

Introduction:

At the Outset we would like to thank the authority for bringing out a pre-consultation paper on Infrastructure sharing and giving us an opportunity to give our comments. We are of the opinion that infrastructure sharing would go a long way in bringing down the CAPEX and OPEX of the DPOs which in turn would allow the DPOs to pass on the benefits to the end subscribers as envisaged by the authority.

The DoT (Department of Telecommunications) has made recent amendments to the Unified License, allowing the telecom service providers to share active infrastructure based on the mutual agreements entered amongst them, this is a game changer in terms of carrier-to-carrier relationships and could greatly improve the service provided by the networks, thus directly impacting the end user.

We feel that infrastructure sharing is a positive progressive step by the authority in easing the CAPEX and OPEX of the DPOS in line with the recent amendments made by The DoT (Department of Telecommunications) to the Unified License "Allowing the telecom service providers to share active infrastructure based on the mutual agreements entered amongst them, this is a game changer in terms of carrier-to-carrier relationships and could greatly improve the service provided by the networks, thus directly impacting the end user."

On similar lines we feel that the MSO registration guidelines can be relaxed and equipment/Infrastructure used by the MSOs like the Headend, CAS & SMS of a MSO can be shared between two MSOs based on mutual agreements. The MSO availing the signal from another MSO (sharing Digital Headend, CAS & SMS) should be allowed to continue & maintain its MSO registration as the Broadcaster agreements would continue to be in the Individual MSOs name. This would greatly help in bringing down the operating costs of individual/independent MSOs and would directly impact the end users.

We submit that the MSO registration guidelines can be modified and equipment/Infrastructure used by the MSOs like the Headend, CAS & SMS of a MSO can be shared between two MSOs based on mutual agreements. The MSO availing the signal from another MSO (sharing Digital Headend, CAS & SMS) should be allowed to continue & maintain its MSO registration as the Broadcaster agreements would continue to be in the Individual MSOs name. This would greatly help in bringing down the operating costs of individual/independent MSOs and would directly impact the end users.

Infrastructure sharing should be allowed between various service providers in Broadcaster TV services, this would go a long way in bringing the operating cost down and the service providers can pass on the benefit to the consumers.

The issues for consultation are:

(a) 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?

<u>Ans:</u> We are of the opinion that the Authority aside from the items discussed in the pre consultation paper should also look for a unified (common conditional access) which can be shared across <u>the state or country whereby interoperability across country can be made a reality.</u>

(b) 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?

<u>Ans:</u> The issues mentioned below must be addressed from an operational, commercial, technical and regulatory issues perspective at the time of developing policy and regulatory framework for enabling infrastructure sharing.

Commercial Issues to be addressed

- 1. The Authority should ensure that broadcaster agreements facilitation for taking signal from another MSO.
- The Authority should make changes in the standard formats of the interconnection agreements between an MSO and LCO in "THE TELECOMMUNICATION (BROADCASTING AND CABLE SERVICES)INTERCONNECTION (DIGITAL ADDRESSABLE CABLE TELEVISION SYSTEMS) (SEVENTH AMENDMENT) REGULATIONS, 2016 (No. 3 of 2016)
- 3. The Authority should give a provision to generate Subscriber level reports (SLRs) in the name of signal giving MSO. Broadcaster to accept the same. It should also look into who is to raise invoices.

Technical Issues to be addressed

The Authority can look into the feasibility of allowing FTA channels directly to the local MSO and Pay channels can be taken from the infrastructure sharing MSO.

(c) 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?

<u>Ans</u>: The Authority may look into the following changes in the existing licensing /registration framework of MSO.

 The Authority would have to change the condition imposed on the MSO at the time of Grant of registration to maintain an independent digital headend and give its services through this headend. THE MSO may be allowed to retransmit the signals through such shared infrastructure/digital head end taken from another MSO.

- 2. The MSO who takes feed from infrastructure sharing MSO should be allowed to have broadcaster agreements in its own name, adequate changes in THE TELECOMMUNICATION (BROADCASTING AND CABLE SERVICES) INTERCONNECTION (DIGITAL ADDRESSABLE CABLE TELEVISION SYSTEMS) REGULATIONS, 2012 should be made to give effect to the same.
- The Authority may make changes in the standard formats of the interconnection agreements between an MSO and LCO in "THE TELECOMMUNICATION (BROADCASTING AND CABLE SERVICES)INTERCONNECTION (DIGITAL ADDRESSABLE CABLE TELEVISION SYSTEMS) (SEVENTH AMENDMENT) REGULATIONS, 2016 (No. 3 of 2016)
- 4. The Authority should also make relevant changes in the regulations that would allow the MSO who takes the feed from infrastructure sharing MSO to bill the customers.

(d) 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?

Ans: We feel the responsibilities can be divided in the lines given below

Network provider to be responsible for

- 1. Quality of channels
- 2. Content aggregation
- 3. CAS and SMS maintenance
- 4. Wholesale billing

<u>Service Provider</u> to be responsible for

- 1. Billing to customer
- 2. Retail service delivery to LCO and direct-customers
- 3. QOS at customer level
- 4. Revenue collection and sharing
- 5. Maintenance of SLA upto LCO level
- 6. Local channels if any (piracy issues)

(e) 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?

Ans: The Authority in terms of right of way (ROW) by OFC network should actively help by

- 1. Publishing the available ROWs including the duplicities in a common portal. Infrastructure like band with.
- 2. Fibre availability should be published.
- Separate Common minimum rates to be announced to each service provider for cable TV services for usage of shared OFC cable network
