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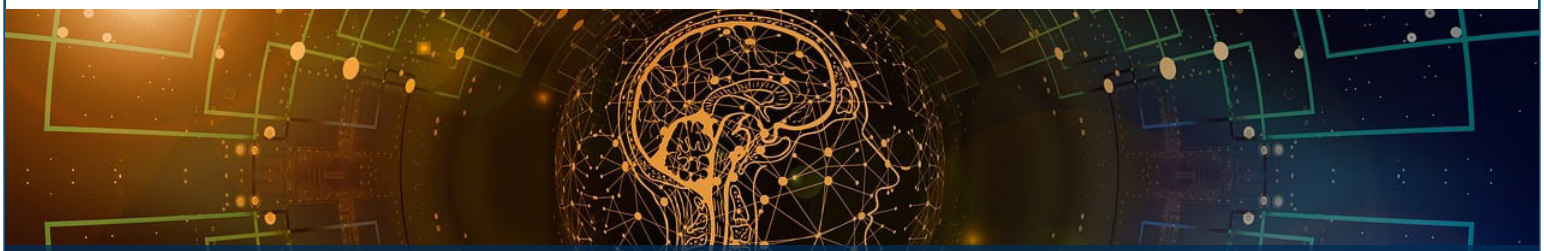

AI GOVERNANCE IN INDIA

BY ANULEKHA NANDI, ORF

Governance of artificial intelligence (AI) is a multidimensional exercise, and for emerging economies like India it goes beyond a simple optimization between promoting innovation and mitigating risk. With effects cutting across the economy, national security, public order, and individual safety, AI governance encompasses the need to manage the technology's cascading effects while harnessing its transformative potential. As the global AI race radiates geopolitically, India must simultaneously keep pace with the breakneck speed of innovation, improve socioeconomic development outcomes, and protect national interests and public safety while reducing individual risk of harm.

As the fourth-largest economy in the world with a vibrant AI start-up ecosystem, India must align with the "pro-innovation regulatory/governance approach" in the G-20 leaders' declaration to maintain and accelerate economic growth, given the productivity and efficiency gains that stem from AI-related growth drivers. This includes the need to ensure that AI productivity dividends benefit critical sectors like healthcare, agriculture, education, and defense, among others. The Indian government's approach has been to serve as an ecosystem enabler through its flagship IndiaAI Mission. The initiative seeks to build AI innovation capabilities in the country on one level and identify pathways to expand AI applications on another. This includes enabling compute availability, supporting indigenous model development, and establishing a national dataset platform to put in place the foundational building blocks for AI innovation.

Concurrently, a thread that has appeared through successive policy documents, starting with the 2018 National Strategy for AI and gathering momentum with the 2025 release of the Report on AI Governance Guidelines Development, has been one of responsible, safe, secure, and trustworthy AI. This had been expanded in the 2021 document on responsible AI and reaffirmed in multilateral initiatives and forums like the Global Partnership on Artificial Intelligence, G-20, and Paris Action Summit.

The proposed governance guidelines chart a pathway for operationalizing this approach by leveraging existing laws and using technical tools to scale detection and compliance. The safe and trusted pillar of the IndiaAI Mission has extended support for the development of technical tools, guidelines, and frameworks in this space along

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with the proposed establishment of an AI safety institute toward which the Ministry of Electronics and Information Technology had released a call for partnerships. The guidelines report also proposed a whole-of-government approach to AI governance through recommendations for an interministerial AI coordination committee or working group, a technical secretariat, and an AI incident database.

As AI adoption rapidly accelerates across different segments of the economy, trustworthy systems have become increasingly important. Deepfakes of female celebrities have thrown the issue of nonconsensual use of images into sharp relief. This elicited intervention from the Ministry of Electronics and Information Technology in December 2023 to include clauses under the existing intermediary liabilities regime for proactively addressing AI-generated misinformation or deepfakes. Furthermore, incidents surfaced of foundational large language models developed in other countries producing warped or biased outputs that do not align with Indian contextual realities. In March 2024 the ministry's revised guidelines focused on notice and labeling requirements for AI-generated content. Overall, increasing adoption of AI has opened up governance requirements on multiple fronts, with implications spanning domains such as data protection, intellectual property rights, liabilities, accountability, and social justice that often call for simultaneous resolution.

In sum, India's approach to AI governance has been a mix of deliberative and reactive policies to augment the AI innovation ecosystem; ensure that the applications of such innovation are reaching critical sectors like agriculture, health, education, and defense; and develop frameworks for known and emerging risks while building up the country's competitive advantage in the rapidly evolving geopolitical landscape of AI governance. This brief scans the evolution of India's AI strategy within the context of proposed modes and rationales of AI governance to identify a way forward for India.

India's AI Strategy and Operationalization

The 2018 National Strategy highlighted the need for AI technologies to solve persistent socioeconomic problems in India. In particular, it envisioned these technologies as addressing institutional voids at the last mile for education, health, and agriculture and driving urban transformation through smart cities and smart mobility and transportation. Since the publication of the 2018 National Strategy, India's strategic approach and policy priorities have evolved to realize the document's vision.

The next several years were devoted to understanding the conditions and landscape that can help or hinder AI development and adoption. The 2018 report was accompanied by the constitution of four expert committees to inform India's strategy and policy direction. This included reports by each of the four subcommittees constituted by the Ministry of Electronics and Information Technology on data and platforms, applications in key sectors, ecosystem conditions, and cybersecurity. This was then followed by the release of the 2023 IndiaAI report with recommendations from seven working groups on areas spanning centers of excellence, a dataset platform, data management, the startup ecosystem, AI skills, computation, and chipsets. This report also contained a number of recommendations for institutional development, platform design, and organizational structure, with recommendations for developing enabling systems and policies.

In addition, sectoral regulators like the Reserve Bank of India (RBI) and Securities and Exchange Board of India (SEBI) are exploring the expanding role of AI in banking and financial services. RBI has appointed a committee for responsible AI adoption in the financial sector, which submitted a report in August 2025 with a dual emphasis on innovation enablement and risk mitigation. A 2019 circular from SEBI includes reporting requirements of the offer or

use of AI tools by market intermediaries. Moreover, a 2024 consultation paper contains recommendations for assigning responsibilities to SEBI-regulated entities for the use of AI, particularly when AI-related outputs are used for decision-making. Regulators like the Telecom Regulatory Authority of India have also been exploring the role of AI in the telecommunications sector, particularly for detecting financial fraud and curbing unregistered telemarketers.

The 2018 Task Force for Strategic Implementation of AI for National Security and Defence report outlined a roadmap for the defense sector to adopt AI and integrate and embed it in defense strategy. Public defense production units (defense public sector undertakings and ordnance factories) were assigned roadmaps for developing AI-enabled products. This led to the establishment of the Centre for Artificial Intelligence and Robotics at the Defence Research and Development Organization to develop AI-based solutions for signals intelligence and enhance intelligence collection, collation, and analysis capabilities. The aim was to develop AI-based tools to detect automated human intrusion partially based on principles of the Internet of Things. This was done to have AI augment armed forces in decision support, sensor data analysis, predictive maintenance, situational awareness, operational management, and logistics support.

The operationalization of the National Strategy for AI over time has included considered and deliberative approaches to develop innovation capacity. The deliberative approach informed by expert research and landscape analysis over time has informed the budgetary allocations and government support toward shaping the IndiaAI Mission and its mandates. Overall, the approach to governance and implementation of India's AI strategy has been to support domestic innovation by boosting foundational model developers, publicly provisioning GPUs through empaneled industry partners, and inviting public solutions for safe and trustworthy AI solutions and frameworks.

Modes of AI Governance and Rationales

The 2025 governance guidelines recommended adopting an approach combining regulatory methods and technical tools to build trust and address risks. This approach resonates with one used within India's digital public infrastructure system, which uses privacy-preserving consent and authentication mechanisms across a range of services. The governance guidelines propose taking a life-cycle view of AI systems (development, deployment, and diffusion), adopting an ecosystem view of actors (data principals and providers, model developers and deployers, and end-users), and leveraging technology for governance with the aim of complementing legal and regulatory regimes with appropriate technological mechanisms to identify and manage risks at scale. On the regulatory front, the overall proposed direction appears to be one of leveraging existing laws to address AI-related risks rather than implementing a single overarching law for AI governance. On the technical side, the safe and trusted pillar of the IndiaAI Mission aims to support projects across themes such as machine unlearning, bias mitigation, auditing tools, explainable AI frameworks, and approaches to fairness testing.

Modes of AI governance globally have tended to focus on AI harms and safety driven by ethical principles. However, countries are realizing that AI governance is not a simple exercise of optimizing for risk and innovation as the underlying technology continues to learn, evolve, and mutate, introducing new areas to be regulated. Given the diverse ecosystem of actors involved in the AI life cycle and the modes by which algorithms learn and evolve, one of the challenges that remains is to locate points of failure and attribute responsibility. Accounting for this challenge within proposed modes of governance would require mandated institutional and compliance mechanisms for start-ups and developers that can be attuned to varying levels of size and organizational capacity. These in turn would require tangible

investments in institutionalizing systems that can oversee responsible AI compliance and inclusion of governance-by-design mechanisms within product development methodologies.

Cutting across the levels of technical, social, and legal specificities of AI systems are core realist rationales of national and economic security and global competitiveness, compounded by challenges associated with operationalizing high-level principles. This requires a system of governance that extends from the granular specificities of cascading design decisions to ensuring that domestic innovation is not affected by geopolitical consequences. For developing countries like India, this has to be done in a way that does not place additional burden on public spending in a country with competing social and economic priorities, but charts a pathway to the promised AI future.

Conclusion: The Way Forward

India's approach to AI governance has proceeded by combining available expertise, building communities of practice, and working to streamline and address sectoral priorities to arrive at a comprehensive governance framework. Like many emerging economies, the country has taken a reflective approach to innovation without the rush to regulate or leaving unbridled innovation unaddressed.

However, given the dual focus on legal and technological approaches to AI governance within the proposed guidelines, one of the overlooked aspects that needs to be addressed is the professionalization of the AI governance space. This is because existing laws will need to be rationalized to make them applicable to AI at one level, while technical approaches need an ecosystem of skills, expertise, and standardized methods to legitimize. This would require developing audits and audit mechanisms, delineating risk management and auditing standards, and defining the legal liability of auditors. For example, the Telecommunication Engineering Centre at the Department of Telecommunications has come up with the Fairness Assessment and Rating of AI Systems (TEC 57050:2023). The adoption of this standard could be strengthened through harmonization and streamlining into standard compliance and auditing processes in conjunction with applicable or relevant criteria released by international bodies such as the ISO 42001. Such oversight would help both public and private organizations developing and deploying AI do so in an appropriate manner in line with national regulatory and governance priorities.

Developing AI governance capabilities highlights the need to build institutional capacity at both the center and state levels. This could include implementing the recommended interministerial coordination committee with the technical secretariat to understand the dimensions of AI risks and modes of mitigating them, whether it be through technical means (compliance by design), standards of practice, or mechanisms for accountability as proposed in the 2025 AI governance guidelines. This underscores the importance of understanding the multidimensionality of AI risks, establishing governance mechanisms that are able to engender trust in systems that can lead to further adoption downstream, and ascribing responsibility to various actors depending on the extent and nature of their involvement.

To realize this process of institutionalization, it is important for India's AI governance framework to work in tandem with the IndiaAI Mission's mandate to develop foundational AI innovation capabilities. A clear operationalization of governance mechanisms is key to enable downstream innovation and adoption by easing and clarifying compliance processes and legitimizing technical modes of governance. Overall, the evolution of India's AI strategy and governance approach reflects a strong commitment to foster innovation and develop governance mechanisms that can support an AI-driven economy.