

DSCI & NASSCOM Joint Submission to TRAI's AI and Big Data Consultation

DSCI along with NASSCOM submitted a comprehensive response to the Telecom Regulatory Authority of India's consultation paper on **"Leveraging Artificial Intelligence and Big Data in the Telecommunication Sector"** released in August 2022. The submission addressed critical policy considerations around AI implementation in telecommunications and provided practical recommendations for regulatory frameworks.

DSCI's primary submission centred on the challenge of defining artificial intelligence for regulatory purposes. The submissions argued that pursuing a universal AI definition was counterproductive, given that AI encompassed diverse applications from machine learning algorithms to automated decision-making systems. Instead of attempting broad definitions, the submissions recommended focusing on specific applications and products requiring regulatory attention. This approach recognized that AI systems were built for domain-specific tasks, making general-purpose definitions less relevant for policy development. The practical implication was that regulators should evaluate self-driving cars differently from surgical robots, focusing on application-specific risks rather than abstract AI categorizations.

The submission identified two distinct categories of AI and Big Data applications in telecommunications. Sector-specific applications included customer behaviour analysis, network optimization, anomaly detection, and service degradation prediction. These applications helped telecommunication service providers understand customer patterns, optimize network utilization, and develop customized pricing strategies. Sector-agnostic applications encompassed business intelligence tools, compliance systems, and contract management platforms that delivered value across multiple industries. Contract analysis platforms using text analytics and computer vision demonstrated significant productivity gains and cost savings for telecommunications companies managing tower leasing agreements and regulatory compliance.

While speaking for the risk management, the submissions emphasized on establishing foundational data protection before creating AI-specific regulations. The submission identified informational privacy and data security as primary barriers to AI adoption that needed to be addressed through comprehensive personal data protection legislation. This foundational approach would enable privacy-enhancing technologies and privacy-by-design methodologies to scale effectively across the telecommunications sector. The submission argued that many AI-related consumer harms could be addressed through robust data protection frameworks without requiring entirely new regulatory structures.

DSCI's regulatory stance has advocated in favour of emphasized precision over broad intervention. The submission warned against disproportionate regulatory responses that could impede India's AI ecosystem development. Instead, recommendations were

based on targeted mechanisms addressing specific enforcement gaps identified through systematic risk assessment. This measured approach recognized that existing laws might already cover many AI-related concerns, particularly once effective data protection legislation was implemented. Self-regulatory initiatives, including responsible AI best practices guides and compliance frameworks, provided valuable governance structures during the early stages of AI adoption. These industry efforts offered flexibility and adaptability that rigid regulatory frameworks might not accommodate, particularly important given the rapid evolution of AI technologies and applications.

Regarding institutional frameworks, DSCI opposed creating sector-specific AI regulators, arguing such bodies would be premature and potentially counterproductive. Since AI systems operated across multiple sectors, the organization advocated strengthening existing regulatory coordination rather than establishing new institutional structures. The anticipated data protection regulator could play a significant role in addressing AI-related risks across sectors, including telecommunications.

The submission addressed data sharing opportunities and challenges in telecommunications. While recognizing that telecom companies possessed valuable datasets including call data records and network data, DSCI emphasized the privacy risks associated with large-scale personal data sharing without adequate protection frameworks. The organization noted that both personal and non-personal data sharing presented risks requiring careful evaluation before enabling broad data access for AI development purposes.

DSCI's approach to emerging technologies like generative AI, augmented AI, and embedded AI distinguishes between capability descriptions and principled frameworks. Rather than attempting to harmonize various AI terminologies, the submission recommended identifying common themes underlying different approaches and contextualizing these themes for Indian implementation. This practical approach would help stakeholders understand consensus themes and desired outcomes without imposing artificial standardization.

Overall, the joint submission presented extensive analysis of global AI governance approaches while maintaining focus on Indian market conditions and regulatory capacity. Their recommendations balanced innovation promotion with risk mitigation, recognizing that effective AI governance required coordinated efforts across multiple stakeholders rather than isolated sector-specific initiatives. The comprehensive response established DSCI as a key contributor to India's AI policy development, providing evidence-based recommendations that supported responsible technology adoption while protecting fundamental rights and commercial interests.