

February 23, 2022

**Advisor (B&CS),
Telecom Regulatory Authority of India,
Mahanagar Doorsanchar Bhawan,
Jawahar Lal Nehru Marg (Old Minto Road),
New Delhi 110002**

**Sub: Response of Dish TV India Limited to Consultation Paper dated 22.12.2021
on Consultation Paper on Promoting Local Manufacturing in the Television
Broadcasting Sector'**

Dear Sir,

We hereby submit our response to the TRAI Consultation Paper dated 22.12.2021 on "Promoting Local Manufacturing in the Television Broadcasting Sector".

Thanking you,

Yours truly,

For **Dish TV India Limited**



Ranjit Singh

Corporate Head – Secretarial, Legal and Regulatory

Enclosed: as above

We welcome this consultation paper on the need to promote local manufacturing in the television broadcasting sector to meet domestic demand and the way for export-oriented growth.

To effectively respond to the issues raised in the present consultation paper, we bifurcate the equipment and related issues in major four parts which are mentioned as under:

1. Set Top Box manufacturing
2. MSO HE and their CAS embedded STB Manufacturing
3. CAS / SMS and DRM development and deployment
4. Major components R&D and their patents

1. Set Top Box (STB) manufacturing:

STB is the costliest and hence the most important component for any customer to receiving the broadcasting services. The STB constitute various parts. From a time when almost all the operators used to import STBs for their business operations, today almost every operator is at least trying to shift this towards the domestic manufacturers.

However, there is a huge gap between the STBs being imported vis-à-vis the domestically produced ones. Not only the imported boxes are of superior quality but the cost of the same and also the support services of the OEMs are much better as compared to their Indian counterparts.

Since cost, quality and support are the most important aspect for any services provider for retention of their subscribers, there is an immediate need for the domestic operators to raise their bar on all these fronts to compete with the foreign vendors.

2. Headend (HE) and CAS embedded STB Manufacturing

As of now, lot of HE equipment in class B, C and D are Chinese encoders, Muxes, and other transmission equipment which are sub-standard and prone for content piracy. This will lead not only bad user experience but also cause huge losses in terms of Government taxes, subscription revenue and overall growth of local manufacturing.

Similarly, we should also look in-depth on client-side equipment i.e., DPO STB which are the last mile and integral part of whole DPO backend and if client / STB gets compromised then whole purpose gets defeated. Therefore, we should plan for a holistic approach

along with entire ecosystem development and manufacturing including Encoders, MUX, STB, and other transmission equipment with complete indigenous components.

As we know currently most of SoC/Chipset/Silicon patent are from USA, Europe, Taiwan, Japan and China and these parts are the backbone in the ecosystem of television broadcasting systems. This is in stark contrast with the objective of Atmanirbhar Bharat scheme of the Government. To deal with this, Government may create better infrastructure for research and development and push for more and more patent specially SoC and other important components in India.

Further, the current tariff and tax policies do not help the industry needs and fiscal revenues. India's high tariff rates and basic customs duties (BCD) as compare to the East Asian countries continue to affect adversely and is detrimental to the industry. The inverted duty structure – high tariff rates for intermediates goods relative to final product – makes domestic production less attractive than imports. High-end broadcasting equipment also attract high BCD, GST and cess (Combined average tariff arbitrage of over 40 percent), which inflates the price further and lead to shift demand to the grey market (viz. sales of around 55-60 percent). Studies show that the Government is losing huge revenues each year on the account of Chinese Encoders, Mux, STB and other transmission equipment and grey market operations.

3. CAS / SMS and DRM development

Conditional Access System (CAS)/Digital Right Management is the most critical element in the entire pay channel encryption and distribution ecosystem. Breach of CAS/DRM of any operator in a market has a direct and huge impact on all the stakeholders of the distribution ecosystem and not only of the platform which has deployed such CAS/DRM.

Therefore, it is extremely important for all the CAS Operator to ensure not only robust but a full proof system to detect and prevent any kind of leakage.

The current security framework which was laid down way back in 2003 has become obsolete now and pay TV industry is suffering huge revenue loss. Therefore, it is not only CAS/SMS responsible for piracy, but all connected echo-system partners are equally responsible for the same like Encoder/MUX where CAS system getting control word (CW) and then ECM/EMM being generated and if Encoder/MUX having escape root for CW leakage.

Roadmap for Security:

- a. We must look for Strong STB security which may last 8-10 years.

- b. Not to be stuck with a single security chain and rather enable several alternative STB security options in both at chipset level and software level.
- c. Easy and flexible to include dormant or combine active security elements.
- d. Ensure security support from all providers of security elements and not only relate to CAS vendor and be unable to reach behind.
- e. Need to split security model into two layers a STB security foundation layer and a CA system layer.
- f. Need to control key-ladder and bootloader keys.
- g. Need to enable additional security blocks in STB chipset and supported by CAS.
- h. New legal framework for security support. Focus on acting if security issues and less on liabilities.

4. Major components R&D and their patents

Increased domestic value addition and the rise of a nascent electronics ecosystem are some of the other successes of the current policies. Assembly has been growing and there has been a shift from Semi Knocked Down (SKD) to Completely Knocked Down (CKD) level showing progress in value added contents. The consumer electronics (CE) segment is growing fast too, especially the TV segment has experienced a variety of new technological developments (from CRT TVs to LED/LCD TVs to Smart TVs). Several firms are choosing to develop smartphone value chains in India, owing to a growing presence of R&D centres, assembly plants and rising exports of finished products. Several Centres of Excellence have been set up along with rise in R&D activities, accompanied with some designing and IP registrations.

Overall, the most visible impact has been for mobile phones, which accounted for more than 40 percent share in total electronics production in 2019-20. Electronics manufacturing firms such as Apple, Samsung and Xiaomi have begun moving manufacturing to India. These firms or their contract manufacturers have made early investments in India. Whereas broadcasting equipment not getting manufactured in India.

The global electronics value chains comprise of thousands of parts and suppliers scattered across the world. Therefore, to make India their production base, the investors need to be able to reliably import these parts to make their products globally competitive. This implies, for the 'Make in India' industrial policy to succeed, the country needs an open and liberal trade regime. But the latter is at odds with the policy of Phased Manufacturing Programme (PMP), which requires continuous rise in basic customs duty (BCD). Similarly, the rise of anti-China sentiments and calls to rapidly end India's imports from China are counterproductive to the goal of making India a global production hub. Unlike India, China announced its 'Made in China' program in 2015, at a time when it had

already become the world's largest trading nation and had pursued a highly open trade and investment regime.

In the above backdrop, we respond to the issues for consultation as under:

Q1. What is your assessment in respect of local manufacturing in the television broadcast sector of India? Is there requirement for a focused action in promoting local manufacturing in the television broadcast sector? Please elaborate.

Dish TV Response: In any manufacturing, there are certain mandatory requirements to be fulfilled which are as under:

- a) R&D department of the relevant manufacturing sector
- b) Availability of skilled resources, raw materials, components indigenous vs imported
- c) Manufacturing plant with required adequate latest machinery and skilled labour
- d) Required QC and QA process in the manufacturing unit for the finished products
- e) After manufacturing warrant and support facility

For local manufacturing to succeed, all these aspects should be individually expertized to be competitive with the respective foreign vendor(s).

Q2. Do you think there is an adequate opportunity, market, and/or demand for the manufacturing of television broadcasting (headend, back haul transmission, CPE and others) equipment in India? Please provide your comments with supporting inputs and data. What are specific requirements of special interfaces and features needed in transmission equipment used in Television broadcasting 30 sector? Elaborate with respect to specific equipment like headend interface equipment and CPE/STB.

Dish TV Response: As stated above, STB is the costliest and hence the most important component for any customer to receiving the broadcasting services and hence the immediate focus should be given on the same. Broadcasting equipment must include FTA satellite box, embedded CAS box, MUX, Encoders, HPA, Modulators, Uplink antenna. Apart of this, we should also focus Indian satellite space for DTH broadcasting. Currently there are crisis of Ku-band transponders and because of this, we are forced to be on international satellite.

Q3(a). Do Indian manufacturers have adequate capabilities to meet the broadcasting (headend, transmission, CPE and others) equipment demand of the Indian cable television sector?

Dish TV Response: Unfortunately the answer is in negative. As the STB is not only a hardware but the middleware involved in it along with the CAS is the heart of the box. At present no Indian manufacturer is nowhere close to having developed these capabilities. The current Indian manufacturers have partial capabilities that too for assembling the CPE/STB products.

Q3(b). If yes, then what new measures, if any, are required for the local manufacturing sector to capture a greater market share?

Dish TV Response: Not applicable.

Q3(c). If your answer to Q3(a) is negative, then please comment what measures can enable local industry to consider manufacturing of equipment for broadcasting (headend, transmission, CPE and others) segment? Please provide supporting inputs with relevant details.

Dish TV Response: Covered in response to Q3(a). Further, HE equipment manufacturing & R&D capabilities are not there therefore complete range of broadcasting products is still a dream. Government should put efforts to bring in these technologies on BOT basis.

Q4. What are the reasons for the limited market share of local STBs? Do the local manufacturers face any entry/exit barriers such as, but not limited to cost competitiveness, and/or technology related issues? Please elaborate with supporting inputs.

Dish TV Response: Cost competitiveness, and technology related issues are certainly the biggest issues. The other major factor are the quality of the product rejection rate and after support services.

Q5. What measures do you suggest for improving the competitiveness of local manufacturers? Please elaborate your comments with supporting inputs and data.

Dish TV Response: The local manufacturers are completely dependent upon the foreign vendor for supplying software and spares because they own the patent. Further, there is no infrastructure for research and development which leads to their continuance of their dependence on the foreign vendors which further leads to increase in the cost due to payment of royalty charges.

Q6. What other measures can be taken to encourage the adoption/usage of domestically produced STBs and other Consumer Premises Equipment among the distribution platform operators?

Dish TV Response: Please refer to our response to Q4.

Q7. MeitY supported development of local CAS, which has been available for more than two years. What further measures, if any, should be undertaken to enable increase the market share of local STBs, that are designed in India, running on Indian CAS and made in India? Please elaborate with reasoning.

Dish TV Response: It is a matter of record that the local CAS has not been a great success and it has not been deployed on any of the commercial operating platform. Therefore before making any roadmap for production of local STBs based on local CAS, a proper and thorough research should be made on performance of Local CAS and implementation thereof. It may be appreciate that CAS being the most important component in the entire broadcasting ecosystem, it should be tested from all parameters being before implemented full-fledged.

At the same time, we should also stop usage of inferior quality CAS system which are also being used by many DPOs.

Q8(a). As per the estimates, yearly broadcasting imports in India amount to more than USD 20 billion. Do you think this market size reflects high potential for local manufacturers for broadcast equipment?

Dish TV Response: Definitely, but the pre-requisite for the same should be to develop and create opportune environment for the same which inter alia should include facility for R&D for more and more indigenous patented components, applicability of PLI scheme in the STB manufacturing, broadcasting head-end including encoder, mux, HPA, modulator, antenna etc.

Q8(b) If yes, why the television broadcast sector is still dependent on imports for deployment in networks? Please elaborate.

Dish TV Response: Please refer to our response to Q8(a).

Q9(a). Looking beyond local markets, can Indian industry gear itself to export television broadcast equipment for export markets?

Dish TV Response: Let us first develop proper and effective environment for 100% usage of local products in domestic market, once the infra and system for quality products is fully ready, export of the local products would only be days away.

Q9(b). If yes, what specific measures may be required to enable local manufacturers to compete in global market for television broadcast equipment? Please elaborate with relevant figures and inputs.

Dish TV Response: Local manufactures to ensure global quality standards and match cost and after sales support in order to compete with the foreign vendors.

Q10. Is there potential for promoting local manufacturing of all types of broadcasting equipment, more specific to television broadcasting equipment e.g. head-end, transmission, CPE etc. or at this stage the industry should focus on specific segment like Customer Premises Equipment / Set-Top Box? Please specify the segment (if any) and support your answer with relevant market size in terms of value and volume.

Dish TV Response: We have established benchmarks for all broadcasting equipment w.r.t. their quality, cost and reliability. Therefore for any local companies to compete any market has to be at par with the existing benchmarks, if not better, to establish themselves in market, either domestic or international.

Q11(a). Do the existing policy measures and fiscal initiatives adequately address the needs of the Indian Television Broadcast manufacturing sector?

Q11(b). If yes, please provide supporting note(s) to your answer.

Q11(c). If the answer to Q11(a) is negative, what policy measures are required to boost local electronics manufacturing in the television broadcasting equipment sector? Please provide details in terms of short term and long-term objectives.

Dish TV Response: Explained hereinabove.

Q12. Should the government extend the PLI scheme to the television broadcasting sector? Which equipment deployed in the television broadcast network should be covered under the PLI scheme? Please elaborate with supporting note(s).

Dish TV Response: We are at a very nascent stage of making our system 'Atmanirbhar'. Therefore to make a system 'atmanirbhar' in letter and spirit, the government needs to

extend all possible support in all possible field/sector to make the scheme successful. We cannot afford to be choosy in selecting certain stakeholder in the value chain and this will impede the growth of other stakeholder leading to collapse of the system. Therefore long term commitment from the Government is needed in terms of easy and cheap credit and long term credit facilities and initial tax holiday in the manufacturing of these equipment.

Q13. There is a need to have a standard understanding of the scope of 'local manufacturing' amongst all the stakeholders to bring uniformity in the consultation. What should be the scope and definition of 'local manufacturing' in the lines of manufacturing vis-à-vis assemblage of the television broadcasting equipment and their core components?

Dish TV Response: The concept of local manufacturing should be in the line of 'Make in India' and 'Atmanirbhar Bharat' initiative of the Government and impetus should be given on the production of the equipment and parts in Indian soil rather than import of the parts and assembling the same in India. As the saying goes, 'vocal for local'.

Q14. Will a stronger R&D ecosystem enable the growth of local broadcast manufacturing sector? If yes, please suggest steps to promote and incentivize R&D undertaken in India to build domestic capability in television broadcast equipment manufacturing.

Dish TV Response: Government should allocate dedicated fund for broadcasting ecosystem for increased R&D and encourage more and more patents for the overall growth of the sector.

Q15. In view of the concerns raised about Free Trade Agreements (FTAs) affecting the cost competitiveness of the local products, what policy measures do you suggest to address this issue? Please elaborate with supporting note(s).

Dish TV Response: FTA is certainly a concern for the local manufacturing sector and should be avoided as far as possible. In fact, FTA is directly in contradiction to the concept of 'Make in India' and 'Atmanirbhar Bharat'. The Government should maximize the PLI scheme covering all sort of equipment in the sector to address this issue.

Q16(a). Do you think that there is a cost disparity due to additional expense on infrastructure vis-à-vis competing nations that adds to disadvantage for local manufacturers?

Q16(b). If yes, please elaborate along with supporting inputs and itemwise comparison, such as with reference to availability of power, labour, land, strong supply chain and logistics, etc.

Dish TV Response: Not applicable

Q 17: Please list (item-wise) the cost disadvantages that an Indian manufacturer faces vis-à-vis its international competitors. Please quantify such disadvantages in percentage terms to enable broad estimation.

Dish TV Response: Not applicable

Q18. Any other issue you may like to raise relevant to the present consultation?

Government may promote local manufacturing of FTA box with all indigenous parts only. Currently the importers/manufactures of STBs who are importing various parts of STBs from various countries by under invoicing and its parts and importing under some different nomenclatures where the custom duty is minimal and /or nil thereby avoiding paying duties and taxes to Government.

These parties are importing STB parts in Semi-knocked-down kit (SKD). These parts are assembled locally in their respective factories and the final/ finished product i.e., STBs/digital decoders are cleared for sale in the market without payment of applicable GST and other applicable taxes. The rate which has been reported are \$1.50 to \$2 per STB seems to be very low. As per information the cost of each SKD STBs be from the foreign manufactures is between \$5 to \$6 besides a royalty fee of \$1 per box on MPEG4, HEVC and HDMI and HDMI technology. It means that cost of SKD STB should be around \$6 to \$7 per box as bare minimum, whereas these importers are showing import price of \$1.50 to \$2 per STB. This is nothing but a deceitful way to evade paying Government duties and taxes.

It is also true that about 40 to 50% of STBs and parts are smuggled in and payment are made through *Hawala* route. These STBs are sold in cash and the rates are around Rs 900 to Rs 1600 in retail market (online/offline) and the income is not accounted for and most of these dealers are selling the digital decoders/set top boxes and are not registered with the competent authorities as per the applicable provisions of law. As per the market estimates, till date there are about 40 to 50 million STBs are sold and every year there is an incremental sale of 4 to 5 million STBs in India for viewing of DTH, IPTV etc. These STBs are sold by from various dealers situated in various part of country for distribution of these illegal STBs. It has come to the notice that huge number of dealers are selling the STB with a various brand name.

This results into a huge financial loss to the Government in the form of GST, Income Tax, custom duties etc. The estimated loss of revenue in terms of GST works out to about Rs. 3000 to 3500 crores per annum, besides there are loss of income tax and custom duties to exchequer on account of sale of STBs is around Rs 1500-2000 crore per annum are either directly getting imported or assembling under CKD and SKD format with under value or in different category and this is not only impacting government revenue but also impacting very largely on Broadcaster's content piracy via various DTH/IPTV boxes.