

09/02/2022

*Response to TRAI  
Consultation  
Paper on  
“Promoting Local  
Manufacturing in  
the Television  
Broadcasting  
Sector”*

FROM:

HATHWAY DIGITAL LIMITED

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**Telecom Regulatory Authority of India (TRAI)  
Mahanagar Doorsanchar Bhawan  
Jawahar Lal Nehru Marg  
New Delhi-110002**

**Sub: Response to TRAI Consultation Paper “Promoting Local Manufacturing in the Television Broadcasting Sector” – Issues for consultation**

**Ref: Your Consultation Paper on “Promoting Local Manufacturing in the Television Broadcasting Sector” dated 22.12.2021**

**Kind Attn: Mr. Anil Kumar Bhardwaj, Advisor (B&CS)**

**Dear Sir,**

At the outset, we are thankful to TRAI for coming out with the captioned Consultation Paper which is in line with idea of “Make in India”, a flagship initiative of the Government of India and to seek stakeholders’ inputs regarding underlying challenges as well as enabling measures that can facilitate the local manufacturers in television broadcasting sector to meet domestic demand and also pave the way for export-oriented growth and enabling its transition from an import-driven industry to a sustained ‘Atamirbhar ecosystem’.

As the Cable Television Sector is predominantly dependent upon import for the deployment of equipment in the distribution networks; the share of locally manufactured equipment is limited. Some of the major concerns pertain to the quality of the final products, cost of the products and the scale of production. Further, the lack of adequate Research and Development (R&D) in the sector is another area of concern for local production of cable television broadcasting equipment. These factors primarily hamper the demand for locally manufactured equipment.

Our detailed submissions on the issues raised vide the CP are enclosed herewith.

We request you to kindly take note of the above.

Thanking you ;

Yours Faithfully;

**For Hathway Digital Limited**



**(Ajay Singh)  
Non -Executive Director**

## RESPONSE TO ISSUES FOR CONSULTATION

**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.**

**&**

**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?**

**Response :** Manufacturing of Telecom/Transmission equipment across all three domains Head end/Core, Transmission and CPE requires production resources

1. Generic resources (SMT, Assembly etc)
2. Product specific resources, mainly testing and test systems.

While there is adequate capacity of generic production resources, the product specific resource deployment like test system is not adequate. This in-adequacy in product specific resources is due to:

- High cost of investment in product specific manufacturing mainly test equipment/systems
- Capacity utilization due to seasonality.
- Capability and cost of maintenance etc.
- Common problem of component eco system to increase scale to other geographies and product lines.

**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 sector? Elaborate with respect to specific equipment like headend interface equipment and CPE/STB.**

**Response :** Yes. The market size is adequate when we look at complete end to end, but when this is segmented across CAPEX (Core/Transmission) and CONSUMABLE (CPE) then it is skewed.

As supply chain for Telecom/Transmission equipment is highly distributed and multilayer a different approach would be required for Capex (Head end/transmission) and Consumable (CPE)

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

**Response :** NA

**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.**

**Response :** While there is adequate capacity of generic product resources, the product specific resource deployment like test system is not adequate. This in-adequacy in product specific resources is due to:

- high cost of investment
- Capacity utilization due to seasonality.
- Capability and cost of maintenance etc.

Common problem of component eco system to increase scale to other geographies and product lines.

Some of the ways to overcome are:

1. Incentivise product specific investment
2. To overcome seasonality export promotion, while the component eco system developments in India.
3. Domestic production incentive at both product level and for part having easy localization opportunity within existing supply capabilities, Cabinets, enclosure, cables, connectors etc.
4. Incentivize domestic product development & Engineering cost incurred in production engineering carried out in India

**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.**

**Response :** The probable reasons for limited market share of local STB are:

- Imports against FTA agreements

- Demand seasonality leading to low capacity utilization of product specific resources like test systems.
- Access to IP and IP cost
- Access to competitive raw material supply chain.
- Limited scale of due to multi-vendor multi-technology.
- High mix product line

The specific entry barrier to EMS are:

- Design and development of Test systems
- Inadequate ecosystem of development of test systems required for product based on product manufacturing test plan, which is primarily designed and is proprietary of product engineering company
- Investment in product test systems.

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

**Response :** The suggested measures for improving the competitiveness of local manufacturers are as below :

- Access /Support to IP and IP cost
- Access to competitive raw material supply chain- With the recent initiatives to development component eco system in progress that would be realizable over next 3 years, till the BCD of components needs to be reviewed.
- Identify the role of SME/MSE-Sheet metal, Die casting, cable, plastics, racks, adaptors etc. and incentive them for sale against end use in telecom sector.
- Ecosystem of development of test systems required for product based on product manufacturing test plan.
- Incentivise product specific investment
- To overcome seasonality export promotion, while the component eco system developments in India.
- Domestic production incentive at both product level and for part having easy localization opportunity within existing supply capabilities, Cabinets, enclosure, cables, connectors etc.
- Incentivize domestic product development & Engineering cost incurred in production engineering carried out in India

**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?**

**Response :** While the measures are taken for support of local manufacturing, product linked incentive can also be thought as procurement linked incentive schemes where the principal buyer is can be incentivised to development of domestic supply chain directly.

**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.**

**Response :** In our view the major reason that iCAS failure and suggested way forward is as given below :

- CAS is not only an integral part of Set Top Box but also needs to be built as an Infrastructure at Headend Level and Network Level.
- iCAS is not proven as yet for complex deployment with Multiple Headend (more than 10 or so) getting served through a single system so this needs to be gradually tested and matured over the time.
- This requires humongous investments from License, Hardware and Network Bandwidth perspective.
- While Consultation Paper highlights cost advantage for Operators with iCAS but at the same time, there are other proven non-Chinese CAS Solution provider which falls into similar Cost structure so in totality it will be a huge effort and investment to begin with.
- If we bundle iCAS with Local Manufacturing subject, this may slow down the focused effort for building CPE and Network Equipment locally.
- Thus it can be decoupled from Local Manufacturing and building Local echo system subject

**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?**

**Response :** Yes. The market size is adequate when we look at complete end to end, but when this is segmented across CAPEX (Core/Transmission) and CONSUMABLE (CPE) then it is skewed.

As supply chain for Telecom/Transmission equipment is highly distributed and multilayer a different approach would be required for Capex (Head end/transmission) and Consumable (CPE)

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

**Response :** *The television broadcast sector is still dependent on imports for deployment in networks because the Supply chain for Telecom/Transmission equipment is highly distributed, multilayer, multivendor.*

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

**Response :** Yes, we need to take a different approach for capex (Core/Transmission) and consumable (CPE)

**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.**

**Response :** *While developing supply chain policies ,*

- a. We may need to take a difference approach for Capex and consumable.
- b. Attract relevant product design companies to India and incentivize domestic product engineering
- c. Cost effective test labs for product testing.
- d. Identify the role of SME/MSE-Sheet metal, Die casting, cable, plastics, racks, adaptors etc. and incentive them for sale against end use in telecom sector.
- e. Ecosystem of development of test systems required for product based on product manufacturing test plan and support to test system design/configuration companies for the manufacturing test plan.

**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.**

**Response :** In our view local manufacturing of Active Transmission equipment is unlikely to happen however for passive component (like Mounters, fixtures and tools) which are involved in deployment, eco system for those can be developed by SME/MSME.

There is also good potential for localisation for Transmission side equipments

There is a high potential for Customer Premises Equipment, related accessories, enclosure, cables and connectors.

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

**Response :** In our view the existing policy measures and fiscal initiatives do not adequately address the needs of the Indian Television Broadcast manufacturing sector . Please note that:

- PLI are Product specific and CPE like STB/HSTB not covered in Telecom Equipment PLI.
- EMC: Scheme are cluster specific for large manufacturing with a clause Anchor unit participation to extent of 50%. :
  - i) The electronic hardware last mile of assembly is multivendor, distributed and multilayer, which does not need large EMC.
  - ii) Large EMC required large pool of man power, which come with its own risk

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

**Response :** NA

**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.**

**Response :** In our view the below measures are required to boost local electronics manufacturing in the television broadcasting equipment sector

**Short Term Measure :**

- Include STB/HSTB CKD in existing telecom equipment policy with no additional investment criteria and eligibility.
- Promote SKD for Head end/Transmission.
- Product engineering domestic development to be promoted while Design can happen elsewhere.
- Separate policy for Procurement linked incentives direct to the principal buyer to encourage and invest in local supply chain development.

**Mid Term Measure :**

- Identify the role of SME/MSE-Sheet metal, Die casting, cable, plastics, racks, adaptors etc. and incentive them for sale against end use in telecom sector.
- Access to USO funds

*Policy support for Ecosystem for development of test systems required for product based on product manufacturing test plan and support to test system design/configuration companies for the manufacturing test plan.*



**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).**

**Response :** The government should extend the PLI scheme to the television broadcasting sector as generic capacity exist which can used across sectors :

- There are two ways to look at this PLI.
  1. Production linked incentive: Which goes to manufacturer.
  2. Procurement linked incentive: Which goes to buyer.
- Advantage of Procurement linked over production is :
  1. Buyer can encourage localization and support local development.
  2. Due to low volume high mix the buyer supply chain strategy will be flexible.

**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?**

**Response :** Mapping of Manufacturing scope vis a vis Equipment categories should be as given below :

#	Category	Product Design	Product Engineering	CKD – PCBA Assembly	SKD assembly/System integration	Testing and configuration	Local supply chain	After market services
1	Head end	Optional	Yes/Optional	No	Optional	Yes	Yes ~20%	Yes
2	Transmission	Optional	Yes/Optional	No	Optional	Yes	Yes ~20%	Yes
3	CPE	Optional	Yes	Yes	Yes	Yes	Yes ~20%	Yes

**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.**

**Response :** We suggest to incentivize local PCBA design (ODM companies) with R&D tax waiver, equipment tax waivers for all designed-in-India products. In addition, designed in India products must be given further offset in PLI. Over time, this will help consolidation of volume through commonality of design/components.

Product engineering domestic development to be promoted while Design can happen elsewhere.

**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).**

**Response :** In our view , Imports against FTA can be linked with End use of importers with respect to local value addition post import so that trading of goods imported under FTA can be discouraged.

**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?**

**Response :** In our view there is cost disparity primarily in Logistics and supply chain as well as manufacturing due to :

- Cost of local transportation due to distributed supply chain to the factory by Road.
- Lack of common/bonded warehouse at low cost.
- Work hrs of employment for direct labour in cases of seasonality of demand.

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

**Response :** With regard to Logistics and supply chain and manufacturing , we would like to state that :

- Cost of local transportation due to distributed supply chain to the factory by Road: The factory located in non port areas and far from port incur local freight due increasing cost of fuel.
- Lack of common/bonded warehouse at low cost: Govt owned bonded warehouses at low cost can help in managing impact on cash flow due to taxes and duties payment
- Work hrs of employment for direct labour in cases of seasonality of demand. India 8 hrs per day with 48 hrs a week with maximum over time Upto 52 hrs/week. China: India 8 hrs per day with 48 hrs a week with maximum over time Upto 60 hrs/week.

**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.**

**Response** : ODMs may be in better position to provide this specific information, we have noting to comment .

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

**Response** : Another important factor which hampers the Make in India initiative in Cable Television Sector are Chinese vendors, who have mushroomed post digitisation, by offering substandard products at a cheaper rate as well as giving financial help for procuring these equipment. Hence it is important that authority should come out with measures/process for getting these substandard and already deployed Chinese equipments certified by TEC at the earliest , so that these substandard equipments are identified and their vendors are blacklisted. This would not only boost the Make in India initiative but would also help in curbing piracy which is hampering the growth of Cable Television Sector.