February 23, 2022.

To,

Shri Anil Kumar Bharadwaj, Advisor (B&CS), TRAI, Mahanagar Doorsanchar Bhawan, Jawahar Lal Nehru Marg, New Delhi 110 002.

Subject: Comments on the Consultation Paper on "Promoting Local Manufacturing in the Television Broadcasting Sector" dated 22.12.2021

Respected Sir,

We would like to thank the Authority for providing us with the opportunity to share our comments on the Consultation Paper on "Promoting Local Manufacturing in the Television Broadcasting Sector"

At the outset, we are thankful to the Authority for providing us the opportunity to share our comments on the consultation paper on Promoting Local Manufacturing in the Television Broadcasting Sector.

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.

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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.

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?

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Q3(b). If yes, then what new measures, if any, are required for the local manufacturing sector to capture a greater market share? Q3(c). If your answer to 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: Presently the manufacturing in cable tv sector at local level is not significant. Most of the material including the set top boxes and equipment required to run the network are being imported majorly from China. The developing, testing and certification facilities in the country are not adequate and affordable for manufacturing in India. The local manufacturing should be promoted by incentivization as below;

- 1. Provision of land at subsidized rates for setting up plant for manufacturing.
- 2. Reimbursement of stamp duty and registration charges.
- 3. Incentive for assembling of the parts for the promotion of final products.
- 4. Provision of loan/funding at subsidized interest rates.
- 5. Tax holidays/reduction on tax rates for manufacturing
- 6. Technology transfer agreement with foreign manufacturers
- 7. Power at subsidized rates
- 8. PLI scheme to promote domestic manufacturing in the broadcasting sector

When we are talking to promote the manufacturing in the television broadcasting sector, major part of execution is already complete. We are discussing about STBs manufacturing wheras millions of STBs worth billions of dollors have already been imported from China and deployed. Govt should focus on manufacturing of ONU/ ONTs and CPEs which will be

deployed in millions in next 5 years and ban complete imports of ONU/ ONTs or increase the import duty on such imports and incentivize local procurement which will attract the service providers to procure their requirement from the local manufacturers and Indian manufacturers will get the scale. If we delay in creating desired eco-sytem, we will end up in importing millions of ONU/ ONTs from China or other countries similar to the set top boxes.

Govt should focus on creating world class policies, manufacturing of quality semiconductors and components, create ecosystem for manufacturing and then expect results after 2-3 years. We expect results before making policies. If we ill be able to manufacture quality products at affordable price, we will be able to export also.

We believe that the Govt should focus on creating eco system, like manufacturing of semiconductors and other components, plastic moulding, manufacturing hubs/facilities, focus to improve manpower skills, etc. All the above facilities will help in for manufacturing of world-class equipment at a reasonable cost. Moreover, Indian firms are not competitive with foreign firms on account of pricing and quality. Cost of Indian manufacturing equipment will come down with large scale manufacturing, automated manufacturing plants, world class moulding facilities, manpower with enhanced skills. This can be done by technology transfer partnerships.

The two broad categories of end-consumer devices are STB and ONT/ONU. ONT/ONU are at present mostly being imported into India, either in Completely Built Up (CBU) or SKD form. As the market shifts to an increasingly converged networks with hybrid television, broadband and data services, demand for ONT/ONU is also expected to increase exponentially. So as an immediate measure, Govt may focus on manufacturinhg of STBs, ONUs and other FTTH network related equipment.

Indian manufacturers are merely assembling the components to make the equipment. Mostly all the components and semiconductors are being imported from China, Taiwan and Korea. We must focus towards productors of components. Presently many of the manufacturing facilities of STB, ONU/ONT are fully or partially owned by Chiense vendors. Indian manufacturers alone do not have capabilities to manufacture quality Headned and other broadcast equipment. If there will be scale, skilled manpower, Ecosystem and incentivation by the Govt, Indian manufacturers will be able to manufacture quality equipment at expected and competitive price

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: Quality, cost competitiveness, non-availability of eco-system, non-availability of India manufactured semiconductors and components, and similar other challenges. The R&D budget of Electornics Communication should be enhanced for innovation of product requirements of future technologies.

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

Response: Focus on manufacturing on quality semiconductors and other electronic components, plastic cabinets, metal housings at competive price, focus on improving skills of manpower to be involved in manufacturing, vision, scale and incentivization. Results of all these should be expected in 2-3 years.

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: In addition to manufacturing of STBs, we should focus on manufacturing of ONU/ ONTs and other CPEs. We further state that chip manufacturing is non-existent in India. Microprocessors are being imported from foreign vendors. Further, owning an assembly line is often viewed as an expensive affair in India. Only few companies in India are being able to afford such kind of technological and business setup. All of these factors are collectively responsible for limited market share of indigenous STBs. The incentivization as suggested in response to question number 1 to 3 will promote the usage of locally manufacturing equipments.

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: We should introspect why local CAS did not gained market share and why Chinese CAS, even not secure enough and non-compliant with regulatory framework, flared well. Most of the STBs chiset vendors did not integrate with Indian CAS. Seems the commercials arrangement between CAS and chipsets vendors did not work well. It is also felt that it was because focus of the India CAS company was to sell STBs bundled with CAS. Also the performance of iCAS remained in question.

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?

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

Response: There is a potential but Indian broadcasters have more confidence in Products quality being imported from N.America, UK. There are limited players in Broadcasting Equipment manufacturing, like Cisco, Nokia, etc. These manufacturers have their R&D and manufacturing in US, UK and other N. American countries. They have earned their names in quality products over the years. Also the requirement now is in the broadband equipments and focus of the government should be on development and promotion of broadband equipments in the country. Technology transfer agreements with the technologically advanced countries will ensure the quality production of required products in the country.

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

Response: Yes. But we should expect results in 3-5 years for the policies and actions being taken today as suggested in our response to the above said questions.

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.

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: At this stage the industry and Govt. should focus on specific segment like Customer Premises Equipment / Set-Top Box/ ONUs for Indian market and exports. Major import is for these items which are of recurring in nature.

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

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

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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 shortterm and long-term objectives.

Response: Existing initiatives are not sufficient and have not resulted in significant progress in this regard. In our opinion initiatives as suggested in our response to question 1 above will encourage and boost local manufacturing in electronics sector.

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: Surely exptension of PLI scheme will help. Govt should focus to create ecosystem as it would take another 2-3 years for the outcome of positive results in this regard.

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?

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: R&D ecosystem will improve only if brain drain to US and other developed countries reduce. If people involved in R&D are considered valuable and paid at good scales, more scientists will work in semiconductor R&D and manufacturing.