RESPONSE OF ZEE ENTERTAINMENT ENTERPRISES LIMITED

TO THE CONSULTATION PAPER

ON

Interoperability of Set Top Box

ISSUED BY

THE TELECOM REGULATORY AUTHORITY OF INDIA ("TRAI")

ON 11th Nov 2019



We welcome the exercise undertaken by TRAI for interoperability of STB's. Considering consumer choice being primary, it is important that consumer gets freedom to choose the service provider or DPO for delivery of broadcaster content.

Q1. In view of the implications of non-interoperability, is it desirable to have interoperability of STBs? Please provide reasoning for your comment.

Ans-If the consumer gets choice to choose the DPO using the same STB then he will get real power of choice of channels rather than worrying to spend more money of hardware before he could choose the channel offered by another DPO which is not either being offered by his current DPO or due to other packaging constraints implemented by the DPO. There should be enhanced Anti- piracy and security measures of CAS to protect rights of the broadcaster at the same time. Broadcasters have already submitted a lot of requirements on security and anti-piracy during consultation paper on interconnect regulations (Schedule III). All such requirements and enhanced requirements on CAS, STB and related systems should be considered by TRAI alongwith the Interoperability of STB's.

Q2. Looking at the similar structure of STB in cable and DTH segment, with difference only in the channel modulation and frequency range, would it be desirable to have universal interoperability i.e. same STB to be usable on both DTH or Cable platform? Or should there be a policy/regulation to implement interoperability only within a platform, i.e within the DTH network and within the Cable TV segment? Please provide your comment with detailed justifications.

Ans-There should ideally be single STB which should be interoperable between various DPO's irrespective of the technology or retransmission mechanism used by the DPO however considering the technological issues Cable to Cable Interoperable STB's and DTH to DTH interoperable STB's should be there and for Cable to DTH and Vice versa the interoperability should be implemented through transparent and practical commercial interoperable solutions which are governed by such regulations that no DPO should be able to stonewall the process and there are binding timelines for the existing operator for porting out.

Q3. Should interoperable STBs be made available through open market only to exploit benefits of commoditization of the device? Please elaborate.

Ans-There should be complete delinking of hardware (STB) provider and service provider (DPO). In case such differentiation is not made then this will lead to cross subsidy and goal shall not be achieved. Broadcasters content is the only asset that broadcasters have, there should adequate steps taken to prevent any piracy of content while framing the guidelines on interoperability. There is requirement if much stringent parameters in STB, CAS and other systems that need to be implemented before interoperability can be implemented.

Q4. Do you think that introducing STB interoperability is necessary with a view to reduce environmental impact caused by e-waste generated by non-interoperability of STBs?

Ans-Interoperability of STB will not only lead to reduction in E waste but also save a lot of money which gets wasted because of unused STB lying at the home of a consumer or lying in the warehouse/store rooms of operator swapping the STB's

Q5. Is non-interoperability of STBs proving to be a hindrance in perfect competition in distribution of broadcasting services? Give your comments with justification.

Ans-Non interoperability of STB's lead to a situation where smaller DPO's who are not able to invest/subsidise STB's are not in a position to compete with Big DPO's who get price advantage because of subsidy they are able to provide due to deep pockets. In case Interoperability is implemented, a consumer shall be able to choose a DPO with best services without bothering to invest in STB again

Q6. How interoperability of STBs can be implemented in Indian markets in view of the discussion in Chapter III? Are there any software-based solution(s) that can enable interoperability without compromising content security? If yes, please provide details.

NA

Q7. Please comment on the timelines for the development of ecosystem to deploy interoperable STBs for your recommended/suggested solution.

Ans-CI is one of best solution to implement inter-operability of STBs in India and considering Adaptability of new technologies – IPTV, OTT and seeding of hybrid STBs. In 2020 it should be mandatory that all networks should seed only software-based STBs with ECI technology to support interoperability and set sunset date like 2022 to phase out all old STBs and post that only STBs supporting ECI technology can be distributed by networks.

Q8. Do you agree that software-based solutions to provide interoperability of STBs would be more efficient, reduce cost of STB, adaptable and easy to implement than the hardware-based solutions? If so, do you agree ETSI GS ECI 001 (01-06) standards can be adopted as an option for STB interoperability? Give your comments with reasons and justifications.

Ans-Yes, software-based solutions to provide interoperability of STBs would be efficient, reduce cost of STBs adaptable and east to implement than the hardware-based solution but software-based solution has also lot of limitations as the solution introduces an additional layer in the form of TA/ILA, it may add procedural and commercial costs to the solution. ECI does not meet the content security and technology needs of major content providers. The proposed ECI standards do not meet ECP standards which describe high-level security requirements for the distribution of content. Also, ECI does not require watermarking and does not create a secure location for a watermark. Watermarked content is crucial as it helps in identifying data breaches and protects content stored on computer server's Technical feasibility and cost implications of extending the solution for more number of CASs is as yet not known. Any new entrant CAS vendor will have constraints to be adopted in the solution framework.

Q09.Given that most of the STB interoperability solutions become feasible through a common agency defined as Trusted Authority, please suggest the structure of the Trusted Authority. Should the trusted authority be an Industry led body or a statutory agency to carry out the mandate? Provide detailed comments/ suggestion on the certification procedure? Ans-The Trusted Authority should be directly under TRAI as it will provide more comfort to the industry and will lead to faster and seamless implementation.

Q10. What precaution should be taken at planning stage to smoothly adopt solution for interoperability of STBs in Indian market? Do you envisage a need for trial run/pilot deployment? If so, kindly provide detailed comments.

Ans-A pilot run should be conducted in 1 Metro and 1 small town/Village to understand nuances in better manner

Q11. Interoperability is expected to commoditize STBs. Do you agree that introducing white label STB will create more competitions and enhance service offerings from operator? As such, in your opinion what cost reductions do you foresee by implementation of interoperability of STBs?

Ans-Interoperable STB's sold through open market will lead to better quality of STB's at competitive rates and this will also cause better after sales service and more touch points from consumer perspective. The operator will also be in the fear of losing its subscribers in case of deficiency in services and hence would ensure enhanced service offering to its existing subscribers for retaining them. At the same time there is requirement of enhanced security/ anti- piracy features to be implemented at CAS/STB level

Q.12 Is there any way by which interoperability of set-top box can be implemented for existing set top boxes also? Give your suggestions with justification including technical and commercial methodology?

Ans - All CAS systems have proprietary algorithms/control and inbuilt in STBs. Hence it will not be possible to integrate the existing STBs with other CAS unless there are some modules to integrate the same. The interoperability for existing STBs (and even those STBs which are available as stock/in manufacturing line on orders of the DPOs) should not be considered.

Q13. Any other issues which you may like to raise related to interoperability of STBs