

AI Governance: Interoperability for a Global Ecosystem

AI is evolving quickly, presenting both opportunities and challenges. This sub-section of the PNAI2024 report examines current national and regional AI governance initiatives and policies, their similarities and differences, and the gaps toward achieving an interoperable global framework for a safe and innovative AI ecosystem.

IGF Policy Network on Artificial Intelligence (PNAI)

Sub-group on AI governance, Interoperability, and Good practices

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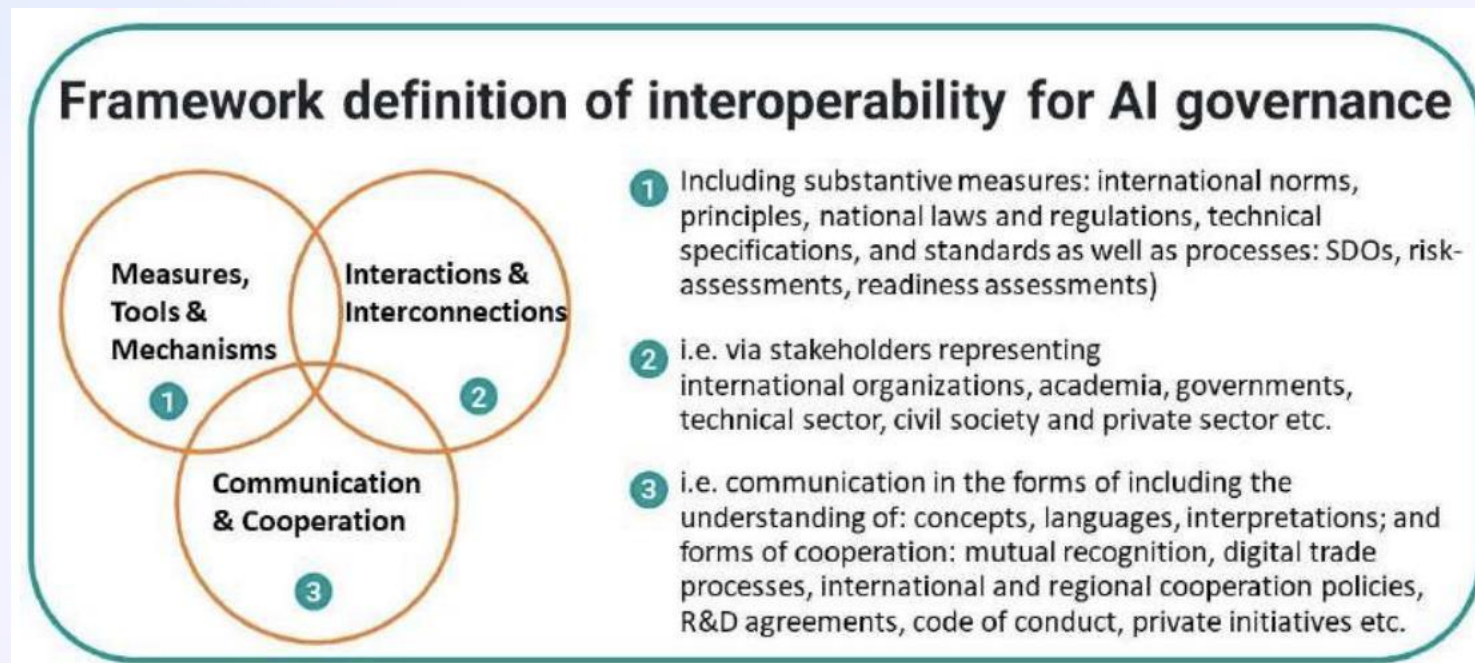
Key Concepts: AI Governance and Interoperability

AI technologies continue to evolve globally, aligning standards and governance models ensures smooth coordination between different systems, enhancing innovation while addressing security, ethical concerns, and societal impacts.

Key Concepts:

Interoperability:

Interoperability in AI governance is built on three key pillars:



AI Governance:

Processes, policies, regulations, and standards that govern the development, deployment, and operation of AI technologies to ensure their ethical, secure, and effective use.

Global AI Governance:

A cooperative process where diverse global interests are balanced, allowing for action to maximize AI's benefits while mitigating its risks.

Good Practices:

Guidelines and strategies that ensure AI systems are developed and used in ethical, responsible, and beneficial way

Global Developments in AI Governance - highlights in 2024

Two UN resolutions in 2024 aimed at promoting international cooperation for capacity building and developing a regulatory framework to ensure safe, trustworthy AI development. **UN Global Digital Compact** promotes interoperable AI standards, open AI systems, a multidisciplinary Independent International Scientific Panel on AI and a Global Dialogue on AI Governance. **High-Level Advisory Body on AI** emphasizes inclusivity, public interest, and alignment with established international norms and frameworks in global AI governance.

African Union

The Continental AI Strategy and the African Digital Compact prioritizes ethical AI use, minimizing risks, and leveraging opportunities for digital advancement, promoting interoperable digital IDs for inclusive access to digital services, and ensuring alignment with regional contexts. The AI Strategy stresses robust governance to ensure AI technologies benefit African societies and avoid perpetuating inequalities.

ASEAN

The Association of Southeast Asian Nations (ASEAN) Guide on AI Governance and Ethics outlines the key components, which include Internal governance structures and measures, determining the level of human involvement in AI-augmented decision-making, operations management, stakeholder interaction and communication, and AI Risk Impact Assessment.

Middle East

The Arab AI Council will coordinate AI initiatives across member states and promote knowledge sharing and resources to boost AI development in the region. It focuses on guidelines and principles reflecting best practices and regional interoperability. Together with significant investments in AI education and training, the council aims to build a robust AI talent pipeline and drive economic diversification across the region.

European Union

The Council of Europe AI Treaty and European AI Office oversee AI development across the EU and implement the EU AI Act. They aim to ensure that AI development aligns with ethical principles, safety, and human rights. Interoperability includes technical standards, transparency, accountability, and compliance with AI systems.

AI Governance and Interoperability - highlights in 2024

In 2024, a variety of AI policies, frameworks, and regulations emerged globally, blending innovation and regulation with a focus on interoperability, ethical standards, and international cooperation.

Latin America

The Santiago Declaration, a UNESCO committee to implement UNESCO AI Ethics in Latin America. The region's integration into the international technical landscape, coupled with its dependence on foreign investment and technologies, highlights the need for a regulatory approach that is adaptable to both global standards and local realities.

EU, UK & USA

Three jurisdictions have established joint efforts to promote a common understanding of competition, risks and principles in generative AI foundation models and AI products.

The USA

The USA's Executive Order on AI, mandates increased AI engagement, faster standards development, and responsible AI deployment. It emphasizes global leadership and collaboration on critical infrastructure standards. NIST has developed Trustworthy and Responsible AI standards, focusing on terminology, metrics, risk management, security, privacy, and incident response.

China

China established AI Safety and Governance Institutes and the Chinese AI Safety Network to promote dialogue, mapping, and collaboration. China's domestic interoperability approach emphasizes technical standardization and cross-domain applications, while its international focus includes AI R&D, open-source communities, capacity-building for developing countries, and joint mechanisms for AI testing, evaluation, and regulation.

Analyzing Gaps in AI Governance

These gaps can hinder the effective implementation and impact of AI interoperability initiatives.

1

Fragmented Global Governance

- Lack of a globally accepted reference framework.
- Lack of coordination among regulatory approaches.
- Lack of input from the Global South.

2

Technical and Trust Deficits

- Risk of further technical incompatibilities.
- Risk of stifling innovation and eroding public trust in AI systems.

3

Insufficient Multistakeholder Collaboration

- Lack of active collaboration from multiple key stakeholder groups.
- Lack of input from the Global South

4

Siloed Integration

- Risk of further technical incompatibilities.
- Risk of stifling innovation and eroding public trust in AI systems.

3 Key Aspects for AI Interoperability



Legal Frameworks

- Differences in maturity level
- Differences in the nature of enforcement
- Differences in regulatory approach.
- Differences in risk categorization.
- Global cooperation and local autonomy.



Technical Standards

- The absence of widely adopted standards and shared frameworks for AI interoperability
- Inconsistencies in the adoption of AI standards across regions
- Disparity between top-down and bottom-up models of AI standard frameworks
- Difference between binding and non-binding standards
- Unequal Distribution of the technology



Data and Privacy

- The Operational Burden of Data Compliance
- Absence of Data Protection Laws
- Disproportionate Influence of AI Powerhouses
- Siloed Data and Resource Limitations

General recommendations for AI Interoperability

A combination of concrete regulatory, technical, and data interoperability mechanisms is needed to support AI interoperability. Here are the recommendations of our multistakeholder group

○ Define Global Priority Areas

- Identifying and prioritizing key areas for AI interoperability, such as AI safety, risk governance, technical standards, data privacy, ethics, AI training datasets and capacity building.
- Develop a concrete plan to tackle them.

○ Establish Compatibility Mechanisms

- Existing mechanisms as foundation for more cohesive global AI governance.
- Establishing compatibility mechanisms to reconcile divergence in regulation; mutual recognition of regulatory outcome agreements; reliance on international standards; recognition of comparable protection; joint AI safety testing or aligning mandates; harmonising regulatory frameworks ; shared understanding of AI principles and terminology.

○ Balance Soft Law and Hard Law

- combination of soft law, such as guidelines and best practices, and hard law, such as binding regulations, can provide a balanced approach to AI governance.
- Combining multistakeholder participatory coregulation with technical AI solutions is the preferred approach for AI governance.

General recommendations for AI Interoperability

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Meet Local Needs and establish cross-regional partnerships

- Ensure that AI interoperability frameworks are inclusive, adaptable and address specific local challenges.
- The UN should work in close collaboration with regional bodies especially those at the Global South, to develop interoperable mechanisms that support regional collaboration and prevent reinforcing existing disparities



Commit to diverse and open global multistakeholder engagement; Strengthen IGF

- Decentralised multilateralism complemented by multistakeholderism to achieve inclusive, transparent and accountable dialogue
- To maximize IGF's potential in implementation of GDC, long-term sustainability needs to be ensured through increased financial, technical and human resources support.



Enhance capacity building in countries that lack resources or expertise

- provide training and resources to countries and organizations with limited AI development capabilities
- Strengthen UN capacity-building initiatives, especially for the Global South.
- Create a global capacity-building initiative focused on data governance

Legal Interoperability Recommendations

Effective AI governance requires legal interoperability, ensuring that different national and international frameworks work together to promote responsible AI development.



Leverage global/international regulatory interoperability principles

- use of global and international regulatory principles in bilateral, regional, and multilateral agreements.
- Local regulations ensures alignment with global standards.
- Local rulemaking needs to take in to account international solutions, allowing policymakers to learn from each other and find common approaches to shared problems.



Increase international regulatory cooperation

- National regulators should strengthen cross-border and pan-industry cooperation.
- Unnecessary costs and barriers due to different regional requirements should be avoided; this could create impetus to strengthen regulatory quality and coherence.



Develop a Global Framework for AI Risk Categorization

- A globally recognized framework for categorizing AI risks for consistent regulation and enforcement. This framework should facilitate tailored risk mitigation strategies, promoting responsible AI deployment in different contexts.

Technical Interoperability Recommendations

Technical interoperability is paramount for enabling effective communication and collaboration between AI systems across different platforms and applications. Achieving this interoperability requires a concerted effort to standardize technical frameworks, promote alignment between international standard-setting bodies, and facilitate the seamless exchange of data and information.

Promote global alignment on AI standards

- The alignments need to be scientifically grounded and respect international law.
- Internationally interoperable technical tools, standards or practice need to be developed and deployed through joint international agreements or treaties.

Use AI technologies in initiatives to increase interoperability

- Use AI technologies to standardize, clean, and structure data to significantly improve interoperability.
- Develop interoperable platforms that allow different AI systems to work together seamlessly to reduce siloed data and incompatible technologies.

Data and privacy Interoperability Recommendations

Shared interoperable privacy standards can ensure that as personal data is processed, it adheres to a common set of privacy principles everywhere in the world. Lack of interoperability presents obstacles to efficient data sharing and collaboration



Global Data Framework and International Data Sharing

- drawing on existing international and regional data and privacy protection guidelines, to facilitate the sharing of AI training data, while ensuring robust protections for personal data and privacy
- Develop International data commons for AI research where countries agree to share anonymized, sector specific datasets under secure conditions.



Interoperability between national data protection legal frameworks and AI governance

- Develop consistency and interoperability between national data protection legal frameworks through mandating transparency obligations of AI system developers and deployers, data protection impact assessments, respect to data subjects' rights, enable data to flow with trust to mutual benefit, and lawful grounds for processing personal data as training data for AI systems.



Contextualize solutions for data privacy

- Current data protection frameworks often fail to consider the unique needs and contexts of different regions and industries
- More flexible and adaptive approaches are needed to ensure that data protection does not hinder innovation
- International organizations, regional or multilateral organizations could pool to create cohesive data governance strategies.



**Thank
you!**

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