Response of Dish TV India Limited
to the
Pre-consultation Paper
on
Infrastructure Sharing
in
Broadcasting TV distribution sector
dated
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Submitted by:

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Response of Dish TV India Limited to the Pre-consultation Paper on Infrastructure Sharing in Broadcasting TV distribution Sector:

1. Introductory Comments

We welcome the Pre-consultation Paper on Infrastructure sharing in Broadcasting TV distribution sector. There is no doubt that with multiple operators in the areas such as DTH which need to uplink a largely common set of channels, there is a possibility for voluntary sharing of passive infrastructure.

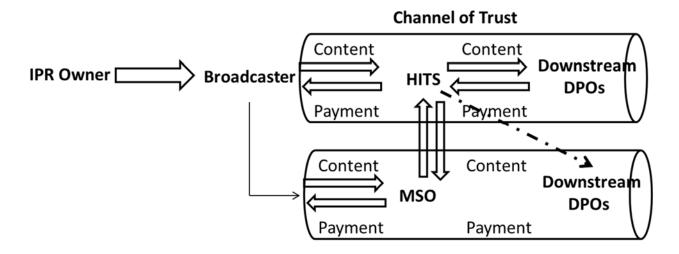
The Authority is also aware that DTH operators have also suggested that voluntary sharing of passive satellite capacity should be permitted.

In fact such sharing of passive infrastructure is already permitted in case of HITS where the policy and the license agreements expressly permit passive sharing. The policymakers have been very careful in explicitly stating that such sharing of infrastructure should only be of passive satellite capacity and have refrained from giving a Carte-Blanche for any authorized operator to start sharing channels given to it under trust of a broadcaster for delivery to customers.

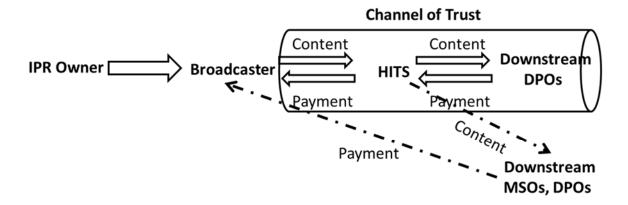
Channel of Trust between Broadcaster and Distributor

The reasons for such policy provisions are not hard to comprehend. The basic premise is that a broadcaster gives content to a distributor under a "Channel of Trust". This implies obligations on the distributor to carry the content in a secure manner, deliver to end customers against considerations as per the interconnect Agreement, and in return for the Channels provided, make payments to the broadcaster as per the Agreement.

The channel of trust is maintained by the DPO in having a secure encryption system, and the ownership of the channel remains that of the broadcaster. This channel of trust is maintained when a DPO uses a passive infrastructure provided by an operator such as HITS as it is only a carriage pipe. A HITS operator is also another operator which operates under the same channel of trust from broadcaster to a number of MSOs or DPOs as it remains solely responsible for meeting obligations to broadcaster whosoever be its customer.



But the channel of trust is broken once the HITS operator gives the signal to a DPO but reneges on its trust obligations to a broadcaster to remit payments, and instead asks the broadcaster to deal directly with a DPO with which broadcaster may never have had any contractual relation.



HITS operator giving Content to Third Party MSOs Without itself taking payment obligation breaks Channel of Trust.

Making Infrastructure Sharing Policy workable

An infrastructure sharing policy can be workable if the channel of trust is not broken between the broadcaster and a DPO in whichever mode (HITS, DTH or MSO). It cannot be workable, if by virtue of a misconstrued policy, a downstream party (DPO) which would normally have been obligated with making payments to the broadcaster is set free of such obligations, or a convoluted channel of payments is implied, for which synchronicity of data and is not maintained while receiving content by a DPO from HITS.

Our comments to this consultation paper are therefore based on constructive mechanisms whereby the channel of trust can be maintained.

We note that the consultation paper is oriented towards **SEPARATION OF NETWORK AND SERVICE PROVIDER FUNCTIONS AT DISTRIBUTION LEVEL.** However we are constrained to comment that all discussions amongst industry players so far have been on the voluntary sharing of Infrastructure, and not by means of any policy directives or amendments to the effect in existing licenses.

If Network Providers and Service providers are separated by policy rather than on a voluntary basis, then all service providers (such as DTH operators) in effect become "Virtual Service Providers" which is the nomenclature used in the industry for non-infrastructure based players. This leaves no distinction between two different DTH operators except marketing plans and branding, as filed services can also be entrusted to one or more common agencies, and all content is common under the must provide RIO mechanism.

2. Comments on Issues Raised for Consultation

Chapter 3 of the consultation paper is dedicated to the sharing of Infrastructure under different segments of broadcasting.

DTH Operators

As per Article 3.3 of the consultation paper:

3.3 It may be noted that most of the satellite TV channels re-transmitted by DTH / HITS operators are replicated which results inefficient use of satellite transponders. Therefore, there exists a possibility of sharing of transponder space by different DTH and HITS operators, who are using co-located satellites and using KU band for retransmission. The basic premise of transponder space sharing is that popular satellite TV channels could be retransmitted using common transponder space on a satellite by multiple operators voluntarily. Since different DTH/ HITS operators may use different CAS systems, simulcrypt technology may be used for encryption of these common channels. In addition, each DTH/ HITS operator may also have a number of channels which are not common.

We would like to point out that Bundling of DTH and HITS in the same bucket is not correct. It is true, and as we have elaborately commented earlier, it is possible for DTH operator to share on a voluntary basis earth station and satellite infrastructure.

However the case of HITS is different because by its very design HITS is designed to serve thousands of MSOs and LCOs. Therefore a single HITS operator can serve any MSO in the country provided the MSO is willing to take the services of the HITS operator. This becomes clear in the context of the next Article (3.5) in the consultation paper viz. Sharing of HITS/ MSO infrastructure.

Article 3.5 reads as follows:

3.5 Based on these guidelines, some of the stakeholders are of the view that HITS operator can share the same feed which has been aggregated by him for its active operations with desirous MSOs as passive infrastructure provider. As per them, it will ensure the optimum utilization of

the available Erath Station and satellite infrastructure. Some other stakeholders are of the view that HITS operator can't share its own feed with MSOs. As a passive infrastructure service provider, HITS operator can uplink the feed aggregated by an MSO independently on its satellite. For this purpose separate transponder space would be required for each MSO feed. If this view is taken then, the infrastructure may not be used efficiently. The efficient utilization of HITS Infrastructure may be ensured when the common feed aggregated by HITS operator is shared with multiple MSOs. As a passive infrastructure service provider, HITS operator can uplink the feed aggregated by an MSO independently on its satellite. It may save the transponder space and avoid establishment of multiple head-ends. This may result in saving of CAPEX and OPEX for operators.

We cannot agree with this contention as the HITS operator is by very definition designed to serve MSOs and that is by sharing its active feed, for which it receives payments and is solely responsible to the Broadcaster for all MSOs in its fold. There cannot be another method of sharing the feed as if it is not the HITS feed but a feed from the broadcaster to the MSO. This breaks the Channel of Trust which we have referred to elaborately in our introductory comments.

In view of this fact, our comments on the issue for consultation are as follows:

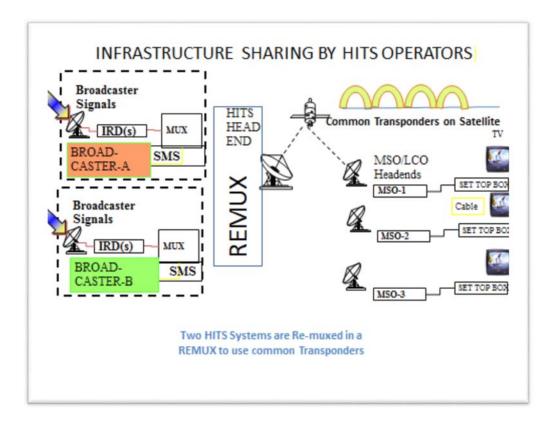
(a) In addition to infrastructure sharing possibilities discussed in pre-consultation paper what more can be shared by the DPOs (MSOs, HITS, DTH) for better utilization of infrastructure?

As pointed out above, the contention apparently made by some stakeholders, that HITS operators could have two ways to share the channels given by broadcasters- one by the HITS active feed, and second by offering the same feed to MSOs as if coming from broadcasters, with no obligation on MSOs to pay to Broadcaster via HITS operator is not correct.

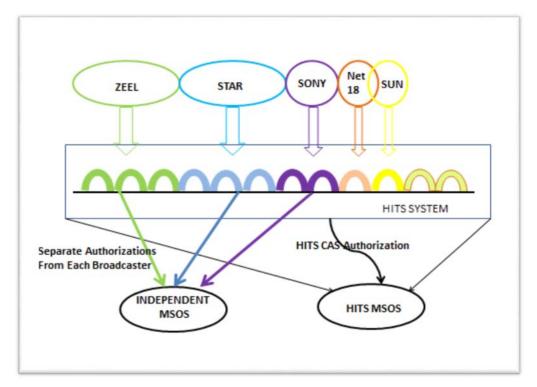
HITS operator by its very nature is designed to serve thousands of MSOs. Moreover two or more HITS operators can share infrastructure identically on the lines of two DTH operators. In this case each one of them must only provide their active feed to MSOs for which they (HITS operator) are solely responsible.

It is not correct to mention that if only passive infrastructure is shared, then transponder space is not saved as additional transponders are used for each MSO or HITS aggregated feed. In fact the correct alternative mechanism in this case would be to permit broadcasters to also simulcrypt their feeds and provide service to MSOs using HITS.

Major broadcasters in India such as Zee, Star, Sony, Eeanadu, SUN account for more than 200 Channels, which is the bulk of pay channels carried by the HITS system. On a voluntary basis HITS operators should allow broadcasters to also simulcrypt their channels on the HITS system. By this mechanism they will be able to enable/ disable MSOs based on their own SMS and payment obligations.



In this architecture, all elements of the Channel of trust are maintained. For example, in case of default by an MSO, the broadcaster can issue suitable warnings via its CAS and SMS, and can switch off channels as per requirements or subscription. At the same time the HITS system uses the same number of transponders. The HITS operator controls its own set of MSOs and can issue forced message via its own CAS and SMS.



The advantage of the HITS system in this case is retained as the MSOs still require only a small antenna and Trans-Mux units as is the case for the normal HITS. Only they will have five-six decoders which will get authorized by either HITS operator (if they are parented to HITS) or by each broadcaster, if they are "independent MSOs".

Broadcasters will retain control and the channel of trust with each MSO or the HITS operator, which is the basic requirement for a distribution system to operate.

4.2 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?

The issues to be addressed are summarized as below:

(a) Commercial Issues

Infrastructure sharing in all cases should be voluntary. It should be realized that if there an advantage in saving costs, it would be but natural for MSOs or DTH operators to take advantage of such policy. However if it is made mandatory, the arrangement will not work.

The other issues to be addressed are:

- (i) It should be possible for all players to maintain the Channel of trust. In effect, broadcasters should be able to ensure that only those DPOs (including HITS) get their signals which commit to minimum standards of security, and payments can be realized from them.
- (ii) The databases/ SMS maintained by each operator should be verifyable by an external auditing agency. All such information should be maintained at the headend as per policy guidelines.

(iii) In shared arrangements, where an operator (say DTH) shares its capacity with another DTH operator, payments for shared satellite capacity would be an essential component for arrangements to continue and should be secured by Bank Guarantees without recourse.

(b) Technical Issues

All DPOs should provide approved CAS and STBs. In case of any piracy detected, they should have a mechanism to upgrade their CAS/ Security algorithm or face disconnection.

All DPOs should deploy devices in the network, which will not mask the fingerprints generated by broadcaster feeds.

DPOs, if they use their own CAS should in addition have their own fingerprinting mechanisms.

(c) Operational Issues

- (i) It should be possible for broadcasters to message, warn and isolate each MSO if in default on any count, as per guidelines, and ultimately if situation demand, disconnect it.
- (ii) The databases should be auditable, verifiable and there should be a common website where all subscribers should be able to lodge complaints.
- (iii) There should be extra efforts that each subscriber is given a number and it should be made mandatory for each DPO to paste such number on the decoder or STB provided to each customer. There should be a website address to which subscribers should be able to SMS their subscriber number and get details of all payments made. There should also be a regulated website operated by authority where subscribers should be able to SMS their operator name and Subscriber number if they feel they are not being officially billed/ acknowledged.
- (iv) Every single case reported to authority should be investigated, and a penalty of Rs 1 Lakh levied for every subscriber undeclared, so detected on the MSO or HITS operator.

4.3 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?

There are major changes required in policy and regulatory requirements for each type of infrastructure sharing. Some of these are summarized below:

(a) Infrastructure Sharing by DTH Operators

- There should be an amendment in the License agreement which should clearly state that the DTH operator can share its satellite capacity with one or more DTH operators.
- Any party should be able to apply for a DTH license merely by providing an Agreement with an already licensed DTH operator, that satellite capacity would be shared. There would not be a requirement to produce a satellite capacity agreement.

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- -Where Space capacity is provided by ISRO either on the INSAT system or a foreign satellite system, they should provide in the Agreement that such capacity can be shared with one or more DTH operators.
- Where Space capacity is provided by ISRO either on a foreign satellite system, its lease Agreement with the foreign operator should specify the end use of the system to be a shared DTH system.
- WPC would charge the transponder spectrum fees from only to the operator which has leased the transponder.
- The NOCC charges would apply only to the operator which has leased the transponder.
- -In Teleport operators Agreement, there would be provision for a Teleport operator to uplink for two or more DTH systems, where some transponders may be common and others may be separate between two or more DTH systems.

(b) Infrastructure sharing by HITS operators

The amendment of various agreements by a HITS operator which leases capacity will be on similar lines as DTH. In addition, there would be QoS and interconnect requirements between HITS and MSOs or LCOs.

- There should be an amendment in the License agreement which should clearly state that the HITS operator can share its satellite capacity with one or more HITS operators and/ or HITS operators, MSOs and Broadcasters.
- Any party should be able to apply for a HITS license merely by providing an Agreement with an already licensed HITS operator, that satellite capacity would be shared. There would not be a requirement to produce a satellite capacity agreement.
- -Where Space capacity is provided by ISRO either on the INSAT system or a foreign satellite system, they should provide in the Agreement that such capacity can be shared with one or more HITS operators, MSOs and Broadcasters.
- Where Space capacity is provided by ISRO either on a foreign satellite system, its lease Agreement with the foreign operator should specify the end use of the system to be a shared HITS system.
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- -In Teleport operators Agreement, there would be provision for a Teleport operator to uplink for two or more HITS systems, where some transponders may be common and others may be separate between two or more HITS systems.

- 4.4 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?
- 4.5 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?

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. In this environment, a Network service provider would uplink all channels under one or more encryption systems. At the same time the DTH operator would become equivalent to a virtual operator. In principle, tens or hundreds of virtual licenses could be issued.

However the crux of the policy decision element here lies in the payment obligations to the broadcasters. The only way it could be implemented would be that the Network Service operator also takes full responsibility as a commercial service operator and ensures payment to the broadcasters for the sum total of the dozens of virtual DTH operators and their subscribers.

This would require the implementation of a common standard (say MPEG-4, DVB-S2 8-PSK) across all subscribers and a common database operated by the network service provider.

It can be considered as a new platform, as all current platforms are implemented on different technologies and will not fit the bill for a common network operator to be used. However on a voluntary basis existing platforms should be permitted to share capacity in effect acting as a network service provider.

In case a new platform is permitted as a "Network Platform", and multiple DTH operators are allowed to share this platform, there would be a need to take a decision on the security Deposit, Revenue share and License fees. In order to spur digitization it is desirable that the high cost structure is revisited.