

BIGTV
DTH SERVICE

Comments on
TRAI's Consultation Paper
on
Technical Interoperability
of
DTH Set Top Boxes

RELIANCE
and Dishabh Ambani Group

Consultation Paper on Interoperability of DTH Set Top Boxes

COMMENTS OF RELIANCE BIG TV LIMITED

Para-wise comments on the issues raised in the aforesaid Consultation Paper are as under:-

- 1 ***Is it possible to have an Open Architecture based Set Top Box (STB) for DTH services that could ensure technical interoperability i.e. technical compatibility and effective interoperability among different DTH operators who have adopted same or different standards?***

Comments:

We do not think that there could be standardized Interoperable Set Top Boxes for different DTH operators due to reasons mentioned below:-

- a) To reduce the cost of the box, each box is designed to support a limited configuration based on the network requirements of the provider. Any attempt for interoperability will increase costs of the older players and increase the cost of their subscriber without getting advantages of newer technology. It may also not be technically possible as CPU and memory configurations are optimized to the selected middleware and compression technology chosen for the existing boxes.
- b) As the choice of the box hardware components and network is interdependent, operator could choose to optimize overall cost of delivery of service over long time without compromising the class and quality of service to the end user. This saving could help reduce the end user price and hence bringing in market forces and healthy competition.
- c) The goal is to achieve complex security problem over one way broadcast network is solved in several ways by the CAS vendors and is kept highly secret. Technical interoperability should not be forced at CAS level as it may lead to hacking of STB's.
- d) Every operator has chosen combination of various standard hardware components to build the STB. In that sense all the boxes deployed today use open architecture to design the box hardware.
- e) To combat the malicious attack by the hacker, there is very important role of chipsets and hence any interoperability attempt at chipset level will lead to possibility of hacking
- f) If the architecture of STB is open and universal, pirates have to hack only one STB design to pirate signal from any provider.

- g) Any attempt to standardize will be detrimental to innovation at technical level, at user experience and GUI level
- h) Mandating technical interoperability will only penalize those who have selected higher configuration AS the boxes with lower configuration are too optimized to support any function that requires slightly more CPU and memory interoperability and hence technical interoperability cannot be forced on them
- i) Technical interoperability will not eliminate the variations of STBs required to support the modulation and compression choices made by various providers.
- j) Will not bring in any advantage to the end user due to reasons cited above.

2 If yes, how can the interoperability be implemented and what would be the implications to the stakeholders?

- a) Implementation of Technical interoperability would be detrimental to the interest of the customer since Cost of acquiring CAM module is higher than the cost of acquiring STB. With the expected increase in the competition from digital cable, the comparative entry price of STB would be much lesser than the cost of CAM. In that respect implementation of interoperability would be regressive step.
- b) CAM module has inherent risks with content security which is the fundamental of any addressable system. CAM module is highly insecure from content security (piracy) point of view as the DVB-CI specifies clear channel between CAM and the STB which is vulnerable to internet key sharing based piracy.
- c) Implementation of technical interoperability will benefit only a select set of operators as the STB's would be backward compatible only. Operators having MPEG2 technology would be able to commercially launch their CAM modules and acquire the base of other operators while operators having higher compression technology will not be able to use STB's of lower compression technology Operators. Since there would not be level playing field between operators, implementation of technical interoperability is not recommended. As the customer benefit in commercial interoperability is much more, it is recommended that authority should promote commercial interoperability.

3 Is there a need to mandate any particular standard so that the objectives of Technical interoperability can be achieved? If so, which standard?

Comments:

As explained in point 3.1 we do not see any advantages or possibility of implementation of interoperability

4 *If technical interoperability for STB is not possible, is there any other mechanism to safeguard the interests of the subscribers?*

Comments:

TRAI has done tremendous work towards digitization and we at Reliance support the cause of digitization and have been working towards achieving the goal. With the expected pace of digitization, there would be even sharp drop in the entry level prices for STB's due to increased competition in market. The cost of providing CAM module is higher as compared to the cost of acquiring fresh STB hence we believe that commercial interoperability would become far easier and practical way of providing interoperability. We believe that fair competition in market will take care of customer requirement by reducing the entry barrier and intervention for technical interoperability is not required.

5. Any other relevant issue that you may like to mention or comment upon.

Comments:

NA