



27 May 2024

# Geopolitics of ICT Standardisation

Focus on India



## Executive Summary

On 27 May 2024, the [StandICT.eu EUOS Standards Academy](#) hosted a webinar to gain knowledge into India's Standardisation strategies and activities in general, while taking a closer look at specific activities in ICT Standardisation.

The webinar provided insight into the making of Indian National Standardisation Strategy, its vision and objective, as well as various initiatives and steps taken by the Government of India to create the India Digital Building Block and Digital Services Stack. Adoption and Harmonisation with international standards in the realms of ICT technologies and close cooperation and collaboration with the International Standardisation Bodies are essential to strengthen the influence of India on the global market.

Discussions were carried out on the opportunities and challenges facing India and its actors, EU and India's growing strategic partnership and close cooperation in ICT technologies and standardisation, and the various partnership instruments and opportunities for collaboration for reciprocal benefits and addressing global challenges. This report summarises the key highlights stemming from the presentations and the discussions.





## Agenda & Key Takeaways

10:00	<b>Welcome and introduction to the event</b> , Maria Giuffrida (Trust-IT Services)
10:05	<b>Intro into standardisation and geopolitics with a focus on technological sovereignty</b> , Knut Blind (Fraunhofer ISI & TU Berlin)
10:15	<b>ICT Standards - Enabling Digital Transformation in India</b> , Abhishek Singh, Additional Secretary, Ministry of Electronics and Information Technology (MeitY);
10:35	<b>India's Standardisation Strategies and Activities in a Global Context</b> , Anupam Kaul, Independent strategic adviser on Quality & Standards
10:55	<b>Opportunities and Challenges for the Cooperation of EU and India in Standardisation</b> , Dinesh Chand Sharma (Seconded European Standardisation Expert in India) Director – Standardisation & Public Policy
11:20	<b>India's strategies and activities in ICT standardisation</b> , Mr. Anupam Agrawal, ICT expert, Member IEC Governance Review and Audit Committee, Tata Consultancy Services
11:40	<b>Q&amp;A &amp; Discussion</b>
12:00	<b>Conclusion</b>

» **Prof. Knut Blind** (Fraunhofer ISI & TU Berlin) moderated the webinar and welcomed all the distinguished speakers.

- » India is the fastest growing economy in the global arena. It is a very strong ICT market with a large consumer base and huge digital services network.
- » The webinar is India focused to understand the ICT Standardisation landscape, opportunities and challenges associated with the Indian ICT Market from standardisation point of view and regulatory environment and the strong collaboration established by EU and India on ICT and emerging technologies.

» **Mr. Abhishek Singh**, Additional Secretary, Ministry of Electronics and Information Technology, presented on **ICT Standards - Enabling Digital Transformation in India**.

- » Technology has played a very important role in efficient and effective delivery of Public Goods services. It has helped in improving Public Service Delivery, ensured inclusive development and enabled large-scale social transformation for all, and lastly, empowered citizens by making them aware through knowledge enhancement, increasing their engagement with government, while fostering efficiency and innovation.
- » **Building blocks of the Digital India:** i.e. Digital Public Goods, Digital Infrastructure, Guidelines, Standards and Framework are built on open standards to ensure interoperability of applications and the sharing of data across various applications and protocols. Open Application Programming Interfaces (Open API) are mandated for various GoI flagship programs.
- » The use of standards ensures that services become more ubiquitous. National and International standards have been adopted to ensure **"Accessibility in ICT Products and Service"**, M2M/IoT based on OneM2M latest standards, etc. India is currently working on creating standards in the AI domain. India is aligned with all the global standards development bodies i.e. ISO/IEC/ITU, W3C, 3GPP, etc.
- » India's experience with open standards is an example for the world on how to scale digitisation in a large and diverse ecosystem.

» **Mr. Anupam Kaul**, Independent strategic adviser on Quality & Standards, on **India's Standardisation Strategies and Activities in a Global Context**.

- » The Indian National Strategy for Standardisation (INSS) final document, based on outcomes and



recommendations of four National Standards Conclaves (2014- 2017) and a global consultation with more than 500 comments, was prepared by an expert group headed by Ministry of Commerce, released in 2018, with an official review carried out in 2022.

- » The vision of INSS is to position standards as the key drivers of economic development, create an ecosystem for standards development, build Awareness, Training and Education on standardisation, enhance competitiveness of Indian goods & services and take leadership positions in International Forums.
- » Standardisation related goals under INSS are harmonisation with international standards, convergence of all standards development activities in India, generate a mechanism for new standards identification, development and their revision, inclusive participation of all stakeholders in standards development including States and MSMEs, and finally, set up the funding mechanism for the MSME's and experts to participate in the standards committees.
- » Following release of Indian National Standardisation, Bureau of Indian Standards released a 5-year **Standards National Action Plan** determining the direction for standards development, with priority focus on sustainability, circular economy, technology changes, along with digital engineering and other enabling technologies.

**» Mr. Dinesh Chand Sharma (Seconded European Standardisation Expert in India) Director – Standardisation & Public Policy on Opportunities and Challenges for the Cooperation of EU and India in Standardisation;**

- » Focus areas aligned with the EU – India TTC i.e. Digitisation: Strategic technologies, digital governance, digital connectivity and Green & Clean technologies.
- » SESEI, the local representative of European Standardisation bodies in India, works closely with Indian SDO's and Ministries, and shares best practices on new and emerging technologies, contributes to technical committees, and provides a platform for open dialogue between the standardisation communities of India and the EU.
- » Interoperability, affordability, and sustainability are all the demands of ICT technology which are addressed via global standards i.e. common standards are used across all networks. It is important for the SDO's worldwide to come together and work in collaboration. ISO/IEC/JTC1, ITU, 3GPP, oneM2M are the global bodies working on ICT/ IT standardisation.
- » ETSI collaborates with regional partners and consortiums towards the development of ICT standards. ETSI works closely with TSDSI, TEC and BIS in India through SESEI.
- » The Bureau of Indian Standardisation (BIS), Telecommunication Standards Development Society for India (TSDSI), Telecommunication Engineering Centre (TEC) are main ICT SDO's in India. ETSI, CEN-CENLEC have MoU's with BIS. ETSI has a cooperation agreement with TSDSI to create synergies in the standardisation activities.
- » The EU – India Trade & Technology Council (TTC) and other partnership instruments, emphasise the importance of harmonisation in International Standards. Topics such as Security, 5G/6G, Artificial Intelligence, Quantum, Privacy & Data Protection etc. are priority topics under the India TTC WG1 dedicated to Digitalisation.

**» Mr. Anupam Agrawal, ICT expert, Member IEC Governance Review and Audit Committee, Tata Consultancy Services on India's strategies and activities in ICT standardisation,**

- » ICT Standardisation is being driven by Industry and the Government, especially in India, where increased engagement of academia is required in ICT standardisation activities. India is heading very important committees in the Information technology space i.e. ISO/IEC JTC1/SC7 on Software & Systems Engineering.
- » Bharat 6G Alliance has been formed for 6G Standardisation activities. India is aiming for 10% of all 6G patents and 1/6th contributions.
- » India needs to focus on the domain name system initiatives and root servers considering its growing requirements of internet users. Considerable infrastructure has been developed in the internet space by Ministry of Electronics & IT
- » There needs to be greater recognition of the importance of standards development and standards essential patents.
- » Standards writing professionals and contributors should be incentivised and nurtured.



## Conclusion

India is cognisant of the role and importance of standards. In the last decade many important steps have been taken by the government of India by way of formulating Indian National Standardisation Policy (INSS), Standards National Action Plan by BIS for strategising the course of future standards and main areas for the country.

Under the Ministry of Electronics & Information Technology (Meity), a vast array of Digital Infrastructure, Digitally delivered services, and Digital Goods have been created to accomplish the vision of a Digitally connected society. The India Digital Building Blocks are based on Open standards.

Bureau of Indian Standards (BIS), TSDSI and TEC are the main ICT SDO's in India and work closely with ISO /IEC/ ITU JTC 1, 3GPP, One M2M etc. India is also taking leadership positions and contributing substantially to the technical committees of the global SDO's

EU and India identify each other as significant strategic partners, specifically in the realm of new and emerging technologies. The EU – India Trade and Technology, A Roadmap to 2025, Joint Declaration of May 2021, emphasises Cooperation around Standardisation, harmonisation of international standards and the promotion of existing international standards.

Technical Committees are now hybrid, with governments and industries ensuring consistent participation and allocation of resources. Participation of SME's/ MSME's and Startups is still a challenge, but steps are being taken by reducing membership fees and allocating funds for participation in meetings etc. Efforts shall continue in India by:

1. Building awareness on the importance of standardisation while carrying out any research and Innovation.
2. Realising that the key element of standardisation is the harmonisation of standards with international standards and close collaboration with the Global SDO's.
3. Industry and academia, in both regions shall engage and collaborate for new & emerging technologies e.g. 6GIA and Hexa X Alliance in EU and Bhart 6G Alliance in India.

## For more information:

<https://standict.eu/events/geopolitics-ict-standardisation-focus-india>



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