RESPONSE BY SITI NETWORKS LIMITED

WITH REFERENCE TO

Consultation Paper On Infrastructure sharing in Broadcasting and TV distribution sector

At the outset, we would like to congratulate the Authority for coming up with consultation paper on infrastructure sharing in Broadcasting TV distribution sector. The Authority has put in sincere efforts in coming up with the consultation paper on much awaited subject of infrastructure sharing among the service providers across platforms. In absence of clarity of infrastructure sharing between DPOs, most of the MSOs have taken bandwidth from telecom service providers, however, if the log sheet of downtime for such P2P links is taken from all MSOs, it will show huge quality of service and downtime issues since such links are not stable and there are frequent breaks in service.

If DPOs are allowed to share infrastructure and license and infrastructure treated separately then infrastructure sharing will not only improve quality of service and consumer experience but will also allow other newer technologies space like Satellite based broadband and VAS which is presently chocked with linear broadcast services. If technology permits any sharing of infrastructure, then the same should not be barred by any license conditions. Such sharing of infrastructure will not only be futuristic but will also allow competition to offer competitive services instead of wasting precious resources on creating parallel infrastructure for similar or same services. The spared capacity can be utilized for additional or newer services for better consumer experience.

Cloud based services are perfect example where not only content but data is stored and shared at the same platform and is secure which proves that there is no risk in sharing infrastructure in digital domain while still continue to follow the license conditions imposed by the licensor. Keeping separate infrastructure for similar services due to license conditions is a retrograde step which should be done away with.

MIB has already permitted channels for uplinkeding their signals through shared or unique infrastructure.

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.

Re: Yes. In digital domain, DPOs operate with secure encryption system and if the technology permits, then, sharing infrastructure will reduce requirement of additional infrastructure to be laid for existing and new players entering in this domain. The same would help reduce cost of distribution services and enhance competition which will ultimately benefit the consumers.

In Telecom, infrastructure sharing has already been permitted and same has resulted in robust growth of this sector with players sharing tower infrastructure, fiber etc. Similar initiative in Broadcasting and TV Sector is likely to help stakeholders invest money on development of services, VAS, and broadband instead of investing again and again in creating parallel networks which not only adds to the cost but require regular maintenance too. Eventually cost of all investment required for creating and maintaining infrastructure ends up in increased consumer prices for the services.

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

Re.: Model No-1 is the preferred model for sharing the infrastructure among MSOs and HITS operators as it would give the liberty to the MSOs to have their own arrangement with the broadcasters for content and at the same time it will give optimal utilization of the satellite transponders as large number of satellite channels retransmitted by each operator are common across the MSOs. The same will also reduce the cost of operations for the service providers.

Infrastructure sharing among DTH operators.

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

Re.: Yes, the same should be allowed for optimal utilization of available transponder space and will reduce the cost of operations for DTH players. MSO

and HITS are similar to the extent that last mile is on HFC and signal is delivered over RF (QAM). However, MSO and HITS can share infrastructure in the existing policy of HITS. DTH also has the similar infrastructure and can share the same with MSOs for delivery of their signals in encrypted mode. In fact, DTH and HITS are similar platforms who both can share infrastructure with MSOs.

It is pertinent to mention that if only passive infrastructure is shared, then transponder space is not saved as additional transponders are used for each HITS / DTH feed which are not available freely. In fact, the correct alternative mechanism in this case would be to permit DPOs to simulcrypt their feeds and MSOs can take service from either DTH or HITS. As far as infrastructure is concerned, it is possible that both HITS / DTH can act as infrastructure providers to MSOs. It is also possible that there could be a neutral platform in future who can provide infrastructure services to all DPOs including MSO, DTH or HITS. In any case the internet world is moving towards converged cloud based platforms where all digital service providers share the same space in secured environment.

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.

(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.

Reply to 4 & 5:   The license condition of the service providers i.e. MSOs and HITS operators should be amended with specific amendments in the Cable TV Act & rules to facilitate infrastructure sharing among all the service providers.

The Condition No. 7th, 8th & 9th of MSO registration as appended below are required to be amended:

7. The MSO shall have an independent digital head-end of his own and provide digital addressable cable services from his head-end.

8. In Phase I & II areas where DAS has been implemented, the MSO shall operationalize their services with necessary conditional access system (CAS) and digital addressable system (DAS) within six months from the date of issuance of MSO registration, failing which the registration shall be liable to be revoked / suspended for those cities where it is not implemented.

9. In Phase III & IV areas, the MSO shall set up digital head-end with necessary conditional access system (CAS) and digital addressable system(DAS) in the Cable TV Network in any or all the districts of area(s) for which this registration is granted within 6 months from the date of issuing of registration, failing which the registration so granted shall be liable to be revoked / suspended for those areas/districts where it is not implemented.

The condition of setting up the digital head-end with CAS should be amended with ***"MSO shall have arrangement to provide digital signal with suitable CAS and SMS as per DAS regulations".***

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

Guidelines should include sharing of infrastructure and infrastructure provider should be a separate category of service provider who can provide service to any DPO who has license in any category of Cable and DTH service.

(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.

Policy framework should include rather than excluding any passive or active infrastructure sharing.

(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.

N.A.

(**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.**

N.A.

(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 on infrastructure among MSOs and HITS operators, among MSOs, and among DTH operators? Kindly elucidate.

In an addressable platform signals are encrypted and controlled by SMS. There would be a need to enter into tripartite arrangement between the MSO / Broadcasters/ HITS defining who will act in case of dispute for disconnections. Needless to mention here that such disconnections would require notice as per the regulations**.**

(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.

Yes. There is a need for tripartite agreement as explained above to ensure action as per regulations in case of any dispute.

(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.

Covet and overt finger printing is one mechanism which is already in place to identify the source of piracy and the same would be used to identify and take action wherever piracy is reported. It should be mandatory on the platforms to take action against any reported case of piracy by blocking such device which is used for piracy.

(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.

There is enough mechanism in place for anti- piracy measures and the same should continue.

(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?

Yes. At present there is such requirement and there could be ways to achieve the same via different streams of signals by the DPO.

(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.

Finger printing and SMS messaging on the Set Top Boxes of service providers is possible and broadcaster and DPO can enter in suitable arrangements to ensure the same, however, this will require access of SMS by the service provider to the DPO. Such individual messages can be sent to every Set Top Box using SMS.

(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.

There is not much difference in the personalization of TV broadcasting services and EPG is unique to the service. In any case, infrastructure sharing will happen by consent of all the stakeholders and they would have to agree to such constraints while sharing such infrastructure by agreeing to such constraints willingly.

(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 of Sharing of CAS and SMS.

Satellite capacity could be a limiting factor, however, as we have already shared earlier that the service providers will have to agree to the capacity which is being shared and any such constraint would be by mutual agreement. Anyone desiring additional capacity can do so by opting for it e.g. DTH uses multiple satellites while delivering their services and it is possible that the service provider use one satellite for infrastructure sharing and other for additional capacity.

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

Yes. SMS and CAS can also be shared provided it is agreed by the stakeholders by mutual consent.

(19) If yes, then what additional measures need to take 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?

In any case, both SMS and CAS data are in digital domain which can be defined, partitioned and accessed as defined in the regulations and the same can be part of license conditions also which will allow authorities to access and audit the same.

(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. There is simulcrypt happening in the platforms when they use two different CAS and sharing of CAS and simulcrypt will no way impact encryption. In case an encryption or CAS is compromised that will happen for the entire fraternity who is using that CAS.

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

The complete separation of functions of a network service provider and a distribution provider is equivalent to a policy change which is similar to licensing or Virtual DTH or Virtual HITS operators.

With mandatory digitization, analogue era has ended which effectively means that every content whether linear or otherwise is encrypted and digital, only delivery platforms / technologies are different like HITS, DTH, OTT, Cable or

Internet, but at the end of the day signal is digital and secure which is nothing but data transmission. If delivery of data transmission can be done through infrastructure sharing, then regulations / licenses should not bar infrastructure sharing in any which way for delivery of services. Such progressive changes would save thousands of crores of rupees spent by different service providers in creating parallel infrastructure and are hindrance in growth of business where such infrastructure is in scarcity.   MSO have a problem of available ground infrastructure for their delivery on IP platforms particularly in DAS Phase IV areas whereas HITS and DTH service providers have scarcity of satellite bandwidth impacting their services. Passive and active infrastructure sharing will resolve all such issues.