



PHD House, 4th Floor, Ramakrishna Dalmia Wing
4/2, Siri Institutional Area, August Kranti Marg, New Delhi – 110016, India
Tel#: (+91-11) 2685 5487 • Fax#: (+91-11) 2685 1321
E-mail: ceo@mait.com • Website: <http://www.mait.com>

Ref.No.MAIT/PY/1916

January 15, 2020

Shri Sudhanshu Pandey
Additional Secretary
Ministry of Commerce & Industry

Ref: Meeting on facilitation of STB Manufacturing in India held on January 13, 2020

Respected Sir,

Thank you for the platform and the engaging discussion facilitated by your office towards the pooling of ideas towards 100% indigenous Manufacturing of STB and self-reliance on the evolving future generation of Hybrid/ Gateway STB boxes.

Setting the Context:

Today, India has an STB market where 95% of the units are imported and 5% catered to by the domestic sector.

The STB has two critical components. One is the hardware and the second is the CAS (Conditional Access System). The CAS in the STB is the decision point on which a Service provider decides the STB. The 95% referred to above have all imported CAS.

The STB is evolving into a converged Gateway Hybrid box offering DTH, Fiber Optic/Cu Broadband Link, Wi-Fi connectivity. This brings in the new dimension of citizen Data & homeland Security.

In this scenario, India should set for itself two Goals

1. All the service providers to source Made in India STB.
2. The development and commercial adoption of India CAS framework.

Summarised on behalf of the Industry are the challenges and possible solutions:

Recommendations:

1. Mandate every service provider that they have to use an India Manufactured STB.
2. Mandate that every STB used in India has to have an India CAS as option.
3. To draw up a Production Linked Incentive for India manufacturing of STB.
4. The FTA with ASEAN to exclude STBs, as they are a key gateway device that captures data flow with confidentiality and security paradigms.
5. The current imports through FTA violate the 35% value addition norm, including profit. As per industry assessment these countries do not have domestic value addition capability including profits to exceed 25% at the outer limit, unless they are under valuing the BOM or bloating the profit margin kept.
(Attached the broad BOM costing table)
6. For India to develop an indigenous CAS, standards is the precursor to innovation. It reduces the risk and increases the probability of success of the R&D. It results in creation of globally leading IPR.

To facilitate creation of India standards for CAS/STB, it is critical India has its own COE – An academic institution of higher learning or a specialised institution that works with Indian industry, tracks global developments in drawing up India standards. It is pertinent to

mention that while BIS Publishes and Regulates standards, it is not the body that has the technology expertise on CAS & STB.

7. Any communication equipment requires a sand box for testing the product and doing pilot trials. This sand box is the network and it exists only with the service providers.

To facilitate India STB & CAS developers to test their product, it is a must that they offer their network for such tests as part of their licence obligation to the country.

8. With the evolution of the Hybrid box, streaming services on the internet the development of these boxes require the interoperability testing and integration with the streaming services provider like Netflix etc. and with the OS platform vendors such as Android, Microsoft and IOS. Today, there is a barrier in the form of a commitment of minimum number of subscribers asked for by these internet service providers before they agree to engage with the developer of a new STB (including sharing of technical files, allocation of resources for integration and carrying out tests).

Such global technology players, who are offering their products and services in India, need to be mandated to develop a minimum of five players. (India can expect that off the five at least two will succeed)

9. One of the strategies adopted by global competition is to offer long-term financing to the service providers (DTH, Cable, Internet Network Providers) by leveraging globally available low-cost finance. This puts Indian manufacturers at a competitive disadvantage.

The biggest problem for these operators is to meet the high capital cost of STBs. No insurance company in India is willing to extend credit insurance to the smaller Cable TV operators. Nor is any bank willing to extend finance to them.

India can offer a credit guarantee scheme against the assured future monthly earnings from the service providers. Such a scheme will enable Indian STB players to have a level playing field with global competition.

We look forward to bold and forward-looking steps from the Govt. of India that will facilitate the development of India STB Manufacturing and India CAS development.

With warm regards,



George Paul
Chief Executive Officer

CC: Shri Shailendra Singh, Addl. Secretary, DPIIT
CC: Shri Saurabh Gaur, Jt. Secretary, Ministry of Electronics & IT
CC: Shri Deepak Bagla, MD & CEO, Invest India
CC: Shri Raghav Gupta, Investment Specialist, Invest India

Attached:

1. Annexure-I: STB - BOM Analysis
2. Annexure-II: STB – China Tactics
3. Annexure-III: STB – India CAS

Companies which participated: Catvision, Modern Communication and Broadcast System, Prysm/Velankani Electronics, KMTS Engineering Pvt. Ltd., Surbhi Broadband & Mehta Infocomm

Annexure-I: STB - BOM Analysis

BOM break up and why FTA countries cannot achieve 35% value addition

Item	% by Value	Imported/Indigenous
ICs (CPU, Flash, Tuner)	38	Imported
Software	7	Imported
PCB	7	Imported
Other Class C Components	8	Imported
Adaptor	10	Imported
Plastic Casing	4	Indigenous
Remote Control	5	Indigenous
HDMI Cable	3	Imported
RCA Cable	2	Imported
Misc. Items(Packing, Batteries etc.)	2	Indigenous
Production, Assembly & Testing	4	Indigenous
Margin	10	Indigenous
Customer Price	100	Ind: 28%*; Imp: 72%

* We have assumed a 10% margin here.

** However, the typical margin is only 5-8%

*** Hence, the claim of 35% Value Addition is an inflated claim

India should carry out audits of FTA imports. Industry shall extend techno-commercial expertise to support the audits.

Annexure-II: STB – China Tactics

China prevailed upon the western CAS companies to transfer their CAS IP to Chinese STB manufacturers in exchange for market access. As a result, many Chinese CAS have been built upon the old tech platforms of the western CAS companies.

China has mandated that every Set Top Box manufacturer used in China has to be manufactured in China. In the early 2000s, imports of STBs were banned in China. It is said even today STB imports are blocked by China Customs. Even STBs sent for repairs to the Chinese manufacturer get held up at Chinese Customs.

China has mandated that every STB has to use at least one Chinese CAS and from there they evolved to China CAS dominating the market.

Annexure-III: STB - India CAS

Currently, all the Indian STB manufacturers are supplying to the smaller cable TV operators, those whose volumes are low and whose performance standards may not be too high.

We may have to accept the fact that the big operators – DTH operators and the big MSOs – will continue to buy their STBs through the ASEAN route or even imports from other countries due to consideration of volumes, price, quality and support. Price is only one of the criteria. Each of these need to be taken up and addressed. This can be led by a CoE who will be

- Leading with India standard
- Developing a few more India CAS vendors
- Benchmarking with global standards

The suggestion about a mandatory India CAS is a good one. But here Bydesign that has developed ICAS will have to have an arm's length transaction with their sister company, Velankani, who manufactures STBs and competes with other STB manufacturers. This will facilitate other Indian STB manufacturers to adopt ICAS in their STBs.