new forms of power and control enabled by digital technologies.[5] These concerns are particularly relevant for developing countries, where institutional capacity and regulatory readiness may lag behind technological adoption.

For Indonesia, the growing influence of international AI governance norms raises important normative questions regarding the alignment of domestic legal frameworks with global standards. While Indonesia continues to advance digital transformation initiatives, the absence of a comprehensive AI-specific regulatory framework underscores the need to examine how international governance norms shape national legal obligations. Accordingly, this article examines the role of

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[3] Karen Yeung. "Recommendation of the council on artificial intelligence (OECD)." *International legal materials* 59, no. 1 (2020): 27-34.

[4] Ileana Citaristi. "United Nations Educational, Scientific and Cultural Organization UNESCO." In *The Europa Directory of International Organizations 2022*, pp. 369-375. Routledge, 2022.

[5] Alessandro Mantelero. *Beyond data: Human rights, ethical and social impact assessment in AI*. Springer Nature, 2022.

international law and international organizations in governing global AI and analyses its implications for Indonesia through a normative juridical approach.

2. Literature Review

The academic literature on artificial intelligence governance reflects a growing recognition that emerging technologies challenge conventional regulatory paradigms. Scholars argue that AI systems are characterized by opacity, adaptability, and transnational operation, which complicate traditional legal oversight mechanisms.[6] As a result, governance approaches increasingly rely on principles-based and flexible regulatory frameworks rather than rigid legal rules.

A significant body of scholarship examines the role of soft law and international coordination in AI governance. Soft law instruments are often viewed as particularly suitable for regulating AI due to their capacity to accommodate rapid technological change and facilitate consensus among diverse stakeholders. Yeung[7] highlights that the OECD Principles on Artificial Intelligence function as influential governance benchmarks that shape national regulatory approaches despite their non-binding nature. Complementary studies emphasize that international organizations act as orchestrators of global governance by coordinating norms, practices, and expectations across jurisdictions.[8]

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[6] Araz Taeihagh. "Governance of artificial intelligence." *Policy and society* 40, no. 2 (2021): 137-157.

[7] Karen Yeung. "Recommendation of the council on artificial intelligence (OECD)." *International legal materials* 59, no. 1 (2020): 27-34.

[8] Christian Downie. "How do informal international organizations govern? The G20 and orchestration." *International Affairs* 98, no. 3 (2022): 953-972.

Another strand of literature focuses on the intersection between AI governance and human rights in the digital age. Bellasio et al.[9] argue that digital technologies, including AI, pose systemic risks to human rights by enabling large-scale surveillance, data exploitation, and algorithmic decision-making. This perspective underscores the need for governance frameworks that integrate human rights considerations into the regulation of digital technologies. Mantelero[10] further develops this argument by emphasizing the importance of human rights and ethical impact assessments as tools for evaluating the societal consequences of AI systems.

Recent governance-oriented research also highlights the importance of trust and accountability in AI systems. Gillis et al.[11] argue that trustworthiness in AI cannot be achieved solely through ethical principles but requires institutional mechanisms and regulatory oversight. This view reinforces the role of the state in ensuring responsible AI governance, even where AI systems are developed or operated by private actors.

Finally, sector-specific studies illustrate the normative implications of AI governance for labour relations and collective rights. De Stefano and Taes[12] demonstrate that algorithmic management practices challenge existing labour law frameworks, raising broader questions about accountability and rights protection in AI-mediated environments. Despite these contributions, the literature remains

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[9] Jacopo Bellasio, Linda Slapakova, Fiona Quimbre, Sam Stockwell, and Erik Silfversten. *Human rights in the digital age*. RAND, 2021.

[10] Alessandro Mantelero. *Beyond data: Human rights, ethical and social impact assessment in AI*. Springer Nature, 2022.

[11] Rory Gillis, Johann Laux, and Brent Mittelstadt. "Trust and trustworthiness in artificial intelligence." In *Handbook on Public Policy and Artificial Intelligence*, pp. 181-193. Edward Elgar Publishing, 2024.

[12] Valerio De Stefano and Simon Taes. "Algorithmic management and collective bargaining." *Transfer: European Review of Labour and Research* 29, no. 1 (2023): 21-36.

largely focused on developed economies, leaving a gap in understanding how international AI governance norms affect developing countries. This article addresses this gap by examining the implications of global AI governance norms for Indonesia.

3. Methods

This study employs a normative juridical research method to examine the role of international law in governing artificial intelligence (AI) and its implications for Indonesia. Normative juridical research is appropriate for this study as it focuses on analyzing legal norms, principles, and doctrines rather than empirical data, particularly in the context of emerging global governance issues. The research adopts a statutory approach by examining relevant international legal instruments that constitute the normative framework for AI governance. These include the UNESCO Recommendation on the Ethics of Artificial Intelligence, the International Covenant on Civil and Political Rights, and the OECD Principles on Artificial Intelligence. These instruments are analyzed to identify the ethical principles, human rights standards, and state obligations that shape global AI governance.

In addition, a conceptual approach is employed to analyze legal doctrines related to soft law, human rights protection, and state responsibility in the context of emerging technologies. The sources of legal materials used in this study consist of primary legal materials, namely international legal instruments and human rights treaties, and secondary legal materials, including scholarly articles, books, and

academic commentaries on international law, artificial intelligence governance, and human rights. All materials are selected based on their relevance and academic credibility. The analysis is conducted through qualitative legal interpretation, focusing on systematic interpretation and normative reasoning to assess how international legal principles governing AI can be internalized within national legal frameworks. This method enables the study to draw normative conclusions regarding the implications of international AI governance for Indonesia.

4. Results

4.1. The Role of International Law in Global Artificial Intelligence Governance

The findings of this study indicate that international law plays a central normative role in governing artificial intelligence (AI) at the global level, despite the absence of a binding international treaty specifically regulating AI. International AI governance has largely developed through soft law instruments and international governance frameworks, which together form a normative structure guiding state conduct and policy development in the field of emerging technologies.[13]

International organizations play a key role in articulating and disseminating global standards for responsible AI governance. Through ethical guidance and policy coordination, organizations such as UNESCO contribute to the promotion of human-rights-oriented and value-based approaches to AI governance. UNESCO's

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[13] Araz Taeihagh. "Governance of artificial intelligence." *Policy and society* 40, no. 2 (2021): 137-157.

role as an international norm-setting organization reflects the increasing reliance on institutional processes to integrate human rights, fairness, transparency, and accountability into AI governance frameworks.[14] Although non-binding, such institutional standards function as important normative reference points for states by legitimizing ethical principles within global governance discourse.

Similarly, the OECD Principles on Artificial Intelligence contribute to global AI governance by establishing widely accepted benchmarks for trustworthy and human-centred AI. These principles promote inclusive growth, transparency, robustness, and accountability in AI systems, influencing national regulatory approaches through peer review and policy coordination mechanisms.[15] The findings demonstrate that soft law instruments operate as effective governance tools by shaping expectations of appropriate state behaviour, even in the absence of legally binding obligations.

From a human rights perspective, the findings further demonstrate that AI governance is closely connected to broader discussions on the protection of human rights in the digital age. The increasing use of algorithmic and data-driven technologies has intensified risks related to privacy, non-discrimination, and freedom of expression, reinforcing the need for governance frameworks that integrate human rights norms into the regulation of AI systems.[16] These international

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[14] Steven Feldstein. "Evaluating Europe's push to enact AI regulations: how will this influence global norms?." *Democratization* 31, no. 5 (2024): 1049-1066.

[15] Karen Yeung. "Recommendation of the council on artificial intelligence (OECD)." *International legal materials* 59, no. 1 (2020): 27-34.

[16] David Leslie, Christopher Burr, Mhairi Aitken, Josh Cowls, Michael Katell, and Morgan Briggs. "Artificial intelligence, human rights, democracy, and the rule of law: a primer." *arXiv preprint arXiv:2104.04147* (2021).

norms collectively shape expectations of responsible state behaviour in the development and use of AI technologies.

4.2. Normative Challenges and Implications for Indonesia

The findings further reveal that Indonesia faces significant normative and institutional challenges in aligning national legal frameworks with international AI governance standards. While international governance frameworks provide clear normative guidance, Indonesia currently lacks a comprehensive and unified legal framework governing the development and use of AI. This regulatory gap complicates the internalization of international principles related to human rights protection, accountability, and transparency in AI governance.

One key challenge lies in harmonizing international soft law principles with domestic legal norms. The non-binding nature of global AI governance frameworks developed through international organizations requires proactive state action to translate international norms into national legislation and policy.[17] Without explicit regulatory mechanisms, the implementation of international AI governance standards remains fragmented, increasing the risk of inconsistent application across sectors.

Another significant implication concerns state responsibility in the context of AI deployment. Governance- and human-rights-oriented scholarship emphasizes that states retain responsibility for addressing human rights risks arising from the

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[17] Ileana Citaristi. "United Nations Educational, Scientific and Cultural Organization UNESCO." In *The Europa Directory of International Organizations 2022*, pp. 369-375. Routledge, 2022.

use of AI systems, including those developed or operated by private actors.[18] This principle is particularly relevant for Indonesia as AI technologies are increasingly adopted in public services, governance, and digital infrastructure. The absence of clear legal standards and oversight mechanisms may weaken the protection of fundamental rights and undermine public trust in AI-enabled governance.

Furthermore, the findings indicate that Indonesia's position as a developing country presents additional challenges in engaging with global AI governance frameworks. Limited institutional capacity and regulatory experience may hinder effective participation in international standard-setting processes and delay the adoption of rights-based AI governance models. These challenges underscore the need for a normative alignment strategy that integrates international governance principles into Indonesia's domestic legal system to ensure responsible and human-rights-based AI governance.

5. Discussion

The findings of this study reinforce existing scholarly arguments that international law has adapted to the governance of artificial intelligence (AI) primarily through soft law instruments and institutional governance frameworks grounded in human rights norms. As highlighted in the literature, the absence of a binding international treaty has not resulted in a normative vacuum but has instead encouraged the development of flexible, principle-based governance mechanisms

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[18] Jacopo Bellasio, Linda Slapakova, Fiona Quimbre, Sam Stockwell, and Erik Silfversten. *Human rights in the digital age*. RAND, 2021.

capable of responding to rapid technological change.[19] The results demonstrate that global AI governance frameworks promoted through international organizations, including ethical and policy standards developed within UNESCO and the OECD, function as key normative reference points in shaping expectations of responsible state behaviour at the global level.[20]

This discussion aligns with prior scholarship emphasizing the regulatory value of international soft law in emerging technological domains. Soft law instruments are often criticized for their non-binding nature; however, the findings suggest that their legitimacy derives from their grounding in widely accepted human rights principles and their endorsement through multilateral consensus-building processes.[21] In this context, soft law operates not merely as ethical guidance but as a normative governance framework that influences national legal development and policy formulation. The results therefore support the view that international soft law plays a substantive role in AI governance rather than serving as a purely symbolic instrument.

The continued relevance of international human rights norms further strengthens this governance framework. Consistent with existing scholarship, the findings confirm that human rights standards remain applicable to AI-enabled practices and continue to function as normative constraints on state use of emerging technologies, particularly in areas involving surveillance, automated decision-

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[19] Araz Taeihagh. "Governance of artificial intelligence." *Policy and society* 40, no. 2 (2021): 137-157.

[20] Ileana Citaristi. "United Nations Educational, Scientific and Cultural Organization UNESCO." In *The Europa Directory of International Organizations 2022*, pp. 369-375. Routledge, 2022.

[21] Christian Downie. "How do informal international organizations govern? The G20 and orchestration." *International Affairs* 98, no. 3 (2022): 953-972.

making, and digital governance.[22] Rather than diminishing state responsibility, technological innovation intensifies the need for careful interpretation and application of human rights principles within evolving technological contexts.

From the perspective of Indonesia, the discussion highlights the tension between international normative expectations and domestic legal readiness. While international governance frameworks provide guidance on ethical and human-rights-based AI governance, the absence of a comprehensive national legal framework creates challenges in operationalizing these principles at the domestic level. This finding reflects broader concerns in the literature regarding the capacity of developing countries to internalize global governance norms, particularly in areas characterized by rapid technological change and limited institutional resources.[23]

The discussion further suggests that Indonesia's engagement with international AI governance should be understood as a normative and institutional process rather than a purely technical one. Aligning domestic legal frameworks with international AI governance standards requires not only regulatory instruments but also mechanisms of accountability, oversight, and legal interpretation that reflect human rights norms and governance principles. In this regard, international law functions as both a source of normative guidance and a benchmark for evaluating national AI governance practices.

This discussion situates the findings within the broader scholarly discourse on AI governance and international law, reinforcing the argument that international

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[22] Alessandro Mantelero. *Beyond data: Human rights, ethical and social impact assessment in AI*. Springer Nature, 2022.

[23] Rory Gillis, Johann Laux, and Brent Mittelstadt. "Trust and trustworthiness in artificial intelligence." In *Handbook on Public Policy and Artificial Intelligence*, pp. 181-193. Edward Elgar Publishing, 2024.

governance norms particularly soft law frameworks and human rights standards play a crucial role in shaping responsible AI governance. The implications for Indonesia highlight the need for a deliberate and rights-based approach to AI regulation that reflects international governance principles while responding to domestic legal and institutional contexts.

6. Conclusion

This article has examined the role of international law in governing global artificial intelligence (AI) and its implications for Indonesia through a normative juridical approach. The analysis demonstrates that, in the absence of a binding international treaty on AI, international governance has developed primarily through soft law instruments and international governance frameworks grounded in human rights norms. Global AI governance standards promoted through international organizations, including ethical and policy-oriented frameworks developed within UNESCO and the OECD, function as normative reference points that legitimize ethical principles, human rights considerations, and state responsibility in the governance of AI.

The study further concludes that international human rights norms remain applicable to AI-enabled practices and continue to provide normative boundaries for state use of emerging technologies. Rather than diminishing state obligations, the adoption of AI technologies reinforces the relevance of human rights principles in guiding state conduct, particularly in areas involving digital governance, automated decision-making, and data-driven public services.

For Indonesia, the findings highlight significant normative and institutional challenges in aligning national legal frameworks with international AI governance standards. The absence of a comprehensive AI regulatory framework underscores the need for the internalization of international governance principles into domestic law. This article recommends the development of a rights-based national AI governance framework that integrates international norms, strengthens state accountability, and ensures effective human rights protection. While this study is limited to a normative analysis of international governance frameworks, future research may explore empirical dimensions of AI governance implementation in Indonesia.

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