Ref No: RP/FY 16-17/087/072

Dated: 4th July 2016

To,

Advisor (B&CS),

Telecom Regulatory Authority of India,

Mahanagar Doorsanchar Bhawan,

Jawahar Lal Nehru Marg, Old Minto Road,

New Delhi – 110002

Kind Attention: Shri Sunil Kumar Singhal

Subject: Response to Pre-Consultation Paper on Infrastructure sharing in Broadcasting TV distribution sector

Reference: TRAI Pre-Consultation paper no. 7 of 2016 dated 23rd May 2016.

Dear Sir

This is with reference to the above mentioned pre-consultation paper. In this regard, please find enclosed our response for your kind consideration.

Thanking you

Yours sincerely

For Bharti Telemedia Limited

Ravi P. Gandhi

Chief Regulatory Officer

Enclosed: As mentioned above

Bharti Telemedia Limited's Response to Pre-Consultation Paper on Infrastructure sharing in Broadcasting TV distribution sector

Q.1   In addition to infrastructure sharing possibilities discussed in pre-consultation paper what more can be shared by the DPOs (MSOs, HITS, DTH) for better utilization of infrastructure?

Airtel's Response:

1. In its pre-consultation paper, TRAI has contemplated the possibility of having the following types of infrastructure sharing among DPOs:
   a. sharing of transponder and earth station infrastructure
   b. Sharing of HITS/MSO infrastructure
   c. Sharing of Optical Fiber/ bandwidth for signal transmission

2. Currently, DTH operators have limited capacity but the number of TV channels is much more. The number of channels in India are approx. 850 (800 SD channels and 50 HD channels) and to carry all these channels, DTH operators require at least 1500MHz spectrum. In contrast, the existing capacity of DTH operators' ranges from 200MHz to 700MHz which makes it more than evident that they cannot carry all the channels due to available capacity being much lower than the required capacity. Therefore, a favorable policy on sharing of satellite capacity will enable DTH operators to carry more channels with the same capacity and to offer services at much more affordable price.

3. **We support the sharing of infrastructure amongst the DTH operators, with other DPOs and with any other licensee which is providing their services under Section 4 of the Indian Telegraph Act 1885 (such as telecom licensees). Since in some cases, the infrastructure sharing entails huge technical and operational challenges, it should be totally voluntary and optional for DTH operators (and for all stakeholders) and not be mandatory. Some challenges of infrastructure sharing are as under:**
   a. **If DTH operators share their existing satellite bandwidth, then the operators will have to re-align all their existing dish antenna installed at the subscriber premises due to change in satellite. Such an exercise will entail huge cost and time.**
   b. **Therefore, simultaneous uplink on two satellites would be required till migration gets completed. Again, such an exercise will entail huge Capex and Opex.**
   c. **Availability of more than 40 Transponders on single orbital slot to cater all DTH operators is a challenge. Furthermore, there will be a need of at least 6 transponders for each operator to uplink unique content/ Value added service.**
   d. **Satellite redundancy in same orbital location for business continuity is essential.**

e. **Currently, different DTH operators are using different combinations of technology in set top boxes. For instance, Airtel is using compression technology of MPEG 4 and transmission technology of DVB-S2, which is the most advanced technology presently available in the market and the same is backward compatible. However, some DTH operators are using a lower specification of compression and/or transmission technology. So there cannot be a common headend and RF system for all DTH operators without replacing STBs. The cost of such replacement would be enormous.**

f. **Piracy concerns, Audit and billing issues with broadcasters (as common facility, it is operationally difficult to manage and control Conditional Access System (simulcrypt) in terms of security and revenue assurance.**

g. **Ownership for handling common facility operationally, owning QoS and service/ network uptime for common services to all operators will be a huge challenge.**

4. In telecom sector, the government has allowed all types of infrastructure sharing among operators only on voluntary basis without any regulatory intervention. The same should also be done for broadcasting sector. However, the infrastructure sharing should make viable business sense to the DPO.

5. Sharing of satellite capacity and infrastructure of different services (like DTH and VSAT) of a Group company needs to be allowed in order to effectively synergize the resources. This will not only save huge cost in procuring exclusive resources for every services of a Group company but will also help in establishing business continuity for a service using the infrastructure of other service during catastrophe.

6. Similarly, sharing of CPE infrastructure of DTH for providing VSAT based broadband services need to be allowed. Such hybrid solutions will enhance broadband penetration by enabling internet availability to large number of homes at uncovered villages and towns in India. (This will also contribute in fast tracking the Digital India mission objectives.)

7. Additionally, a single window system with defined time frame for regulatory clearances (ISRO allocation, WPC & NOCC clearances) and Satellite related payments need to be established. Billing for the Satellite capacity allocated to an operator shall start when WPC Operating License & NOCC Uplink Permission are provided to the operator.

Q.2   What could be the operational, commercial, technical and regulatory issues which require to be addressed at the time of developing policy and regulatory framework for enabling infrastructure sharing in the broadcasting TV distribution space?

Q.3   Do you envisage any requirement for change in the existing licensing / registration framework laid for DTH, DAS and HITS broadcasting services? If yes, please specify those changes clearly for each platform?

Airtel's Response:

1. According to us, some major issues related to infrastructure sharing are as under:

    a) Allocation of Satellite capacity by Antrix should be offered to an individual DTH operator. Thereafter, sharing of transponders and its related rules should be left for DTH operators to decide without any regulatory intervention.

    b) Satellite capacity is today endorsed on DTH license. The emission characteristics (such as DVB-S or DVB-S2, symbol rate, data rate FEC etc.) are also mentioned in the permission. Necessary changes in WPC Licence and NOCC may be required to allow the sharing of satellite spectrum.

    c) The broadcasters should not be allowed to switch off the IRD in case of default by one or more sharing DTH operators unless all sharing DTH operators have defaulted. However, they can ask the defaulter DTH operator to switch off the channel and the same should be regulated by TRAI for efficacious sharing arrangement. Additionally, this would also call for suitable amendments in the Interconnect regulations.

2. **We strongly believe that infrastructure sharing in broadcasting sector has immense technical, operational, financial and regulatory challenges. Therefore, we suggest that TRAI should constitute a Working Group consisting of officials from TRAI, participants from DTH operators and other relevant stakeholders to deliberate upon all issues related to infrastructure sharing and suggest an appropriate regulatory and licensing framework under which the infrastructure sharing can be carried out by all stakeholders in the broadcasting Industry. It is to be noted that TRAI had carried out a similar exercise for framing the rules of spectrum sharing and trading in telecom sector which was widely accepted and turned out to be beneficial for all stakeholders.**

Q.4 **What could be the implications of allowing separation of network and service provider functions at distribution level? How the responsibilities can be divided between the network and service providers?**

Q.5 **Any other issue which you feel will be relevant for enabling the infrastructures sharing and separation of network and service provider functions in TV distribution sector?**

Airtel's Response:

1. We believe that once all types of infrastructure sharing are permitted among DTH operators, there would be no need for such a drastic change in the current licensing framework. Furthermore, there is no visibility over the associated benefits of introducing a new licensing model which otherwise cannot be achieved with the existing licensing framework or by further reforming it.

2. Based on the current licensing regime, the DTH operators have invested significantly in creating the infrastructure across the nation and are providing competitive and affordable TV services to their customers. To encourage massive investments, a stable and predictable licensing framework is critical and thus, an appropriate approach would be to continue with the existing licensing framework with suitable changes to avoid risks to the investments already made.