

## **BIF RESPONSE TO TRAI CP ON ' IN-BUILDING ACCESS BY TSPs"**

**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?**

### **BIF RESPONSE:**

In-building deployments is currently done through Commercial Agreements between incumbent Mobile Operators( TSPs ) and Building Owner/Developer/RWAs. Speed of deployment is often hindered due to delays in negotiations between the TSPs and the building owner/developers or due to the charging of exorbitant rents/fees by them. This leads to the following issues:

- a) Loss of quality of services
- b) Delay in availability of in-building telecom services
- b) Restriction of choice of service provider i.e. resident of the building cannot avail telecom services from the service provider of his choice .
- c) Leads to creation of artificial monopoly wherein choice of service in-building is limited to the TSP or those few select TSPs who can manage access to the building after entering into a commercial agreement with the builder/owner.
- d) Customer loses choice of selecting TSP
- e) The TSP that gets access inside the premises then denies the other TSPs and also does not permit sharing of their infrastructure with other TSPs thereby restricting choice and competition
- f) Thus, consumers will have to remain contented with the Quality of services and Price being fixed by the captive TSP

All the above issues are coming in the way of providing variety and good quality Telecom services to the end customer and to enable benefits of fair and reasonable choice of service provider to the end customer besides instilling a sense of competition amongst the service providers. Thus, it is absolutely necessary to evolve a regulatory framework applicable to provision of in-building facilities which would enable all TSPs to obtain efficient access on fair, reasonable and non-discriminatory terms and also enable customer to get the choice of service from the TSP that offers the most efficient and cost effective services.

**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?**

### **BIF RESPONSE**

It is well established that sharing of Telecom infrastructure inside a residential/commercial complex or a multiplex/hotels/airports/shopping malls between the Infrastructure provider with other Service Providers ( TSPs ) will lead to reduction in infrastructure costs as well as transaction costs and help in faster roll-out of the telecom services besides leading to reduction in cost of services . Such an arrangement also provides better in-building coverage , better QoS to the end user and leads to a decrease in level of radiated power from Macro cell sites.

It is important for all TSPs to realise that in order to provide mobile coverage or network presence inside the residential or commercial complexes to improve Quality of service, it is not practical to install individual in-building infrastructure by each of the TSPs as it will result in sheer multiplication and duplication of networks and will lead to unnecessary huge networks costs.

It will be far more beneficial to all if one or a few of the TSPs deploys the required telecom infrastructure inside the buildings and others share this infrastructure. Also it may not be feasible/advisable to deploy the infrastructure, once the building is already constructed.

Hence TSP or the Infrastructure provider should be dissuaded from entering into contracts/arrangements with the owner of the building which put a condition on exclusivity. It would be preferred if they agree to share its telecom infrastructure inside buildings with other willing TSPs at reasonable and non-discriminatory charges

### **Mandatory sharing**

The importance of having a robust telecom infrastructure for the provision of reliable telecom services is quite well established and understood. For all new buildings and complexes, the same should be developed in a planned manner so as to cater to both existing and future requirements/demand in an efficient and cost effective manner.

One option could be that local administration make it mandatory to have adequate provision for laying of ducts , optical fiber cables & in-building solutions while approving or clearing the construction of new facilities viz. multiplexes, malls, hotels, etc. Provisions should be such as to facilitate access to all TSPs providing telecom services to the residents/tenants of the residential complex/society

TRAI in its Recommendations to DOT on 17th April, 2015 on the issue of " Delivering Broadband quickly " examined the issue of ensuring access mechanisms for telecom services in residential and commercial complexes by stating

*" There is need to change building bye laws which currently deem only electricity, water and fire safety as essential infrastructure for issue of Completion Certificate. There is need for Mandatory inclusions of either ducts and/or optical fiber cables with well defined access mechanisms in all upcoming office complexes , commercial*

*spaces and residential complexes which would have significant and measurable net positive impact on Broadband penetration"*

It is also understood that BIS is framing guidelines mandating provision of ' Common Telecom Infrastructure " ( CTI ) housed inside buildings for convenient provision of telecom services . It is envisaged that the same shall be included in the ' National Building Code of India ' ( NBC ) . This shall lead to creation of one time infrastructure i.e. telecom ducts to reach the buildings which could be used by any TSP for having unhindered access. It is also envisaged that CTI may be treated as ' essential infrastructure' and no charges be levied by the building owner for the same.

Mandating creation of CTI i.e. that is facility that is housed inside the buildings would enable effective & quality access to telecom services . All new buildings and buildings undergoing rehabilitation should include CTI mandatorily.

**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?**

**BIF RESPONSE**

The Case studies highlighted from advanced and developed countries like Singapore, HK, and the European sub-continent throw light into the mature policy & regulatory regime which has been in place in those countries/continents with mandatory provisions for defining fair, transparent and non-discriminatory access mechanisms for all telecom operators inside the buildings -be it residential, commercial/business or other areas viz. shopping malls, airports, multiplexes, etc. Some of the examples given below could be included in the provisions of the CTI ( Common Telecom Infrastructure ) which shall form a part of the National Building Code of India.

For example , COPIF ( Code of Practice for Information & Communication facilities in buildings ) issued by the Singapore regulator -IDA, ensures that developers and owners of buildings & new developments provide adequate space & facilities for deployment & operation of equipment used for providing information & communication services to the buildings. Under this code, detailed specifications of space & facilities which developers or owners of buildings that are required to provide to enhance range and quality of information & communication services that are to be provided to the residents of their buildings by the TSPs. COPIF also specifies duties that are required to be observed by developers , building owners & the TSPs with respect to provision, maintenance & utilisation of relevant space & facilities. Developers and/or owners are required to submit their building plans for approval by the Regulator ( IDA ), prior to construction of the building.

COPIF permits developers/owners to enter into a commercial arrangement with any TSP ( referred to as Telecom Licensee ) to install in-building solutions ( viz. cables ) while developing the property. However, in case of multi-tenanted buildings, tenants

or lessees have the choice of getting any TSP to provide any telecom services. As per Para 2.10 of COPIF guidelines, 2013, the developer/owner shall allow any TSP to install in-building solution ( telecom cables ) within the building to serve any tenant/lessee , should the latter require use of such equipment( cables)

As per 2014 Broadband Cost Reduction Directive of the EU Commission, specific infrastructure requirements were provided which were aimed at increasing broadband speeds & provision across EU. Number of measures to reduce cost of Broadband access were announced. The Directive requires new buildings and major renovations to include a minimum standard of in-building physical infrastructure as per Article 8 and as per Article 9, providers of high speed broadband networks must have certain rights to access this infrastructure . This is enunciated in Article 9. Most of the principles as laid down in Article 9 pertains to Access to in-building physical infrastructure. These may be adopted inside the Common Telecom Infrastructure ( CTI ) of the National Building Code of India ( NBC )

The Communications Authority of HongKong has granted through the act of law , authorisation to all kinds of wireline & wireless TSPs legal rights to install & provide in-building Telecom systems ( IBTS ). This could be Telecom Equipment, cables, besides relevant facilities in the common parts of the building for deployment of Telecom & Broadcasting services to the residents of the building. Further in April 2012, it issued a ' Code of Practice ' ( COP ) for provision of access facilities inside the buildings for supply of Telecom & Broadcasting services in consultation with the TSPs and the Building owners. This encourages building designers and construction professionals to ensure that all new buildings will be designed with adequate building access facilities so that TSPs can install their equipments, cables inside the buildings and provide services in the most efficient and cost effective manner without causing undue inconvenience to the occupants of the building. COP lists all requirements of facilities required to be provided inside a building by developers to facilitate provision of telecom & broadcasting services to the residents .

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

##### **BIF RESPONSE**

It may be prudent to mention the utility of various spectrum bands which could resolve or at least mitigate the issues facing the TSPs to provide good in-building coverage. One of the excellent spectrum bands for this purpose is the UHF Band IV ( 470-585Mhz ) and Band V ( 582-698Mhz ) which are currently being used for TV/broadcasting . These bands have excellent signal propagating characteristics which allows in-building coverage in dense urban areas., a feature which is unrivalled by any other spectrum band

We recommend that while considering possible solutions to the in-building issues, it may be borne in mind by the DOT & the Regulator ( TRAI ) that they could possibly look towards freeing up or a part of the TV UHF bands as mentioned.

Another band which can be used for this purpose is V band ( 57-66Ghz ) which has characteristics /properties by which high throughput /capacities can be provided ( upto several Gigabytes ) while installed indoors and can serve as a suitable substitute to optical fiber for driving broadband connectivity inside the building/premises

Another issue that has been highlighted is the mandatory inclusions of ducts or optical fiber with well defined access mechanisms in all new residential and business complexes, commercial spaces, etc which would have significant positive impact on broadband penetration inside the buildings. Suitable enabling provisions are being planned to be included in the NBC( National Building Code ) for creation of one time infrastructure in these new complexes to facilitate unhindered access to the TSPs to lay optical fiber inside the building.

However the agencies approving the building plans are the local/state bodies viz. municipalities which are not under the jurisdiction of the Central Govt or the Department of Telecommunications. In case of non-compliance or any disputes arising due to interpretation of the mandate by the local/state authorities or by the builder , there is a clear reference under Section 15 of the Indian Telegraph Act, 1885 which reads as under " 15. Disputes between telegraph authority and local authority.—

(1) If any dispute arises between the telegraph authority and a local authority in consequence of the local authority refusing the permission referred to in section 10, clause (c), or prescribing any condition under section 12, or in consequence of the telegraph authority omitting to comply with a requisition made under section 13, or otherwise in respect of the exercise of the powers conferred by this Act, it shall be determined by such officer as the 1[Central Government] may appoint either generally or specially in this behalf. 1[Central Government] may appoint either generally or specially in this behalf."

(2) An appeal from the determination of the officer so appointed shall lie to the 1[Central Government]; and the order of the 1[Central Government] shall be final.

Thus it clearly follows from the Indian Telegraph Act, 1885 that "the power to make rules for the conduct of telegraphs and impose charges thereof have been conferred on the Central Government under Section 7 of the said Act. Under Section 15 of the same act ( as mentioned above), the Central Government would be represented by

the administering department which in this case happens to be the Secretary of the Department of Telecommunications ( DOT ). Therefore the competent authority in such matters will have to be Secretary, Department of Telecommunications or an officer appointed by him and all decisions pronounced by this authority in this regard shall be binding.

Reference is also made to the TRAI Recommendations dated 12April,2011 on Telecommunication Infrastructure Policy, where they have clearly stated the same under section 1.32, & 1.36.

### **Section 1.32**

Accordingly, local authority's power and authority in terms of exercising the provisions of the Indian Telegraph Act, 1885 should apply only to those properties that are vested in or under the control or management of local authority and all other private properties would not be under the purview of the local authorities. Consequently in so far as private properties are concerned; all transactions in terms of the provisions of the Indian Telegraph Act, 1885 would lie directly between the telegraph authority 21 and the property owner without the intervention or mediation of any local authority. The matter relating to private property will continue to be between telegraph authority and the owner of the property.