



# **TEC signs MoU with IIT Bombay for collaboration on Joint Studies and Technical Contributions in Telecom Technologies and Standardisation Activities**

## **Strategic Partnership to Advance 6G, AI-Driven Networks, and Next-Generation Telecom Standardization**

## **Collaboration to Drive Innovation in Core Networks, Satellite Communications, and Telecom Signaling Protocols**

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The Telecommunication Engineering Centre (TEC), the technical arm of the Department of Telecommunications (DoT), Government of India, has signed a Memorandum of Understanding (MoU) with the **Indian Institute of Technology, Bombay (IIT Bombay)** to collaborate on joint studies, research, and technical contributions in advanced telecom technologies and global standardisation activities.

The partnership aims to develop India-specific standards and test frameworks, explore future network technologies such as 6G, Artificial Intelligence (AI), NGN, VoIP and enhance India's participation in ITU-T (International Telecommunication Union – Telecommunication Standardization Sector) Study Groups.



The MoU was signed on 7th November 2025 by Shri Amit Kumar Srivastava, DDG (Mobile Technologies), TEC and Prof.Sachin Patwardhan, Dean (R&D) IITB in presence of Shri Syed Tausif Abbas, Sr. DDG &Head (TEC), Sh. Jitendra B Chavan DDG (WR TEC) Mumbai and Prof.Prasanna S Chaporkar, EE Department, IITB at IIT Bombay.

The partnership creates a formal framework for TEC to work closely with IIT Bombay on next-generation telecom and standardisation activities.

#### **Key Areas of Collaboration:**

- **6G:** Study of 6G architecture and enabling technologies with active contributions towards research, pre-standardization studies and standardization activities in 3GPP & related global forums.
- **Core Network:** Joint studies and technical contributions in telecommunications core networks.
- **Artificial Intelligence (AI):** Joint studies and technical contributions in the field of AI in telecom and Development of AI-driven telecom applications for intelligent networks, automation, and predictive maintenance with a roadmap towards realizing AI-Native capabilities in future 6G systems.
- **Satellite Communication Systems:** Design and development of indigenous, low cost satellite communication terminals with a focus on remote sensing and rural connectivity applications.
- **Signalling Requirements and Protocols:** Joint Studies and technical contributions in signalling requirements and protocols for telecommunication networks, including NGN, VoIP, IMT-2020/2030, and signalling based architecture.

This partnership aims to accelerate indigenous R&D and increase India's influence in global standardisation processes by strengthening India's contributions to global standardisation bodies such as ITU and 3GPP.

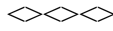
This collaboration will further the Atmanirbhar Bharat vision by strengthening indigenous research, design and manufacturing in telecom - developing India-specific standards, test frameworks and home-grown solutions that bolster national self-reliance, secure critical communications infrastructure and reduce dependence on imports.

#### **About TEC**

The Telecommunication Engineering Centre (TEC) is the technical arm of the Department of Telecommunications (DoT), Government of India. TEC formulates technical standards, specifications, and conformity assessment requirements for telecom equipment and networks in India, ensuring interoperability, quality, and alignment with global best practices. TEC represents India in international fora such as the ITU-T, ITU-R and coordinates National Working Groups for global standardization activities

### **About IIT Bombay**

Indian Institute of Technology Bombay (IIT Bombay) recognized as Institute of Eminence, by the Government of India, is known worldwide for the high-quality education that it imparts and for undertaking cutting-edge research in various areas of science, engineering, design, management and humanities. It has strong academic and research capabilities in signaling requirements & protocols for telecommunications networks including NGN, telecommunication core networks, 5G/6G technologies, artificial intelligence applications in telecom and convergence in broadcasting.



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