

Ministry of Communications



TEC signs MoU with IIIT Delhi for collaboration on Joint Studies and Technical Contributions in Telecom Technologies and Standardisation Activities

TEC and IIIT Delhi Formalize Next-Gen Telecom Partnership

New Telecom Collaboration Aims to Strengthen Atmanirbhar Bharat Mission by Enhancing Research for Indigenous Telcom Tech and advancing India's pledge towards Sustainable Development Goals through Research leading to Standards for energy- efficient telecommunication equipment

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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 **Indraprastha Institute of Information Technology, Delhi (IIIT Delhi)** 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, collaborative research in telecom and related ICT, explore future network technologies such as 6G, Optical communication, NTN, etc. and enhance India's participation in ITU-T (International Telecommunication Union – Telecommunication Standardization Sector) Study Groups through National Working Groups.



The MoU was signed on 19th November 2025 by Shri Rakesh Desai, DDG (Fixed Access), TEC and Dr. Abhjit Mitra, Assistant Professor, IIIT-Delhi in presence of Dr. Prof. Ranjan Bose, Director, IIIT-Delhi, Shri Pawan Gupta, DDG (Admin.), TEC, and Dr. Prof. Vivek Ashok Bohara, ECE Department, IIIT-D at IIIT Delhi.

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

Key Areas of Collaboration:

- **AI in Telecom:** AI-based network optimization, anomaly detection, predictive maintenance, intelligent traffic management, and AI-driven policy enforcement in telecom networks
- **5G/6G:** Collaborative research and standardization activities in the field of 5G, 6G, mmWave, mMIMO, heterogeneous networks etc.
- **SDN & NFV:** Joint studies and standardization activities in the field of Software Defined Network (SDN) & Network Function Virtualization (NFV)
- **Free Space Optical Communication / Li-Fi:** Joint studies and technical contributions in standardization activities for high-speed, low latency, reliable, secure, optical wireless connectivity for backhaul and access applications, especially in rural and defense applications.
- **Renewable Energy Technologies (RETs):** Use of ICTs for improving energy efficiency of telecommunication equipments and infrastructure.

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 IIIT Delhi

Indraprastha Institute of Information Technology Delhi (IIIT-Delhi) is a premier institute of national importance with strong academic and research capabilities in advanced telecommunications, 5G/6G technologies, optical communications, and emerging ICT domains. IIIT-Delhi is accelerating on the path of becoming one of the leading comprehensive research-led teaching institutes in India and has proven to be consistently responsive towards the evolving needs of society.

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