Lr. No.TRAI/RO/Hyd/Seminar-Corres/HD/2025-26/   Date:27/02/2026

To
Principal Advisor (CA & QoS)
Telecom Regulatory Authority of India
4th, 5th, 6th & 7th Floor, Tower-F
World Trade Centre, Nauroji Nagar
New Delhi: 110029.

Sir,

    Sub: **Report of Seminar on "Rating of Buildings for Digital Connectivity"** held at Hotel Green Park, Hyderabad, Telangana on 24th Feb 2026.

The Telecom Regulatory Authority of India (TRAI), Regional Office Hyderabad, organized a seminar on *"Rating of Buildings for Digital Connectivity"* in Hyderabad, bringing together key stakeholders from government, telecom industry, real estate, and academia.

The seminar aimed to create awareness about TRAI's *"Rating of Properties for Digital Connectivity Regulations, 2024"*, a major initiative to improve in-building digital connectivity across residential, commercial, and public spaces.

Number of total participants: Over 100

Participation composition:

The event witnessed wide participation from CREDAI, along with builders, architects, and academicians from premier architectural institutions such as Jawaharlal Nehru Architecture and Fine Arts University, IIT Hyderabad, Osmania University, and Indian Railways Institute of Signal Engineering and Telecommunications. Representatives from Public Works Department, Central Government departments including Department of Telecommunications, Indian Railways, as well as State Government bodies such as Greater Hyderabad Municipal Corporation and Directorate of Town and Country Planning, actively participated.

The event also saw representation from infrastructure providers like Indus Towers and RailTel, telecom service providers, consumer groups, and media organizations including Press Information Bureau, All India Radio, and Doordarshan, along with other key stakeholders.

Expert speakers included representatives from Telecom Regulatory Authority of India, the Ministry of Housing and Urban Affairs, the Ministry of Consumer Affairs, the Department of Telecommunications, Directorate of Town and Country Planning, Greater Hyderabad Municipal Corporation (Government of Telangana), Cellular Operators Association of India, CREDAI, Indus Towers, Reliance Jio, DCRAs such as Estex Telecom, Osmania University, and Synergy Infra.

Consumer Advocacy Group:

1. Shri R. Prabhakar Rao
2. Smt N.Shobha Rani
3. Shri B. Ashok Vardhan

Shri K.V. Suresh Babu, Joint Advisor, TRAI, RO, Hyderabad invited the dignitaries to the dias and moderated the sessions.

In his welcome address, **Shri B. Praveen Kumar, Advisor, TRAI RO Hyderabad,** underlined that digital connectivity has become a basic necessity and noted that a significant portion of data usage occurs indoors, necessitating strong in-building solutions.

In his address, **Shri Pushpendra Kumar Singh, Principal Advisor, TRAI,** detailed a new comprehensive rating framework designed to ensure reliable telecom connectivity for citizens both on the move and within buildings. This initiative focuses on extending outdoor networks into indoor environments such as residential complexes, offices, and hospitals to support the critical demands of remote work, online education, and digital transactions. By introducing a star-rating system for both new and existing structures, the framework assesses the quality of telecom infrastructure to empower consumer choice while incentivizing developers to adopt superior connectivity solutions in line with the Government of India's vision for strengthened digital services.

Shri C. Sekhar Reddy, National Chairman, IGBC and former national President of CREDAI participated as Guest of honour and gave valuable insights about environmental protection with green buildings and stressed the importance of improving coverage inside buildings. He also requested for reduction of compliances to be submitted by builders.

Shri N. Jaideep Reddy, President, CREDAI, Hyderabad participated as Guest of honour and highlighted that digital connectivity has become an essential daily utility, necessitating the robust framework introduced by TRAI for rating buildings particularly gated communities and office spaces. He emphasized that this structured 1-to-5 star rating mechanism offers long-term advantages for builders by streamlining the enhancement of digital infrastructure and improving quality of service. Furthermore, he advocated for a collaborative effort between CREDAI and TRAI to raise stakeholder awareness, noting that the system will drive higher standards and increased demand for digitally-ready developments like shopping malls and public spaces. He said that they are ready to invest in the IBS infrastructure but they suggested to reduce rating & other compliances.

Shri M. Nagesh Rao, ITS, Additional DGT, AP LSA, DoT participated as chief guest and highlighted the growing importance of robust digital infrastructure. He has explained about the importance of digital connectivity inside building and also stressed the importance of giving ROW permissions in time.

Shri G. Suresh Reddy, Joint Advisor, TRAI, Regional office, Hyderabad thanked all the dignitaries who participated during the inaugural session.

The following speakers participated In the seminar and their brief of the presentation is given below:
- Shri Tej pal Singh, Advisor(QoS), TRAI, HQ, New Delhi gave presentation on "**Introduction to Rating of Properties for Digital Connectivity Regulation 2024 , Process of DCRA Empanelment and process of Registration of Builders**"

The **TRAI Rating Framework for Digital Connectivity** is a strategic initiative that treats telecommunications as an essential utility, mandating that digital infrastructure be planned during a building's construction stage to overcome the indoor signal blockages that affect 70–80% of mobile data consumption. By aligning with the **National Building Code 2016**, this framework establishes requirements for cabling, pathways, and common distributed antenna systems (DAS) to ensure seamless voice and data services. Under the **"Rating of Properties for Digital Connectivity Regulation 2024,"** independent agencies (DCRAs) evaluate properties ranging from apartments to transport corridors on criteria like infrastructure resilience and user experience to award a **one-to-five star rating**. This transparent benchmark ultimately helps managers attract tenants, allows providers to deliver higher quality service, and empowers consumers to choose buildings based on their digital readiness.

- Shri SK Tripathi, Director – Sales, Estex Telecom Pvt Ltd gave presentation on "**Process of Rating of Buildings for Digital Connectivity**"

The TRAI Rating Framework for Digital Connectivity treats telecommunications as an essential utility, mandating that digital infrastructure like cabling and common distributed antenna systems (DAS) be integrated during a building's construction stage to resolve indoor signal blockages. Under the "Rating of Properties for Digital Connectivity Regulation 2024," properties ranging from apartments to transport corridors undergo a standardized evaluation by independent agencies (DCRAs). This process includes a 30-day document review and a 60-day on-site audit using secure, GPS-tagged tools to award a star rating from one (Basic) to five (Excellent). By establishing transparent benchmarks for performance from basic legal compliance to high-speed 500 Mbps connectivity the framework empowers consumers to choose digitally-ready buildings while driving property managers to improve infrastructure.

- Shri Lalith Kumar – Enterprise & IBS Project Manager, Indus Towers gave presentation on "**Planning for in-building solutions in new projects**"

Indus Towers, a leading telecom infrastructure provider with over 256,000 towers across India, delivers advanced In-Building Solutions (IBS) and Distributed Antenna Systems (DAS) to address the fact that 80–85% of mobile data usage happens indoors. Acting as a neutral host, it supports all major telecom operators to enhance network coverage, capacity, and user experience in large venues such as malls, hospitals, and high-rise buildings through installations like Base Transceiver Stations (BTS), fibre and power cabling, and strategically placed antennas. In alignment with Telecom Regulatory Authority of India (TRAI)'s Digital Connectivity Rating framework, the company stresses mandatory mobile signal infrastructure in new developments to ensure better ratings and reduce call drops, while also advocating early-stage planning and collaboration to overcome challenges like health concerns and builder resistance.

- Shri Suresh Kogileru, Assistant Vice-President (Wireless Technology), RJIO gave presentation on "**Rating of buildings for digital connectivity- opportunity to improve indoor consumer experience**".

Reliance Jio highlights the need for strong In-Building Solutions (IBS) to address 5G indoor coverage challenges, noting that most data usage occurs indoors in the hybrid work era, and promotes a neutral host model where buildings treat connectivity as an essential utility by providing shared infrastructure like power, fiber ducts, and space access to all telecom operators. By adopting standardized solutions such as small cells and Distributed Antenna Systems (DAS), the approach aims to overcome deployment issues like high costs and space constraints while ensuring seamless, high-speed connectivity and improved user experience across residential and commercial spaces.

- Shri Abhishek Sharma, AD/Scientist-B, MoCA, New Delhi gave presentation on "**NBC (National Building By Laws)**"

Bureau of Indian Standards' National Building Code (NBC) 2016, Part 8, Section 6 establishes a framework for ICT infrastructure in buildings by mandating provisions such as telecom rooms, entrance facilities, and structured cabling pathways to support high-speed connectivity without future structural changes. By treating digital infrastructure as a core utility like plumbing and electricity, it supports 4G/5G and IoT needs, reduces maintenance costs, enhances safety, and ensures buildings are future-ready for the digital economy.

- Dr. Pawan Kumar, Associate Town & Country Planner, MoHUA, New Delhi gave presentation on **"Model Building by laws"**

Town and Country Planning Organisation outlines the integration of Common Telecom Infrastructure (CTI) into the Model Building Bye-Laws (MBBL) 2016 to treat digital connectivity as an essential utility by mandating builders to submit CTI plans before construction, ensuring fair access to all service providers, prohibiting exclusive rentals, and preventing monetization of telecom infrastructure. It also links the Occupancy-cum-Completion Certificate to compliance with these provisions, ensuring buildings are future-ready with reliable indoor connectivity.

- Shri Mallikarjun Rao, AD, DTCP, Govt of Telangana gave presentation on **"NBC& MBB"**

The Government of Telangana's Municipal Administration & Urban Development (MA&UD) department is integrating TRAI's 2024 regulations into a localized roadmap to ensure digital connectivity is treated as a core building utility alongside water and electricity. The strategy involves updating the Unified Development and Building Regulations (UDBR) to mandate dedicated telecom infrastructure such as underground OFC ducts, telecom shafts, and equipment rooms as a prerequisite for obtaining an Occupancy Certificate. To drive quality, the department has proposed a four-tier Digital Connectivity Rating (DCR) system ranging from Level 1 (Basic), which ensures mandatory compliance and single ISP entry, to Level 4 (Platinum), which signifies 99.9% uptime, 5G small cell readiness, and IoT integration. By incorporating these requirements into the Online Building Permission System (OBPS) and publishing ratings on the MA&UD portal, Telangana aims to create a transparent, self-sustainable ecosystem that enhances property value and ensures high-speed, multi-operator access for all residents.

- Prof. V. Bhikshma, M.Tech, PhD (Structural Engg), Senior Professor of Civil Engineering, Osmania Univeristy gave presentation and stressed importance implementation of **NBC and Modal Building by laws** for improving Digital connectivity in Buildings.

- Shri.D. Bhaskara Rao, DDG,DOT, AP LSA gave presentation on **"Rating of Buildings for Digital connectivity"** DOT perspective

The Department of Telecommunications (DoT), AP LSA, presented a regulatory framework for the "Rating of Buildings on Digital Connectivity" based on the **Telecommunications Act, 2023**, which mandates non-discriminatory **Right of Way (RoW)** to ensure telecom infrastructure is treated as an open-access utility. A key highlight is the Telangana Government's proactive amendment to its building rules (**GO Ms No.49**), which requires all new constructions to demarcate specific space for broadband and power. Most significantly, the issuance of an **Occupancy Certificate (OC)** is now linked to a mandatory **Digital Connectivity Infrastructure (DCI) checklist**, requiring architects and engineers to certify common access for all service providers before a building is cleared for use.

- The session followed by panel discussion with Speakers Shri Vikram Tiwathia, Senior Advisor, COAI, Shri D. Bhaskara Rao, DDG, DOT, AP LSA, Shri S. Devendar Reddy, Director, DT&CP from Govt. of Telangana, Shri. K. Srinivas, CCP, GHMC from Govt. of Telangana, Shri SK Tripathi, Director – Sales, Estex Telecom Pvt Ltd, Shri Tej pal Singh, Advisor (QoS), TRAI, New Delhi, Synergy infra Consultants Pvt Ltd by Shri V. Srinivas, CEO, Hyderabad. The session is moderated by Shri Pushpendra Kumar Singh, Pr. Advisor (CA,QOS &IT), TRAI, New Delhi. The members of Panel clarified all Question raised by participants.

The main outcomes of the seminar:

- The Government of Telangana's Municipal Administration & Urban Development (MA&UD) department is integrating TRAI's 2024 regulations into a localized roadmap to ensure digital connectivity is treated as a core building utility alongside water and electricity. The strategy involves updating the Unified Development and Building Regulations (UDBR) to mandate dedicated telecom infrastructure such as underground OFC ducts, telecom shafts, and equipment rooms as a prerequisite for obtaining an Occupancy Certificate. The inputs of TRAI framework on "Rating of Buildings for digital connectivity" will be given MAUD officials attended the seminar to the committee formed for updating the Unified Development and Building Regulations (UDBR)

- The Builders said that they are ready to invest in the IBS infrastructure but they suggested to reduce rating & other compliances

- Jio advocates for a collaborative "neutral host" model where property managers treat digital connectivity as an essential utility similar to water or electricity by providing 24/7 access, dedicated power, and fiber ducts at zero rental to all Telecom Service Providers (TSPs). The strategy focuses on overcoming deployment hurdles such as high right-of-way costs and space constraints through standardized infrastructure.

More than 100 participants attended the seminar who gained a lot of insight through the proceedings, and it was an important step in highlighting the importance of enhancing seamless digital connectivity within residential, commercial, and public buildings by strengthening in-building digital communication infrastructure and by rating of Buildings.

After every session, clarifications were given for the queries of participants.

The program covered by both electronic media and print media i.e., Doordarshan, All India Radio, PIB, ETV and Eenadu.

The program ended with vote of thanks by Shri G. Suresh Reddy, Joint Advisor, TRAI RO, Hyderabad

(K V Suresh Babu)
Joint Advisor
TRAI RO - Hyderabad.