

**February 23, 2022**

To,

**Anil Kumar Bhardwaj,**

Advisor (B&CS)-II,

Telecom Regulatory Authority of India.

**Subject:** Comments/Observations on behalf of DEN Networks Limited on the Consultation Paper on “Promoting Local Manufacturing in the Television Broadcasting Sector” dated 22.12.2021 (“CP”).

**Dear Sir,**

We would like to express our gratitude for providing us with the opportunity to share our observations on the Consultation Paper.

At the outset, it is noted that the comments in this paper are premised on our understanding of the broadcasting and cable TV industry practices, its gradual growth over the decade and the current legislative structure. We humbly acknowledge and appreciate the efforts that the Authority has put forth in initiating a CP on such a significant issue that is in relation to the growth of local manufacturing in cable television and broadcasting sector.

While the Authority has, in the past, issued two consultation papers, one in 2010 and the other in 2017, in relation to promoting growth of local manufacturing in telecommunication sector, this is the first time that the Authority has initiated a consultation on a similar subject, but the same is specifically in relation to broadcasting and cable television sector. We completely agree and stand supportive of the vision that is envisioned by the Authority of making India a manufacturing hub in all sectors.

It is therefore, suggested that grant of infrastructure status to the broadcasting and cable distribution sector will not only help in the proliferation of the local manufacturers operating in the television industry and cable television services, but will also promote Make in India initiative.

Thanking You

Yours Faithfully

**DEN NETWORKS LIMITED**

## **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.**

**AND**

**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.**

**AND**

**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?**

**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 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.**

**AND**

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

**Response:** In response to the above stated questions, we are of the opinion that it is rightly acknowledged that before promoting efforts for local and indigenous manufacturing in the broadcasting and cable television sector, it is imperative that, the authority should first assess and ascertain the quantum of demand and requirement of equipment associated with the broadcasting and cable television sector without paying heed to the fact that the same being locally manufactured or imported. It is further stated that as the Authority has rightly highlighted basis the 25th Report of Standing Committee on Information Technology (2020-2021) that most of the major broadcast equipment, i.e., SW Transmitters, FM transmitters, Diplexer, measuring equipment, Programme production software, Digital transmitters,

Camcorder, Non-Linear Editing (NLE), Production Switcher, Routing Switcher, Dynamic Frequency Selection (DFS), Personal Digital Assistant (PDA), Measuring equipment, Encoder, High Power Amplifier (HPA), Integrated Receiver/Decoder (IRD), Up-converter & Down-converter, Modulator, etc., are not manufactured in the Indian market and are imported from foreign vendors. Bulk of deployment in the television broadcast sector is being met through imports and presently, the technological and business ecosystem does not stand supportive of domestic manufacturing of such equipment. The equipment(s) that are deployed for transmission of cable television can be classified and listed into the following three categories including Headend Equipment that majorly comprises of Encoders, IRDs, Multiplexers, Conditional Access System (CAS) and Subscriber Management System (SMS), Transmission Equipment like Gigabyte Passive Optical Network (GPON), Optical Line Terminal (OLT), Amplifier, Optical Fiber Cables (OFC), Radio Frequency (RF) Coaxial Cables, and, Consumer Premises Equipment like Optical Network Terminal (ONT), Set top Box (STB), Audio and Video (AV) cables.

With respect to the Headend, most of the demand associated with headend equipment is catered through imports and the demand of headend and other associated equipment saw a peak during the implementation of digitalization in the last seven years, wherein most of the MSOs installed equipment that were imported from countries like America, Europe and China due to the quality and cost of the equipment. The Authority would be aware that with the completion of digitalization in 2017, the demand for headend equipment has tapered off and limited circumstances like expansion, upgradation or replacement or new registrations will only call for deployment of headend related equipment. Moreover, encouraging indigenous manufacturing for headend and associated equipment with headend, at this stage, will require investment and resources of huge magnitude which is not likely to give lucrative and commercially gainful returns on account of low and limited instances of demand as it is observed that the demand is comparatively much higher for transmission equipment as well as Consumer Premises Equipment as compared to that of headend related equipment. Moreover the Transmission Equipment and Consumer Premises Equipment that are used for backhaul connectivity and for provisioning access connectivity to the customer premises in the television and broadcasting sector are broadly the same as those being in Telecommunication sector and for provisioning of broadband services. Demands for these equipment(s) are therefore not likely to see any depletion as is the case with Headend Equipment. Therefore, it is suggested that the following measures be considered for facilitating domestic and indigenous manufacturing of equipments:

- i. The government may consider setting up manufacturing plants for local production and manufacturing of equipment and may provide

- land at subsidized rates to the local manufacturers or may grant a land subsidy to such manufacturers.
- ii. Introduction of a one-time 100% reimbursement of stamp duty and registration charges paid with respect to lease/purchase of land, industrial plots or tenements.
  - iii. Introduction of a one-time 100% reimbursement of land conversion fee payment that may be applicable in case of land conversion fee payment made for converting land from agricultural use to industrial use through imports and presently, the technological and business ecosystem does not stand supportive of domestic manufacturing of such equipment.
  - iv. Introduction of separate subsidy for plant and machinery by virtue of which the manufacturers who prepare the finished product by virtue of assembling various components and parts, can avail such subsidies which will act as an incentive for them to engage in local manufacturing of finished equipment.
  - v. The Government may also introduce special funding schemes with low interest rates as well as tax benefits for the manufacturers who intend to engage in local manufacturing of several components associated with any equipment or finished products.
  - v. Additional incentives in the form of tax holidays and/or reduced taxes on domestically manufactured Transmission Equipment and/or Customer Premises Equipment like STBs, OLTs and ONU. The Government may also introduce higher import duties on finished Customer Premises Equipment (CPE) that are imported. This will encourage the buyers to purchase from Indian manufacturers who procure and locally assemble the finished products and will provide an impetus and an edge to such manufacturers over imported products which do not use locally deployed resources.
  - vi. Collaboration with foreign manufacturers for promoting technology transfers as the same will enable and equip the local manufacturers to themselves indulge in the domestic production of both the equipment (finished product) as well as the components of the equipment and the same will promote indigenous manufacturing of equipment.
  - vii. Additional incentives including grant of electricity at subsidized rates for a period of at least five years from the date of commencement of commercial production, followed by introduction of power tariff reimbursement and production linked incentive to the tune of 5.00%- 10.00% of net sales turnover for a period of five years from the date of commencement of commercial manufacturing and indigenous production.

**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.**

**AND**

**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 response to the above stated questions, it is observed that in India, most of the demand for set top boxes (STBs) is catered by numerous Korean and Chinese vendors which offer STBs at very economical rates. This is precisely why indigenous manufacturers are struggling since the demand for STBs gets catered by the foreign manufacturers. Moreover, the STB manufacturing industry is thwarted with the dependence on foreign Conditional Access System (CAS). The foreign CAS companies already have pre-existing tie-ups with other stakeholders like System on Chip (SoC) providers, STB manufacturers, System Integrators, etc. Even if the domestic manufacturers attempt to enter into an understanding/agreement with global CAS companies, under most circumstances, they are not subjected to convenient/competitive terms or conditions. Therefore, lack of effective collaboration between the domestic manufacturers and global software companies, act as a major impediment towards STB manufacturing in India.

It is further stated product like chip manufacturing is still not available in India follow by microprocessors which are 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. It is suggested that for proliferating the growth of indigenous manufacturers of STBs, measures that have been suggested as a response to the aforementioned questions, i.e. benefits of availing land, plant and machinery at subsidized rates, subsidizing the process of technology transfers and introduction of financial incentives, should be introduced by the Government. The Indian Government should incentivize public-private partnerships to ensure successful technology transfer. Such transfers will not only encourage indigenous manufacturing by equipping the local manufacturers with the technology of comparable standards, required for production, but will also create employment opportunities.

**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 humble opinion, it is stated that millions of STBs were integrated with I-CAS, it caused several setbacks for the DPOs that deployed such STBs. Such STBs having i-CAS were neither amenable to the technical system requirements nor were statutorily compliant in terms of security standards and parameters. In the absence of a secured system, the entire purpose of addressability gets defeated. It is therefore suggested that the past experiences with i-CAS be analyzed and reviewed on a holistic basis. It is imperative that indigenous development of CAS should be devised in such a way that the same should not only be offered at a competitive and affordable price but should also match the quality and standards of CAS that are being offered by foreign vendors. It is also suggested that the Government may consider opting for technology transfer at subsidized rates instead of funding a new technology. It is pertinent to note that developing a new technology would require significant resources for Research & Design (R&D) and would be tedious process. Instead, opting for technology transfer would ensure that the local manufacturers of STBs can be equipped with the technology for production and the same will also generate opportunities for employment. It is also suggested that at all times, such CAS should be compliant to all technical parameters and standards as may be issued by the Authority from time to time and shall also be subjected to a uniform testing and certification mechanism as has been enshrined by the Authority. Such an initiative will encourage the DPOs to deploy locally developed CAS as a part of their digital addressable systems.

**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?**

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

**Response:** We state that while the broadcasting imports in India may amount to more than USD 20 billion on an annual basis, however, placing reliance on our response to Question No. 1, we state that for determining the potential for proliferation of indigenous manufacturing under any instance, it is imperative to first analyze the regularity and the day to day demand that the stakeholders face, of equipment associated with each such category of broadcasting and cable television sector, i.e. headend equipment, transmission equipment and customer premises equipment. We seek to bring to the kind attention of the Authority that out of an approximate USD 20 billion, an approximate value of USD 4.68 billion deals with equipment that are primarily deployed in the broadcasting sector, while an approximate value of USD 15.43 billion are equipment that are deployed across multiple sectors, including for provisioning of broadband and telecommunication services. It is imperative to note that an approximate value of 7.55 billion is towards transmission and

customer premises equipment. Taking into consideration the aforesaid and reiterating our response to Question 1, we state that local and indigenous manufacturing should be encouraged in the sector of transmission equipment and customer premises equipment as the demand for equipment with respect to such categories are regular and are not likely to face any deficit, unlike the headend equipment that will arise only under limited circumstances like expansion, upgradation or replacement or new registrations. In this regard, we yet again seek to draw the kind attention of the Authority to our introductory comment and establish before the Authority that any measures for encouraging local manufacturing should be preceded by adopting and carving out measures for sustenance of the broadcasting and cable television sector, the future of which is at grave risk on account of continuous churn of subscribers to unregulated platforms that offer the same content at comparatively lower prices without being subjected to the framework of applicable regulations.

It is noted that majority of the transmission equipment and customer premises equipment are presently being imported from countries like China or South Korea as the present business environment does not promote a sustainable environment for domestic manufacturers of such equipment. Moreover, with respect to STBs, the Authority has recognized that a large number of DPOs are importing the same from Korea and China as the foreign manufacturers are offering the STBs at much economical prices and are also suited to their day to day business and technical requirements. We suggest that for promoting indigenous manufacturing, it is imperative that the Government creates a sustainable business and technological ecosystem by adopting measures in furtherance of our response in this consultation paper. Introduction of technological transfers, financial incentives in terms of tax exemption and tax holidays and production linked incentive are examples of such measures that significantly encourage and promote indigenous manufacturing of transmission and customer premises equipment.

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

**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:** In response to these questions, it is stated that the measures suggested in this Consultation Paper can flourish and encourage local manufacturers to establish a strong foothold in the Indian market and address the local demands in the upcoming year with the of promotion of such measures. It is only after that step that they can subsequently also compete in global market in the long run, i.e. subsequently within a period of fifteen years from the implementation of the aforesaid measures. Such measures can be followed by manufacturing friendly government policies and incentives that

would benefit not only the manufacturers but also the DPOs who currently rely solely on the import of equipments from neighboring countries.

**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 response to this question, we would like to reiterate the response to Question No. 1 and the same addresses the concerns raised in this question.

**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.**

**Response:** In response to the above question it is observed that the existing fiscal policies are not adequate to promote and encourage the indigenous and local manufacturing of television and broadcasting sector equipment in India. It is suggested that in order to promote indigenous manufacturers measures including short-term measures and long term measures. While the government has already notified the import of colored television in the 'restrictive list', introduction of Production Linked Incentive on domestic manufacturing of television sets will also encourage local manufacturing of such products. Domestic manufacturing presently provides for 12-15% value addition for televisions in India. Some of the Short term measures are highlighted below:

1. Introduction of production linked incentive to the tune of 5-10% on the annual sales for a period of five years will provide huge impetus to domestic manufacturing of television sets in India and will increase the value addition to 30%.
2. Promotion of manufacturing of open-cell television including setting up a manufacturing plant for local production of open cell televisions, the Government may provide land at subsidized rates to the local manufacturers or may grant a land subsidy to such manufacturers. The extent of such subsidy can be determined by the Government by taking into consideration



the nature of equipment for which a plant is sought to be set up. The area for setting up a manufacturing plant should be a disaster free zone and should be near the coastal areas for encouraging exports, in the long run.

3. Relaxation under Income Tax act shall be introduced for local manufacturers.

4. Financial assistances from external agencies like India Infrastructure Finance Co, IDFC etc. to be extended to broadcasting sector.

5. Introduction of additional incentives in the form of reduced taxes on domestically manufactured Transmission Equipment and/or Customer Premises Equipment like STBs, Optical Line Terminal (OLT) and Optical Network Unit (ONU). The Government may also introduce higher import duties on finished products. This will encourage the buyers to purchase from Indian manufacturers who procure and locally assemble the finished products and will provide an impetus and an edge to such manufacturers over foreign products that are not deploying local resources in the country.

Some of the long term measures include:

1. Establishment of training centres for equipping the local manufacturers with requisite skills to manufacture, manage and operate factories, high end optic screen, highly automated machines that are required for manufacturing of televisions, transmission and customer premises equipment.

2. Funding and establishment of Research and Design initiatives in the long run that may pave way for innovation, research, design and development, which will make the industry competitive.

3. Creation of specific Special Economic Zones (SEZs) for manufacturing of equipment related to broadcasting, television, cable and telecommunication 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:** As established as a response to the aforesaid questions, production linked incentive should be introduced on the manufacturing of television sets, transmission equipment and customer premises equipment. The Government should incentivise the domestic manufacturers by providing a production linked incentive to the tune of 5.00%- 10.00% of net sales turnover for a period of five years from the date of commencement of commercial manufacturing and indigenous production.

**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:** 'Local manufacturing' in the context of broadcasting and cable television sector may be defined as "the process of manufacturing in terms of which any product is made or developed or created using > 20% of components sourced from component/service providers in India." It is suggested that the percentage of locally sourced components/services should increase by at least 5-10% every year for any equipment to continue to qualify as 'local manufacturing'.

**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:** In response to the above stated questions, it is suggested that promotion of R&D mechanism should be viewed as a long term measure and the government itself in its diplomatic capacity should primarily collaborate with foreign manufacturers for technology transfer which will equip the local manufacturers to manufacture the equipment utilizing the known and available technology. Moreover, domestic manufacturing is channelized and demands for equipment are catered locally, with the help of technology transfer and financial incentives thereof, the Government should then promote Research and Design as a long term measure that will pave way for innovation, research, design and development and will make the industry competitive.

**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:** We are of the view that there should not be any intervention with the benefits that are available to the stakeholders on account of India being a signatory to the FTAs. Aside to that, the Government should undertake distinct and independent measures to develop a sustainable business and technological ecosystem in relation to broadcasting and cable television sector. Such measures have been identified and have been discussed at length as a response to the aforesaid questions. Summarily, introduction of measures of technology transfer by virtue of which the government itself in its diplomatic capacity may collaborate with the foreign manufactures, introduce financial incentives in terms of tax exemption and tax holidays and production linked incentive measures will significantly encourage and promote indigenous manufacturing of equipment associated with television and broadcasting sector.

**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 item wise comparison, such as with reference to availability of power, labor, land, strong supply chain and logistics, etc.**

**Response:** In our opinion, the instant technological and business ecosystem in India is not favorable to domestic manufacturing of equipment associated with broadcasting and cable television sector. It is reiterated that the Government should undertake measures to develop a sustainable business and technological ecosystem in relation to broadcasting and cable television sector. Such measures have been identified and have been discussed as a response to preceding paragraphs. Collaborate with foreign manufacturers in diplomatic capacity by adopting measures of technological transfers, financial incentives in terms of tax exemption and tax holidays and production linked incentive measures will significantly encourage and promote indigenous manufacturing of equipment associated with television and broadcasting sector.

**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:** The above stated questions does not warrant any response from us.

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

**Response:** The above stated questions does not warrant any response from us.