

SATELLITE & Cable TV

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To
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Satellite & Cable TV Magazine's Response To TRAI's "Consultation Paper On Interoperability of Set Top Boxes" dated 11th November 2019.

INTRODUCTION TO SATELLITE & CABLE TV MAGAZINE

Satellite & Cable TV is India's oldest and largest B2B magazine devoted to the Cable TV, DTH and Broadband distribution industries. Now in its 28th year, the magazine is primarily a monthly publication, printed bilingually in Hindi + English. The magazine content is also available free-to-read on our website (www.scatmag.com) in English. The website also provides a wealth of industry archival material such as the Cable Act, several hundred technical articles from the magazine and other long-term reference material.

COMPULSORY USE OF STBS

The government has compulsorily introduced Digitalisation of both – Cable TV & DTH signals delivered to Indian consumers. Further, the law also requires that all these signals be encrypted. This has resulted in the need of a separate STB at each Consumer TV set.

INDUSTRY LIFE CYCLE

Both – Cable TV & DTH distribution solutions are at the end of their life cycles. Delivery of linear & non-linear TV content is shifting to direct delivery via the Internet, to consumers. This Over-The-Top (of DTH & CATV networks) delivery, is rapidly gaining universal acceptance.

In January 2019, US DTH platform DirecTV declared that the satellite they had just launched, was their last satellite ever, for DTH.

While CAS has been used to secure Cable TV & DTH content, almost all online content is now secured by DRM. CAS is moving towards obsolescence.

Given these developments, it seems a futile and wasteful exercise for the regulator to now push for the development and deployment of new interoperable STBs. It is simply too late.

DARK STBS

Reports indicate that there are at least 50 Million DTH STBs seeded, which are currently ‘dark’ or non-operational. This implies a waste of at least Rs 5,000 Crores for these STBs, which more often than not, have been paid for, directly or indirectly, by consumers.

Similar estimates are not available for Cable TV STBs.

The above clearly indicates the huge wastage of hard-to-obtain money, due to non-implementation of interoperable STBs, as spelt out in the DTH licenses, more than a decade ago.

COMMERCIAL INTEROPERABILITY

TRAI has mandated that Cable TV STBs be provided to consumers either on rental or outright purchase. STB rentals have enabled “Commercial Interoperability of STBs,” since a consumer can simply return his STB, when switching service providers.

INTEROPERABLE STB DEVELOPMENT

For several years, the government has been working on the development of interoperable STBs.

Besides lab trials, little has been achieved.

Interoperability has been further impeded due to a handful of CAS vendors internationally dominating the market. They have often refused to cooperate or change their systems, citing security concerns.

iCAS

It is note-worthy that the Indian government sponsored and completed the development of an indigenous CAS, called iCAS, which provides secure conditional access, at a very low price.

Unfortunately, iCAS has hardly been deployed by private sector Cable TV or DTH operators.

iCAS Can Be Mandated (As A SimulCrypt Solution) On All Cable TV & DTH Platforms, Enabling iCAS STBs To Be Used As Interoperable STBs

SUGGESTED SOLUTION - INTEROPERABILITY VIA iCAS

We suggest that iCAS can be deployed immediately, to provide interoperable STBs.

TRAI could mandate that all Cable TV and DTH platform must compulsorily incorporate iCAS as a Simulcrypt option. They can continue using their existing CAS of choice, but must also include iCAS. DTH & Cable TV consumers can purchase iCAS STBs from the open market, and use them interoperably in any Cable TV or DTH network in the country.

RESPONSE TO ISSUES FOR CONSULTATION

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

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***DTH & Cable TV Are At The End Of Their Life Cycle.
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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.

While at first sight it would seem desirable to have a Universal interoperable STB for CATV & DTH, the cost of 2 Front ends & Tuners would substantially increase the cost of the STB.

Further, it will also increase the development time, for a project that is already too late to the market.

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

It is doubtful if open market availability vanilla interoperable of STBs will substantially reduce their price.

On the other hand, the consumer could be left running pillar to post, if the STB he purchases from the open market does not work when installation is attempted.

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

Not significantly.

It could be argued that availability of this new type of (interoperable) STB, consumers could be induced to indulge in an unnecessary purchase of a new STB with a very limited life cycle, increasing e-waste.

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

The interoperable STB solution is being attempted too late in the industry's life cycle, currently making it unnecessary and wasteful.

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.

The world is rapidly moving from CAS to DRM.

To introduce Interoperability in the CAS domain, we believe that iCAS can be deployed immediately, to provide interoperable STBs.

TRAI could mandate that all Cable TV and DTH platform must compulsorily incorporate iCAS as a SimulCrypt option. They can continue using their existing CAS of choice, but must also include iCAS.

DTH & Cable TV consumers can purchase iCAS STBs from the open market, and use them interoperably in any Cable TV or DTH network in the country.

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

iCAS can be deployed immediately and interoperability via iCAS SimulCrypt could be implemented within 6 months.

Q8a. 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?

Yes.

Q8b. 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.

DRM not CAS is the solution for the future.

Q9. 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?

Follow what has already been set up for iCAS deployment.

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.

Extensive field trials are absolutely essential.

In case successful field trials have been already conducted for iCAS as a SimulCrypt system, it would be an excellent enabler for quick commercial deployment.

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?

Please refer to our response to your Question 3 above

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?

Use of iCAS as a SimulCrypt solution will retain full use of existing STBs, while seamlessly introducing iCAS interoperable STBs for new consumers and existing users who want to avail the new iCAS STBs.

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

We re-iterate that both – Cable TV & DTH distribution solutions are at the end of their life cycles. Delivery of linear & non-linear TV content is shifting to OTT that provides direct delivery to consumers, via the internet.

DRM is displacing CAS and is the growing solution for protecting online content.

Given these developments, it seems a futile and wasteful exercise for the regulator to now push for the development and deployment of new interoperable STBs. It is simply too late.

Thank you.



Dinyar Contractor
Editor – Satellite & Cable TV Magazine