

**CHAPTER 3**  
**ISSUES IN ACCESSING STREET FURNITURE FOR SMALL**  
**CELL AND AERIAL FIBER DEPLOYMENT**

**Q.1:** Is there a requirement for any modification in existing RoW Rules as notified by DoT to accommodate small cell deployment on street furniture? If yes, please provide the changes required.

**Ans:** Yes, development of an online bulk approval process, inclusion of small cells under a simplified rule system/RoW based on standardized size, installation, and deployment specifications, in place of the present practice of multiple approvals for building/ street furniture permits is suggested for a faster and streamlined approval process.

**Q.2:** Have the amendments issued in 2021 to RoW rules 2016 been able to take care of the needs of aerial fiber deployment? If not, what further amendments can be suggested? Please provide exact text with justification.

**Ans:** Yes, at is clearly addressed the issues related to nominal one-time compensation and uniform procedure for establishment of overground telegraph line in the Indian Telegraph Right of Way Rules, 2016 under the(Amendment) Rules30, 2021 in October 2021

**Q.3:** What are the suggestions of stakeholders for aligning RoW policies issued by various other Central Government Bodies with existing DoT RoW policy?

**Ans:** As the Smart Cities are targeting an inclusive city with citizen friendly urban infrastructures, newly designed Street Furnitures can be standardized to incorporate the Small Cell and Aerial Fiber Deployment.

**Q.4:** Whether it should be mandated that certain public infrastructure (municipality buildings, post offices, bus, and railway stations, etc.) be earmarked to have dedicated spaces that allow service providers to deploy macro/small cells? If yes, what are the possibilities and under what legal framework this can be done? What should be the terms and conditions of use of such infrastructure? Please provide detailed inputs with justifications.

**Ans:** Municipal Building Acts, Motor Vehicle act can be amended with the policies in implementing Smart Cells. Buildings, public spaces, public transport etc can be mandatorily provisioned with Smart Cells, similar fashion to the earmarking of dedicated parking spaces for EV charging vehicles.

**Q.5:** Can some of the street furniture like traffic lights, metro pillars etc be earmarked for mandatory sharing between controlling administrative authority and Telecom Service/Infrastructure providers for deployment of small cells and aerial fiber? Does existing legal framework support such mandating? What should be the terms and conditions of such sharing? Please provide details

**Ans:** If the metro pillars, street lights etc are intended to be earmarked for deploying smart cells, then such infrastructures need to have provision for mounting Small Cells/ Aerial fibre even during

its construction stage itself. However, if the already constructed street furnitures are utilized then TRAI can issue regulations and guidelines in mounting the infrastructure.

**Q.6:** How can infrastructure mutualization and infrastructure collaboration be ensured to avoid exclusive rights of way? What legal provisions can support mandating these? Provide full details.

**Ans:** In either of the scenarios, there should be a legal binding agreement on the shared infrastructure and the way it is being used, otherwise it will be difficult to monitor multiple agencies from the point of view of Operation and Maintenance.

**Q.7:** Should there be permission exemption for deploying certain categories of small cells at all places or all categories of small cells at certain places (Like apartments etc.)? What legal framework will support such exemptions?

**Ans:** TRAI shall develop standards and guidelines similar to European Electronic Communications Code (EECC) for public as well as privately owned buildings by incorporating certain criterias on the power, antenna position etc.

**Q.8:** What should be the criterion/ conditions (like power, height etc.) and administrative procedure for implementing such exemptions? Please provide exact text with detailed justifications

**Ans:** The conditions on the power can be slab based criterias and also the provisioning of antenna shall be based on the minimum as well as the maximum height of placement.

**Q.9:** For Small Cells that do not fall under the exemption category, should there be a simplified administrative approval process (like bulk approvals etc.) for deployment? If yes, what should be the suggested process? If not, what should be the alternative approach?

**Ans:** Yes, that should be followed by the RF guidelines issued by the TRAI

**Q.10:** What power related problems are envisaged in deploying small cells on street furniture? Please provide full details.

**Ans:** Financial Burden on the consumption of Power will be a major problem envisaged.

**Q.11:** What viable solutions are suggested to address these problems? Please provide full details.

**Ans:** Telecom sites should be provided electricity connection under utility tariff.

**Q.12:** Is there a need for standardizing the equipment or installation practices for next generation small cell deployment on street furniture? If yes, what are the suggested standards and what should be the institutional mechanisms for defining, and complying to them?

**Ans:** Yes, Similar to BIS, IEC, ARAI etc standards, Government shall entrust public bodies to verify and provide approvals based on the form factor, power consumption and whatsoever parameters of the equipment as well as for its installation process.

**Q.13:** Is there a need for a specific mechanism for collaboration among local bodies /agencies for deployment of small cells and aerial fiber using street furniture? If yes, what mechanisms should be put in place for collaboration among various local bodies/agencies involved in the process of permissions with TSPs/IP1s and to deal with other aspects of Small Cell deployment?

**Ans:** Instead of separate bylaws and mechanism for individual states, a centralized mechanism with an online portal will help in obtaining approvals and empanelling TSP's is also a good mechanism.

**Q.14:** Kindly suggest an enabling Framework that shall include suggestions about the role of various authorities, rules of coordination among them, compliance rules and responsibilities, approval process, levies of fees/penalties, access rules etc.

**Ans:** Officials from the DoT HQ, DoT-LSAs and State (PWD/Urban development/Forest and Environment/IT) together formed under the TRAI in each state would be an effective mechanism and enabling Framework.

**Q.15:** How can sharing street furniture for small cell deployment be mandated or incentivized? What operational, regulatory, and licensing related issues are expected to be involved in sharing of small cells through various techniques in the Indian context and what are the suggested measures to deal with the same?

**Ans:** Multi-operator Radio Access Network (MO-RAN) can be absorbed in this matter

#### CHAPTER 4

##### Various Street Furniture Designs for small cell and aerial fiber deployment

**Q.16: a)** Whether there should be any specific regulatory and legal framework to enable Small Cell and Aerial Cable deployment on

- (i) Bus Shelters
- (ii) Billboards
- (iii) Electric/Smart Poles
- (iv) Traffic lights
- (v) Any other street furniture

**Ans:** Yes, in order to have uniformity in the equipment and installation process there should be a specific regulatory and legal framework that has to be enabled.

**Q.17:** What should be the commercial arrangements between the TSP's/Infrastructure Providers and street furniture owners for the same?

**Ans:** Revenue sharing model, Public Private Partnership, BOT models can be explored in this aspect. This will help the Government to set up good public infrastructure without any capital expenditure.

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