1178/TRAI/ISPAI/16

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Subject: ISPAI response to TRAI Consultation Paper on "In-Building Access by Telecom Service Providers"

Dear Sir,

We congratulate the Authority to have come out with the Consultation paper on the matter captioned above and sincere thanks for proving us the opportunity to submit our response on this matter.

We have enclosed our comprehensive response for your consideration. We believe that the Authority would consider our response in positive perspective and incorporate our concerns on the subject matter.

Looking forward for your favourable consideration.

Thanking you,

With Best Regards,
For Internet Service Providers Association of India

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Encl: As above

ISPAI Response to TRAI Consultation Paper on In-Building Access by Telecom Service Providers

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?**

Response:

We agree there is need to address the issues discussed in the consultation paper. However we would like to state that there are various issues requiring coordination with local municipal authorities and prevailing building byelaws etc. They do not fall within TRAI ambit and would need coordination with other agencies and ministries. Matter has to be taken up at the Government level to incorporate in the Building Bye Laws in coordination with the State Governments.

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?**

Response:

We need to consider the infrastructure in two stages

Stage1: Access to the Buildings. *Building here means occupied by Multiple Tenants, Residential, Commercial or a mix of both.*

Access permission to TSP (TSP here means both Access and Internet Service Providers and IP1 as well) cannot be denied and it should be mandatory upon building owners/building management societies/ Resident Welfare Societies etc.. There should be no charge for the permission of access. Further such 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.

There would be needed to take some space in the building to keep the Access equipment.

Rental charges per sq ft. for such space should not be more than 25% of general rent per sqft. Further, there should be upper cap of Rs 50 per sqft per month. Electricity charges would need to be paid by TSP.

Stage2: Network extension and distribution within the building

There should be no mandation on all TSPs to share the network laid by any of the TSP with other TSPs wanting to enter the building. Suitable Network sharing should be allowed among TSPs on mutual commercial terms.

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?**

Response:

Government should frame guidelines to mandate compulsory deployment of duct space for fibre/telecommunications cables and space for telecommunication towers in all new buildings starting from multiple entries to the building (for redundancy) till a designated common distribution space in the building. Neutrally Shared In-Building Solutions (IBS) is the perfect solution to address the challenges posed by ever growing mobile traffic inside the buildings.

With neutral IBS, all Mobile Service Providers (providing services in multiple frequencies and technologies) can utilize the same efficient antenna system, eliminating the need for multiple unsightly antennas distributed across a building. DAS protects the ambience and aesthetics of the property because multiple wiring projects are not required. Changing service providers does not lead to the defacement of property because no change to the wiring is necessary. Service providers can simply "plug-in" and services are up and running immediately.

4. **Any other option, which in your view, could resolve the issues discussed in this consultation paper?**

Response:

There should be allocation of 2-3 MHz spectrum for In-Building Networks.

The consultation paper discusses various issues related with the access to infrastructure providers including TSPs inside the building to install their wireline and wireless   infrastructure or lay their cable.

The mobile connectivity requirements inside the buildings are primarily depend on the outside micro networks. The traditional mobile infrastructure deployment being used by mobile operators primarily aimed at extending coverage and capacity needs at the street level (outside buildings). This approach is not an optimal & efficient way to ensure ubiquitous mobile coverage inside the buildings and significantly hence affect the Quality of Service badly. It may be noted that even the license conditions of TSPs do not stipulate coverage inside the building as a mandatory provision.

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.

In this regard, we would like to mention here that National Frequency Allocation Plan - 2011 (NFAP 2011) had earmarked some 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 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 some 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.   The best international practices are:

- **UK :** 3.3 MHz in 1800 MHz Band [1781.7 – 1785 paired with 1876.7- 1880] – issued to 12 licensees to operate in same frequencies at low power of 200 mw EIRP
- **Netherlands :** 2 x 2.5 MHz spectrum [1782.5 – 1785 paired with 1877.5-1989.9 MHz] with limitation on EIRP of 200 mw.
- **PTS Sweden :** 2 x 1.8MHz [1783.1 – 1784.9 paired with 1878.1 – 1879.9 MHz]
- **Belgium :** 2 x 5 MHz [1780 – 1785 paired with 1875-1880 MHz] with EIRP limited to 200 mw.

It is submitted that the authority must identify a small chunk of frequencies in GSM bands and allocate about 2-3 MHz for micro cellular low powered systems operations inside the buildings, without causing interference to the existing mobile networks.

Most important, this will help to decongest the telecom networks by reducing the spectrum load for outdoor macro networks, which is one of the major concerns leading to Call Drops and degrading of quality of services inside a building .

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