

## Digicable Network (India) Ltd

Oct 18, 2016

Dear Sir,

Please find attached the comments from Digicable Network (India) Ltd on “Consultation Paper on Infrastructure sharing in Broadcasting TV distribution sector” which was published on 21st September 2016.

Regards,

Manjari Sheela  
Digicable Network (India) Ltd

### 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.**

Yes, Infrastructure sharing among MSOs and HITS must certainly be enabled.

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

Without any doubt, model no. 1 is the preferred method of infrastructure sharing, especially for HITS operators since transponder capacity is scarce and expensive. Among MSOs however, since about 100 frequency bands (of 7/8 MHz each) are available, and each of these frequency bands can accommodate about 25 to 30 channels using H.264 compression and almost double that with H.265 compression, the model no 2 method of infrastructure sharing can be used for about 5 different MSOs. But if one combines both model no 1 & 2, a very large number of service providers can share this MSO infrastructure.

*Infrastructure sharing among DTH operators*

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

Most definitely, Yes. In fact we believe that the maximum benefit of infrastructure sharing can accrue in DTH, since all DTH players have been experiencing huge bandwidth constraints due to limited and expensive transponder capacity. All DTH players, under pressure to accommodate more number of channels, are forced to compromise on bandwidth allocation per channel resulting in sub-standard

reception quality for the subscribers. The use of model 1 for infrastructure sharing among DTH operators can free up large amounts of capacity thereby saving valuable foreign exchange as well, while at the same time reducing the cost of service providers and improving the quality for subscribers dramatically.

*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.**

No major changes are required in the Cable TV Act for this purpose. The only issue is with respect to MSO License condition VII which stipulates that every MSO shall have an independent headend of its own. This can easily be amended to accommodate infrastructure sharing.

**(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.**

As mentioned in answer (4), license condition VII will need to be amended for MSOs. The HITS guidelines already provide for infrastructure sharing in different models. It may be necessary just to re-iterate them with additional clarifications for model 1 as per this consultation paper.

**(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.**

DTH guidelines should be amended to clearly allow both transponder capacity sharing as well as teleport infrastructure sharing. Thus a new DTH license applicant should be allowed to apply without signing an individual satellite capacity agreement or any teleport arrangement. In fact, we believe that till the stage of getting an LOI from the government, the applicant shall be free from all such tie ups. After the LOI is granted, the applicant can choose any of the existing DTH service providers for satellite capacity, teleport and other infrastructure sharing. Post tying up with existing service provider, the applicant could be granted the license. Further the applicant should have the option of shifting from one service provider to another just like the change of teleport is allowed today for broadcasting channels.

**(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.**

Yes we believe ISRO can play a big constructive role in facilitating infrastructure sharing in both HITS and DTH. Besides providing the satellite capacity which ISRO does today, they could also set uplink infrastructure with Encoding, RF, CAS, EPG etc which can then be shared by private individual service providers for both DTH and HITS. In fact most of the infrastructure including satellite capacity can also be shared between HITS and DTH. An independent provider like ISRO can go a long way in building the confidence and facilitating 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.**

No major changes envisaged.

**(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 major changes envisaged.

**(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.**

This issue can easily be addressed by using the conditional access and SMS of the HITS infrastructure platform provider. One can easily create different subsets of STBs/subscribers as per the number of service provider on that platform and it is easily possible to shut down the entire subscriber base of one particular operator who is a defaulter without deactivation of the IRD by the broadcaster. In fact SMS control can be remotely provided to the broadcasters through suitable handle to enable them to implement this action. This solution is possible even when different service providers are using conditional access systems from separate vendors by using a process known as simulcrypt.

In fact exactly the same process can be implemented for a DTH player as well as, as an MSO to achieve infrastructure sharing thereby saving huge amount of capital. If implemented correctly, this policy can free up a lot of transponder space especially in DTH which will result in higher capacity of channels being delivered

to the subscribers. It can go up from the current 350 odd to more than 1,000 thereby benefitting the broadcasters who are forced to pay huge amount of carriage fees (when more than 800 channels are vying for space when only 350 can be accommodated, carriage fees will remain high) as well as subscribers who will get to watch a larger variety.

**(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.**

No, we do not think tripartite agreements are required, although broadcasters will keep shouting about protection against possible piracy etc. In reality, this obsession with security of the content and therefore forcing the service providers to comply with hundreds of absolutely unnecessary and irrelevant conditions is just an excuse to harass and deny content to some service providers. The broadcasters have always used this tool for their commercial advantage. To elucidate this point let us give the example of an MSO (or HITS for that matter) providing content to hundreds of LCOs. In the several years of industry experience with CAS and DAS, there has never been a case or even an allegation of piracy due to weak security in any conditional access used by any MSO in the country. Most of the complaints are of cases where a particular broadcaster has disabled or de-authorized its particular set of channels. In such cases, piracy is usually indulged in by LCOs who insert unauthorized content using DTH set top boxes of almost all DTH service providers which are modified to hide their fingerprint and watermark thereby making it impossible to identify the source of piracy. Such boxes are freely available across the country but despite this fact, the instances of piracy by MSOs using this method are negligible.

Thus the point is that as long as such modified IRDs are available, it is futile and pointless to over emphasize the security aspects at the service provider level. This would have been relevant if there were no DTH service available whereas now anybody can get digital quality content without any identification mark by spending just a few thousand.

**(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.**

The existing method of unique finger printing for every IRD and water marking for STB is sufficient.

**(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.**

No further strengthening of anti-piracy measures is required and as explained in Answer 12, some broadcasters tend to over emphasize the security requirements.

**(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?**

Geographically targeted advertisements would be an additional welcome feature and it can easily be enabled in cable TV MSOs/HITS, while it will require some effort for enabling the same for DTH.

**(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, this is possible. The techniques differ depending upon the vendor for CAS/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.**

No it does not affect personalization.

**(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?**

*Sharing of CAS and SMS*

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

We believe infrastructure sharing can still happen without sharing of SMS and CAS. However, different service providers can opt for the common SMS and CAS vendors who could give them independent servers and/or licenses/keys. Different CAS can co-exist by way of simulcrypt.

**(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?**

The existing regulation is sufficient for the purpose of monitoring the compliance.

**(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, it does not compromise the requirement of encryption in any manner.

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

None