



Government of Jharkhand
Urban Development & Housing Department

NOTIFICATION

Date- 03/04/23

No.-7 / न०वि० / अधि / स०स० / 102 / 2013¹²⁸⁸, In exercise of the powers conferred under clause-89 of the Jharkhand Building Bye-laws, 2016, as amended, the Government of Jharkhand do hereby notify the Jharkhand Building (IXth Amendment) Bye-laws, 2022.

Sl.	Chapter	Clause	Sub-clause	Provision	Amended Provision
1	IX	81		Telecom Tower Permission	Telecom Tower Permission /Provisions For In-Building Solutions (Digital Communication/ Telecommunication Infrastructure)
2	IX	81		<p>Addendum: -</p> <p>81.2 In-Building and Gated Buildings Solutions: - It is important to ensure quality telecom services inside a building – in residential, multi-story building, commercial complex, hotel or airport, police/Government offices/ buildings etc. It is also essential for Telecommunication Service Providers/ IP-1s to work on sharing of telecom infrastructure which may be made mandatory as they extend the services in the buildings. Telecom Service Providers/IP-1s require a non-discriminatory and unhindered access inside the building / along the premises to install the telecom infrastructure or lay their cables. At present, mobile operators and the building owner or building developer or Resident Welfare Associations (RWA) enter into commercial agreements for in-building deployment. Building owners or building developers delay the negotiations or request exorbitant rents — slowing down the speed of deployment. The Urban Local Body /Urban Development Authority may intervene in this regard wherein commercial agreements are insisted upon. TSPs/ IP-1s should be given legal rights and permissions to use the Common Telecom Infrastructure (CTI) within the premises of Building / Gated Society free of charge or for a standardized nominal charge just like other essential services like water electricity and/ or gas. Provision of CTI in a building should not be deemed as a revenue source in any way, much as the water and electricity utilities are not. Sufficient space should be provided within the premises to install telecom services by MNOs/ network operators. The issue is not limited to sharing of IBS/ Distributed Antenna System (DAS) systems only, but TSP should get access to all telecom infrastructures including Fiber Cable and LAN cables for provision of wired and wireless network, other telecom/ ICT and IoT services. It is important for telecom service providers to provide mobile coverage / network presence/high speed connectivity inside big residential / commercial complexes to improve QoS of their networks. It may not be practical to install individual in-building infrastructure by TSPs/ IP-1s as this will result in not only duplication of network resources but will also entail huge avoidable cost. It may also be not advisable to lay down cables again and again on the same land / building by several TSPs/IP-1s.</p> <p>81.3 The buildings are to be constructed in such a way that they are 'Digital Infrastructure deployment' / 'Digital Connectivity' ready. There should be provision of telecom ducts / common pathways / runways (digital access paths) to reach to the accessible parts of the buildings. The common ducts /digital access paths to access buildings from outside should invariably be part of the CTI, which could be used by TSPs/ IP-1s for laying/ deploying digital infrastructure including cables. While approving the building plans, it has to be ensured that plan for creation of CTI including the common duct to access the common space used as telecom room inside the building is also prepared and separate set of drawings showing the inter / intra connectivity access to the building with distribution network need to be furnished. <i>Occupancy-cum-Completion certificate to a building to be granted only after ensuring that the CTI as per the prescribed standards is in place and an undertaking by the Architect or Engineer to be insisted to certify that building has ensured common access to all digital infrastructure to all Service providers in accordance with plan of creation of CTI. Provision of visit from Department of Telecom (DoT) / TRAI officials along-with joint inspection with TSPs - who may suggest any relevant modification in the plan to be ensured.</i> As part of Building Bye-Laws, the builder/RWA shall be mandated to ensure that –</p> <ul style="list-style-type: none"> • While preparing the building plans, there is a need to mandate to have properly demarcated sections within buildings and on rooftops for housing BroadBand / digital connectivity infrastructure / antenna. These areas should have access to power supply for reliable, always-on services. • Access to building as well as CTI facilities inside the building should be available on a fair, transparent and non- discriminatory manner to all Service Providers/ IP1's. • The Service Providers/ IP1's should have unrestricted access for maintenance work. • The permission to in-building access and/or CTI facilities inside the building should not be 	

seen as a source of revenue generation for builder(s)/ RWA(s) but as a means for facilitating penetration of broadband access and thereby helping in socio-economic growth of all the residents.

- Charges (rentals/ power rates etc.) levied to the TSPs/ IP-Is should be fair, transparent and non-discriminatory and should be on residential rates.
- Suitable provision for the creation of Common Telecom Infrastructure (CTI) inside the newly constructed public places like Airports, commercial complexes and residential complexes.

81.4 At Layout Level

While developing Greenfield cities/ towns, the layout plans should clearly indicate the telecom as Utility infrastructure lines. Standards followed for Utility planning shall be published and work shall be done by the respective department for bringing in the standardization of the utility coding and sequences. The placement and sequence of above- and below-ground utilities at the appropriate location in the right-of-way to be ensured for unconstrained movement as well as easy access for maintenance. Telecommunication cables should be placed in a duct that can be accessed at frequent service points with sufficient spare capacity to enable scaling and future expansion, and empty pipes (large size hume pipes / HDPE pipes) should be laid before planting trees in order to accommodate additional infrastructure.

Digital Readiness Rating of Buildings / Society in line to the GREEN ratings shall be created where the existing and new buildings shall be rated on standardized parameters such as; but not limited to; Digital Infrastructure access, provisions for Emerging Technologies, Maintenance and Operational ease to TSPs / IPv1, Quality of Wireless Services, Quality / Inter-changeability ease of Wireline Services till each Unit Security, redundancy and Expandability of the digital infrastructure etc. A detailed rating parameters and calculation mechanism of Points / Stars shall be devised and benchmarked for all new / retrofitting of buildings/ societies.

Digital Asset repository which will ensure Proper planning and mapping of utilities through GIS is necessary especially when the alignments of telecommunication cables are identified. Design criteria and standards Utilities

should meet the following criteria:

- Telecommunication cables should ideally be placed below the parking area or service lane, which may be dug up easily without causing major inconvenience. Where this is not possible, the cables may be placed at the outer edge of the right-of-way.
- There is a need to reduce conflicts with pedestrian movements is to place telecom boxes in easements just off the right-of-way. Where this is not possible, they should be placed within parking or landscaping areas. If cables have to be located in the pedestrian path, a space of at least 2m should be maintained for the through movement of pedestrians. Telecom boxes should never constrain the width of a cycle track.
- In order to minimize disruptions, cables should be installed with proper maintenance infrastructure.

81.5 Procedures for setting up In-Building Solution (IBS)/ Fiber Networks

81.5.1 There is a need to promote installation of In-Building Solution (IBS) / Smart Connectivity infrastructure, where there is a poor connectivity in terms of weak signal strength inside the office, shopping mall, hospitals, multi-story building, education institutions and the objective has to be to strengthen quality of service of the voice & data of mobile and Fiber broadband network and access to digital services being offered by TSP And IP1's.

A) Procedures of obtaining IBS-NOC during plan approval and completion:

a) While submitting the proposed Building plan seeking approval from the relevant sanctioning Authority, applicant shall also submit

1. A complete Service Plan for IBS-infrastructure along with required specifications (in consultation with, and certified by a credible Telecom Networking hardware-consultant)
2. An undertaking that such IBS Infrastructure, when constructed shall be available for sharing by various TSPs/IP-Is.
3. Such Service Plan (IBS) shall be forwarded by the concerned Local Authority to the Telecom Enforcement Resource and Monitoring (TERM) cell of the State (external NOC agency) – for approval NOC.
4. During the Joint Site Inspection of the completed building structure the TERM cell shall undertake inspection of the constructed/ installed IBS infrastructure – for issuance of NOC for OCC.

b) The Local Authority shall liaise with the TERM cell as per its relevant online / offline process of communication to seek the relevant NOCs within the specified time as per the Service Charter/ Service Guarantee Act and rules in place. Separate communication from the applicant shall be needed to secure the IBS NOC.

B) Provision of IBS components in building premises: (as per NBC 2016)
Entrance Facilities (EF) /Lead-in conduits: (clause 3.1.4, of Part 8: Sec 6) min. 1.2m x 1.83m space to be allocated for each TSP adjacent to the EF.

Underground conduits/pipes to MDF room: min 100mm dia encased conduits.

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Main Distribution Frame (MDF)/ Equipment Room (ER): (clause 3.1.2, Part 8: Sec 6)

- prescribed size with L:W ratio between 1:1 to 2:1
- appropriate ventilation of MDF room
- proper Lighting for vision of equipment's,
- located at a level above from the Natural Ground level to avoid incidence of flooding

Electric distribution panels, isolaters, sockets and earthing as per specific requirements w.r.t. the area proposed for coverage (DUs/ service subscribers)

Telecommunications Room (TR) at each building block unless provided with MDF room:

- (all provisions of space to be as per clause 3.1.3.2, Part 8: Sec 6)
- Appropriate nos. of Service/Telecom risers (vertical shafts) for all multi-storeyed buildings w.r.t the area proposed for coverage (DUs/ service subscribers):
- of appropriate nos. and size (width & depth) to accommodate cable trays
 - with access door at each floor.

Telecommunications Enclosures (TE) at each floor of a block or TR (clause 3.1.5, Part 8: Sec 6)

Telecom Media and Connecting Hardware (TE):(clause 3.2, Part 8: Sec6)

Various cabling system and trays: (clause 3.2.4, Part 8: Sec6)

Wireless systems: (clause 3.2.5, Part 8: Sec6)

Backbone Cabling Media Distribution and Bldg. pathways

(clause 3.3, Part 8: Sec6)

Horizontal Cabling Media Distribution and Bldg. pathways

(clause 3.4, Part 8: Sec6)

IBS installation spaces: area for rooms or systems (e.g. antennas, base stations, remote units, power distribution boxes etc.) to be provided as per requirements w.r.t. the area proposed for coverage/ no. of proposed users (as per clause 3.1.3.2, Part 8: Sec6, table stated below)

Telecom room space norm for buildings with Built-up area >465 sqmt

Sl.	Area to be covered by IBS	Size of Telecom Room (all dimension in m)
1	Upto 465 sqmt	3.0 x 2.4
2	465.0 sqmt to 930.0 sqmt	3.0 x 3.4
3	More than 930.0 sqmt	Additional TR required with same space norms

Space requirements for smaller buildings with Built-up area <465 sqmt

Sl.	Area to be covered by IBS	Space provisions (all dimensions in m)
1	Upto 93.0 sqmt	Wall cabinets, self-contained enclosed cabinets.
2	93.0 sqmt to 465.0 sqmt	Shallow Room (0.6 x 2.6)
		Walk-in Room (1.3 x 1.3)

IBS installation spaces, so provided, should be:

- not susceptible to flooding
- not exposed to water, moisture, fumes, gases or dust
- able to withstand designed equipment load (to be specified in design)
- located away from any vibrations to avoid dislocation/ dislodgement

For any other necessary detailing of building components and service installations with respect to common Telecom/Digital connectivity Infrastructure, architects/ developers and other service consultants involved in preparing building and service drawings may refer Part 8 – Section 6: Information and Communication Enabled Installations of Volume 2 of the National Building Code, 2016.

81.5.2 Mode of deployment of In-Building, FTTx/IP Solution: There shall be various mode of deployment of In Building solutions such as: The possible modes are deployment by a neutral host infrastructure provider or build and managed by mobile operator and sharing with other service providers on non-discriminatory basis. The In-Build Solutions (IBS), FTTx/IP Solutions can also be deployed by TSPs/ IPs. Moreover, if TSP/ IP1 requires to install optical fiber for connecting In-Building Solution (IBS)/ Distributed Antenna System (DAS) nodes/ FTTx solutions, RoW/ permissions should be granted by the road owning agency through online mode (if same is working seamlessly) or offline mode till online system is established. For deploying indoor solutions these companies should have deemed permissions from the premises owners for installation of Distribution Network within the utility shafts / common spaces with provisions for common / shared Points of Interconnect for Connectivity to individual units. Moreover, if the TSP/IP requires to install optical fiber for connecting In-Building Solution (IBS)/ Distributed Antenna System (DAS) nodes , FTTx/ IP Solutions for which RoW/

permissions should be granted by the road owning agency through online mode.

81.5.3 Permissibility: The IBS, FTTx/ IP component being small equipment can be installed on any type of land/building/utility pole and shall be exempted from obtaining the permission for installation of these components from the respective Urban Local Body/Urban Development Authority but should get permission from the Administrative Authority of the concerned premises.

81.5.4 Procedure for submitting application for obtaining clearance: TSP/ IP-1 will apply to the administrative authority of the building/ head of the office with layout diagram for implementing IBS in the building as mentioned in the RoW Rules 2016 or State notified RoW Policy.

81.5.5 Fees: No fee will be charged for IBS/ FTTx Network. However, charges may be levied for power (as per Industry tariffs), fixtures, etc. provided by building owners to TSP/ IP-1s as per actuals.

81.5.6 Access and Distribution Fiber and IP/ LAN networks for connectivity for the Shopping Malls, Multi-Storey Residential Buildings, Cooperative Housing Societies, Residential Welfare Association and Commercial Buildings to be planned and deployed by TSP/ IP-1s as per standard requirement of providing high bandwidth and adequate indoor coverage to each unit/ apartment in these complexes.

Abbreviation :-

CCTV	Close Circuit Television
CTI	Common Telecommunication Infrastructure
DoT	Department of Telecommunication
FTTX	Fiber to the X Fiber
	Fiber To The Home (FTTH)
	Fiber To The Premises (FTTP)
	Fiber To The Building (FTTB)
	Fiber To The Node (FTTN)
	Fiber To The Curb/Cabinet (FTTC)
GDP	Gross Domestic Product
IBS	In Building Solutions
ISP	Internet Service Provider
MBIT	Megabit
OFC	Optic Fiber Communication
QoS	Quality of Service
RWA	Residential Welfare Association
TRAI	Telecom Regulatory Authority of India
TSP	Telecommunication Service Provider

By the order of the Governor of Jharkhand

(Vinay Kumar Choubey)

Secretary to Government

Urban Development & Housing Department

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Ranchi, Dated.03/04/23

Copy to :- Superintendent, Govt. Press, Doranda, Ranchi for information and necessary action.

It is requested to publish this notification in the extra ordinary Gazette and provide 100 copies of the same to the undersigned/Nodal Officer, E-Gazette, Urban Development & Housing Department, Government of Jharkhand for information and necessary action.

Secretary to Government

Urban Development & Housing Department

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Ranchi, Dated. 03/04/23

Copy to :- P.S to Hon'ble Departmental Minister/OSD to Chief Secretary, Jharkhand/All Additional Chief Secretary/Principal Secretary/Secretary, Govt. of Jharkhand/All Divisional Commissioners, Jharkhand/Director, SUDA/ Director DMA/Town Planner, UD&HD/VC, RRDA, Ranchi/All Deputy Commissioners, Jharkhand/Municipal Commissioners, All Municipal Corporations/Managing Directors all Industrial Area Development Authorities/MD, MADA, Dhanbad/Special Officer, Executive Officer, All Urban Local Bodies, Jharkhand/ M/s. Softech Engineers Ltd. for information and necessary action.

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Secretary to Government
Urban Development & Housing Department

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