## Response to TRAI

## Consultation Paper on In-Building Access by Telecom Service Providers

## **Contributed by**

Dr. V. Sridhar, Professor, IIIT-Bangalore (vsridhar@iiitb.ac.in)

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-Building or On-premise network infrastructure has all the following properties of a natural monopoly (much like to some extent as is true with wire line telecom):

- a) Duplication of infrastructure is neither required nor warranted;
- b) Economies of scale and scope exists and hence requires a dominant operator to be present to reduce the average cost of service provisioning;
- c) Right Of Way is difficult and cumbersome for laying down infrastructure.

Hence the resultant economic solution is to have one or a few service providers. This may lead to all or some of the following market distortions:

- a) Inadequate quality of service;
- b) Higher price of services
- c) Lock-in of subscribers with poor exit options

Due to these market distortions, it is required to address this issue and intervene as and when required.

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?

With DoT guidelines on sharing of both spectrum and passive infrastructure, the public land mobile operators have started practicing the same in their networks to optimally use their infrastructure assets.

While sharing of telecom infrastructure in public places such as airports, and railway stations is the next logical step, such sharing shall continue in private properties such as apartment/ residential complexes and semi-public properties such as malls and hotels for optimal use of scarce resources.

However, while in public places such sharing can be mandated by the government who normally is the custodian of public goods and properties, the same guidelines do not apply to private and semi-public properties. Care should be taken to lay down guidelines that provides a win-win for all stakeholders concerned in these situations.

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?

While the clause is applicable to larger extent to IBTS, the same shall be applicable for the following:

- a) Common cable conduits and ducts for laying down cables from multiple operators;
- b) Common junction boxes for interconnections;
- c) Common antenna masts and tower infrastructure for mounting antennas from multiple operators;

In concomitant with the above, the owners of private and semi-public places shall be provided with guidelines for enabling shared infrastructure to be deployed inside their premise. Towards this, the guidelines need to be framed for enabling commercial agreements between the infrastructure providers and premise owners in terms of rent and other applicable charges.

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

- a) As of now, in some states such as Karnataka, extra levy is charged in property tax assessment if premise has telecom towers. If this is the case, in case the property owners puts in shareable infrastructure and if more than one operators uses this infrastructure this extra levy shall be waived.
- b) New building code shall be strengthened to include its applicability to residential communities as well.
- c) Residents Welfare Association (RWA) shall be empowered to enact commercial agreements with telecom infrastructure providers as compensation to the use of their premise for telecom services.
- d) RWA shall be assisted with DoT TERM cell in conducting periodic assessment of radiation levels emanating from mobile towers and antennas if these are installed inside residential communities.