



**Telecom Regulatory Authority of India**



## **Recommendations**

**On**

### **In-Building Access by Telecom Service Providers**

(Response to back-reference dated 22<sup>nd</sup> November 2017 received from Department of Telecommunications on TRAI's recommendations dated 20<sup>th</sup> January 2017)

**9<sup>th</sup> March 2018**

**Mahanagar Doorsanchar Bhawan**

**Jawahar Lal Nehru Marg,**

**New Delhi- 110002**

**Contents**

**TRAI's RESPONSE TO THE BACK REFERENCE OF DoT ..... 1**

**ANNEXURE: DOT'S BACK-REFERENCE DATED 22ND NOVEMBER 2017. 10**

## **TRAI's RESPONSE TO THE BACK REFERENCE OF DoT**

### **General**

1. To ensure that there is ubiquitous voice and data network inside the commercial and residential complexes and large public places like Airports, hotels, multiplexes, first and foremost requirement is that Telecom Service Providers (TSPs)/Infrastructure Providers Category-I (IP-Is) gets an access to in-building facilities and infrastructure. Keeping in view the requirement to evolve a framework applicable to enable the Telecom Service Providers (TSPs) to obtain access on in-building facilities on reasonable terms and conditions, the Authority *suo motu* decided to initiate a consultation process on the issue. Based on the comments received from the stakeholders and its own analysis, the Authority, on 20<sup>th</sup> January 2017, gave its recommendations on “In-Building Access by Telecom Service Providers”.
2. The recommendations have been considered by DoT. On some of the issues, DoT needs clarifications. Therefore, through its letter dated 22<sup>nd</sup> November 2017, some of the recommendations have been referred back to the Authority for clarifications/reconsideration. A copy of the DoT's back reference is attached at **Annexure-I**.

### **Response of the Authority to the recommendations referred in back reference**

3. The Authority's earlier recommendations, the views of the DoT thereon, and the response of the Authority are given below.

#### **I. Para No. 2.19 of TRAI Recommendations**

*The Authority recommends that:*

- (i) *Considering the requirement of ubiquitous voice and data network inside the large public places/commercial complexes/residential complexes and considering the fact that it is not practical for each TSP to put its IBS and other telecom infrastructure inside such complexes, the requirement of sharing the In-building telecom infrastructure including IBS has become inevitable. Therefore, TSPs/IP-Is should be mandated to share*

*the in-building infrastructure (IBS, OFC and other cables, ducts etc) with other TSPs, in large public places like Airports, hotels, multiplexes, etc., commercial complexes and residential complexes.*

- (ii) The TSPs/IP-Is may be categorically disallowed to enter into any kind of agreement or contract, which results in exclusive access or lessening of competition. Indulgence into such a practice, through either formal or informal arrangement, may be treated as violation of the license agreement/registration.*
- (iii) To make it more effective, the Authority recommends that a system (time bound) may be developed, which may, inter-alia, include:
  - a. The seeker-TSP i.e. who wish to access the Cables/IBS installed by an existing TSP/IP-I (provider-TSP), should place its requirement in writing to such provider-TSP.*
  - b. The provider-TSP shall respond in writing within 30 days time. In case of denial of request to access the infrastructure, the provider-TSP shall give reasons and justification for denial.**
- (iv) Commercial terms for sharing of the in-building telecom infrastructure system, may be decided by the provider-TSP. However, the same shall be done in transparent, fair and non-discriminatory manner.*

#### **DOT's View**

- (i) Presently, the TSPs are deploying diverse network elements viz. IBS, Optical Fibre cable, DLC, DSLAM, copper cable as well as ducts for such cables etc., for providing Access Services in large public places / commercial complexes / residential complexes/ customer premises. These network elements are deployed based on specific requirement of the customers as well as the services being offered. The TSPs enjoy first mover advantage in setting up such infrastructure and in majority of cases such infrastructure is deployed in cost effective manner. Passive infrastructure sharing was already permitted in the access services licences. Government has also permitted sharing of active infrastructure vide letter No. 20-443/2014-AS-I Pt dated 11.02.2016. Telecom sector should be a light touch regulation sector where mutual commercial arrangements must be encouraged. Roaming which is a facility is also not mandated*

and operators are free to enter into mutual arrangements. Next, it is to categorically mention that IBS provision requires a licence and IP-I is only a Registration, hence IP-I cannot provide IBS.

- (ii) The present licensing framework does not envisage regulating / micro-managing the affairs of TSPs / IPs-I with landlords / RoW (Right of Way) providers. Under the prevailing licensing framework TSPs are not allowed to enter the private property and hence cannot be mandated to provide indoor coverage. Licensee is solely responsible for making all infrastructural arrangements either on its own or through sharing which is permitted on mutually agreed terms based on market forces and not on mandated terms. It is also felt that in case mutual sharing arrangement between licensees does not happen, alternative is desired to be worked out. Any such move at this point of time for mandating sharing of infrastructure is likely to complicate the situation and give rise to litigations.
- (iii) In view of above, it is felt that mandating the requirement of sharing of infrastructure may not be appropriate. TSPs may share the in-building infrastructure with other TSPs on mutually agreed basis. Active and passive infrastructure sharing has already been permitted and various operators are sharing their infrastructure to cut the cost.
- (iv) In view of the above comments / observations, DoT has felt that provisioning of IBS requires a licence and IP-I is only a Registration, hence IP-I cannot provide IBS. Further, DoT is of the opinion that TSPs may mutually agree to share the in-building infrastructure (IBS, OFC and other cables, ducts etc.) with other TSPs, in large public places like Airports, hotels, multiplexes, etc., commercial complexes and residential complexes. Hence it is felt that recommendations in para 2.19 (i) to (iv) may be referred back to TRAI for re-consideration and submitting its reconsidered opinion / recommendations.

## Response of TRAI

- 1. The Authority does not agree with DoT's contention that TSPs are not allowed to enter the private property. Access inside a building is essential for the TSPs to provide telecommunications services, including fixed line and broadband; and also to maintain the telecom infrastructure located inside or on the building. It facilitates a TSP to install equipments such as in-building solutions (IBS), Wi-Fi hot spots and laying copper cables, optical fibre cables (OFC), LAN cables etc for better in-building coverage and better quality high data rate wireless/wireline services.**
- 2. When a TSP seeks access to a building to install any telecom facility for providing telecom services to its residents, often it faces challenges in accessing and installing telecommunications facilities in commercial /residential complexes and large public places like Airports, hotels, multiplexes, etc. Para 1.4 to 1.6 of the Recommendations dated 20<sup>th</sup> January 2017 on "In-Building Access by Telecom Service Providers" (reproduced below) brings out the challenges faced by the TSPs/IP-Is and the resulting problems that are caused to the end users.**

*".....it is seen that generally restrictive practices are adopted by building/premise owners while giving access to the building due to commercial interests. In many cases, these owners enter into exclusive agreement with one of the TSPs/IP-Is for providing telecom services to the consumers living or doing business from a particular location/building/society/commercial complex etc and deny access to their building(s) to other TSPs, thus creating an artificial entry barrier for such TSPs. Such practices not only limit competition, it also leaves no choice to consumers except to avail services from the TSP with whom the contract is entered into, taking away choice and flexibility from the consumers which they would have had in terms of quality of service (QoS), tariff, redundancy etc.*

*In some cases, building owners allow TSPs to access their premises at exorbitant rates. For instance, Airport or mall owners may charge high*

*price from TSPs for accessing their premises. As TSPs cannot leave such places uncovered from their telecom network, they are compelled to enter into agreement at the terms and conditions set by such owners.*

*sIn cases of leased line connectivity, many organizations take secondary leased lines from other TSP(s) to have redundancy. However, places where building owners allow access to a TSP on an exclusive basis, do not allow these dwellers to have redundancy provision.”*

3. **The subscriber is entitled to quality telecom services at the best available prices in the market. The choice of TSPs for using these services should be made by subscribers; not by the building owners. Although there is no regulatory barrier, as far as passive and/or active telecom infrastructure sharing is concerned, TSPs/IP-1s are, often, not keen on sharing the telecom infrastructure put in place by them inside a building. As brought out by the Authority, the TSP/IP-I often enters into exclusive arrangements with the building owners and, thus, restricts the entry of competitors. While TRAI supports light touch regulation in Telecom Sector, such light touch approach should not create a monopolistic situation where the customer choices become restrictive.**
  
4. **In its back-reference, DoT also stated that “*It is also felt that in case mutual sharing arrangement between licensees does not happen, alternative is desired to be worked out.*” Therefore, the Authority is of the view that it is essential to evolve a framework to ensure that TSPs get an opportunity to roll-out its network inside a building.**
  
5. **Due to factors such as space constraints, costs involved etc, it may not always be feasible/cost-effective to install in-building telecom infrastructure by all the TSPs. If the execution of the work inside the existing building is carried out at different point of time by each TSP, it is likely to cause inconvenience to the residents/occupants and may not be appropriate from the aesthetic point of view. To overcome such issues, it is**

required that telecom infrastructure, put in place by one or a few TSPs/IP-I providers, is shared with others at reasonable and transparent conditions.

6. TRAI does not envisage to regulate/micro-manage the agreements entered into by TSPs/IP-Is with building owners/RoW providers. However, TRAI has recommended that the TSPs/IP-Is may be disallowed to enter into any kind of agreement or contract which results in exclusive access or lessening of competition. This aspect may be ensured by inserting a suitable clause in the terms and conditions of the license agreement of TSPs and Registration Certificate of IP-Is.
7. In its back-reference dated 22<sup>nd</sup> November 2017, DoT compared the in-building infrastructure sharing with Mobile Roaming facility. DoT mentioned that roaming is a facility which is not mandated and TSPs are free to enter into mutual agreements. However, the Authority is of the view that the in-building infrastructure sharing is totally different from the mobile roaming arrangements. In case of roaming arrangement, a Service Provider has options to seek roaming agreement with multiple service providers, whereas in case of In-building telecom infrastructure there could be a monopolistic situation, if not regulated.
8. In its back-reference, DoT stated that *“....IBS provision requires a licence and IP-1 is only a registration, hence IP-1 cannot provide IBS.”* In-building infrastructure denotes both the passive elements like dark fibre, cables, etc as well as active elements like the BTSs/Pico cells. Therefore, both IP-1s as well as TSPs should be facilitated the access inside the building to install the equipments/cables etc within their scope of licence/registration.



**It may be relevant here to take note of the decision of the Hon'ble TDSAT dated 10th April 2012 in the matter of Reliance Infratel Ltd vs Etisalat DB Telecom Pvt Ltd (Petition No. 75 of 2012 – M.A. No. 112 of 2012) with regard to the jurisdiction of Tribunal to adjudicate the dispute involving Infrastructure Provider Category-I and Telecom Service Provider.**

**Vide Para 124, 125 and 126 of the said order, Hon'ble TDSAT in respect of grant of license under Section 4 of Indian Telegraph Act, 1885, has observed that:**

***“If, whether by way of grant of registration certificate or otherwise, any part of the exclusive privilege vested in the Central Government is to be parted with or outsourced in favour of any other entity, the same would mean a license.”***  
**(Para 125)**

***“If that be the legal position, it is difficult to comprehend as to why the power to lay down passive infrastructure would not come within the purview of Section 4 of the Act.”*** (Para 126)

**In view of above, it may be stated that the registration certificate issued to IP-I provider is actually a license granted under Section 4 of the Indian Telegraph Act, 1885, though on a different consideration and with specific scope.**

**As far as the provision of IBS is concerned, the Authority is of the view that IP-I should be permitted to install all the passive elements involved in IBS. Components involved in establishment of In-Building Solution, such as Passive Distributed Antenna System (DAS) including splitters, combiners, couplers, feeder cables, passive antennas etc., are all passive elements. Therefore, IP-I providers should be**

allowed to establish and share it with TSPs. TSPs can plug-in their respective RF signals to the IBS and extend their mobile coverage.

Even for Active DAS, which involves optical fibre cable in place of RF feeder cable and associated Master/Remote units, the IP-I providers can lay the dark fibre also besides establishing the above mentioned passive elements.

9. TRAI is not recommending the outlines of the commercial terms and conditions of sharing, as the commercial terms for sharing of the in-building telecom infrastructure is to be decided by the provider-TSP, which should be done in a transparent, fair and non-discriminatory manner. The question of commercial terms arises when there is an intention of TSP concerned to share its resources. The intention may be to share the resources or not to share the resources and maintain exclusivity inside the building/premises. In order to thwart only the intent of TSP to maintain exclusivity of its IBS resources, TRAI has recommended that the TSPs/IP-Is should be mandated to share the in-building infrastructure with other TSPs.

With an estimated 80 percent of mobile traffic originating or terminating within a building, In-Building Solutions have become as vital to the buildings as water or electricity. Today's data-hungry devices simply cannot be served by the outdoor network. The evolution to 5G, combined with the explosion of Internet of Things (IoT) devices, IBS and its sharing will become more important.

10. The objective behind the Authority's recommendations is to ensure that TSPs/IP-Is are able to get access to buildings under fair and reasonable terms so as to improve the deployment of high-speed telecommunications networks. This

**development will enable telecom players to arrest call drops inside buildings, malls and other such areas.**

- 11. In view of the above, the Authority reiterates its earlier recommendations.**

No. 20-545/2017 AS-I  
Ministry of Communications  
Department of Telecommunications  
Access Service Division-I

Sanchar Bhavan, New Delhi  
Dated the 22<sup>nd</sup> November, 2017.

Subject: TRAI recommendations dated 20<sup>th</sup> January 2017 on "In-Building Access by Telecom Service Providers" – regarding.

This has reference to TRAI recommendations vide letter no.102-3/2016-NSL-II dated 20<sup>th</sup> January 2017 on the above subject.

2. The said recommendations have been examined in the Department. In terms of fifth proviso of section 11(1)(d) of the Telecom Regulatory Authority of India Act, 1997 (as amended), the said recommendations are being referred back to TRAI to provide its considered opinion in the light of comments/ observations of the Department annexed herewith (Annexure A).

3. This has the approval of competent authority.

Encl: As above.

  
22/11/17  
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Director (AS)  
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To

The Secretary,  
Telecom Regulatory Authority of India  
Mahanagar Doorsanchar Bhavan,  
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New Delhi – 110002.

## ANNEXURE-A

TRAI recommendations vide letter No. 102-3/2016-NSL-II dated 20.01.2017 in respect of "In-Building Access by Telecom Service Providers"

**TRAI Recommendation:** *Para 2.19.... the Authority recommends that*

(i) *Considering the requirement of ubiquitous voice and data network inside the large public places/commercial complexes/residential complexes and considering the fact that it is not practical for each TSP to put its IBS and other telecom infrastructure inside such complexes, the requirement of sharing the In-building telecom infrastructure including IBS has become inevitable. Therefore, TSPs/IP-Is should be mandated to share the in-building infrastructure (IBS, OFC and other cables, ducts etc) with other TSPs, in large public places like Airports, hotels, multiplexes, etc., commercial complexes and residential complexes.*

(ii) *The TSPs/IP-Is may be categorically disallowed to enter into any kind of agreement or contract, which results in exclusive access or lessening of competition. Indulgence into such a practice, through either formal or informal arrangement, may be treated as violation of the license agreement/registration.*

(iii) *To make it more effective, the Authority recommends that a system (time bound) may be developed, which may, inter-alia, include:*

**a.** *The seeker-TSP i.e. who wish to access the Cables/IBS installed by an existing TSP/IP-I (provider-TSP), should place its requirement in writing to such provider-TSP.*

**b.** *The provider-TSP shall respond in writing within 30 days time. In case of denial of request to access the infrastructure, the provider-TSP shall give reasons and justification for denial.*

(iv) *Commercial terms for sharing of the in-building telecom infrastructure system, may be decided by the provider-TSP. However, the same shall be done in transparent, fair and non-discriminatory manner.*

### **The DoT's comments/ observations:**

Presently, the TSPs are deploying diverse network elements viz. IBS, Optical Fibre cable, DLC, DSLAM, copper cable as well as ducts for such cables etc. for providing Access Services in large public places/ commercial complexes/ residential complexes/ customer premises. These network elements are deployed based on specific requirement of the customers as well as the services being offered. The TSPs enjoy first mover advantage in setting up such infrastructure and in majority of cases such infrastructure is deployed in cost effective manner. Passive infrastructure sharing was already permitted in the access services



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The present licensing framework does not envisage regulating/ micro-managing the affairs of TSPs/ IPs-I with landlords/ RoW (Right of Way) providers. Under the prevailing licensing framework TSPs are not allowed to enter the private property and hence cannot be mandated to provide indoor coverage. Licensee is solely responsible for making all infrastructural arrangements either on its own or through sharing which is permitted on mutually agreed terms based on market forces and not on mandated terms. It is also felt that in case mutual sharing arrangement between licensees does not happen, alternative is desired to be worked out. Any such move at this point of time for mandating sharing of infrastructure is likely to complicate the situation and give rise to litigations.

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In view of the above comments/ observations, DoT has felt that provisioning of IBS requires a licence and IP-I is only a Registration, hence IP-I cannot provide IBS. Further, DoT is of the opinion that TSPs may mutually agree to share the in-building infrastructure (IBS, OFC and other cables, ducts etc) with other TSPs, in large public places like Airports, hotels, multiplexes, etc., commercial complexes and residential complexes. Hence it is felt that recommendations in para 2.19 (i) to (iv) may be referred back to TRAI for re-consideration and submitting its reconsidered opinion/ recommendations.