RELIANCE

RBTV/TRAI/LT/16-17/5419
27th October, 2016

Shri Sunil Kumar Singhal
Advisor (B&CS)

Telecom Regulatory Authority of India
Mahanagar Doorsanchar Bhawan,
Jawaharlal Nehru Marg,
New Delhi-110 002

Subject: Comments on Consultation Paper "Infrastructure sharing in broadcasting TV distribution sector"

Reference: TRAI Consultation Paper dated 21st September, 2016

Dear Sir,

At the outset, we are thankful to the Authority for giving an opportunity to submit our views on the issues raised in the said consultation paper.

2.   Please find enclosed herewith our response on the various issues posed by the Authority for the comments of the stakeholders.

3.   We hope that Authority would find merit in our suggestions and take these into account before taking final decision on this issue.

Thanking you,

With Regards,
For **Reliance BIG TV Ltd.**

(Authorized Signatory)
Please reply to: Amit mathur
             Executive Sr. Vice President
             Fax: 011- 3033 1781

ISSUES FOR CONSULTATION

Infrastructure sharing among Cable TV and HITS operators
(1) Is there a need to enable infrastructure sharing among MSOs and HITS operators, or among MSOs? It is important to note that no mandate for such infrastructure sharing is being proposed.

RDTV Response: No comments

(2) Which model is preferred for sharing of infrastructure among MSOs and HITS operators, or among MSOs? Kindly elucidate with justification.

RDTV Response: No comments

Infrastructure sharing among DTH operators
(3) Is there a need to enable infrastructure sharing among DTH operators?

Each DTH operator retransmits large number of satellite TV channels. Out of these large number of satellite TV channels retransmitted by each operator, many of them are common across the DTH operator in a relevant market. Therefore, retransmission of such common channels independently on each distribution platform ends up duplicating the infrastructure. In order to reduce Opex and Capex, infrastructure sharing can be done for optimal utilization of resources.

Satellite transponder, Earth Station, Head-end, Hybrid Fibre Coaxial (HFC) network, Conditional Access System (CAS) and Subscriber Management System (SMS) form major part of the infrastructure used for delivery of the TV broadcasting services to the subscribers. There is possibility of sharing some of these infrastructure items among DTH operators.

Relevant issues in sharing of infrastructure
(4) What specific amendments are required in the cable TV Act and the Rules made there under to enable sharing of infrastructure among MSOs themselves? Kindly elucidate with justification.

RDTV Response: No comments

(5) What specific amendments are required in the MSO registration conditions and HITS licensing guidelines in order to enable sharing of infrastructure among MSOs and HITS operators? Kindly elucidate with justification.

RDTV Response: No comments

(6) What specific amendments are required in the guidelines for obtaining license for providing DTH broadcasting service to enable sharing of infrastructure among DTH operators? Kindly elucidate with justification.

Guidelines for obtaining license for providing DTH broadcasting services need amendments to enable sharing of infrastructure among DTH operators. Following clauses/ sections need to be revisited:

- Procedure for application and grant of license needs to be revisited as DTH operator may be planning to share transponder space/headend with another operator

- Article 12, WPC Wing's License and Article 13, Commissioning of DTH Platform need to be amended as the operator might be sharing transponder space and/or head-end with another operator.

(7) Do you envisage any requirement for amendment in the policy framework for satellite communication in India to enable sharing of infrastructure among MSOs and HITS operators, and among DTH operators? If yes, then what specific amendments would be required? Kindly elucidate with justification.

Our response is limited to Infra sharing among DTH operators:

Current process for satellite capacity allotment is that every DTH operator applies to DoS/Antrix in a prescribe format with prescribed refundable deposit for the initial as well as incremental capacity. Antrix combines all such requests and floats tenders for acquiring capacity from foreign satellite operators if the requested capacity is not available on INSAT/GSAT fleet.

Antrix sources transponder capacity from foreign satellite operators and sub-lets it to DTH operators through back-to-back agreements.

There is no clarity on timelines when the requested capacity would be made available to the customer. This causes considerable delay in services launch, as well as expansion and growth plans.

Further, there is no visibility on availability of transponder capacity for future expansion on that particular satellite in that orbital slot.

Further, Antrix enters into short term contracts with foreign satellite operators and offers only three-year deals to DTH operators as of now.

DOS/Antrix intervention is required only when DTH operators need to get KU band transponders. When broadcasters want to launch new TV channels on C band transponders, they can approach foreign satellite operators directly and enter in to an agreement withforeign satellite operator.

DTH operators have to enter into lengthy commercial and contracting negotiations every three years with Antrix. This affects operational efficiency and adds to the overall cost of operating platforms–costs which are ultimately passed on to the consumers.

This puts significant constraints on commercial negotiations with satellite operators, most of who are looking for 10+ year long-term contracts.

We request authority to make necessary amendments in the satellite communication policy so that DTH service providers can directly approach foreign satellite operators, as being done by broadcasters for C Band capacity, and enter into long term agreement with foreign satellite operators for initial as well as incremental capacity.

To safeguard rights of orbital slot and coordination of frequency plan, DOS/Antrix can provide the list of approved foreign satellites.

This will allow DTH service providers to negotiate with foreign satellite operators and obtain most favourable terms.

In case of infra sharing among DTH operators, the Host Operator gets in to agreement with the satellite operator and have necessary agreement for sharing transponder capacity with other interested DTH operator/s in India.

The host DTH operator and guest DTH operator/s may decide among themselves on which proportion each one of them wish to bear shared capacity cost.

(8) Do you envisage any requirement for amendments in the NOCC guidelines and WPC license conditions relating to satellite communications to enable sharing of infrastructure among MSOs and HITS operators, and among DTH operators? If yes, then what specific amendments would be required? Kindly elucidate with justification.

Use of allotted transponder capacity does not start immediately as it involves cumbersome and lengthy, multi-stage post allocation regulatory clearance process.

As per current guidelines, the following process needs to be followed sequencially.

1. DTH Operator has to get NOC from MIB as soon as transponder capacity allocation.

2. SACFA(WPC) clearance(in case of new frequencies),

3. Carrier Plan approval from NOCC

4. Frequency Assignment from WPC

5. Equipment import license from WPC

6. MPVT clearance from NOCC (applicable for new installation as well as additional antenna)

7. WPC operating license with spectrum royalty payment and

8. Uplinking Permission from NOCC.

As it can be seen from the above, multiple stages of approvals required from various Ministries/Departments/Agencies of Govt, sometimes from the same department. This entire process takes at least 6 months. Actual use of allocated transponder capacity can start only after this.

Further, currently ad hoc mechanism is followed by WPC for grant of spectrum usage rights. WPC opens spectrum allocation window only for six months. DTH operators have to apply for satellite spectrum allocations during this six-month window period. Once this six month window period closes, not sure when the next six month window period would get opened. The whole process is being run in an ad hoc manner and operators have no visibility of when the next spectrum allocation applications will be entertained by the WPC (once a particular six-month window is closed). Also, spectrum allocations are being done only on a provisional basis, resulting in continued anxiety among the DTH operators.

We request authority to issue suitable amendments in the current licensing norms so that there is a Single Window mechanism to obtain all necessary licenses.

Further in case of sharing of infra among DTH operators, the Host DTH Operator obtains NOCC/WPC license and shall be liable to pay NOCC monitoring charges and WPC spectrum charges.

(9) Do you envisage any requirement for amendments in any other policy guidelines to enable sharing of infrastructure among MSOs and HITS operators, among MSOs, and among DTH operators? Kindly elucidate with justification.

No.

(10) What mechanisms could be put in place for disconnection of signals of TV channels of defaulting operator without affecting the operations of the other associated operators with that network after implementation of sharing of infrastructure among MSOs and HITS operators, among MSOs, and among DTH operators? Kindly elucidate.

It must be made mandatory for broadcasters to provide their pay channels to host DTH operator as well as the DTH operator desirous of entering into infrastructure sharing (Associated Operator).

Broadcaster, Host DTH operator and Associated Operator/s enter in to a tripartite agreement for disconnection of services wherever there is default on payment by either operator.

Scenario1: Associated Operator defaults on payment.

Scenario2: Host Operator/s defaults on payment

Scenario3: Both Host DTH Operator as well as Associated Operator/s default on payment

Host operator has to be entrusted with the job of disconnecting signals in all the above scenarios. Hence, for this purpose tripartite agreement has to be in place wherever infra sharing is envisaged.

The above can work either with independent CAS, MW and SMS or common CAS, MW and SMS

(11) Is there any requirement for tripartite agreement to enable sharing of infrastructure among MSOs and HITS operators, among MSOs, and among DTH operators? Kindly elucidate with justification.

Tripartite agreement is needed to enforce disconnection of signals in case of defaults and Host operator is given the responsibility of disconnection of signals, which is legally binding on him through this agreement.

(12) What techniques could be put in place for identification of pirates after implementation of sharing of infrastructure among MSOs and HITS operators, among MSOs, and among DTH operators? Kindly elucidate.

Each individual operator has their own anti piracy mechanism which remains unchanged. The only change is the broadcaster IRD's finger printing would be seen by all sharing operators STBs. To further narrow down the pirated signal, individual operator also need to send finger printing commands.

For example, Broadcaster uses CAS-A, Host Operator CAS-B and Associated Operator CAS-C

i) Finger printing triggered from the Broadcaster CAS-A identifies the IRD
ii) Finger printing triggered from Host operator CAS-B or Associated operator CAS-C indentifies their respective subscriber/STB

This can be covered in the tripartite agreement

(13) Is there any need for further strengthening of anti-piracy measures already in place to enable sharing of infrastructure among MSOs and HITS operators, among MSOs, and among DTH operators? Kindly elucidate with justification.

As can be seen from the response given in point 12, existing anti piracy mechanism deployed by each operator can address this issue. However, through advanced anti piracy mechanisms, like binary search of STBs, the hacked STB can be zeroed down.

(14) Is there a requirement to ensure geographically targeted advertisements in the distribution networks? If yes, then what could be the possible methods for enabling geographically targeted advertisements in shared infrastructure set up?

Targeted Ads is catching up in India and this can be done through Middleware and CAS in sharing or non-sharing mode. Though this application is in nascent stage, this is going to be a big differentiator sooner or later. However, sharing of infra does not affect this capability.

(15) Whether it is possible for the network operator to run the scrolls and logo on the specific STBs population on request of either the broadcaster or the service delivery operator after implementation of sharing of infrastructure among MSOs

and HITS operators, among MSOs, and among DTH operators? If yes, kindly elucidate the techniques.

Yes it is possible and the infra sharing does not affect this capability.

(16) Whether implementation of infrastructure sharing affects the differentiation and personalization of the TV broadcasting services and EPG? If yes, then how those constraints can be addressed? Kindly elucidate with justification.

Differentiation and personalization still be maintained through EPG and UI even in the case of Infra sharing.

(17) Whether, in your opinion, satellite capacity is a limiting factor for sharing of infrastructure? If yes, then what could be the solutions to address the issue?

DTH sector is one of the largest users of satellite transponders. With increase in demand for HD channels, the requirement for satellite transponders is also increasing day by day. Availability of adequate satellite transponders for growth is always a concern of DTH operators. Currently each DTH operator uplinks the signals of TV channels to different satellites located at different orbital slots. More than 100 transponders of 36 MHz equivalent are in operation by existing 6 DTH operators. Each DTH operator transmits approximately 350 to 450 SD TV channels and around 50 HD channels on its platforms. It may be noted that, more than 80% channels are common across the DTH operators. In this scenario, enabling sharing of satellite transponders and Earth station facilities, which may include the Head-end, CAS and SMS, also, by two or more DTH platform operators, may reduce CAPEX and OPEX of operators.

Further, Antrix has limited Transponder capacity on Indian Satellite Systems, and most of the operators are using Foreign Satellite Systems, resulting in huge outflow of Foreign Exchange. By sharing Transponder capacity, this foreign exchange outflow can be minimized.

By sharing of infrastructure among multiple DTH operators, the multiplexed streams of common channels aggregated by a DTH operator are shared by multiple DTH operators. Platform specific channels/ services unique for each DTH operator can be multiplexed into separate streams and transmitted using additional transponder space on the same or adjoining satellite. The multiplexed streams can be uplinked after carrying out encryption by same or different CASs as per agreement between them. Sharing of satellite transponders among multiple DTH operators may address the issues relating to shortage of transponder space which some time necessitate the disproportionate compression of the signals of TV channels resulting into degradation in quality of viewing experience of consumers. The sharing of infrastructure among multiple DTH operators may ultimately result in better quality of viewing experience at an affordable price to the subscribers.

Sharing of CAS and SMS
(18) Is there a need to permit sharing of SMS and CAS?

Sharing among DTH operators can be envisaged on the following

i) Transponders(Txs) and Digital Headend(DHE)
ii) Txs and DHE and SMS/Billing
iii) Txs, DHE, SMS and Middleware(MW)
iv) Txs, DHE, SMS, MW and CAS
This will help in huge savings in CAPEX and OPEX

(19) If yes, then what additional measures need to taken to ensure that SMS data remain accessible to the tax assessment authorities and Authorized officers as defined in the Cable TV Act for the purpose of monitoring the compliance with relevant the Rules and the Regulations?

None in particular

(20) Whether sharing of CAS can in any way compromise the requirement of encryption as envisaged in the Cable TV Act and The rules and the regulations.

No

(21) *In addition to the issues mentioned above, comments of stakeholders is also invited on any other issue relevant to the present consultation paper.*

i) Infra Sharing with DD Freedish:

Doordarshan Freedish, the state broadcaster run DTH service is being beamed using GSAT-15, located at 93.5°E, providing FTA as well as encrypted(very soon) services.

There are many private DTH operators who are beaming their services using satellites in the close vicinity of 93.5°E orbital slot. These operators can pick signals from GSAT-15 and provide DDFD services to their customers in addition to their own services facilitating DDFD services reach to wider audience.

This will not only help pubcaster to generate more revenue, through auction of slots, based on combined subscriber base of DDFD and all such interested operators and also help Govt of India achieve its Digital Drive by way of vast reach these operators can facilitate.

We urge the authorityto include or bring the national broadcaster also in the Infra sharing ambit, so that Doordarshan Freedish shares infra/services with interested DTH service providers who are in the vicinity of 93.5°E orbital slot, allowing private DTH operators to carry FTA as well as encrypted channels from DDFD platform.

Private DTH operators desirous of carrying DDFD services can have two CAS clients, one for their own CAS and other for decrypting DDFD CAS, in their STB

This will help private DTH operators to free up some transponder capacity which can be used for providing additional services.

ii) Infra Sharing with Operators in neighboring countries:

Authority should also look in to allowing sharing of infra with operators based in SAARC countries

iii) Interactivity using Satellite Return Path:

DTH broadcast is one way communication. The explosion of OTT technology has increased competition in the field of interactive TV.

Interactivity and convergent applications are the main differentiators that can easily be added in OTT and IPTV environment.

To be relevant and in order not to fall behind in terms of market demand for convergent television services, DTH operators need to add interactivity alongside digital video signal to the customers.

DTH operators are facing the problem of upgrading their networks with Interactive TV which includes recordings, time-shift TV, VOD content, enhanced EPG, second-screen features as well as internet and social TV features.

Authority should look in to allowing interactivity using satellite return path for DTH operators. This will not only help DTH services to have interactivity and also facilitate reach of e-governance, e-education, e-banking to wider population and even most remote locations where there is no terrestrial communication infrastructure. Such solution has been adopted in Europe and other parts of the world. This solution called Smart LNB should be allowed under DTH license, which reuses existing infrastructure, like Antenna, Coaxial cable and STB, at customer premises.