



21st July, 2016

Shri R. S. Sharma
Chairman, TRAI
Mahanagar Door Sanchar Bhawan, Jawahar Lal Nehru Marg,
New Delhi - 110002

Sub : TSDM Comments on Consultation Paper No. 10/2016 on "In-Building Access by Telecom Service Providers"

Dear Sir,

This has reference to the subject consultation paper on In-Building Access by Telecom Service Providers. We would like to submit our comments in response to the following issue;

- 1. Do you agree that there is a need to address the issues discussed in this consultation paper or the market is capable of taking care of these issues without having any policy intervention/guidelines in this regard?**

In our opinion, yes, there is an urgent need to address the issues discussed in the consultation paper for framing an appropriate policy framework & guidelines. However, it may be noted that access to the buildings involves many agencies, including State Development Authorities (DDA, HUDA etc), RWAs, Municipal Corporations etc., which are outside the purview of TRAI / DOT.

- 2. How can sharing of telecom infrastructure inside a residential or commercial complex/airport/hotels/multiplexes etc among service providers be encouraged? Should the sharing of such telecom infrastructure be made mandatory?**

In this regard, we would like to submit our comments as under:

- Access to permission to TSPs cannot be denied rather it should be made mandatory upon building owners/building management societies/ Resident Welfare Societies etc. to allow the access of Licensed Telecom Service providers.
- There should be no charge for the permission of access.
- Access permission cannot be exclusive. If any restoration is required while laying the network, this should be done by TSP. In case the restoration is done by building owner, TSPs can be charged to the extent of actual cost incurred by the building owner.

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- There would be provisions for space in the building to keep the Access equipment.
- For Network extension and distribution within the building, it should not be mandatory on any TSP to share the network laid by TSP with other TSP. Unrestricted Network sharing should be allowed among TSPs. TSPs should have full freedom to share on mutually agreeable terms.

In this regard, we feel, the **Neutral Operator concept** will be more suited to address the challenges associated with multiple TSPs required to provide services inside the buildings. All TSPs can utilize the same efficient antenna system installed by the 'Neutral operator'. TSPs can simply "plug-in" and services are up and running immediately.

- 3) In view of the international practices given in para 18-23 of Chapter-II of the Consultation Paper, what provisions should be included in the National Building Code of India to facilitate unhindered access for all the TSPs?**

No Comments

- 4. Any other option, which in your view, could resolve the issues discussed in this consultation paper? Please explain and justify your opinion on all the above questions**

The country has witnessed exponential growth in the mobile subscriber base with urban tele-density reaching 153.14%, where tele-density of wireless telecommunications itself contributes 147.90%. In the urban scenarios, as per studies, it is an established fact that over 70 to 80% of the calls are made when a person is inside the building. Hence, it is most critical to address the network availability and Quality of Service inside the buildings.

The typical network deployment architecture adopted by the TSPs mainly designed to provide good coverage in outdoor environments, which leads to inferior quality of service inside the buildings. Hence, that is not the optimal and efficient way of using scarcely available frequency spectrum in the network.

We would like to mention that the National Frequency Allocation Plan - 2011 (NFAP 2011) identifies provisions under IND 50 & IND 55 to consider small chunks of spectrum in 900/1800 MHz band for requirement of microcellular low powered telecom systems using indigenously developed systems and technologies with Max EIRP of 4 Watts subject to coordination on a case by case basis.

Globally, countries like UK, Sweden, Belgium & Netherlands etc., have de-licensed frequency bands for private networks and indoor purposes to decongest the spectrum allocated for macro coverage and to minimize the power of RF radiation from macro towers. Most of them allocated minimum 3.3 to maximum, 5.0 MHz in 1800 MHz band for use by building owners etc.

In our considered opinion, by deploying In-Building mobile solutions with dedicated frequency spectrum can provide better Quality of Service (QoS) inside the buildings and ensure efficient spectrum utilisation.

We feel it is relevant to mention here that in response to TRAI Consultation Paper No. 4/2015 on 'Compensation to the Consumers in the event of Dropped Calls', we had submitted our suggestions to allocate a dedicated spectrum for 'In-building Solutions' to address the issues related with Call drops and Quality of Service. The same may be of relevance in this paper also.

It is our earnest submission once again that in line with the best international practices and provisions envisaged under NFAP provisions the authority may consider recommending identification of small chunk of frequencies in GSM bands and allocate about 3 MHz for micro cellular low powered systems operations inside the buildings, without causing interference to the existing mobile networks.

Thanking you,

For Telecom System Design & Manufacturers Association

A handwritten signature in blue ink, consisting of stylized, cursive letters that appear to be 'A' and 'S'.

Authorized Signatory