

**Comment from GTPL hatchway,  
Date: Apr 29, 2016**

Sir,

Please find our responses as under –

1. In your opinion, what are the concerns that should be taken care of at the time of development of framework of interoperable of STBs?
  - STB's should be interoperable across all platforms.
  - The technology for content security should be proven.
  - A cost effective solution
  
2. What are the techno-commercial reasons for non-interoperability of STBs other than those mentioned above? Please provide reasons with full details.
  - Technically difficult due to non-standard implementations of CA systems. Many CA system use proprietary technologies for security purposes.  
  
Interoperability can be achieved through an “open architecture”. All CA systems has to be made compatible with this open architecture.
  - Proposed solutions for interoperability is not cost effective. The cost of the solution should be less than the cost of Set Top Box presently deployed.
  - Encoding of video is not uniform across broadcast segment. This makes interoperability difficult.
  - Lack of standards for interoperable CPE specification.
  
3. What are the plausible solutions for technical interoperability of STBs and their impact on the sector growth?
  - The interoperable solution may be implemented alongwith provision for CI slot for any

CA system to be used. Also the stb should mandatorily have satellite and cable inputs to make it completely interoperable.

- The Govt. may mandate to operate a particular CA systems by all. In such a case all service providers (Cable and DTH) should run the mandated CA system

In a simulcrypt mode. This has high capex implications on the service providers.

This can provide interoperability for the stbs that are compatible to that universal CAS.

Consumers will have to opt for the interoperable stb.

However this can compromise security for MSOs and Broadcasters.

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

NA

Regards,

Shaji Mathews