

Indian's Standardization Strategies and Activities in a Global Context



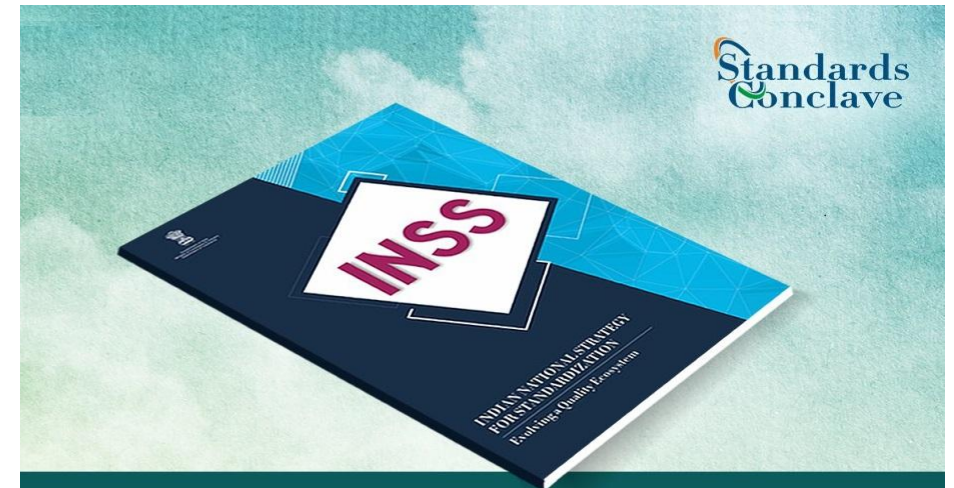
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Standardization Strategy - consultation process

- Policy recommendations were based on outcomes and recommendations recorded in four annual National Standards Conclaves (2014- 2017) that attracted more than 1000 experts from standards bodies, conformity assessment bodies, ministries, regulators, industry, academic and research institutes, apex global institutions
- The Draft documents was placed on DoC website for open comments, widely publicized on social media
- More than 500 comments received, including several from Europe, USA. Every comment was reviewed and addressed
- Final document prepared by an expert group drawn from Trade Policy Division, Ministry of Commerce, Accreditation Bodies, Industry bodies, Law firms, Policy research bodies etc.
- The INSS was notified in 2018 as a high level government policy document.

INSS – Strategic intents

- Positioning standards as a key driver of all economic activities
- Developing a comprehensive ecosystem in India for standards development taking into account the diversity of interests and expertise available
- Using standards for providing a level playing field to domestic industry and enhancing the competitiveness of Indian goods and services
- Adopting best practices in standardization, conformity assessment and accreditation, and technical regulations, and creating an integrated infrastructure, roadmaps, and institutions for their effective management
- Playing an active role and taking leadership positions in apex international forums in the related areas
- Creating response mechanisms to global developments on standards, technical regulations, and conformity assessment that impact market access of Indian goods and services
- Aligning the Strategy with other national policies related to trade and industry, consumers and environment



Focus of INSS

- Considers the current state of development across sectors, the existing quality infrastructure and the policy directions in relation to domestic economic developments and for trade in goods and services
- Addresses four broad pillars of the Quality Ecosystem
 - Standards Development
 - Conformity Assessment, Accreditation & Metrology
 - Technical Regulations and SPS Measures
 - Awareness, Counselling, Training and Education

The progress was reviewed during the National Standards Conclave in December 2022

Standardization : Goals

Vision: Building a national culture of standards for growth and economic leadership

Mission: Developing a dynamic, relevant and priority driven standards ecosystem that will drive development across sectors, promote competitiveness of Indian products and services, and foster India's eminence among the global leaders in standardization



Goal 1: Convergence of all standards development activities in India

- Enhance capability of SDOs for dynamic and faster development of standards, matching with the pace of technology development
- Encourage setting up of new SDOs in emerging technology areas with international connects. Set up an accreditation scheme for SDOs
- Adopt the SDO standards as National standards when required
- Avoid duplications and overlaps
- Ensure market relevance of standards produced at all times

Goal 2: Setting up a dynamic mechanism for new standards identification, development and their revision

- Make standardization a key priority area across all sectors
- Set up dialogue forums and processes to articulate and prioritize needs for standards development
- Create opportunities for Indian business through standards
- Focus on critical sectors linked to economic, social and sustainable development

Goal 3: Inclusive participation of all stakeholders in standards development including States and MSMEs

- Enhance awareness on the role and benefits of standards and conformity assessment practices among businesses, government and civil society including consumers
- Creation of States and District forums for standards related activities
- Set up Funding mechanisms to supplement participation costs

Goal 4: Harmonizing standards with international standards

- Harmonize national standards with international standards
- Align national standards with market driven standards
- Special focus and pooling of expertise on converging technologies

Goal 5: Identifying sectors where India could pioneer standardization work

- Develop pioneering standards in areas of traditional strength
- Develop service standards on a time bound programme
- Develop innovative and cutting edge standards based on Research & Development

Goal 6: Systematic and continuous participation in international and regional standardization work

- Ensure continuous participation in international standards committees by identified experts through liberal funding support
- Take leadership roles in technical committees and governance structures
- Play an active role in development of private standards

Goal 7: Development of Service Sector Standards

- Set up a national task force to accelerate service standards development work
- Identify service quality gaps, standards required for related infrastructure and occupational skills
- Develop fast track national standards based on gap analysis
- Take leadership role in international service standards development work

Goal 8 : Creating an ecosystem to meet the challenges from Private Sustainability Standards

- Identify all Private Sustainability Standards Programmes that impact exports
- Set up national response structures comprising of experts and seek a voice in the programmes standards setting process
- Create corresponding schemes and develop expert resources to evolve national ecosystem and facilitate easier compliance

Post INSS Developments

- BIS developed a 5-year Standards National Action Plan determining the direction for standards development subjects and process improvements
- An SDO recognition scheme was established to encourage existing and new SDOs to converge into a common framework
- Industry bodies and ministries established standards cells to articulate standardization needs and providing coordinated responses
- A full-scale Services Division was created at BIS with 20 technical committees, aligned to national service trade policy
- Country wide standards conclaves, awareness programmes were organized to propagate the strategic intent and help States prioritize their standardization needs
- By 2021-22, around 80% of the Indian standards for which corresponding ISO/IEC International Standards are available, are harmonized.
- A formal funding scheme to develop research based standards has been established. Chairs have been established in leading Academic institutes.
- A shift is in place to recruit more individual experts in place of organizations in the technical committees
- A significant increase in convener positions in ISO/IEC Committees

Standards National Action Plan 2022-2027



Bureau of Indian Standards
The National Standards Body of India

- Play a more active role in international standards setting. Prepare experts who can contribute. Reduce adoption time-lines
- Focus on sustainability, circular economy, technology changes
- Prevent duplication – harmonize standards
- Push adoption of Indian standards by other countries
- Digital engineering and other enabling technologies identified as one of the key drivers of future standardization
 - Position standards as key facilitators in the integration of digital technologies
 - Provide the mechanism for building trust on digital and data driven economy by ensuring interoperability, reliability, security and privacy

however comes with associated costs and risks, and many of its applications have raised particular concerns related to issues of transparency, privacy and security. BIS has been working on addressing many of these issues and standardization in this area would continue to be a priority in national standardization efforts. Technologies like AI, ML, IoT, big data, additive manufacturing, block chain and DLT, quantum computing, etc and the application of these technologies in areas like smart manufacturing, smart cities, smart grid, smart agriculture, and many others, along with associated issues of cyber security and data protection, would be some of the major areas of future standardization work.



SNAP

Priority areas

Grid Integration	Interconnection and interoperability of Distributed Energy Resources	Medium
Smart Grid	Cyber security (Security risk assessment and industrial automation and control system security)	High

SUBJECT AREA	PRIORITY
Drones used in agriculture (Spraying, Yeild Estimation, Nutrient Application, Seeding and Irrigation)	High
Use of Artificial Intelligence (AI) / Internet of Things (IoT) in agriculture, Block Chain in agriculture	High

Digital Technologies	Artificial Intelligence	Medium
	Internet of Things	Medium
	Blockchain and DLT	Medium
	Big Data	Medium
	Geographic Information System	Medium
ICT	Metaverse	Medium
	Smart cities ICT aspects	Medium
IT Security Techniques	Data privacy	High
	Cyber security	High
	Mobile security guidelines	High
IT Services	Data maturity assessment and data governance	Medium
	Trustworthiness	Medium
	Digitally delivered services	Medium
	Natural Language Processing	Medium
	RFID/ Geo-tagging	Medium

IT and IT Enabled Services	Cloud services	Medium
	Digital signature services	Medium
Retail, E-commerce and E-payments Services	E-commerce - principles and guidelines for self-governance	Medium
	E- subscription	Medium

Service Level Agreements	Low
Use of ICT in services	High
Customer data security	High



Thank you