

# Cable Operators Federation of India

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**Without Prejudice**  
(by Speed Post/E-mail)

Ref/COFI/TRAI/05/2016

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The Chairman,  
Telecom Regulatory Authority of India,  
Mahanagar Doorsanchar Bhawan,  
Jawahar Lal Nehru Marg  
New Delhi-110002

**Kind Attn: Mr. Sunil Kumar Singhal, Advisor (B&CS) and Mr G S Kesarwani**

**Sub: Comments on TRAI Pre-Consultation Paper On Set Top Box Interoperability dated 4 th April, 2016**

Dear Sir,

This is in reference to your Pre-Consultation Paper on Set Top Box Interoperability dated 04 April 2016.

Our response/ comments on the issues are given below:-

**Q1. In your opinion, what are the concerns that should be taken care of at the time of development of framework of interoperable of STBs?**

**Comments:**

**Major concerns are:**

- 1. Consumer should be given the freedom to use any type of STB available anywhere in the world to satisfy his demand.**
- 2. Consumers should have the freedom to change his service provider without changing his STB.**
- 3. Cost of STB should be kept minimum by manufacturing in the country and**

availability in the open market.

Detailed explanation is given below:-

- a) **For DTH** : The BIS specs are clear that boxes have to be interoperable, and this has been based on the current licensing condition. This is very much in the consumer interests and this condition should not be dispensed with. The present mechanism of having a CI slot should be maintained as it gives a easy plug in solution to consumers. The operators should be asked to certify that all models of their STBs are compatible with the CI interface. This will ensure that the licensing condition as under is met **Articles 7.1 and 7.2 of the DTH License Agreement lay down the following conditions regarding interoperability.**

***“7.1 The Open Architecture (non-proprietary) Set Top Box, which will ensure technical compatibility and effective interoperability among different DTH service providers, shall have such specifications as laid down by the Government from time to time.***

***7.2 The Licensee shall ensure subscribers interests through a Conditional Access System (CAS), which is compatible with an open Architecture (non-proprietary) Set Top Box.”***

With the increase of HD service and pressure on the bandwidth today all DTH operators are providing MPEG4 DVBS2 boxes, though only Dish TV is still continuing with MPEG2 transmission, but their boxes being deployed are compatible with the transmission of other operators except for the boxes deployed prior to 2013 when they were only MPEG2 for SD and MPEG4 DVBS2 for HD.

There should be an effort to bring in the CAMs in the market and with the volumes and “**Make in India**’ efforts the CAM prices will come down as the CAM have much less electronics than STB. It does not have any power circuit in it and does not have a big form factor.

All the CAS service providers should be asked to provide the CAM in this market.

The standards for the IDTV with the CAM slot be formed and each TV above the size of 30 inch should have a CAM slot and DVBC and DVBS2 tuner in it. This will help in “**Make in India**” as most of the flat panel and TV are now manufactured in India .

**The authority in the Recommendations on Licensing Issues relating to DTH dated 25 August 2006 had recommended as under:-**

- ***There should not be any amendment in Articles 7.1 and 7.2 of the DTH License Agreement which mandate technical interoperability among DTH service providers.***
- ***The license conditions should be amended to provide for casting an obligation on the service provider to inform and educate the consumers about the limited technical interoperability of the Set Top Boxes with Personal Video Recorders/Digital Video Recorders.***
- ***The DTH Service Providers should also be encouraged to provide Basic or Advanced Set Top Boxes to consumers under rental schemes, but there should be no dilution in the technical interoperability conditions as they exist today.***

Thus authority again said in its Recommendations on Interoperability & other issues relating to DTH dated January 30, 2008 -

- that the issue of revision of BIS standards for DTH set top boxes should be taken up by the Government with the Bureau of Indian Standards so that the standards laid down by BIS for DTH Set Top Boxes are updated for advanced technologies.
- It is further recommended that revision of standards should be prospective and should apply to DTH subscribers who are enrolled after six months from the date of such revision.
- Such revision should not compulsorily require the DTH operators to upgrade the STBs of existing subscribers to conform to revised standards, though they would be free to do so on their own.

***3.17 Accordingly, the Authority recommends that clause 7.1 of the DTH license conditions should be amended to read as under:-***

***“7.1 The Open Architecture (non-proprietary) Set Top Box, should be such as to ensure technical compatibility and effective interoperability among different DTH service providers. The DTH Set Top Boxes supplied to the subscribers shall have such specifications as laid down or as revised by the Government from time to time. However, in cases of revision of specifications such revisions will be applicable prospectively to new subscribers, and the licensee will have a transition period of six months from the date of such revision to ensure full compliance with the revised specifications for the new subscribers.”***

The DTH operators had by themselves signed on the agreement to provide interoperable STB and they have been avoiding that and in the same process have been keeping the price of the CAM artificially higher, the CAM which does not have powering circuit and has a small form factor should be much cheaper than a box, it does not need an LNB switching power circuit also as in the case of STB.

The DTH operators want to retain monopoly on their subscribers and thus have been avoiding this interoperability.

**For the Cable STB:**

The standards should be amended to bring in the CI slots and common encryption and modulation techniques and all the operators be given a period of 6 months to migrate to the new regime from the date of notification, today India is the only market which is working on MPEG2 and thus we are generating too much of obsolescence and encouraging cheaply produced goods which are not in the interest of the consumers

**DD Free Dish** : DD should be also asked to follow the BIS standards and it should ensure that when it launches the CAS in its set-top-boxes, it also makes CAM available in the market.

**The Pay DTH operators today do not allow the box to be used on the DD free dish services after the consumer subscription period is over which also needs to be addressed.**

**DD Terrestrial Digital Service:** Soon DD will launch its DVB-T2 service which is under trial. Millions of STBs will be used in this service too. These days, many manufacturers make dual purpose STBs which can be used for two or more services. Consumers should have the choice of buying any type of STB according to his need. For this, we have to have interoperable STBs available in the market.

The operators generally make the excuse that their middleware will not work; this should be transparently declared by the operator that which feature will work and which will not if the box is used in any other network.

The Regulations require availability of STBs in the open market. TRAI must ensure this happens.

**Q 2. What are the techno-commercial reasons for non-interoperability of STBs other**

**than those mentioned above? Please provide reasons with full details.**

**Comments:** The operators avoid providing interoperability because they feel they will lose hold on the subscriber who may migrate to some other network which offers better service or better price.

- The interoperability will bring in more competition, which will help consumers to pay the right price.
- Operators will be benefitted if the interoperability is brought in as then operators who provide good services at an economical price will grow.
- The price of the STBs have come down over a period of time as the volumes have gone up, similarly the price of the CAM module have internationally come down, the price being cited are European prices whereas the fact is that the price of the CAM is much lower in terms of Bill of Material required.
- The fear of the operator to loose subsidy provided to the consumer is also one of the factor it does not want to support interoperability or open the box for other services like DTH operator allowing DD free dish to be viewed. For such cases where the boxes is subsidized the operator can declare that for this scheme consumer has a choice to either return the box and take his money back but will not be able to watch other services and for other schemes the boxes should be open.

**Q3. What are the plausible solutions for technical interoperability of STBs and their impact on the sector growth?**

**Comments**

The Technical interoperability is possible, we should not try to reinvent the wheel, with the DVB-S regime the interoperability has been made possible at a minimal cost, the operators should be asked to follow the BIS standards which if needed can be revised at a short notice and after a time frame of 6 months to ensure that orders placed are met, the new boxes with the revised standards are allowed to be deployed.

- This will also provide the opportunity for Indian Manufacturers to make the CAM modules and thus will save lot of foreign exchange, the CAM modules are more durable and thus service issues will be less.
- The TV manufacturers can also benefit as then they can market IDTV which they do in other markets worldwide and can help in building the market for the

service providers.

**Q 4. Any other issue which you feel will be relevant for development of technical interoperability of the set top boxes.**

- a) A regular check be done on the technical quality of the boxes , to check if they meet the standards as laid and the licensing requirements.
- b) The current RIO also prohibits the operator to provide its content on the CAM which also needs to be addressed.**
- c) This is a new ecosystem and it needs to be encouraged in the interest of the onsumer, operator and National interest as it will save considerable foreign exchange , save e-waste and generate new employment opportunities.

Yours Faithfully,

(Roop Sharma)  
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