

**COMMENTS ON CONSULTATION PAPER ON PROMOTING NETWORKING AND TELECOM EQUIPMENT
MANUFACTURING IN INDIA
BY P.M.Dutta**

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.

[A1].

Comments : Agree to the comments below.

Elements of promoting NATEM

National Policy on Electronics 2019 (NPE 2019) created a conducive and enabling environment for the industry to compete in a global perspective. Further more Production Linked Incentive Scheme (PLI) for large Scale Electronics Manufacturing (LSEM) was launched in 01 April 2020.

In the financial year 2020-21, four schemes to promote electronic manufacturing were launched by Ministry of Electronics and Information Technology (MeitY). Three schemes, namely PLI for large scale Electronic Manufacturing, Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECS) and Electronics Manufacturing Clusters (EMC) 2.0 were approved by the Union Cabinet in March 20, 2020.

The fourth scheme PLI on IT Hardware's was launched in February 2021, with the objective to provide financial incentive for the manufacturing of Laptops, Tablets, All in One PC's and servers in India.

The scheme is envisaged to bring an additional investment of Rs.11,000 crores of value addition was anticipated to go up to 35-40% by March 31, 2025 from 20-25% presently. After the success of the first round of PLI scheme, the second round of the PLI scheme applicable from April 01, 2021 was approved. MeitY has come out with Technology Incubation and Development of Entrepreneurs (TIDE) scheme to develop incubation centres in the areas of Electronics and Information and Communication Technology (ICT).

The data's hint on a upward skew significantly better than the preceding years. The PLI scheme be monitored till its traverse to the highest crest and then indulge in an equilibrium shift to the future.

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

[A2].

Comments : Agree to the comments below.

Next Generation Incubation Scheme (NGIS) is a futuristic scheme entrusted by MeitY to STPI for implementation and emerge as an export hub for markets like South Asian Association for Regional Cooperation (SAARC), Association of South East Asian Nations (ASEAN), African, and Latin American countries to start with, and then emerge as global market player in this sector.

The PLI scheme is expected to attract large investments from global players and help domestic companies seize the emerging opportunities and become big players in the export market. In order to create a thriving Networking and Telecom Equipment Manufacturing (NATEM) ecosystem in the country, thrust on promoting Research & Development (R&D) is the mandate to develop and

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compete with the internationally at-par technological trends with indigenous evolvments, stringent quality control, punctuality in achieving milestones, best from the rest and dextrous & dynamic pricing are the key controlling (winning and game changing) parameters.

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?

[A3].

Comments : Highly agree to the comments below.

Electronic Development Fund (EDF) has been set up as a “Fund of Funds” to participate in “Daughter Funds” for risk capital to start-ups in Electronics System Design and Manufacturing (ESDM) and IT. The vision of EDF is to support Daughter Funds (DF) primarily in Electronics System Design and Manufacturing (ESDM). The Software Product Development Fund (SPDF) works beyond the scope of EDF and Fund of Funds (FFS) to fulfil the gaps left in EDF and FFS for the growth of the Software Product Ecosystem (SPE).

Monitoring and managing of EDF-DF-ESDM as an apex body to FFS to manage & resolute interbody conflicts and lead to an overall composite team success.

Q4. Is there a need for 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.

[A4].

Comments : Agree. This has been established in “Make In India” approach.

Creation of Telecom Entrepreneurship Promotion Fund (TEPF) and Telecom Manufacturing Promotion Fund (TMPF) will have it inherent pros and cons :

Pros :

Better feedback and performance tuning & management. Process modifications will not affect the other. A mobilised and rationalistic corpus of controlled funds will construe to a high yield.

Cons : Too much of fragmented funds will led to ineffective fund mobilisation, non performing assets will accrue a low yield down the time line.

Q5. What additional measures are suggested for promoting and supporting the in the telecom sector in India.

[A5].

Comments : This is a future assessment and depends on the virtue of technology trends then, therefore it is too early to comment without through analysis of techno-economy analysis.

Project Financing Venture capital (VC) and Promoting start-up ecosystem

Fund of Funds fostering R&D and innovation in technology sectors like electronics, Information Technology and Nano-electronics. It supports the Venture Fund, Angel Fund, and Private Equity Funds focusing on product and technology development of electronic sector.

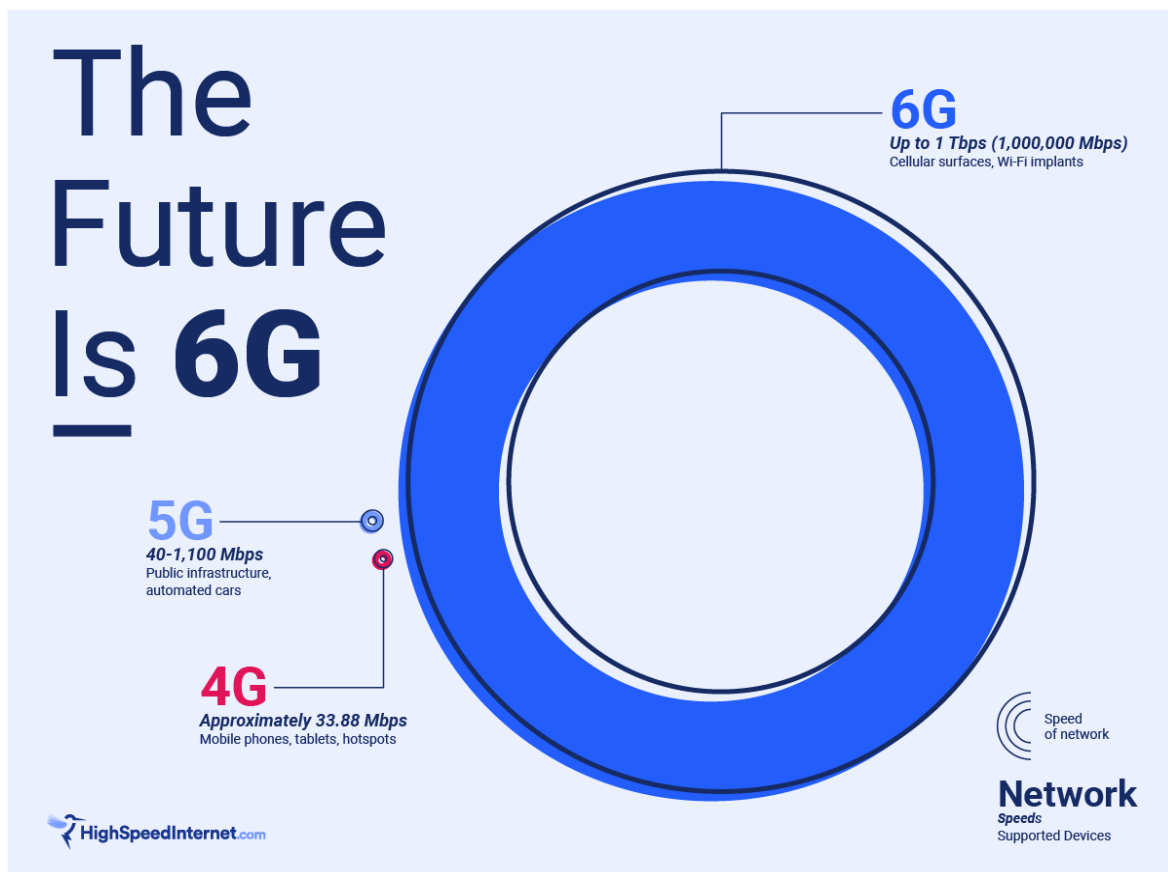
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Electronics Development Fund (EDF)

Contract financing Schemes for insuring/guaranteeing Credit The basic of any Start-up ecosystem project is the management and manoeuvrability in terms of the mixed pedagogy in our management schools to a rational and realistic approach. Fund management and mobility, just-in-time decisions is the mantra to the success cruise.

The target market creation and continuous triggering to ride on market dynamics by a dynamic apex body is an augmented need of the hour.

We all sense the advent of 6G in the very near future. The expanse of 6G is will understood from comparative illustration below.



The 4G and 5G seem to appear as a miniscule in the backdrop of 6G. The need for India to study and strategize the future opportunities and harness to the parlance of promoting networking and telecom equipment's in a global perspective.

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?

[A6a].

Comments : Agree to this comment.

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Project Financing refers to the funding of long-term projects, through a specific financial structure. Lending arrangements are based on the cash flow generation of the project, the cash flows from the project enable servicing of the debt and repayment of debt and equity. Finances can consist of a mix of debt and equity. Liability is limited to the contributed equity capital, and financiers often have limited recourse to project sponsors.

The telecom sector have a mixed market pedagogy, some of the Universal Service Obligation Fund (USOF) wherein initiated projects can also fall under this category where the TSPs or their consortium can opt for project financing mode. Skew up of telecom infrastructure requires favourable investment in 5G with lucid upscaling 6G and beyond, Internet of Things (IoT), Artificial Intelligence (AI), Virtual Reality (VR) etc.; the widespread deployment to skew up will drive the future growth of global telecom equipment's market and its allied accessories.

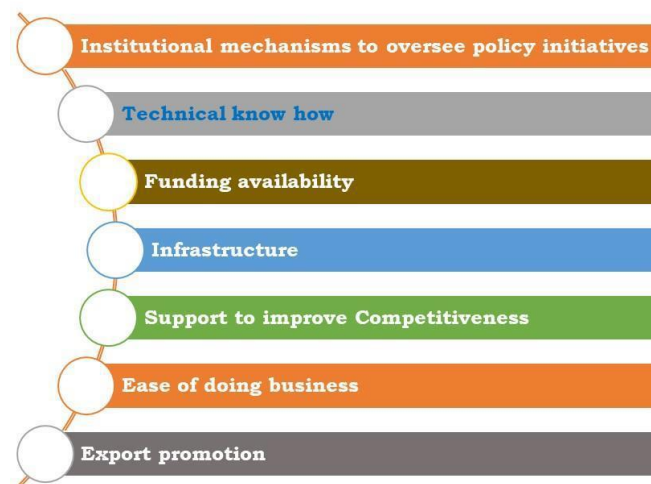
A dextrous mix of all the above will twine into a successful integration, thereby to a future ready networking and telecom equipment's growth worldwide and catalyse to open up new avenues to economic expanses.

Q6b. Are these financing instruments able to cater to the needs of NATEM in India?

[A6b].

Comments : Agree partially to the comments.

Development of telecom infrastructure requires favourable investment support through innovative project financing schemes. Some of the financial institutions are already addressing the needs of project financing. For example, the Industrial Finance Corporation of India (IFCI) provides customized financial solutions to meet the growing and diversified requirement for different levels of the projects – Greenfield projects, minimised brownfield, multilevel network and telecom equipment's diversification, and modernization of existing projects in telecom infrastructure in manufacturing sectors.



Elements Promoting NATEM

Over and above the Foreign Direct Investments (FDI's) will generate a project impetus in terms of investment management and performance monitoring and economy of scale.

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The diagram above shows the elements comprising to the promotion of NATEM, dextrous selection the best suited lucrative financing schemes will be allocated by the financial stake holding functionaries.

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.

[A6c].

Comments : This has been a basic requirement to develop Indian industries.

The thrust areas are [1] R&D solutioning with patent selling in the Emerging Areas of Information Technology (IT), Blockchain, Data Analytics, Quantum Technologies, IoT, Green Computing, Artificial Intelligence (AI), Virtual Reality (VR), Perception Engineering, etc. delivering unprecedented economies of scale.

The selling of competence to global financial institutions to invest in these cream projects in terms of soft and hard products / service sponsors. R&D facilities exchange etc. to these focussed areas of tremendous ascent to growth with and irresistible economic potential of resilience.

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

[A7].

Comments : Agree to the comment.

The create a balance between loan protection versus minimisation of the cost of funds a delicate equilibrium of the parameters has been attained by involving interest subvention earlier in NABRAD and RBI. Capital linked incentives or incentives linked to CAPEX. schemes have been implemented by MeitY which were targeted to the Electronics System Design and Manufacturing (ESDM) ventures.

Modified Special Incentive Package Scheme (MSIPS) offer incentive for investments on capital expenditure were formulated as 20% for investments in Special Economic Zones (SEZs) and 25% in non-SEZs. Over and above providing capital expenditure linked incentives, it also included reimbursement of countervailing duty/excise for capital equipment for non-SEZ units and reimbursement of duties and central taxes for selective projects with high capital investments. The scheme was initially introduced for 29 categories of ESDM products including telecom, IT hardware, consumer electronics, etc. Later the revised scheme included products of 44 categories. Under telecom products it includes Optical fibre equipment, Terrestrial Communication equipment, Satellite communication equipment, switches/ Routers, transport systems, Wireless technology equipment up to LTE and LTE Advanced, Radio systems, Antenna systems, CPEs etc. The incentives were available for a period of 5 years from the date of approval of the application, viewing 5G adoption and infrastructure demand in view, a similar scheme with specific focus on 5G Radio Access Network (RAN) products, 5G testing equipment, software products, Internet of things, Artificial Intelligence, Robotics and Cloud Computing component-level products etc. can be beneficial to

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promote the cause of NATEM. Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECs) provide a capex incentive of 25% on capital expenditure on units manufacturing electronic components, semiconductor / display fabrication units, and capital goods. It was notified on April 01,2020 and is open to receive applications till March 31,2023. The total approved expenditure outlay by cabinet is Rs.3,285 crore. Programme for Development of Semiconductors and Display Manufacturing Ecosystem (DME) in India has been highly appreciated by the industry.

Q8. Whether the existing financial assistance for MSME's that are into NATEM are sufficiently catering to their requirement or a separate dedicated scheme is required for the sector? Please provide a detailed response along with suggested schemes, if any.

[A8].

Comments : The incentive should be volatile depending on the performance of a MSME.

An incentive of 25% on capital expenditure on MSME units manufacturing electronic components, semiconductor / display fabrication units, and capital goods. It was notified on April 01, 2020 and is open to receive applications till March 31, 2023 has given a reduction in MSME's bottom line expenses adding more to allocatable fund/s. The total approved expenditure outlay by cabinet is Rs 3,285 crore.

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 percentage cost disadvantage to domestic NATE manufacturers vis a vis other country? The details of calculations and methodology adopted for the same may be provided.

[A9].

Comments : Agree to the comment.

Domestic manufacturers in India face the dual problem of having to produce products that have world class quality on one hand, and on the other, these products need to be cheaper to compete in the international market.

Q10. Whether schemes allowing tax holidays/deferment of tax are available for NATE manufacturers? If yes, are they meeting the requirement? If no, what modifications are required? Please justify and provide details.

[A10].

Comments : Optimal usage of capital strategy is needed to be stated.

NATEM is essentially capital-intensive, a major hurdle in rapid formation and expansion of a monolithic equipment ecosystem in India is due to insufficient availability of low cost funds. Fluidic availability of capital, soft-loans, contract financing, and credit default insurance are important for promoting productivity across all manufacturing sectors. The Telecom industry was given infrastructure status by the Government in April 2013. This will facilitate Indian manufacturers to be at par with global players and promote the means of local manufacturing. All domestic telecom equipment manufacturers producing Indian Products or Indian manufactured products and having an annual turnover of less than Rs 1000 crores, should get access to debt finance for capital and

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working capital for a period of 5 years on subsidized terms. The extent of subsidy will be 6% for the Indian Product Manufacturers and 3% for producers of Indian Manufactured Products.

Ecosystem creation for Telecom Manufacturing Fund (TMF), providing venture capital to indigenous manufacturing in the form of equity and soft loans for supporting pre and post commercialization product development and brand creation.

TRAI recommendations of 2011 and 2018 on the subject have dealt with them in detail. As envisaged in National Digital Communication Policy (NDCP) -2018, towards maximizing India's contribution to global value chains, focus on domestic production, skew-up exports, and reduce the import burden as required. For the same, several parallel initiatives need to be taken, inter-alia :

- i. Steps to promote Research & Development (R&D),
- ii. Providing funds for R&D,
- iii. Developing R&D parks,
- iv. Putting in mechanisms to develop skill sets
- v. Addressing issues related to patent framework like rights and obligations of Standard Essential Patent (SEP) holders including dispute resolution
- vi. Promoting incubation centres
- vii. Addressing issues related to testing and certification
- viii. Ensuring availability of component ecosystem
- ix. Setting up cutting edge technology FAB facility
- x. Providing various fiscal and non-fiscal incentives
- xi. Creating funds for promoting manufacturing and entrepreneurial activities
- xii. Creating infrastructure for facilitating manufacturing like tech parks
- xiii. Extending incentives for creation of such infrastructure/manufacturing facilities
- xiv. Addressing issues related to power availability and pricing
- xv. Implementation, monitoring and periodic review of PMA policy
- xvi. Addressing issues arising out of Free Trade Agreements (FTAs)/Information Technology Agreements (ITAs).
- xvii. Announcing Incentive Schemes for telecom equipment parts
- xviii. Addressing ease of doing business including expediting policy clearances and succinct review of all the compliance requirements
- xix. Promoting deployment of indigenous products in other countries through incentivizing system integrators
- xx. Showcase make in India start-ups and their products in international events
- xxi. Upgrading the manufacturing PSUs under DoT to effectively harness strategic and operational synergies.

The Management, Utilization, and Taxation of Repatriated Offshore Funds, 2019 provides preferential tax rates of 8 percent to 10 percent for firms and individuals repatriating offshore funds within two years of the act's date of enforcement

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 implementation of PMA/PMI be addressed? Please elaborate.

[A11].

Comments : Should be monitored at predefined time slice/s.

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Preferential Market Access (PMA) / Preference to Make in India (PMI) has created a healthy turbulence in the telecom market potential and momentum, in the neighbouring countries like Bangladesh, Nepal, Bhutan has expressed their interest in the Indian electronic products in qualitative superiority and quantitative price advantage.

Reviewed duty remission structure to all forms of Made in India products will enjoy lesser duty structure and quality enhancement incentives in contrast to imports of items already available in India will face higher import duties at the same time have to give a commitment to opt for usage of Made-In-India products.

The PMA/PMI order August 2021 was kept in abeyance by DoT as not mandating only 'Make in India' companies to offer equipment was defeating the very purpose of the policy need to be rejuvenated and enforced with full rigour and vigour on utmost of the priorities.

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 ?

[A12].

Comments : Agree to this comment.

In certain public procurements e.g. Universal Service Obligation Fund (USOF) tenders element-wise compliance of Local Content as per the DOT notification is not monitored instead low value addition components like tower erection, civil work, installation charges, AMC charges etc are construed as local value addition to take benefits under PPP-MII Order 2017 as these infra items are having high value in total site pricing. Therefore, the actual benefit of the PMI scheme for domestic equipment manufacturing is not getting extended. On the contrary some of the stakeholders also mentioned that present calculation methodology doesn't capture the local value addition at the Project level. The cost incurred for local sourcing of material for network rollout, spares cost, warranty, AMC etc are not getting captured. Main inputs/ stages cost incurred on assembly/ testing/ integration and other necessary requirements for deploying the equipment's in the network are not being considered.

- I. The spectrum of the policy should be envisaged to include the purchases by State Government's, Purchases by Telecom operators, World bank funded projects for the listed products, Indian projects undertaken in other countries against LOC or Grant in Aid etc.
- II. On many occasions buyers ignored the directives of the standing committee for implementation of Public Procurement Preference to Make in India (PPP MII) order. Implementation agencies shall be made responsible for the compliance to policy and ensuring stringent compliance both at buyer end as well as sellers end for making wrong declarations and prompt & severe action to be taken against the defaulters.
- III. Many times, the procuring agencies do not follow the protocol to get a waiver from Standing committee as per Department for Promotion of Industry and Internal Trade (DPIIT) guidelines to get "Make in India" policy exemption for domestic manufacturing. Foreign make and models have been sought even if equivalent domestic products are available. Strict enforcement of PMI in all Government tenders needs to be ensured and use of restrictive tender conditions should be avoided.
- IV. Government's PMI policy in telecom is defined at the product level and not at the manufacturer's level. There are challenges around the existing methodology of calculating local value addition norms as in view of the large number of products and their scalability, telecom manufacturing facilities tend to be in 'nodes' wherein selective products are

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manufactured on a global scale and exported to meet global demand. Due to the inability to create scale, no entity can manufacture the entire bouquet of its products in one geography. However, tenders insist on all products from one OEM. Indian SMEs not having all the subsystems required for a project, are left out from participating.

Q13. What should be the incentive structure (fiscal and infrastructural) for Telecom Product Development Clusters (TPDC) set up within the EMCs or separately?

[A13].

Comments : Agree to this comment.

Viewing the importance of manufacturing eco-system provided by manufacturing clusters, Authority in 2018 further recommended that Telecom Product Development Clusters (TPDC) within the Electronic Manufacturing Clusters (EMC) should be established. TPDCs can be promoted through government support or in Public Private Partnership mode by providing/facilitating pre-identified land, ensuring adequate availability of large quantities of pure water, uninterrupted power, pollution free environment, logistics, waste disposal etc. If India wants to be a global manufacturing hub for NATE, achieving scale and cost competitiveness will be a major focus for manufacturers. For this, creation of thriving self-sustaining dedicated TPDCs added with exemptions/ incentives and infrastructural support may be required. While formulating the policies for TPDCs, one can draw a leaf and two from the development of Special Economic Zones (SEZs) and Software Tech Parks in India. The TPDCs should incentivize large scale participation of non-government entities or private sector players and should be able to, inter-alia, provide –

- I. Leasing of infrastructure at Low-cost (Land, power, water etc)
- II. Exemptions of tax and subsidies.
- III. Superior communication and technology infrastructure
- IV. Promotional Schemes for R&D activities.
- V. Incubation services
- VI. Schemes for nurturing MSME's and Start-up's.
- VII. Access to Trial/Testing beds
- VIII. Regulatory Sandboxes

Incentives, wherever granted to TPDCs, can serve likewise purpose as that for the Special Economic Zones (SEZs). Government has granted several incentives to SEZ units such as Tax incentives, world class physical infrastructure to facilitate the manufacturing sector especially exports of manufactured goods. To attract investment including foreign investment into SEZs, some of the incentives and facilities that are offered to the units in SEZs are as mentioned below :

- I. Duty free import/domestic procurement of goods for development, operation, with 100% Income Tax exemption on export income for SEZ units under Section 10AA of the Income Tax Act for first 5 years, 50% for next 5 years thereafter and 50% of the ploughed back export profit for next 5 years. (Sunset Clause for Units has become effective from April 01.2020.
- II. Exemption from Central Sales Tax, Exemption from Service Tax and Exemption from State sales tax. These have now been subsumed into Goods & Service Tax (GST) and supplies to SEZs are zero rated under the Integrated Goods & Services Tax (IGST) Act, 2017.
- III. Other levies as imposed by the respective State Governments.
- IV. Single window expedited clearance for Central and State level approvals.

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Q14. Whether NATEM is facing any limitation affecting 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.

[A14].

Comments : Agree to the comments.

Harmonized System (HS) Codes are standardized numerical combination used to categorize and sub-categorize various goods being traded across countries. Though the main objective of the Code is to help customs authorities ascertain the right duties and taxes on imports, there have also been instances of misdeclaration of HS Codes. Some stakeholders have informed that equipment is often imported through various duty-free HS Codes which are meant for import of inputs for the manufacture of mobile phones. It needs due surveillance mechanisms and stricter implementation of existing norms to ensure such unlawful import does not hamper the cause of NATEM in India.

Remediation

1. Every HSC has a link to the parent category, automated system can easily track deliberate misrepresentation of HS. This should be treated as a crime to the basic developmental process of NATEM concepts. The sender and receiver credentials should be brought under legal action and blacklisted. The blacklisted details should be available in the public domain.
2. The proven convict/s trade license should be cancelled.
3. Intensive Artificial Intelligence (AI) along with Document Management (DM) systems should deeply monitor every imports by the virtue of its nature and compliance to the norms.
4. Heavy penalty should be imposed on this corrupt individuals / organisations for committing such heinous act of treason against India.
5. Keep vigil on e-waste import and prevention of its dumping in INDIA.

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.

[A15].

Comments : Agree to stringent quality control/s at par with international standards.

An inverted duty structure has to be reverted by the Government with immediate effect on telecom raw materials and increase on finished telecom products. This reinverted duty structure will generate impetus to domestic NAT manufactures.

Next comes the international standards of quality, it is extremely important, I repeat extremely important to consistently confirm/out perform the contracted level of quality standards.

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The success mantra is rigorous adherence to quality and develop indigenous techniques to better the world standards. A pertinent example here can be LCD panels used by SONY to manufacture TV was not actually manufactured by SONY. SONY sourced them from specific original design manufacturer (ODM) under SONY's specifications. ODM panels had to pass through stringent quality control process of SONY, the QC cleared panels were then tweaked as tri-luminous/ formerly trinitron circuitry – a proprietary technology of SONY enhanced the viewing experience in comparison to their competitors. There many such indigenous product enhancements to outperform the internationally acclaimed standards through setting a new paradigm to product differentiation strategizing a brand identity of its own in the global markets.

Last but not the least is to adhere to a stringent level of punctuality in attaining every milestone set in the contract.

An apex team to monitor and restore the timeliness of every milestone should very effectively make the process nothing else by success only.

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 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.

[A16].

Comments : The policies should be schemed and aligned in line with international requirements.

1. Well established centres like Sponsored Research and Industrial Consultancy (SRIC) in IIT Kharagpur, IITR, Industrial Consultancy and Sponsored Research (ICSR) in IIT Chennai, Kancheepuram etc. has to be actively involved in indigenous research with distinctive commercial ethos and product development (similar to indigenously manufactured "Covishield"). A cost effective deployment of Indian facilities already available.
2. The above academically linked research institutes of national importance be segregated into respective fields of strengths and tagged with respective manufactures for skill transfers as per the contracted product standards and specifications.
3. Indian export council will relentlessly explore global markets in context to Indian manufacturing capabilities and their need for enhancements in the global parlance.
4. Applied academic institute wings has go be introduced / upscaled to churn out graduates to meet the global technology need and meet challenges with distinction.

Q17. Stakeholders are also requested to comment on other relevant issues, if any.

[A17].

Comments : The plans are excellent but need to be monitored and grounded by efficient management.

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Shri Ashwini Vaishnaw, Minister for Communications, Electronics & Information Technology and Railways stated "India, has emerged as a major electronics manufacturing hub. Today, electronics manufacturing in India is close to US dollars 75 billion. It's growing at more than 20% compound annual growth rate (CAGR). India have launched a major semiconductor programme, a very comprehensive programme in which right from silicon chip to compound semiconductors, design led manufacturing. The 5G network is also in its final stages of development. The country is participating today in development of 6G standards, in the thought process of 6G".

Government Of India (GOI), has made an ambitious plan taking optical fibre to all 6 lacs villages. So far optical network have reached to 2.6 lacs villages and Department of Telecom plans to achieve the target by 2025. This will bridge the digital divide as well as fulfil the motto of "Minimum Government and Maximum Governance".

The aplomb to become a global manufacturing hub, India has the domain knowledge but the management aspects needs a profound commitment, versatile and agile integration of academic institute's with research facilities as a knowledge and skill harnessing centre with applied strategies/plans with tangible milestones set, tax befits are some of many attributes to this .

The check and controls from the respective stake holders need to be critically scrutinized as mentioned in my consultancy suggestion no. A5.

Conducive growth environment and succinct bur lucid laid down processes in the context of Promoting Networking and Telecom Equipment Manufacturing in India will sail smooth in this economic regression to opportunistic manufacturing upstream.

India Telecom held on February 8th-12th, 2022, was an acclaimed platform for convergence of technology and edge business exchange. This mega event was 'a must attend' for Telecom and IT Stakeholders as it encapsulates strategies and learning that transcend the two most important present day industries having potential of unlocking huge demand of ICT services across multiple domains. It's the place to network, meet and shape the future of Indian network & telecom diaspora on the global parlance.