



Response to TRAI Consultation Paper on “Promoting Networking And Telecom Equipment Manufacturing in India”

Preamble

1. We thank the Authority for providing us the opportunity to provide the comments on the TRAI Consultation Paper on “Promoting Networking And Telecom Equipment Manufacturing in India”.
2. Making India a manufacturing hub and in particular communications equipment manufacturing, has been a national priority, and one of which the industry is fully cognizant and supportive of. Measures taken by the Government in furtherance of this goal have drawn interest and engagement from a cross-section of the industry.
3. At the same time, given the global dynamics leading to a shortage of semiconductors/chip supplies, it is time that the Indian Government puts a cohesive plan to develop and encourage the entire gamut of manufacturing in India. To this effect, clearly, the Government has come out with two important PLI schemes; one by DoT on telecom networking equipment and another recently by MeitY on setting-up semiconductor facilities in India including design-led fab units.
4. The issuance of the PLI scheme is well appreciated as through this the Government has shown its vision to encourage companies who have long-term investments, employment creation, commitment to the country, and technology. The PLI scheme has already triggered the entry of several global players manufacturing mobile devices and components.
5. With this scheme, India will be well-positioned as a global hub for the manufacturing of Telecom and Networking Products and will create a conducive environment for ease of doing business. PLI will move India towards self-reliance and will improve its competitiveness in manufacturing with increased value addition.
6. For India to become a center for telecom equipment manufacturing, there are certain issues that need to be tackled realistically with the intention to make their goals translate into a pragmatic and actionable roadmap. The Government may look at holistically promoting the overall manufacturing eco-system within the country which can be plugged into the global supply chain.
7. The creation of a supporting ecosystem and this incentive-based approach will yield the desired results in the long run in the field of domestic manufacturing of telecom equipment, making it competitive in terms of quality, technology, and cost.
8. Ease-of-business climate in the country is a big limiting factor in decision-making by large manufacturers to enter India. While the government has taken substantial measures to provide fast-tracking and ease of business for companies looking to invest in the country, similar focus and urgency are needed to resolve day-to-day operational issues companies face while dealing with the Government. Some of these issues are –

- a. Manual paper-based Government processes, yet to move to completely online mode. Where even online e-Governance systems are implemented, there are often duplicate manual processes still existing.
 - b. Infrastructure constraints such as availability and quality of power. Unreliable power leads to fall-back on diesel gen-sets which is inefficient.
9. While the Authority plans to come out with a separate consultation process for promoting R&D in the sector, as mentioned in the CP, we submit that the required fiscal and non-fiscal incentives need to keep a significant focus on promoting R&D in the country in all the fiscal and non-fiscal schemes. We believe that the development of a robust NATEM sector in long run in the country is dependent on the development of strong R&D capabilities in the country along with the push required for hardware manufacturing.
10. An actionable roadmap needs to be prepared to deal with the issues, which should be inclusive of the following:

a. Manufacturing

- i. Kickstarting local manufacturing – aimed at global markets- calls for developing specialized telecom clusters while addressing infrastructural, fiscal, and legal issues, including labor laws.
- ii. Fiscal initiatives are key for accelerated development. Currently, the lack of a local cluster imposes an effective ~ 3% higher-end cost on account of freight, etc.; the government may wish to consider a time-bound (5 years) incentive to overcome this and kick start the coalescence of a cluster in India.
- iii. The present challenges in supply chains, critical components (e.g., Chips) have disrupted the telecom equipment landscape.
- iv. Without local IC fabrication facilities, not more than ~15-20% value addition is possible in India even over the next 3-4 years. To go beyond that figure requires India to promote the entire electronics cluster.
- v. PMA mandate should be consistent with WTO guidelines. To the extent applicable, the government may consider revising its PMA guidelines for 'value addition' to incorporate substantial transformation to recognize transformation activities and make policy more implementable.
- vi. India is also a big DTH market. Considering nearly 12 Crore domestic DTH and Cable TV subscribers, the manufacturing of Set-top Boxes ("STBs") within India should be brought under the Telecom PLI scheme. Further, the PLI scheme must be considered for all OEMs, EMS, Fabrication, and contract manufacturers encompassing Global and domestic OEMs who have set up manufacturing facilities in India and have already invested in R&D and developed world-class products.

b. Innovation

- i. Encouraging foreign investment is key to transferring know-how and developing capabilities to enable end-to-end product development. Need to strengthen IP protection and infrastructure to facilitate this.

- ii. Initiatives providing seed funds and infrastructure for early-stage ventures need to incorporate global best practices.
- iii. Lack of comparable commercial financing options costs local small players significantly in the market. This gap needs to be plugged from both supply and demand perspective
- iv. To build the ecosystem, we need three or four independent mission mode taskforces to foster partnership between Government, industry & academia and focus on developing commercialized technologies

Issue Wise Response

Q1: Is the PLI scheme in its current form effective enough to address the needs of promoting NATEM in India? Are any amendments or extensions required to the current PLI scheme to make it more effective? Please provide details.

COAI Response

1. **Aligning Preference to Make in India (PMI) with PLI:** Global Telecom product companies recognize India's aspiration to be a global export hub of telecom manufacturing and are fully committed to making it a reality. Companies welcome futuristic policies like the Product Linked Incentive (PLI) scheme for the telecom sector. India has a telecom manufacturing disability of ~6-8%. The PLI Scheme only partly addresses this disability as it provides an incentive of only 4-6% over 5 years. However, an alignment between PLI and PMI policy will ensure a very enthusiastic response from global companies to invest in India. This can be achieved with the government providing PMI points equivalent to 75% of the commitment of goods to be exported from India. The OEM could utilize these PMI points to qualify as a '*Deemed Class 1 Local Supplier*' for products not manufactured in India, from the date of approval of the application. This requirement will make India a significant player in the global value chain and at the same time recognize the holistic investments made by global multinational telecom product companies and rightfully place them in the inside ring of Atmanirbhar Bharat.

Guidelines for PLI scheme cap R&D scheme at 15% of the total committed investment. We submit that such restriction will discourage companies who intend to invest in R&D for product development and may incentivize only contract manufacturing or product assembly in the country. We request that the cap should be increased to 50% for domestic companies to promote indigenous product development.

2. **Removing Yearly Incentive Cap in the PLI scheme:** The Investment threshold for Year 1 is capped at 20% of the Total investment commitment and hence the PLI Incentive Payout in the 1st year is capped at 20X of the 20% investment proposed. This disincentivizes the companies which work to exceed the production threshold of 20X of 20% of the investment. Hence, we request that the PLI policy be amended to consider an incentive pay-out of **20X of the Actual Investment** made during the financial year and not the 1st Year threshold of 20% of the proposed investment.
3. **Build the component ecosystem:** Given the infancy of the telecom equipment manufacturing sector in India, the majority of the components are not locally produced. Only 15-20% of the component manufacturing takes place in India. The majority of the components manufactured in India belong to the plastic and material category. The bulk of the components in the electro-mechanical category and all the components in the semi-conductor category are not manufactured in India, indicating that 80-85% of the

total BOM is sourced from global suppliers. This indicates a tremendous opportunity for India to build its supplier ecosystem and ensure the bulk of the component production takes place locally. If there is a focus on building the component ecosystem, there will be a natural increase in value addition of domestic manufacturing as it will be cost-efficient for manufacturers to source locally. Hence the PLI scheme to develop diverse component manufacturing should be introduced, in addition to finished good manufacturing.

4. **Making electronics and telecom manufacturing cost-competitive with the world:**

The Government should work to make electronics and telecom manufacturing in India more cost-competitive to meet the vision of \$300Bn annual production by 2025-26. While we welcome Government's Indian Semiconduction Mission and other incentive initiatives, some of the other important policy measures suggested are –

- a. Provide targeted incentives for cutting-edge technology components like multi-layer, complex-material bare PCBs. For example - Indian suppliers of bare PCBs are not using PTFE Laminates as raw material, Polytetrafluoroethylene (PTFE) is a synthetic fluoropolymer of tetrafluoroethylene. Government should incentivize the bare PCB makers to adopt more high-tech technologies and materials. This could be in the form of a Capex subsidy for the upgrade of existing facilities.
- b. Incentivise global component distributors to set up aggregation facilities in India so that components can be bought in India cheaply. Currently, components must be bought from major aggregator companies that do not have their global Hubs/ Warehouses in India. Hence a higher air-freight cost is applied to components. If the government can subsidize these component aggregator companies for setting up warehouses/ hubs in India, then the cost of production will come down for Indian manufacturers as they will be able to source cheaper components in India itself and not pay extra air-freight charges.
- c. Reduce import duties on silicon components – where there is minimal production in India at present. Currently, for many silicon-based components like ICs (Integrated Circuits), the facilities are yet to come up in India. Till that time these components should be allowed at zero-duty so that SMT (Surface Mount Technology) Manufacturing can take up in an exponential way in India first.
- d. Simplify export controls such as DGFT SCOMET, to make exports' approval faster and easier for large volume exporters through a separate dedicated channel. It will be essential for large manufacturers and exporters to have a dedicated fast-track channel of export-import clearances to adhere to SLAs demanded by global Customers. Hence a dedicated import-export clearance Single Window at DGFT, Customs, and other agencies is required. A similar dedicated clearance channel is required for making India a Repair Hub – for bringing faulty equipment in India, repairing, and returning within a fast-track timeline. Currently, these clearances take several weeks/ months in India as opposed to a few days in global manufacturing hubs in Southeast Asia.
- e. Increase ease-of-business in telecom product certification and approvals which delay time-to-market e.g., TEC MTCTE scheme. There are multiple product compliance regimes in Telecom Sector such as NSDTS (National Security Directive for Telecom Sector) for trusted products, and TEC's MTCTE for mandatory product testing, among others. Often these schemes are duplicating the same compliances leading to enormous delays and burden on the industry.

- f. For example, taking the case of the TEC's MTCTE scheme - The industry was given to understand that a product's manufacturing origin and sourcing details would be verified under the National Security Directive for Telecom Sector scheme for 'trusted products' and 'trusted sources' and **not** under TEC's MTCTE.
- g. The MTCTE scheme is aimed at Product testing and certification to Essential Requirements of Safety, EMI/ EMC, technical, among others, and not at verifying the manufacturer, sourcing related information since that falls under the scope of the NSDTS scheme, which the industry is already complying with.
- h. TEC has expanded the scope of MTCTE by re-verifying such details going beyond the earlier mandate of the MTCTE scheme - which is unnecessary, redundant, and immensely adding to the compliance burden for the industry. This is totally against the spirit of Ease-of-business being promoted by the Government of India and the Hon'ble Prime Minister of India.
- i. Hence, a review of such compliance schemes is needed to ensure that best practices are adopted like the clarity of scope, well-defined SLAs with timelines, and transparent verification process with an online tracking facility, among others.

5. Inclusion of Set-top-Boxes (STBs) under DoT's PLI Scheme:

- a. In the list of specified products under the current PLI scheme¹, the Telecom equipment Access, and Customer Premise Equipment ("CPE") and Access Devices are included. The STBs by nature are CPE only with assembly lines very similar to what other CPEs need and hence they are fully eligible to be considered under the said scheme. However, STBs are not covered under the PLI scheme yet.
- b. This is important given the size of the Indian DTH market and limited manufacturing and significant dependency of STBs on imports. We believe that with a mix of the right government policies and incentives the industry is capable to boost domestic manufacturing and make India a net exporter of STBs to the world.
- c. Therefore, the STBs should be covered under the current PLI scheme or by notifying a separate PLI scheme for the Broadcasting sector including new broadcasting sector players under the new PLI, or by providing an option under the existing Telecom PLI scheme for companies to opt for it.

Q2: Whether going beyond the PLI scheme, a range of financial and fiscal incentives needs to be put in place to promote NATEM in India? Please elaborate on your response.

COAI Response

- 1. To overcome the freight disadvantages arising from the lack of a local component ecosystem, and to encourage the timebound development of such clusters, the government may consider introducing Duty Credit Scrips linked to export quantum and can be offset against local duties, for a period of 5 years; as well as making intra-NMIZ/SEZ transactions as deemed exports.

¹ Promoting Telecom & Networking Products Manufacturing in India, vide Gazette Notification No. 13-01/2020-IC dated Feb 24, 2021.

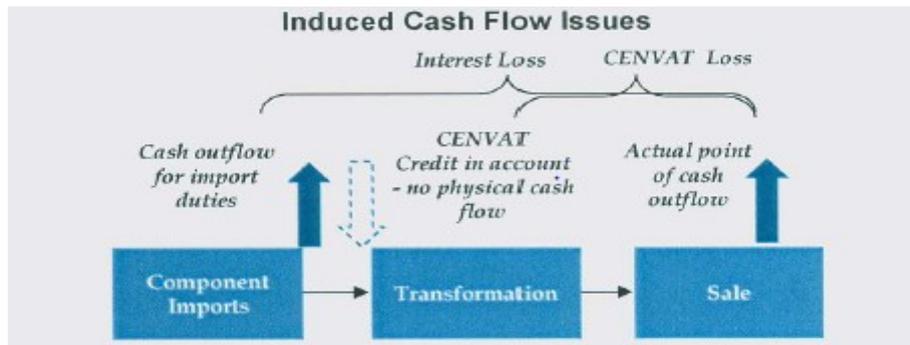
2. Infrastructure disabilities lead to cost disadvantages. Underdevelopment of the domestic supplier base and infrastructural handicap translate to higher costs for domestic manufacturers (in the figure given below). The absence of a component supply base nearly doubles the freight cost in comparison to other zones. Further, higher cost of power and uncertainty in supply also translate to increased manufacturing costs in India. The Government of India could mitigate this by instituting a special scheme in this regard. A scheme similar to the Focus Products Scheme can be devised that includes all local telecom equipment and component manufacturing satisfying DIT requirements on value addition. Under this scheme, Duty Credit Scrips can be offered as a fixed percentage of exports and DTA sales for a fixed period, for instance, 5 years from the date of scheme commencement. These credit scrips may then be used to offset indirect taxes like excise payments to reduce the effective cost.

Impact of disabilities on cost structure (%)

Cost Account	 India	 China	Comments
Raw Material Cost	85	85	▪ Assume CST waiver
Raw Material Freight Costs	3	1.2	▪ Difference arises from absence of component supply base
Labor	2	2	▪ Similar labor costs due to lower wages in India offset by lower productivity
Power and Overheads	10	7	▪ Higher power costs and uncertain supply in India
Total Cost	100	95.2	▪ ~5% cost differential

*Note: Assume power costs are 5% of overall costs. Assume other overhead costs are the same between India and China.
Source: Interviews, DIT Task Force Study, Booz & Company Analysis.*

3. Further, the Government needs to harmonize fiscal regulations across manufacturers. Current regulations do not recognize intra-SEZ sales as foreign exchange earning transactions. This precludes the development of the component eco-system as the component manufacturers struggle to meet the Net Foreign requirements of the SEZ. The Government needs to ensure that the export benefits propagate to component manufacturers within the manufacturing zone.
4. The current duty payment and refund system also induce cash flow issues and this needs to be modified. Interest losses arise from the difference in time between cash outflow for import duty and tax payments and point of reconciliation and refund transfer after product sale (see figure below). The refund amount is also unpredictable to the complex refund criteria and calculations. Some manufacturers are hindered by the non-accrual of balance CENVAT credit, where there is no physical cash flow. Consequently, the Government is urged to streamline the process of obtaining refunds and accrual of CENVAT credit to enable the development of the manufacturing ecosystem.



Source: Interviews, Booz & Company analysis

5. Further to the above, we suggest an incentive-based approach to create incremental demand for the locally manufactured equipment i.e., by incentivizing the buyers to purchase domestically manufactured equipment, without any mandate for the same.
6. As suggested in response to Question 1- targeted incentives for Capex for adopting high-tech technologies and materials used in the telecom industry are needed. Extra incentives for such component makers to adopt materials like PTFE and multi-layer technologies will be very helpful to make sure high-end component manufacturing technologies are adopted in India.
7. India must consider attracting global telecom OEMs to participate in the recently announced upcoming "design-led 5G equipment manufacturing" PLI scheme as global technology OEMs are substantially contributing to Atmanirbhar Bharat by manufacturing in India as well as having the largest R&D bases in India apart from managing global telecom networks from India. Government should incentivize the global OEMs by providing clarity and fair guidelines on preferential market access schemes where the local content definition can be made more pragmatic to account for the fact that the silicon-based component eco-system in India is still at a highly nascent stage. Moreover, the contribution from job-creation and capacity building in R&D should be quantified towards local content and value-addition.

Q3: Does the Electronic Development Fund (EDF) meet the requirements of promoting NATEM in India? What are the limitations in EDF for the NATEM sector and how can its scope be enhanced?

Q4: Is there a need for the creation of separate funds on lines of EDF or those earlier recommended by TRAI (like TEPF and TMPF) for promoting NATEM in India? What institutional mechanisms should be put in place to govern the fund(s)? Give justification and elaborate on its possible impact on the sector.

Q5: What additional measures are suggested for promoting and supporting the Start-up ecosystem in the telecom sector in India?

COAI Response

1. We note that the criteria for selection of Daughter Fund by EDF include superior investment returns (absolute and relative) and evidence of value creation through operational improvement, among others. Hence it is likely that the selected daughter funds will not be inclined in investing in nascent firms involved and invested deeply in R&D for the development of cutting-edge technology with a longer gestation period. We suggest that same should be reconsidered so that the supported Daughter Funds focus

on the targeted objective to promote innovation, R&D, and product development within the country.

2. We submit that there is a need for the creation of separate funds on lines of EDF or those earlier recommended by the Authority (like TEPF and TMPF) for promoting the start-up ecosystem in the NATEM sector in the country. Research projects having commercialization potential, require funding and mentorship for the initial years. They require support for scaling them up to a matured ecosystem, which might take 5 to 10 years also. Hence there is a requirement for a government-backed venture capital fund that can promote the development of firms that require a longer gestation period.

Q6 (a): Which of the financial instruments related to project financing, contract financing, and credit default insurance currently available in India are being used by the stakeholders, and to what extent?

Q6 (b): Are these financing instruments able to cater to the needs of NATEM in India?

Q6 (c): Are there any suggestions to further improve these financial instruments or are there any new proposed financial instruments that can cater to the needs of NATEM in India? Please provide full details along with justification.

COAI Response

1. Project finance and contract financing have been available for all growth sectors, including the telecom sector, for projects which have a predictable cash flow projection. Beyond the ability of project finance to customize the repayment schedule for the borrowing entity, we suggest that Government should explore options to allow lower interest for debt extended to the NATEM borrowing entity to promote the growth of the sector in the country. State-owned banks grant preferential access to capital to domestic companies through subsidies, low-interest loans, and bonds, especially for small and medium-sized enterprises.
2. Availability of attractive credit lines can be instrumental in the growth of NATEM in the country. Vendor financing is one of the key options made available to the buyers of telecom equipment by Global NATE manufacturers. A similar arrangement could be established for Indian NATEM. For this, it is suggested to establish a master fund to offer credit lines to buyers of telecom equipment (both in the domestic and global market) from select Indian ventures.

Q7: Whether the existing schemes relating to CAPEX and interest subvention are meeting the requirement of finance for NATEM in India.? Suggest modifications/ new schemes needed if any with details.

COAI Response

1. The Government of India launched the Modified Special Incentive Package Scheme (M-SIPS) in 2012 to promote large-scale manufacturing in the country and attract investments in Electronics System Design and Manufacturing Industries. The scheme provides a capital expenditure subsidy of 20-25%.
2. However, the disbursement has witnessed significant delay on account of the lack of transparency and arbitrary clauses introduced in the process.

3. The inefficiency in the existing M-SIPS process is evident from the Standing Committee Report on Information Technology, which states as of 10th March 2021 MeitY approved investment proposals worth Rs.81,126² Crores (FY 2012-21), **out of which incentives only worth INR 1,072 Crores have been disbursed, which is just about 12.5% of the committed incentives of INR 8,593 crores.**
4. Such an extremely slow level of disbursement defeats the purpose of such schemes to expand the manufacturing capabilities by incentivizing domestic manufacturers.
5. Further, the government set a modest target under MSIPS disbursement for FY 2021-22 at INR 700 crore.
6. In this regard, our recommendations are:
 - a. Guidelines should not be amended once the applications are filed for a scheme.
 - b. Disbursement guidelines should strictly be adhered.
 - c. The government should quarterly publish the data of applications received; incentives disbursed against incentives approved.
7. We also request that the following points may also be considered for NATEM, some of them are already present in current schemes while other points need to be incorporated:
 - a. Financial incentive of up to 50% on capital expenditure for the identified list of NATE for both new units and expansion of capacity/ modernization and diversification of existing units can be considered.
 - b. Incentives for every part of the supply chain including electronic components, sub-assemblies, and finished goods should be announced.
 - c. Financial support from the Government can be offered, including Grant-in-Aid, Viability Gap Funding in the form of Equity and/or Long-Term Interest-Free Loan, tax incentives, and infrastructure support, among others.
 - d. Interest subvention schemes, allowing a subsidy in the rate of interest on the loans, can be extended by financial institutions and subsidies may be borne by the Government to promote the industry. Interest subvention schemes can play a significant role in supporting the domestic equipment manufacturer to stay competitive in the domestic and global market and enjoy a level playing field against foreign manufacturers.

Q9: Whether any cost disadvantage is experienced by domestic NATE manufacturers as compared to global counterparts due to various limitations discussed above? If yes, what is the percentage cost disadvantage to domestic NATE manufacturers vis a vis another country? The details of calculations and methodology adopted for the same may be provided.

² http://164.100.47.193/lsscommittee/Information%20Technology/17_Information_Technology_24.pdf

COAI Response

1. We understand that domestic manufacturers are approx. 10-15% costlier than the Global OEMs who are manufacturing in neighbouring countries. The major difference as per our estimates and understanding is due to:
 - a. Higher manufacturing value-added cost as compared to neighbouring countries
 - b. Availability of highly skilled manpower and automated manufacturing facilities
 - c. High forex hedging & financing costs
 - d. Duty on certain imported components
 - e. Infrastructure cost – higher operational expenditure (due to low productivity) or other expenses incl. power, fuel, etc.
2. Hence, we believe that government should look at these issues to make Indian manufacturing competitive.
3. Indian NATE manufacturers have a cost disadvantage when compared to other countries focused on NATE manufacturing, viz. China and Vietnam, for the global market. Underdevelopment of the domestic supplier base, infrastructural handicaps, and higher taxes/duties translate to higher cost structures for domestic manufacturers.

Q10: Whether schemes allowing tax holidays/deferment of tax are available for NATE manufacturers? If yes, are they meeting the requirement? If not, what modifications are required? Please justify and provide details.

COAI Response

1. Effective tax rate for India, prior to the recent revision, was non-competitive compared to other countries which were favourable destinations for the NATE manufacturers; hence making domestic production in those economies cost-efficient compared to manufacturers in India. Even after revision, with an effective corporate tax rate of 27%, a lot of gap needs to be filled to make domestic NATE manufacturers competitive in the global market.
2. Beyond the corporate tax rate, specific prominent NATEM countries, ex: China and Vietnam, provide significant tax rebates to NATE manufacturing entities for promoting their country as global suppliers for NATE. For making our country competitive, we need to ensure that Indian NATE manufacturers get equivalent support from Government as those provided by other countries to their manufacturers.

Q11: Is the PMA/PMI scheme in its current form comprehensive for promoting NATEM? Are there any suggestions for modifications? How can the challenges associated with the implementation of PMA/PMI be addressed? Please elaborate.

COAI Response:

1. We are supportive of the concept of Preferential Market Access ('PMA') for domestic manufactured products and believe that it can be an effective tool for promoting Indian Products. Although, we submit that such PMA should be driven by an incentive mechanism for the buyers of Indian NATE Products. It should be ensured that there is no penalty associated with the PMA scheme, as the TSPs should be free to procure the best quality NATE products at an optimal price to ensure that the security and quality of the network are maintained. PMA policy should be in form of a nudge intervention that

ensures positive reinforcement and influences the behaviour by way of incentivizing through preferential market access.

2. We support the cause of manufacturing of network and telecom equipment in the country, and believe that a long-term, progressive, and step-by-step approach should be followed to create a domestic manufacturing ecosystem, without disrupting services to customers and rollouts.
3. India is the world's second-largest telecommunications market with a subscriber base of 1.17 billion. The overall tele density is at ~86% with wireless at 84% and wireline at a meagre ~2%. The rural tele density is still at ~58%. On the digital front, the Indian mobile economy is growing very fast and will contribute substantially to India's GDP. The government has aimed to achieve \$1 trillion from the digital economy.
4. While a significant part of India's digital economy and its growth can be attributed to investments and rollouts by TSPs in data-capable 4G services that enabled new use cases; the new planned 5G rollout in India will herald new opportunities for consumers and enterprises alike. India was able to achieve 4G success by making the best use of the OEM ecosystem and suppliers who all could pitch in to supply the necessary equipment to TSPs.
5. In the present times, there is an emergent reality of supply chain constraints, and other geopolitical challenges impacting the equipment/products. Given India's domestic manufacturing capacity limitations, and the need for sectors' growth and rollout of services to citizens of India in a timely and effective manner, we believe that existing and planned rollouts of the industry should not be constrained/disrupted due to any policy mandates like PMA/PMI.
6. Since Telecom is a global industry in nature and TSPs compete globally with the best; we believe no mandates should be prescribed related to the procurement of equipment only from domestic sources which could impact the competitiveness of the Indian Telecom sector and India itself.
7. Moreover, the telecom service sector thrives and competes in a truly interconnected and interoperable world. Networks from around the world are interconnected, therefore, the equipment deployed in the Indian networks needs to be carrier-grade and best in class irrespective of whether it is manufactured domestically or imported. Any mandate regarding procurement from domestic manufacturers should not impact the interoperability of Indian networks.
8. However, coming to manufacturing, India today contributes approximately ~3% of the global manufacturing output across all sectors and ranks 6th amongst all global economies. While this number has grown over the years owing to increased FDI, India still trails behind other Asian economies. When it comes to the manufacturing of telecom equipment products, India has a manufacturing output of 3-4 USD Bn, contributing 2-3% of the global manufacturing output. A decade of stringent implementation of preferential market access policies has not contributed significantly to manufacturing in a country. Besides, there should not be any mandate on private telecom operators for procurement of equipment/products manufactured in India, which otherwise would be counter-productive, bring in inefficiencies, increase costs, and indirectly promote non-competitive products as well as pose security risks to the telecom networks. Some of the key challenges of the PMI scheme and its potential solution are highlighted below:

CHALLENGE	SOLUTION
<p>A wide range of products mandated under PPP-MII norms limit competition in public procurement. ICT equipment varies extensively with respect to its functionality (hi-tech, low-tech) and demand (low-volume, high volume). Given this variance, it is not feasible for companies to invest extensively in hi-tech, low-volume products. Further, the demand for such products is low, so several companies fail in manufacturing.</p>	<ol style="list-style-type: none"> 1. An independent study must be conducted to assess the capacity and competition of ICT products and only products with adequate manufacturing capacity, required value addition, and adequate competition (More than 3) 2. Focus of PMA must start with building capacity and an ecosystem around low-tech, high-volume products, which will not only give India a competitive edge but also result in mass-scale employment 3. In hi-tech, low volume, Indian players must be allowed to support global OEMs, allowing them to build their capacities, test their solutions, and prepare themselves for global competition. 4. Definition of Local Content under the DoT PMI scheme should be aligned with the definition of Local Content in the MEITY PMI scheme where the non-availability of component eco-system in India at present is considered and SMT manufacturing should be encouraged at a large scale. 5. R&D and associated Job creation, export generation should be measured as key criteria for assessing Local Content for a particular company. Job creation in R&D activities is not accounted for as a parameter currently in the PMI scheme which is not reflecting the true picture of investment and efforts made by companies in India.
<p>Access to quality and secure components</p>	<p>Similar schemes like PLI must be introduced for building the component ecosystem, which will enthruse manufacturers to shift manufacturing to India.</p>

<p>India has a cost disability of 6-10% compared to several other Asian countries. Despite the prevalence of the PPP-MII scheme over the last 10 years, there have not been significant shifts in manufacturing. The game-changer is the PLI scheme which has resulted in investments in the country.</p>	<p>To further augment these investments propelled by the PLI scheme, it is essential an alignment between PLI, and PMI policy is introduced. As highlighted earlier, this can be achieved with the government providing PMI points equivalent to 75% of the commitment of goods to be exported from India. The OEM could utilize these PMI points to qualify as a 'Deemed Class 1 Local Supplier' for products not manufactured in India, from the date of approval of the application.</p>
<p>PPP-PMI guidelines limit innovation in ICT solutions, therefore impacting the deployment of advanced and futuristic products. Given the evolving nature of technology, not all companies invest in R&D.</p>	<p>The focus should be on building an R&D ecosystem to develop domestic futuristic solutions. For projects concerning critical infrastructure, financial services, etc. implementation of PPP-MII guidelines should not be stringent.</p>

Q12: Whether the incentives to Telecom Service Providers to deploy indigenous manufactured products in their network will be helpful in promoting NATEM in India? Please justify with reasons. What incentivization model is suggested?

COAI Response

1. TSPs are in process of building a new-age network for the country and the development has been phenomenal for the country in the last decade. The NATE CAPEX plans are determined by TSPs based on their strategic roadmap and technology plan. TSPs in collaboration with technology and manufacturing partners incur significant expenses for product development, engineering, and evaluation. Hence we submit that TSPs should be given the freedom to choose the NATE supplier although should be incentivized to prefer the domestic NATE supplier or develop technical collaboration with them.
2. India's vision for *Atmanirbhar Bharat* has been lauded by both global and Indian industries. The National Policy on Electronics (NPE) states India's vision to increase exports to 60 percent of domestic production by 2025. However, to become a global hub in electronics manufacturing, it is important to have *Atma Vishwas* along with wanting to be *Atmanirbhar*. The confidence to not just cater to our needs but be a critical part of the global supply chain. The key to making this a reality is to make India globally competitive.
3. Being a user of networking and telecom equipment, every TSP is very conscious of delivering best-in-class services to his customers and thus procures the best equipment available globally and ensures a robust network in order to address the large volume of customers and to meet their demands.
4. While flexibility for procurement of networking and telecom equipment should remain with the TSPs, the government may consider an incentive-based approach to encourage procurement of indigenous networking and telecom equipment by TSPs. In such procurement cases, an exemption of GST on the procurement of networking and telecom equipment may be provided as an incentive.

5. The government of India's projects to propel the adoption of Digital India to all corners of the country are laudable. There is bound to be an increase in domestic demand. However, the domestic demand only stands at 3-5% of the total global demand. The focus of the government must shift from catering solely to the domestic market to exporting to the global market, the remaining 95%. Therefore, policies that are restricted to capturing the domestic market will neither help global investments nor catapult domestic players to the global supply chain.
6. To become both cost & talent-competitive, India must focus on building its domestic capacities. Procurement mandates limit the industry's incentives to go beyond the products enlisted within the policy. India can support its domestic companies by incentivizing R&D, supporting obtaining global certifications or adherence to global standards, promoting domestic companies in global markets through G2G engagements, *et al.*
7. Lastly, as India prepares itself to become the global hub for electronics and telecom manufacturing, it must demonstrate its capability to build secure and future-proofed technology. Conflating domestic manufacturing with security and future-proofed technology will limit India's aspirations.
8. From a long-term perspective, the policies should encourage telecom Operators with graded incentives of reduction in license fees, for procuring equipment/products manufactured in India by domestic OEM or foreign OEM.

Q 13: What should be the incentive structure (fiscal and infrastructural) for Telecom Product Development Clusters (TPDC) set up within the EMCs or separately?

COAI Response

1. TPDC, developed along the lines of SEZs, can go a long way in ensuring economies of scale and cost competitiveness for domestic manufacturers. Although the same can be achieved only when TPDCs incentivize significant participation from private players through fiscal incentives such as tax exemptions, duty exemptions, subsidies, and R&D promotion schemes and non-fiscal incentives such as low-cost infrastructure (land, power, and water) and access to trial testing beds. Such TPDCs should give required financial incentives for domestic players to become globally cost-competitive through tax exemptions on export revenue and duty exemptions on imports.

Q14: Whether NATEM is facing any limitation affecting the competitiveness of Local manufacturers due to misdeclaration of HS codes, inverted duty structures, landed cost differential, etc.? Please provide specific details. What are the suggestions for improvement? Please elaborate.

COAI Response

1. Inverted duty structure impacts the domestic industry adversely as manufacturers have to pay a higher duty for raw material, while the finished product lands at lower duty and cost. A corrected duty structure will reduce the cost of intermediate inputs imported for the manufacturing of exports thereby making the country's exports more competitive. The incentive scheme will boost local manufacturing and increase the growth of exports.
2. In Customs tariff, all the telecom products are classified under HS code 8517 category wise instead of Product level which leads to a lot of misdeclaration of HS codes.

Customs can map the products with the category mentioned in the Customs tariff / Notifications.

Q15: Whether the current schemes/ measures or policy support for exporters of Indian manufactured equipment are sufficiently meeting the requirement to promote the global competitiveness of Indian NATE exporters? Are the Schemes/instruments in India consistent with the international schemes for exporters in leading manufacturing countries? Please suggest measures to bridge the gap if any.

COAI Response

1. The Government's vision to encourage companies who have long-term investments, employment creation, commitment for the country, and technology is well appreciated. Giving such companies preferential treatment will help in eventually nurturing a product vision, investment in R&D, and IPR. Only a product company can have the objective of impactful long-term economic growth and societal benefits beyond just capability or skill set.
2. Single channel export-import clearance system to be implemented at Customs. DGFT for large exporters. This includes single-channel clearance for large Repair Hubs. This is as outlined in answer to Question 1 –
 - a. Simplify export controls such as DGFT SCOMET, to make exports' approval faster and easier for large volume exporters through a separate dedicated channel. It will be essential for large manufacturers and exporters to have a dedicated fast-track channel of export-import clearances to adhere to SLAs demanded by global Customers. Hence a dedicated import-export clearance Single Window at DGFT, Customs, and other agencies is required. A similar dedicated clearance channel is required for making India a Repair Hub – for bringing faulty equipment in India, repairing, and returning within a fast-track timeline. Currently, these clearances take several weeks/ months in India as opposed to a few days in global manufacturing hubs in South East Asia. In other countries, schemes like SCOMET are through a General Validated License (GVL) for large exporters instead of licenses for each export shipment like in India.
3. Most of our members are associated with the Indian telecom industry for many years and leveraging on their combined strength with the manufacturing, global services organization, and state of art research and development facilities. As you know, most eminent manufacturers, who have invested in India, "to develop the Telecom Manufacturing Eco- System" by transferring technologies as a part of our localization strategies by setting up a state of art manufacturing facilities for manufacturing products in India.
4. Our members have manufacturing hubs globally and have expanded to make India a strategic supply base, given the focus of the Government and the fact that the component level ecosystem for high-tech electronic manufacturing will be a reality soon.

Q16: Whether the existing incentives/policies issued by DoT and MeitY do meet the requirements for the growth of telecom software products? What additional policy initiatives and enabling regulatory measures are suggested to facilitate the integration of telecom equipment and software products that are made in India? What measures are required to enhance exports of such products? Please justify your response.

COAI Response

1. According to a recent report by NASSCOM, India has 1,430 GCCs, with revenue of \$36 billion, and with a total talent base of 1.3 million employees. NASSCOM expects India to have 1,900 GCCs, employing 2 million people and generating revenue of \$58- 61 billion by 2025. More than half of these GCCs (Global Capability Centres) have multifunction portfolios and focus on setting up Technical CoEs (Centres of Excellence) and there is an urge to move beyond outposts & satellite centers to portfolio and transformation. A significant number of global MNCs also have their R&D centers, in India, conducting significant innovations in telecom hardware and software.
2. It must be noted the jobs generated by the GCCs require highly skilled professionals, at par with global capabilities, resulting in them being more valuable than manufacturing jobs. With the current global atmosphere of protectionism, there is a greater challenge for India to attract investments and jobs to India.
3. Further, a typical supply chain of Software development is across multiple geographies, involving resources from the product company, its subsidiaries specializing in R&D, and third-party service providers to whom certain services are outsourced. With multiple MNC and domestic GCCs present in India, our geography plays a pivotal role in the global outsourcing supply chain.
4. In these circumstances, the Government of India should not take GCCs for granted and should look at all levels in their hands, including Government procurement, for India to remain a default location for GCCs.
5. India must consider attracting global telecom OEMs to participate in the recently announced upcoming "design-led 5G equipment manufacturing" PLI scheme as global technology OEMs are substantially contributing to Atmanirbhar Bharat by manufacturing in India as well as having the largest R&D bases in India apart from managing global telecom networks from India. Government should incentivize the global OEMs by providing clarity and fair guidelines on preferential market access schemes where the local content definition can be made more pragmatic to account for the fact that the silicon-based component eco-system in India is still at a highly nascent stage. Moreover, the contribution from job-creation and capacity building in R&D should be quantified towards local content and value-addition.
