

Workshop on “Neutral Digital Connectivity Infrastructure (DCI) in Buildings Dated 6th March, 2024, New Delhi

Key Takeaways

A. Importance of Neutral Digital Connectivity Infrastructure

1. Some key statistics of the impact of DCI that were emphasized:
 1. 70-80% of the data consumption is indoor.
 2. 10% broadband penetration leads to 1.39% increase in GDP as per world bank report
 3. 10% increase in investment in telecom increases India’s GDP by 3.3%.
 4. Projected upgrade in rental in DCI implemented buildings is 5% or more. There is increase in productivity if indoor connectivity is meaningful.
2. There is huge demand of DCI due to intrinsic requirement of customers and hence supply needs to be matched to the demand.

B. DCI be treated at par with Utilities (Water, Electricity, and fire)

All participants were of the view that Digital Connectivity Infrastructure needs to get the status of ‘utilities’ at par with drinking water supply, sewerage, solid waste management and drainage.

C. Challenges in implementation of DCI

1. Reluctance of various stakeholders for DCI adoption due to lack of awareness of Neutral DCI.
2. Lack of process, procedures, and guidelines for:
 - i. Design Approval in Initial Stages & for Upgradation with respect to DCI
 - ii. Process flow for Occupancy- cum-Completion Certificate (OCC) and NOC for DCI during the Building Plan Approval and on Completion of the Building.
3. Non-availability of trained DCI professionals, evaluators, and DCI auditors for DCI design, implementation and approval
4. With respect to installation & maintenance of DCI, as per current regulatory provisions, active elements can only be installed and maintained by Telcos.
5. Interoperability of devices, platforms, and telecom equipment.
6. Cost of DCI, Data security, and privacy
7. DCI being treated as a revenue earner by Building owners.

D. Recommendations:

1. **Awareness on Digital Connectivity Infrastructure (DCI)** and its benefits is very low. To enhance the awareness among various stakeholders (agencies,

- developers & builders, DoT, ISPs/IP1s/TSPs), a drive to be launched including workshops/ conferences zone-wise.
2. **Guidelines:** Need to expedite the streamlining of process, procedures, and guidelines for design approval at building planning Stage, Process flow for Occupancy- cum-Completion Certificate (OCC).
 3. **Process for Approval of Plan and Issuance of OC/CC.** Due to lack of trained and qualified DCI professionals, currently plan approval and OC/CC is being issued based on self- declaration with an affidavit. Urgent need to provide skilled manpower to the field units so that actual evaluation of DCI can be carried out.
 4. **Skilling, Capacity building of DCI professionals and Certification:** For smooth and effective implementation of the DCI in buildings, the skilling and capacity building of DCI professionals, DCI Designers/Engineers is a pre-requisite. A skilling & capacity building drive should be launched across the nation and database should be made available online for use by various stakeholders. An assessment and certification mechanism need to be devised and implemented.
 5. **Portal:** Need to have a portal with details of authorized / approved DCI Designer, DCI Engineer and DCI evaluators and certifying agencies and also for rating of buildings for DCI, as it is for approved structural engineers etc
 6. **Rating framework for Neutral DCI:** Rating framework should be recommended and adopted by competent authorities at the earliest to give a real push to DCI, creating a pull factor among various developers and building owners.
 7. **Incorporation of MBBL in ALL State Byelaws:** So far, 17 states and UTs have adopted the provisions of Addendum to Model Building Byelaws 2016 in their respective Building By-laws. Remaining States and Union Territories should follow the suite. MoHUA may expedite the amendments in their respective building Byelaws and a nodal officer may review the developments periodically.
 8. **Incentivisation to States for implementation of Neutral DCI:** Ministry of Housing and Urban Affairs (MoHUA) should consider incentivizing State Governments to include the NBC amendments in their Building Bylaws like they have been doing for implementing various schemes like river fronts and other pan city projects in their states. States may be incentivized based on the number of buildings implemented with DCI in building from planning to execution stage.
 9. **Learnings from GIFT city:** Experiential learnings and regulations for intelligent buildings for installing the Digital Connectivity Infrastructure (DCI) by the GIFT City may be used as the initial framework for Neutral DCI.
 10. **Inclusion in NBC-2025.** It is strongly recommended that DCI should be included as a separate chapter in part 6 section 8 of National Building Code 2025 to be

issue shortly to highlight the importance of DCI, rather than referring to it in an annexure.

11. **Collaboration of various stakeholders:** There is a need for collaboration and co-operation between the various stakeholders viz Telecom Service Providers, Infra Providers, Architects, Developers & builders, RWAs and other stakeholders for early adoption and implementation of DCI in buildings.
12. **Sharing of Infrastructure:** India created a history for sharing infrastructure in the case of Telecom Towers, which should be replicated in having Common and Neutral Telecom Infrastructure. This will help to bring down the costs and ensure the quality.