

Improving Ease of Doing Business for Telecom Sector in India

USIN Foundation

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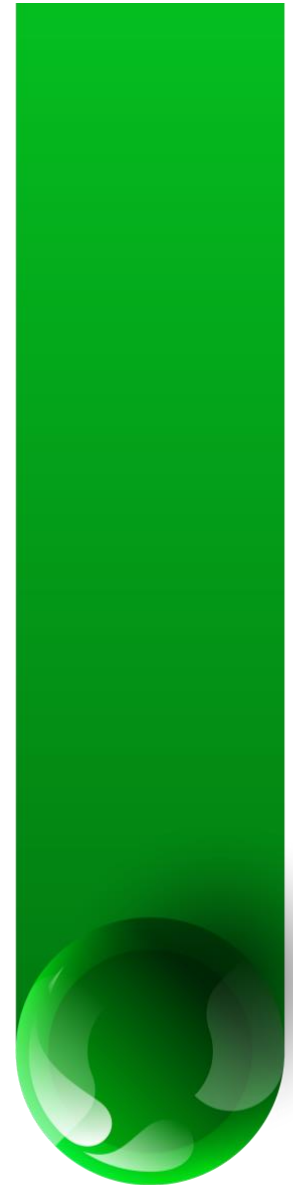
Executive Summary

As the second largest market in the world, the Indian telecommunication sector is currently at an inflection point. Driven by the increasing penetration of data and devices, telecom in India plays a pivotal role in the digital transformation of the country. As on date, the telecom industry alone contributes to more than 6.5% of India's GDP. A pillar of support behind this success story has been the enabling policies of the Government of India. To meet the growing requirements for a resilient telecom infrastructure and boost investments in telecom equipment manufacturing, the report attempts to highlight three key areas, i.e. local value addition requirements, standards & certification and customs procedures which require further policy attention -.

To promote domestic manufacturing, the introduction of the Public Procurement (Make in India) Order, 2020 (as updated in 2024) has been a welcome initiative of the Government of India. While the policy intention is well-acknowledged, it is also important to recognize the contributions of global telecom OEMs. As partners in India's journey towards a trillion-dollar digital economy, telecom OEMs have attracted massive amounts of foreign direct investment ("FDI"), created substantial number of jobs and undertaken exports worth billions. To continue incentivizing such partners to invest in India's growth story, the report recommends:

- a. Re-evaluation of local value addition requirements in line with the local component capabilities' ecosystem and building a point-based framework to consider holistic investments by global partners and to account for the same while computing domestic value addition.
- b. Alignment of standards & certifications with global procedures. Further, requirements like Communications Security Certification Scheme ("ComSec") should be limited to critical infrastructure rather than being mandated for all telecom products. This will enable procedural efficiencies without compromising on quality and security. The report also recommends mutual recognition of trusted vendors/sources, testing and certification through bilateral/mutual recognition agreements. To enable a trust-based compliance framework, the report also recommends a robust consultation and process for introducing new requirements as well as simplification of existing processes.
- c. Alignment between HSN classification and MTCTE requirements will reduce the challenge in assessment of telecom imports. Further, the report also suggests ensuring a conducive policy environment, publishing uniform guidelines and adopting a consultative process with periodic reviews to limit the identified challenges.

India's journey towards building a strong telecom ecosystem looks promising and the above policy changes would further assist in achieving the same.



Introduction

India has witnessed a remarkable progress in the last three decades in the field of telecommunications. As on date, the telecom industry¹ contributes around 6.5% of India's total Gross Domestic Product ("GDP")².

In addition to being the 2nd largest telecom market in the world, India is also the largest democracy to utilize its telecom infrastructure and services for inclusive delivery of socio-economic services. Since the introduction of affordable smartphones, 4G and 5G services in the country, every household had gained access to latest technologies at their fingertips. The proliferation of digital services ranging from online banking to quick e-commerce to ride hailing services and digital payments stand testament to the contribution of telecom sector to the Indian growth story.

Along with mobile manufacturing, the telecom equipment manufacturing in India has made significant progress. The Indian telecom equipment market size is projected to grow at a CAGR of 10.41% from an estimated USD 18.48 Bn in FY2023 to USD 41.77 Bn in 2031³. The unprecedented growth and rapid digitization in the sector have become the key factors to drive growth of the Networking and Telecom Equipment market⁴.

With some of the world's largest telecom Original Equipment Manufacturers ("OEMs") setting up their manufacturing units in India either themselves or through the contract manufacturers under the Production Linked Incentive ("PLI") Scheme introduced by the Government of India, the telecom equipment sector exemplified an exceptional sales growth of 370% in FY2023-24 as compared to the base year FY 2019-20⁵.

While progress has been remarkable, India needs to build the right ecosystem to achieve its aspirations.

The National Policy on Electronics ("NPE") 2019⁶ sets out India's vision to increase exports to 60% of domestic production by 2025. With growing global demand for telecom equipment across sectors and the government's focus on 'Make in India', there lies immense opportunity for telecom OEMs to step up manufacturing efforts and multiply the current telecom manufacturing output.

It is also vital to recognize the role that global telecom OEMs may play in aiding the Government of India's aspiration to attract USD 100 Bn in FDI per year⁷. With an enabling ecosystem that attracts global telecom OEMs to initiate their manufacturing plans in India, the country could see a substantial rise in annual FDI. For the same to happen, it is fundamental to build an enabling ecosystem for growth of telecom OEMs in India. The sector has also showcased significant growth in exports USD 1.25 Bn (INR 10,500 Cr) in FY2024⁸. Hence, with an enhanced ecosystem, the growth is expected to

¹ The industry includes Infrastructure, Equipment, Mobile Virtual Network Operators (MNVO), White Space Spectrum, 5G, Telephone service providers and Broadband.

² https://www.trai.gov.in/sites/default/files/ADC_31052021_1.pdf

³ <https://www.marketsanddata.com/industry-reports/india-telecom-equipment-market>

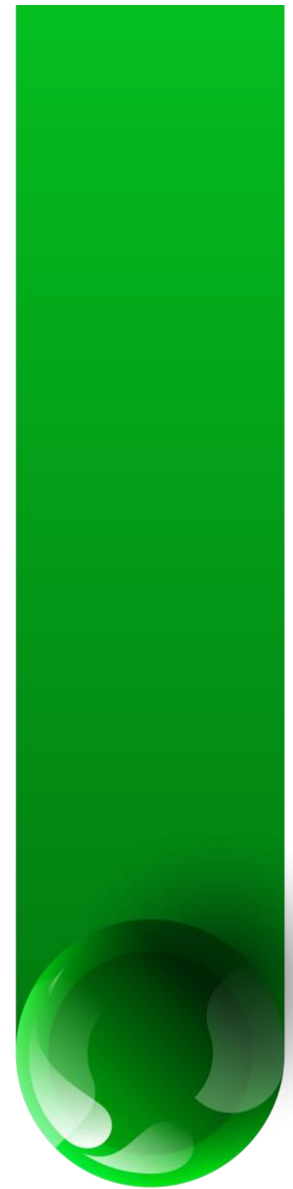
⁴ https://traai.gov.in/sites/default/files/Recommendation_23092023_0.pdf

⁵ <https://pib.gov.in/PressReleasePage.aspx?PRID=2031963>

⁶ https://www.meity.gov.in/writereaddata/files/Notification_NPE2019_dated25.02.2019.pdf

⁷ <https://www.businesstoday.in/latest/economy/story/india-plans-to-attract-100-bn-a-year-in-gross-foreign-direct-investment-industry-secretary-424547-2024-04-06>

⁸ <https://pib.gov.in/PressReleasePage.aspx?PRID=2031963#:~:text=Within%20three%20years%20of%20the, and%20many%20more%20indirect%20jobs.>



multiply. It will also enable the development of increased business functions in the country of such telecom OEMs such as Global Capability Centres (“GCC”), Research & Development (“R&D”) centres etc.

Objective of this Report

The PLI scheme has been fundamental in contributing to the growth of the telecom sector thus far with Telecom equipment manufacturing sales cross USD 5.9 Bn (Rs 50,000 crore) and reducing the country’s reliance on imported telecom equipment by 60%⁹.

While the success of PLI towards telecom equipment manufacturing has been excellent, the aim of the PLI is not just restricted to promotion of manufacturing and exports. In the longer run, India must envision to be part of the global value chain in the telecom manufacturing space. One of the most critical partners in this journey are global telecom OEMs. For India to become a globally recognized manufacturing and exports destination, she must strive to form a bigger part of global OEMs’ investments global value chain by improving ease of doing business (“EoDB”) for the OEMs.

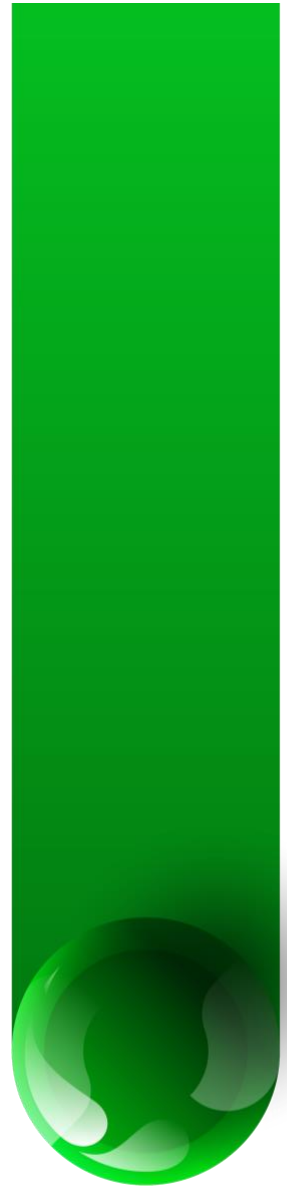
Against this background, this report seeks to highlight some challenges faced by telecom OEMs in India, particularly across three areas:

- A. Public Procurement
- B. Standards and Certifications
- C. Customs

Once these challenges have been addressed, this should allow telecom OEMs to increase manufacturing and export efforts in India while further strengthening India’s growth story and positioning India as a global leader in the telecommunications OEM manufacturing space especially high value additions and scale of production.

The report is divided into 3 sections as highlighted above. Each section focuses on the challenges and recommendations pertaining to its area.

⁹ <https://pib.gov.in/PressReleasePage.aspx?PRID=2031963>





Public Procurement





One of the key customers of telecom OEMs in India is the Central Government of India and any public sector institution affiliated to the Central Government. To be able to sell best-in-class innovative telecom equipment to the Central Government and its affiliated bodies, OEMs need to participate in public bids/tenders that are floated via the Government's central procurement portal, the Government e-Marketplace ("GeM").

At present, the Indian public procurement procedure is mandated under the Public Procurement (Make in India) Order, 2020 ("PPO"), revised on 19th July 2024¹⁰ and the respective PPO orders of nodal/administrative ministries. The objective of the Order is to boost domestic manufacturing, while increasing India's income, employment, and exports by giving purchase preference to those producers/service providers who can demonstrate that they have manufactured their product locally and added to the domestic value.

Need for aligning the provisions and objectives of the Public Procurement Order

Undoubtedly, the goals of the PPO are commendable as the push for domestic manufacturing is well-recognized. However, there is a need to re-examine the current conditions and local value addition norms under the PPO keeping in mind the need for quality and security in the telecom sector.



The current global market size of telecom equipment industry is USD 789.3 billion in 2024¹¹ and India accounts for USD 5.99 Bn¹², which is <1% of the global market share. While the market for telecom equipment is growing in India, it accounts for only <3% of the global revenues. There have been continuous efforts by global OEMs to ramp up investments to manufacture in India. OEMs envisage India as a strategic and a trusted partner to build supply chain resiliency.

Over the past decade, cumulative FDI inflow in the sector has been USD 39.31 Bn¹³. As of July 2024, under the current PLI scheme for telecom sector, India has attracted approximately USD 404 Mn in investments, created 17,800 direct jobs and totaled exports to USD 1.2 Bn. Hence, Telecom OEMs are contributing significantly to India through FDI investments, employment, global capability centres and R&D, services.

However, despite such vast number of investments and plans of scaling up manufacturing, India's manufacturing output contributes only about 1.4%-1.5% of the total global telecom equipment market¹⁴. Even with such investments & R&D, Telecom

"With growing global demand for telecom equipment across sectors and the government's focus on 'Make in India', there lies immense opportunity for telecom original equipment manufacturers ("OEMs") to step up manufacturing efforts and multiply the current telecom manufacturing output."

¹⁰ https://dpiit.gov.in/sites/default/files/PPP-MII_Revision_Order_19July2024.pdf

¹¹ <https://www.marketresearchfuture.com/reports/telecom-equipment-market-4441>

¹² <https://pib.gov.in/PressReleasePage.aspx?PRID=2031963>

¹³ <https://www.ibef.org/industry/telecommunications>

¹⁴ https://traigov.in/sites/default/files/Recommendation_23092023.pdf



OEMs are unable to qualify as preferred local suppliers in government tenders, owing to the mandated preference to procure products with minimum local value addition.

Therefore, to meet the underlying objective of PPO, it is essential to assess the state of value addition and manufacturing output and support industry in navigating some challenges with the PPO *are* highlighted below:

1) An unrealistic expectation of manufacturing all products in India

PPO mandates that all products proposed to be supplied to the Government need to be locally manufactured, which is an unrealistic expectation. It also fails to acknowledge assembly as an important manufacturing activity, particularly in the telecom space. Majority of our telecom OEM members emphasized that manufacturing all their products in India is not possible due to lack of an ecosystem and offers a disadvantage to telecom OEMs who want to ramp up their local value addition even for a couple of their products.

For a given product, telecom manufacturing facilities are spread across nations. This is because telecom products are *low-volume high-complexity* in nature. There are several components and configurations involved in the making of a singular telecom product. Therefore, telecom companies have thousands of product IDs / models instead of few stock keeping units. A global value chain example of mobile manufacturing is given in Figure 1.

Owing to this, activities of putting together a telecom product tends to be in “nodes” spread across multiple nations. No entity can manufacture an entire bouquet of its products in a single nation. For example, if an OEM is manufacturing a Wi-Fi router, which may have hundreds of models, it is likely that the manufacturing and configuration of this product happens in three different nations including India.

If one were to source everything locally, both quality and cost would be compromised. Thus, it is crucial to link the PPO obligation vis-à-vis the OEM supplier and not any specific product per se.

2) The current PPO does not appreciate the lack of local component ecosystem readiness especially for high-complexity, low-volume products

The Networking and Telecom Equipment manufacturing (“NATEM”) market can be subdivided into finished goods, sub-assemblies, and components on one hand and supporting software on the other hand. The components manufacturing in India is comparatively nascent and localization at the component level is much lower as compared to sub-assembly level. Components like chipsets, PCBs, etc. are currently imported due to the inability of domestic production to meet manufacturers’ requirements.

Illustrative Bill-of-Material breakup for a Set Top Box (STB)

Commodity Category	Component	Suppliers (including global leaders)	Manufactured in India?
Plastics and mechanicals	• Mechanical fabrication (base cover, sheet metal)	• Flextronics, Supreme	Y
	• Plastic fabrication	• Rosti, G-Plast, Nypro	Y
	• Cables/wires	• Amphenol, Molex, FCI, Volex	Y
Electro-mechanical (including specialty 'discrete' tech)	• Caps and resistors (through-hole)	• Vishay	Y
	• Heat sinks	• Auto Ancillary (Eg: Jindal Extruders)	Y
	• Batteries and power supplies	• Laird Tech, Murata	Y
	• Inter-connectors	• Tyco, Molex, FCI, Amphenol	Y
	• Printed Circuit Boards (<4 layer)	• AT&S, Epitome, Ascent	Y
	• Caps and resistors (SMT)	• Belfuse, Delta, Lineage, Panasonic	N
	• Inductors and magnetics	• Delta, Jan Mao	N
Semiconductor (Silicon)		• Broadcom, Marvell, Maxim	N
		• NXP, Hynix, Samsung, Fairchild, Texas Instruments	N
	• Communications module	• Freescale, Fairchild, Broadcom, PMC	N
	• Logic, Memory	• Diodes Inc, Fairchild, ST Micro	N
	• Chipsets; Logic devices	• Maxim, Texas Semiconductors, National Semi, Linear Tec.	N
	• Diodes	• Maxim, Pericom, Kyocera, Analog	N
	• Linear Voltage Regulator	• Fairchild, Central Semiconductor	N
	• Timing devices		N
• Transistor		N	

Table 1: Break-up of a STB, Source: [USISPF](#)



A weak supplier ecosystem for components affects particularly the high-complexity, low-volume telecom product segments. To give an example – nearly 85% of the components (by value), in the Bill of Materials (“BOM”) of a set-top box (a high-complexity, low-volume product), are sourced from global suppliers due to a weak supplier ecosystem in India (illustrated on the right)¹⁵. Only 15-20% of the components are currently manufactured in India¹⁶. Over 40% of India’s total telecom equipment requirements are imported from China.¹⁷ Further, based on our discussion with members of USISPF, it is understood that the components dependency is on third parties and require entire value chain to be shifted to India which may be beyond control of telecom OEMs as buyers of such components, given the share of India market was smaller for such

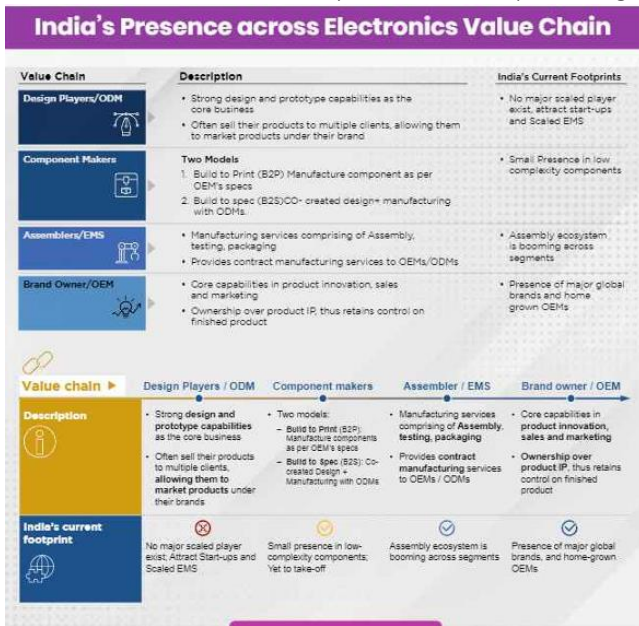


Figure 1: India in the Global EVC, Source: [NITI Aayog](#)

OEMs and is evolving. The state of value chain is reflected in Niti Aayog report on GVC 2024. This disability makes it impossible for Telecom OEMs to manufacture the entire value chain in India making them ineligible to qualify local value addition requirements.

Several other advanced telecom products have 20-30 layers of PCB, but India has capability of only <6-layer PCB manufacturing. While India's overall electronics production grew at a CAGR 13% (between FY17 and FY23); electronics component production only grew at 7%. A majority of the current US\$ 15 billion component production is comprised of low-complexity components such as non-SMD (Surface Mounted Device) grade passives, electromechanical components, wound components, etc. An ecosystem for high-complexity components such as SMD grade passives, semiconductors etc., does not currently exist¹⁸.

In telecom manufacturing, semiconductor chips are a major part of any component or sub assembly. They constitute ~50% of the total cost of the components.

Other elements are electro-mechanical, enclosure (sheet metals), etc. Telecom products need 5-7 nm chips, whereas the recent chip manufacturing investments in India are in the range of 28 nm. Therefore, it is very difficult for any OEM to access semiconductor chips in India. Owing to the lack of this domestic capacity, the inclusion of semiconductor chips as part of the local value addition mandate under the DoT PPO Order is not feasible.

3) PPP-MII rules do not consider costs disabilities which are not entirely covered by PLI

In India, the challenge of manufacturing and logistics with regards to telecom manufacturing is multi-fold for a global OEM

¹⁵ <https://usispf.org/wp-content/uploads/2020/11/USISPF-Hi-Tech-Manufacturing-Report-1.pdf>

¹⁶ https://www.trai.gov.in/sites/default/files/MAIT_06042022.pdf

¹⁷ https://www.niti.gov.in/sites/default/files/2024-07/GVC%20Report_Updated_Final_11zon.pdf

¹⁸ https://www.niti.gov.in/sites/default/files/2024-07/GVC%20Report_Updated_Final_11zon_0.pdf



Moreover, compared to other geographies, India does not offer equivalent landed cost parity in the telecom manufacturing space. When procuring components sourced globally (which cannot be procured in India given there is no local manufacturing capacity for those components), OEMs need to pay high freight and transformation costs. India's electronics manufacturing faces a cumulative cost disability of 10%-14% for assembly and 14%-18% for components manufacturing due to several factors. Tariffs and material costs result in a 5%-6% disadvantage for assembly and 4%-5% for components compared to China due to the high cost of inputs. Logistics issues contribute to an additional 2%-3% cost, while high finance costs add 1%-2.5% for assembly and up to 4% for components¹⁹. To maintain the high quality offered by global OEMs in their products, they also need to incur cost of global network 'load balancing'.

Given the lack of manufacturing ecosystem, the DoT PPO is stringent compared to other PPO orders, whether of the DPIIT and the MeitY. The prescription of higher minimum local content requirement ranging from 36%-75% seem unrealistic to most telecom equipment manufacturers.

While the DPIIT has itself prescribed 20% as the minimum ceiling to qualify as Class-II and 50% for Class-I supplier, DoT leaves only recognizes Class-I suppliers. Further, DoT does not agree with 50% local value addition as being the minimum ceiling for a Class-I supplier. In the 36 telecom products that it lists, DoT has prescribed minimum local content ranging from at least 40% up to 75%.

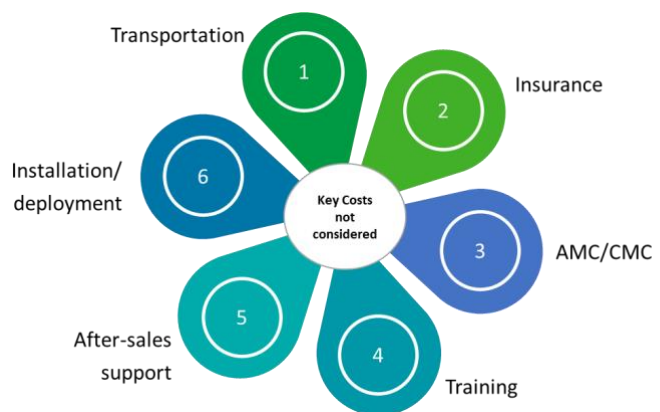
The MeitY Order dated 7th September 2020²⁰, on the other hand, is cognizant of the complexities of manufacturing electronic products (much like telecom products). In its prescription, it drills down to the sub-component level local content requirements of each of the listed products. Where there is absence of local capacity, it allows for the sub-component to be assembled in India without any capping.

4) Integral costs incurred while supplying a telecom product/service are excluded from local content ("LC") calculation

The DPIIT, in its clarification issued on 4th March 2021²¹, stated the cost exclusions from LC calculation. The circular read that for imported products, costs such as the following **cannot be considered as LC costs**:

The members suggested that telecom products are generally not off-the-shelf products. They are also products with high-security functions, meant to serve critical infrastructure. To supply a telecom product, one requires pre-assessment of infrastructure, and more importantly, post-sales support to maintain the quality and functioning of the product.

The DoT Order makes it more stringent with assembly, integration and testing stage capped at only 10% of the total Bill of Material ("BoM") for 33 products. This is not reflective of the actual situation as several suppliers spend significant amounts in this stage, particularly when sub-components need to be imported owing to the lack of a domestic ecosystem for those components.



In the consultation initiated by the Department of Telecommunications in September 2024, a change had been recommended that "While calculating % local content in a product, cost of Integrated chips (ICs) – Processor, Memory etc. shall be excluded from the total Bill of Material. This shall be reviewed when sufficient

¹⁹ https://www.niti.gov.in/sites/default/files/2024-07/GVC%20Report_Updated_Final_11zon_0.pdf

²⁰

https://dpiit.gov.in/sites/default/files/Meity%203%28a%29%20Notification%20dated%2007092020_0_0.pdf

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²¹ https://www.dcmsme.gov.in/PPP_Order_08032021.pdf

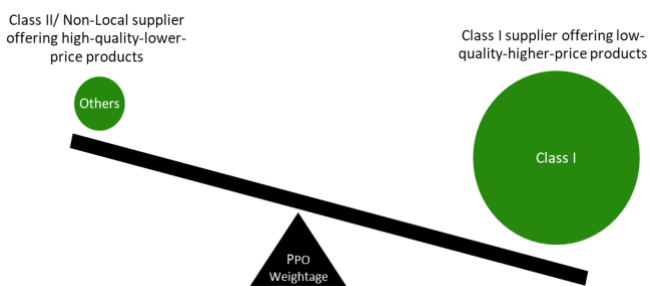


Semiconductor FABs are operational in India. However, this change was removed from the notified version from October 2024²². Further, there is no change to upper ceiling of LC for assembly/testing/integration and it continues to be 10%.

Consequently, telecom OEMs invest a significant amount and incur high costs in performing these services.

Additionally, it is seen that in most tenders and RfPs, the demand from the procuring entity is to also include after-sales support or training as part of the bundled service. In that case, bidders are left with regulatory uncertainty about what exactly can be considered as a 'local cost.'

5) Current bidding process under PPO leaves opportunities for market dominance



In a space like telecommunication equipment manufacturing, there are a handful of players who supply at scale. Many of these players are global OEMs. When a mandate like PPO comes into action, it implies that only few players get the chance to bid for government tenders, leaving out many manufacturers. On examining the PPO bidding process, it is understood that even if the Class-I supplier quotes a higher price than a Class-II or a non-

local supplier, they shall be given purchase preference. This would not only tantamount to anti-competitive practices but also significantly increase costs for the procuring entities.

“In one of the tenders to increase last mile connectivity in India worth USD 200 Bn, very limited number of solution providers could even bid despite several having the capacity and credential to qualify.”

6) Other investments creating positive spillover effects on the economy not considered as local content under PPO

In India, telecom OEMs have made significant contributions in creating jobs, investment in advanced R&D with high-end research output and contributed significantly to tax revenues. Additionally, OEMs have boosted innovation, built robust cybersecurity systems and brought in significant foreign direct investment in India.

While these are critical contributions, they are not recognized as 'local content.' If the ultimate objective of the PPO is to promote jobs, economic growth and exports, there is a need to change the lens of examining the 'local content' contribution of a company.

The Make in India preference is product specific and does not acknowledge the holistic investments. In fact, telecom OEMs are subject to additional trade and non-trade barriers.

7) Other ambiguities

A. IP Residency clarity – For IP residency, it is unclear how to define it for a product driven industry like telecom. There is clarity needed on when can IP be considered as resident in India.

²² <https://dot.gov.in/sites/default/files/PPP-PMI%20order%2021102024.pdf>



The Cyber Security Products PPO issued by the MeitY states that the intellectual property (“IP”) rights of the product needs to be owned by the Indian entity to fulfill the following conditions:

- a. The bidder should have the right to use, distribute and modify without third party consent
- b. The total licensing / royalty fees being paid by the manufacturer to a third party should not exceed 20% of the total cost of the product.

While these requirements could have potentially defined “IP residency in India” for telecom products under the DoT, the MeitY limits the applicability of the Cyber Security Products PPO to a specific list of cybersecurity products. Thus, there is no clarity on whether the same can apply to products notified under the DoT.

B. Recognition for principles of PLI contract manufacturers - The updated Order in July 2024 has clarified that the manufacturers manufacturing an item under PLI scheme will be considered Class II suppliers for that item if they have received incentive for the manufactured item. This provision does not consider the investments made under PLI through contract manufacturers. Under the FDI Policy, even the principle of contract manufacturer is also regarded as manufacturer and hence there is a need for clarity that the manufacturers will also include contract/toll manufacturers:

“Manufacturing activities may be either self-manufacturing by the investee entity or contract manufacturing in India through a legally tenable contract, whether on Principal to Principal or Principal to Agent basis²³.”

The 17th Standing Committee on the Public Procurement (Make in India) Order’s acknowledgment on considering this point is well-recognized.

Or the clause may be re-written as:

“Such manufacturers will be treated as deemed Class-II local suppliers for the products specified in the list and up to the specified period”. As the manufacturer would make substantial investment, the deemed status should apply once the manufacturer has qualified under the PLI scheme and continue to apply even after the completion of the specified period.”

²³ <https://pib.gov.in/PressReleasePage.aspx?PRID=1846088>



Some Suggested Recommendations



1) Revisit the local value addition norms to incorporate holistic investments

Telecom OEMs in India are invested in manufacturing, product exports, R&D, skill development, product design, building testing capabilities, social sector investments, etc. The

Government must take into account such investments and identify “Net Investor Score”, which will take into account all investments made by global companies across manufacturing, R&D, startup acquisition, talent, CSR projects, etc. This score can enable the government to provide differentiated business facilitation, including on public procurement.

The Government should consider sub-component-wise value addition requirements of all notified products under the DoT PMI Order

2) Revise the high local value addition requirements keeping in mind the evolving component ecosystem

As per the current PPO, component manufacturing within India is mandated to meet the local value addition requirements and given the inadequacy of a local ecosystem to produce the components, it becomes impossible for the telecom OEMs to meet these requirements. As mentioned in the challenges section, the DoT Order attributes a very high percentage of value addition requirement to components ranging from 40% to 75%. It is therefore suggested that the component value addition requirements within PPO are re-evaluated.

Further, the government should consider the complexities of manufacturing the telecom products and drill down to the sub-component level local content requirements of each of the listed products much like the MeitY Order. Adopting an approach similar to MeitY for defining the value addition for telecom manufacturing would ensure that lack of capacity at a component level is taken into consideration and quality in such cases is not compromised on account of capacity constraints. A liberal approach for considering local content at entity level should also be considered rather than at product level in case components procurements for global products could be undertaken and products meeting higher local content can offset obligations for products with limited or no local capacity.

To address the issue of an ever-evolving component ecosystem, it becomes crucial to assess the manufacturing capacity and adequate competition within India across finished goods, sub-assemblies, and components. A thorough assessment on the in-house capabilities should be undertaken to clearly establish the present disabilities which should then be considered while defining the PPO eligibility requirements. In this regard, the DoT can take cue from MeitY’s PPO Order, wherein every product is broken down to its component/sub-component level and weightage/criteria is set out for each depending on the local capacity.

3) Adopt a points-based framework to assess a global OEM’s domestic value addition

It is appreciated that the Government has taken cognizance of bringing in alignment between the PLI and PPO by considering manufacturers whose product is availing the PLI as a deemed Class II supplier²⁴ for that product. Industry welcomes this clause, as it provides due consideration to the

²⁴ https://dpiit.gov.in/sites/default/files/PPP-MII_Revision_Order_19July2024.pdf



investments made by telecom OEMs despite multiple challenges. Taking this initiative forward to acknowledge companies undertaking significant investments across different spectrum of growth for the country should be recognized through this scheme.

This report suggests a **'Points-based Framework'** to assess domestic value addition undertaken by telecom OEMs.

To further attract global companies to invest in India and qualify under PPO, the Government may also consider the concept of 'Deemed Class II local supplier'. Under this, the government could provide **PPO points** equivalent to say 75% of the goods to be exported from India as given by the OEMs. These points could then be used to off-set the local costs incurred as part of local content calculation.

Additionally, the government could consider providing a status akin to the Authorised Economic Operator ("AEO") model followed for imports to incentivize companies who are investing heavily in India. The OEMs can then utilize these PPO points to qualify as 'Deemed Class I local supplier' for products not manufactured in India, from the date of approval of application.

As a hypothetical example,

Export Commitment (In USD million)	PMI Points (Weightage)
20	20
50	40
85	50
100	75

This can prove to be a win-win situation for both the Government and the OEMs in the following ways:

How does the Government benefit?

- Attract major brands to set-up export hubs in India
- Build and strengthen the supplier ecosystem
- Boost to authenticate domestic manufacturing within India
- Become an export surplus market
- Attract emerging, future-proofed technologies for Digital India projects

How does the OEM benefit?

- De-risk by building global resiliency
- Ability to address India market

4) Need for clear definition of IP residency within the law

Given the complexity of products and requiring higher technology and R&D play, it is essential to clarify the definition of IP residency and condition requirement regarding buyouts, license arrangement for manufacturing as well as composite products should get clarified. This will help telecom OEMs plan their manufacturing facility to ensure compliance with PPO guidelines.



5) Harmonization of mutually accepted procurement norms (multilateral/bilateral)

The members suggest harmonization of procurement norms across countries can play a critical role in addressing the challenges faced by global OEMs while participating in government tenders. This can be achieved with India's accession to the WTO Agreement on Government Procurement ("GPA")²⁵ which would not only attract foreign investments to India, but also create opportunities for Indian companies in foreign markets. The GPA, a plurilateral agreement, would ensure that companies based in GPA participant countries receive open and fair access to procurement contracts for goods, services, and construction in other GPA participant countries. Joining the GPA can help India attract the much-needed inbound foreign investment which can prove instrumental in achieving the Hon'ble PM's vision of making India a 'Developed Economy by 2047'.

Being a signatory to mutually recognized procurement agreements will assist the Government in attracting higher number of investors

²⁵ https://www.wto.org/english/tratop_e/gproc_e/gp_gpa_e.htm



Standards & Certifications





The liberalisation of the telecom sector along with enhanced demand for telecom products has increased the number of standards and certifications required by Telecom OEMs. Today, to operate in India the OEMs must comply with multiple India specific standards and certifications which are again required to be renewed frequently.

Testing and certification of telecom equipment is an expensive and a time-consuming process. Lack of Mutual Recognition Agreements/Arrangements (MRAs) with major economies like the US, EU and the UK is one of the major cause of concerns for the OEMs operating in India.

Key Challenges faced by OEMs in Standards & Certifications

- 1) Re-testing and certification of products already tested internationally

While India has adopted international standards for in-country testing and certification process, it has also mandated the products to undergo re-testing and certification to be able to be sold in India – as part of the Mandatory Testing and Certification of Telecom Equipment (MTCTE) scheme. The repeated certification adds no ostensible benefit nor enhances the products safety and quality to the end consumer but adds compliance cost burden on OEMs. For instance, the standards specified under the MTCTE are based on international standards for safety (IEC 60950 / IEC 62368), EMI/EMC parameters (CISPR 32/22), and Technical Parameters including Radio Frequency parameters (ETSI EN 300 328 or FCC CFR47 standard). Since the telecom products are sold globally, across different markets, these products are internationally tested and certified as per the International Standards. However, the same products are required to undergo testing in India, and based on members inputs, it adds USD 25K approximately per model (in case of Radio product) to the compliance cost.

The repeated certification adds no ostensible benefit nor enhances the products safety and quality to the end consumer but adds humongous compliance cost burden

- 2) Need for risk-based testing and certification schemes as current schemes cover all equipment irrespective of their relevance

To safeguard the performance and security of Indian Telecom networks, it is important to test and certify the primary telecom equipment like Routers/Switches that connect directly to the network. **However, regulating the secondary telecom equipment like Access Points, which do not connect to any telecom network directly, only increases the compliance burden while not adding any value to India's public networks.** This requirement arises from Rule 529 of The Indian Telegraph (Amendment) Rules, 2017, which introduced a clause on Mandatory testing and certification of all Telecom Equipment "*which is used or capable of being used with any telegraph*" While it is important to safeguard the India's telecom network, it is equally important to create policies that endorse, trade and promote Ease of Doing Business.



Similarly, the product scope under **the Communications Security Scheme (Com Sec)** notes that “*any original equipment manufacturer (OEM)/importer dealer who wishes to sell, import, or use any telecom equipment in India, shall have to get their equipment security tested and certified.*” **This indicates that any piece of telecom equipment, regardless of the levels of risk they pose, must be tested and certified.** Testing and certifying every single piece of telecom equipment does not help improve safety but limits it by diverting resources away from those products that present a higher risk.

India has mandated certain requirements like the Communications Security Scheme (Com Sec) and Trusted Source/ Trusted Product Certifications, which no other market has mandated for the products market access.

3) Ambiguous and ambitious requirements

India has mandated certain requirements like the Com Sec and Trusted Source/ Trusted Product Certifications for all telecom products to be used in Indian networks. In rest of the world like in the US, requirements like the Trusted Source and ComSec are mandated only for the critical infrastructure sale like the Federal/defence projects. India mandating such ambitious requirements for every single product significantly impacts the EoDB in India.

Further, the Security Standards (ITSAR) are not in a state to be interpreted directly as test cases. Many of the requirements in ITSARs ask for disabling of options in the product at the product development stage. Products are not manufactured or developed for a specific country (India for example) but are built with a wide range of features for the global market. However, based on ITSARs the telecom operator can configure the product to exactly meet the specifications and ensure that the needs are fully met. Similarly, the ITSAR requires re-testing for every software update/ patch/ bug fix. With the fast development in the technological world, there are frequent updates released by the software firms to keep the customers abreast with the developments. In such cases, it is extremely difficult to continue retesting the products. Moreover, the normal security testing and certification time under the ComSec Scheme, would take a minimum of 6 months. By then, many a times, the technology would become obsolete.

4) Unpredictable policies and certification schemes

Telecom products have recently witnessed stringent compliances for approvals and certifications with limited/ inadequate consultation to assess the risk and preparedness of testing facilities. For instance,

- Department of Telecommunications (DoT) identified 47 product categories under MTCTE Phase 3 and Phase 4 in September 2021. Since then, the DoT has granted six extensions primarily due to the unavailability of test labs capable of handling the high volume of products needing in-country testing. Often, these extensions are granted at the eleventh hour, causing immense uncertainty for businesses. This has created significant uncertainty and instability within the industry.
- Similar to the MTCTE, DoT notified Security testing and certification for the first time in Wi-Fi CPE and Routers in Feb 2023 giving just 4 months to the OEM to start testing the products. The Voluntary Certification Scheme commenced in September 2023, where only three labs were accredited. Keeping in mind the capability of the lab ecosystem, DOT has since announced the date for commencement of mandatory certification in April 2024. According to the notification, the certification of the notified products, which were certified under MTCTE and deployed under licensee’s network (TSP) and proposed for change in hardware or software had to commence on October 1, 2024. While the industry continues to engage with the Department on various open issues, including process related challenges, family grouping, lab ecosystem, et al, the industry has commenced submission of applications.



- However, on October 2, 2024, the DOT has proposed only one month extension for applications to be submitted along with a self-declaration stating compliance with the testing requirements and agreeing to “withdraw the said product along with its associated models from the deployed networks, in case, after due evaluation, NCCS declares that the product is non-compliant”. National Centre for Communication Security (NCCS), the nodal agency for Com Sec. Considering the pending challenges with the scheme, the immense time taken to apply, test and certify, it is impractical for OEMs to submit such declarations.

This uncertain and unpredictable approach by the government, lacking a proper impact assessment, can reflect poorly on India's growing attractiveness to global investors.

5) High costs of testing expenditures

Currently, for an OEM to obtain market access for a telecom equipment, they must ensure compliance of their product to the MTCTE certification which includes testing of each model for Safety parameter, EMI/EMC parameter, Technical Parameters (which include Radio Frequency, IPV6, etc.,) and Security parameters. As per inputs received from members, the cost of in-country testing for the all the above parameters amounts to INR 74 Lacs (~USD 90,000) per model.

Type of Testing	Cost per Model (in INR)
Security parameter testing per model	58,00,000 (~USD 70,000)
Rest of MTCTE parameters testing per model	16,00,000 (~USD 20,000)

According to the Indian Telegraph Amendment Rules 2017, "the fee charged for testing carried out by the telegraph authority from the person who offers the telegraph for testing shall not exceed INR 50 Lakhs as specified by notification..."

The maximum testing cost specified in the Telegraph Rules covers comprehensive MTCTE testing, which includes Safety, EMI/EMC, Radio Frequency, Technical Parameters, and SECURITY parameters. However, the current fees charged by testing labs often exceed this maximum cap. There is no standardized pricing regulated by the department, allowing labs to impose arbitrary testing fees. Moreover, due to the limited number of labs available, a monopolistic market environment has emerged. OEMs are left with no choice but to accept these exorbitant testing costs. Such high expenses create trade barriers and foster the formation of an oligopoly.

Some Suggested Recommendations

During his visit to the US in June 2023, Prime Minister Narendra Modi along with President Biden shared the vision of creating a secure and trusted telecommunications space for deepening the public-private cooperation between the vendors and operators.²⁶ The following recommendations can assist in further strengthening the India- US shared vision for telecommunications.

1) Framework for Trusted Vendors/Sources with India and US as pilot:

The need to put in place a “Trusted Network/Trusted Sources” bilateral framework has been discussed by the Heads of the Government during the June 2023 bilateral summit. Given the shared vision, India and the US can explore joint facilitative mechanisms that emphasize trusted sources and networks, ensuring



fair and secure trade practices. India and the US can effectively engage and build a robust framework that supports the vision of “Trusted Network/Trusted Sources,” fostering mutual growth, security, and innovation while also addressing the multiple retesting and re-certification challenges for the OEMs.^{ac}

2) Mutual Recognition Agreement/Arrangements (MRAs)

In 2013, the International Telecommunication Union (ITU) prepared a set of guidelines²⁷ for the development, implementation, and management of mutual recognition agreements (MRAs) on conformity assessment to establish a conformance and interoperability infrastructure in Telecommunications sector. MRAs ease the burden on OEMs and reduce the cost and time to market for products while ensuring that products that reach the market are compliant with MTCTE.

The US has entered into MRA with Canada, Vietnam, Australia, Israel, EU, Hong Kong, Chinese Taipei, Singapore, Korea, Japan and the UK among others reducing the burden of retesting and re-certification of the same equipment and the related costs.

However, in case of India, only Singapore has entered into such MRA for the telecom equipment. India further needs to explore such options and enter into MRAs with the larger economies like the US, Canada, Australia, Korea, EU and the UK, to reduce the burden of duplication of testing and certifying the same equipment.



3) Harmonization of mutually accepted testing and certifications

The Indian authorities accept certification of telecom products by International Laboratory Accreditation Cooperation (ILAC) accredited labs. However, certain tests such as ComSec are required to be undertaken and certified by Indian designated labs alone. This is leading to duplication of efforts and expenses for all the OEMs. Such disparity in global testing and certification will have to be addressed at the earliest.

The authorities can consider exempting Trusted Source/Trusted Product certified OEMs from such mandatory India based testing and embrace global certifications. This can help OEMs reduce the burden of retesting and recertification while also ensuring the availability of the most advanced products for consumers across Indian markets. Simultaneously, the need for retesting of products for every software update/upgrade also needs to be addressed. Similar to Federal Information Processing Standards (FIPS) ComSec certifications can be limited to products being used by government agencies or contractors reducing the burden of compliance and time delays for new network setup.

4) Certainty and consultative process for new requirements/standards

The Telecommunications Engineering Center (TEC) holds extensive consultations with the industry before publishing new and mandatory testing and certifications. The National Center for Communications Security (NCCS) can adopt similar processes for consultation while defining the ITSAR regulations. The National Cyber Security Coordinator (NCSC) also needs to publish minimum requirements for OEMs to qualify as Trusted Source/Trusted Product. Along with timely consultations, all three departments are required to bring certainty and predictability in implementation timelines of the regulations. Government can conduct a thorough impact assessment evaluating the readiness of the ecosystem, including the availability of testing labs, capacity of manufacturers to comply with new requirements, and the potential economic impact on businesses.

DoT should establish clear and consistent regulations governing certification processes and fees. It must regulate the testing cost as defined under the law promoting fair competition and affordability for manufacturers. The government should consider a phased implementation approach of certifications

²⁷

https://www.itu.int/en/ITU/Technology/Documents/ConformanceInteroperability/GuidelinesMRAs_E.pdf



Government should carry out a thorough impact assessment to evaluate the readiness of the ecosystem, including availability of testing labs, capacity of manufacturers to comply with requirements before the launch of new certification schemes.

allowing time for all stakeholders to prepare adequately without compromising on the quality and reliability of testing processes.

These steps can help the OEMs in improving their supply chains and planning their product lines in advance for Indian markets while also reducing the losses and unnecessary expenditures of retesting & recertification.

5) Monitoring and review mechanism

Implement a robust monitoring and review mechanism to track the progress of certification schemes. Regular evaluations should assess whether the objectives are being met, identify challenges faced by stakeholders, and prompt necessary adjustments to improve the effectiveness and efficiency of the schemes.

6) Recognition of compliant suppliers/vendors

While every country has the right to prepare, apply, and maintain mandatory regulations to safeguard its network and consumers, it is important to note that certification assessment only reviews the product's safety and security at a discrete point in time. While certifications can be useful in certain instances, they are not appropriate for all telecom products and use cases. India should consider alternatives to certification. Similar to AEO operator concept, it is of great importance that mandatory certification be used only in situations where no better alternatives exist.

Alternatives to certification are widely accepted in the marketplace, depending on the product, service, use, or standard and risk. These alternative approaches demonstrating compliance are used by vendors, recognized and accepted by the marketplace, and are ones in which industry has extensive experience.

7) Narrow the scope to high-risk telecom equipment

If all the telecom equipment (irrespective of its ability to connect directly or indirectly) is deemed in the scope of certification, then no equipment is critical. Testing and certifying every single piece of telecom equipment does not help improve security. It is pivotal to cover telecom products that connect directly to the Indian telecom network or licensed operator's network posing a greater threat to the nation. To start with, DoT can limit the product scope in the ComSec Scheme and not include products that connect to a customer data center environment, or which pose low security risk to the public network. By limiting the scope of products covered by ComSec, GOI can ensure a manufacturer can complete the product testing and certification by an Indian-approved lab within a reasonable time. A limited scope will avoid long queues at laboratories and certification bodies, and scarce resources can be utilized on telecom products that pose a real security risk.

8) Global best practices

Benchmark India's certification schemes against global best practices and standards. Learning from successful implementations in other countries can provide valuable insights into optimizing processes, enhancing credibility, and attracting global investments.

Adopting the above recommendations, the government can mitigate the uncertainties and instabilities caused by certification schemes. This proactive approach not only ensures regulatory compliance but also fosters a conducive environment for innovation, investment, and sustainable growth in India's telecommunications and technology sectors.



Customs





The telecom sector has been evolving at a rapid pace, driven by continuous innovation and the introduction of new technologies. However, this rapid advancement often outpaces the ability of customs laws and regulations to adapt, resulting in a range of interpretational challenges. These challenges arise because the regulatory frameworks governing customs procedures are typically slower to change compared to the fast-moving nature of technology. This lag leads to ambiguities and inconsistencies in how new products and technologies are classified, valued, and regulated at customs borders.

Key Challenges

1) Disputes around correct HSN classification and assessment of concessional duty under Notifications

As new telecom devices and technologies emerge, they often do not fit into existing tariff classifications as the Indian Customs Tariff itself does not contain sufficient breakouts for such products. Further, modern telecom products often serve multiple functions due to convergence of technologies and optimization of network resources. For example, modern routers and switches are no longer simple devices performing singular function. It may have integrated security features such as firewall and VPNs, network monitoring etc. Customs regulations do not have clear guidelines on how to classify such multifunctional devices, although the 'Principal Function' test has been applied judicially in such cases. This leads to inconsistent treatment being followed by officers at different port of import, disputes over the correct tariff classification and inconsistency in duty rates applied. There is also a lack of suitable guidance from the Central Board of Indirect Taxes & Customs ('CBIC') on certain common issues, such as classification of 'Parts' of telecom apparatus or classification of 'IP Phones' despite several judicial determinations on this issue resulting in divergent trade practices. Due to interpretational issues, exemption or concession duty benefits are often denied at the time of import, resulting in higher costs for industry.

2) Misalignment of Product HSN Classification and MTCTE Requirements in the Telecom Sector and implementation of MTCTE

MTCTE is not driven by the requirements of Customs classification. Misalignment between HSN classification and MTCTE requirements can potentially pose significant challenges in assessment of telecom imports. A product's HSN is determined based on the Explanatory Notes, Section Notes, Chapter Notes etc. which is aligned with the internationally accepted system followed by all World Customs Organization (WCO) member countries. Under MTCTE requirement, Certification is issued based on fulfilment of essential requirements (ERs) for different telecom products which is India specific. Under the said frameworks the same product may be treated differently leading to inconsistency in declaration between MTCTE certification and HSN classification for the same product without any change in functionality.

In certain cases, such as End of Life ('EOL') products or spares, there is also an exemption from MTCTE certification requirement. However, the acceptability of such cases remains to be seen at the Customs port.

3) Higher import duties on telecom components despite the absence of local ecosystem and local players

The telecom sector's reliance on high end imported components becomes pronounced when local alternatives are scarce or non-existent. Higher import duties (averaging 16%) further reinforce this dependency, potentially limiting supply chain resilience and local technological innovation. The imposition of higher import duties increases the cost of importing telecom components, directly impacting importers



and businesses in the telecom sector. Hence, the Government should reduce the duty incidence on telecom components till India has developed telecommunication ecosystem.

4) Unpredictable policy environment and other licensing related issues in telecom sector

Uncertain policy environment in India impacts long-term business projections and investment decisions. For example, under Manufacturing under Customs Bonded Warehouse scheme there was upfront exemption from all duties including Integrated Goods & Service Tax (IGST). However, subsequently scope of deferment on the IGST component has been restricted from a future date to be notified. Further, certain basic procedures such as MOOWR to SEZ movement clearly amounting to export as per law do not have a specific guidance provided in procedures resulting in uncertainty at the ground level. This unpredictability can have significant implications for businesses that may already be operating or seek to operate under the scheme.

Aside from multiplicity of licenses on import and export, another challenge is the time involved in obtaining these. For example, for export of restricted goods and technology under SCOMET (Special Chemicals, Organisms, Materials, Equipment, and Technologies), the process of obtaining license is a very time consuming and assessing the applicability also is a major challenge (product may get covered in multiple categories). SCOMET licensing has evolved in the last few years to cater to several business scenarios by adding ten different licensing categories like stock & sale to end customers, repair & return, introducing long-term licenses, etc. Nevertheless, in the case of technology exports where end users/sub-licensee cannot be identified upfront at the time of export there is challenge in identifying the license type, compliance, and reporting.

The sudden introduction of system changes without pilot / phased implementation also caused challenges for industry. For instance, the integration of SEZ with ICEGATE and discontinuation of NSDL filings, which was rolled out on July 1st, 2024, has caused widespread disruption in the routine functioning of Free Trade Warehousing Zone ('FTWZ') units.

5) Impact of CAROTAR Compliance on the Telecom Industry

The Customs (Administration of Rules of Origin under Trade Agreements) Rules, 2020 (CAROTAR rules) specifies the information that the importer should be in possession to demonstrate the manner in which country of origin criteria is satisfied. As per the CAROTAR 2020, the importer is required to possess the stipulated origin related information for claiming benefit under FTA.

The said requirement presents significant challenges for industries such as telecom, which heavily rely on imports of specialized and high end equipment and components. The telecom sector, in particular, depends on a wide range of imported goods, including routers, antennas, and advanced network infrastructure, often comprising both hardware and software-integrated devices. Demonstrating the origin of these complex products under CAROTAR is particularly challenging, especially when components are sourced from multiple countries. This creates complications in compliance, making it difficult for telecom companies to prove the origin of their goods. These challenges can lead to substantial supply chain disruptions, as the time required to verify the origin of goods delays critical telecom projects, such as network expansions and 5G rollouts. The resulting delays not only extend project timelines but also incur significant additional costs.

6) Challenges Posed by Quality Control Order (QCO) on Telecom Industry

The Quality Control Order (QCO) imposes stringent quality standards on a wide range of products, including telecom equipment, creating challenges in an industry where technology evolves rapidly. A key concern is the potential mismatch between QCO requirements and international telecom standards. Telecom companies may face difficulties in ensuring compliance with these local regulations, which can slow their ability to swiftly adopt new technologies and hardware from global suppliers.



In addition, the need to meet India's QCO requirements for imported equipment could lead to increased costs, affecting both network expansion initiatives and consumer pricing. The approval process for new telecom technologies, such as 5G network devices, may also experience delays due to the time required for QCO certification, contributing to an innovation lag in the Indian market.

Suggestive Recommendations

1) Uniform interpretation of concessional duty benefit notification and alignment of HSN classification

The government should issue detailed and updated guidelines for the classification of telecom products including products having multiple functionalities and features etc. These guidelines should include examples and explanations to help businesses correctly classify their products. Currently, the 'principal function' test has been applied in various judicial rulings to determine the functional character of such products. However, this must be enshrined in appropriate guidelines so that this is uniformly implemented at Customs ports by assessing officers. Additionally, the Government should ensure uniform interpretation of concessional duty benefit notifications as it would help prevent disputes, reduce compliance costs, and promote a level playing field for all stakeholders. The Government should issue Circulars clearly specifying the criteria for duty benefit along with illustrative examples.



Further, the telecom sector is still facing a lot of issues in spite of Government issuing Circulars including Circular 08/2023 – Cus clarifying on interpretation and products eligible for benefit under Notification No. 24/2005 dated 1st March 2005 and Notification No. 57/2017 dated 30th June 2017. For instance, there is still no clarity on what connotes a 'Carrier Ethernet switch' which is a routine trade item in the telecom sector. The terms used in the circulars can at times be technically better defined and would benefit from leveraging industry expertise to plug the gaps. Hence, the Government should issue clear guidelines to field formations based on industry consultation to ensure uniformity in interpretation and eligibility of the products for benefit.

Although the introduction of Faceless Assessment was supposed to create subject matter expertise within assessing groups, there is a wide gap in product understanding and assessment practices. It is suggested that Customs coordinate with industry to organize trainings for staff assigned in product groups. Further, tenure of the staff must be ensured for minimum period to develop the required expertise.

2) Addressing misalignment between HSN classification and MTCTE requirements and ensuring smooth implementation of MTCTE / resolution of technical issues

In order to mitigate the challenges faced due to misalignment between HSN classification (aligned with Global system) and, MTCTE (India specific requirement) it is important that technical parameters under MTCTE is harmonized with the characteristics used in HSN classification, Ensure that product categories specified under MTCTE are mapped to appropriate HSN codes based on functionality, composition, and intended use would aid Customs and Trade alike. By harmonizing definitions, providing clear guidance, enhancing capacity building efforts, and fostering stakeholder collaboration, India can achieve a more integrated and efficient regulatory framework that supports industry growth and technological advancement. Self-declarations by importer should also be accepted when there is an exemption from MTCTE certification requirement, such as for EOL products and spares.

It is also desirable that when products are routinely sent by Customs for testing during queries, the testing is conducted as per standard methodology and all ancillary processes (adjudication, bond closure) are concluded immediately after receipt of test report. If a test report is already available with the importer, the same must be accepted by Customs.



It is important for implementation of MTCTE and resolution of technical issues that there is a routine collaboration between the Central Board of Indirect Taxes & Customs and the Department of Telecommunications, with industry consultations, to enable alignment between product regulations, the Customs tariff and evolving technologies.

3) Conducive policy environment and clear guidelines on licensing requirement

Businesses can make long-term strategic plans and investments when they have confidence that the regulatory environment will remain stable. Stability and predictability in policies attract both domestic and foreign investors by reducing risks and uncertainties. Hence, it is important that it is ensured that there are no frequent changes in regulatory framework and policies are reviewed only after stipulated time frame like 3 years or 5 years along, except changes that procedurally facilitate ease of doing business or enables certain transactions, without impacting the overall framework of the scheme.

Suitable guidance should also be issued by the CBIC based on judicial decisions and implementation of decisions must be ensured across all ports. This will reduce uncertainty and prevent multiplicity of disputes on common issues.

Further, with respect to licensing requirement on import/export especially SCOMET, the Government should compress timelines for issuance of these licenses and provide blueprint of license type/ filing processes. Additionally, regular consultations with industry stakeholders can ensure that guidelines are practical and consider the needs and challenges of businesses.

Any large systemic changes ought to first be consulted with trade, preferably rolled out on a trial basis and thereafter fine-tuned for implementation. There is also a need for incremental system upgradation to capture transaction level specifics, such as the addition of software value for customs purposes.

4) Easing the compliance requirement under CAROTAR and alignment of QCOs with international standards

The Government should make suitable changes under the CAROTAR Rules to ensure that there is no disruption in the supply chain. Currently, significant time is taken for verification, and businesses are required to furnish a bank guarantee during this period, which adds an additional cost for industry players including the telecom industry. Therefore, suitable instructions should be issued to ensure that verifications are completed within a stipulated timeline. Additionally, the requirement for a bank guarantee should be eliminated by making appropriate amendments to the Customs Act.

It is also important to ensure the harmonization of QCO requirements with globally recognized telecom standards. While there is alignment in some cases, further harmonization will help ensure that imported telecom equipment meets both local and international standards without redundant testing or certification processes. Additionally, since the telecom sector experiences rapid technological advancements and the development of associated products, a fast-track approval process should be provided for telecom products to ensure their timely entry into the market.

Conclusion

India's vast consumer base and manufacturing potential coupled with rapid digital transformation presents a significant opportunity for telecom OEMs to contribute to India's development and aid in India's leadership in the global manufacturing chain of telecom.

We summarize our recommendations below:

Area	Recommendations
Public Procurement (Make in India), Order, 2020 as revised in 2024	Consider high-value, holistic investments already being made by global companies in India as 'value addition' to the Indian economy for the purposes of public procurement
	Assess the local capacity and components ecosystem in India with respect to telecom manufacturing to adequately prescribe local value addition requirements
	Focus on building a point-based ecosystem to account for exports while calculating domestic value addition and introduce the concept of Deemed Class-II local supplier
	Harmonize India's public procurement requirements with mutually accepted procurement norms (multilateral/bilateral)
	Bring definitional clarity on intellectual property residency and how to calculate the same for the purposes of local content in telecom industry
Standards & Certifications	Explore Mutually Recognized Agreements with major economies
	Harmonize mutually accepted testing and certifications to reduce expenses and time consumption
	Enhance consultations for new standards requirements with consistency in timelines
	Recognize conformity standards by suppliers/vendors
	Narrow the requirements to high-risk telecom equipment for mandatory security testing
	Regulate testing costs as defined under the Indian Telegraph Rules, 2017
	Conduct an impact assessment of locally available testing capabilities with a monitoring and review mechanism
Customs	Bring about a uniform interpretation of concessional duty benefit notification and alignment of HSN classification
	Align HSN classification and MTCTE requirements while ensuring smooth implementation of MTCTE / resolution of technical issues
	Create a conducive policy environment and clear guidelines on licensing requirement



The potential benefits accrued via easing of public procurement norms, bringing about policy and definitional clarity, reducing costs of standardization and testing and improving customs processes are crucial to attract higher investments in India. These can significantly enhance the business environment for telecom OEMs.

Policy predictability and regulatory clarity are fundamental for the growth of global investments in India. This multifaceted approach to address regulatory and procedural limitations allows telecom OEMs to ramp up manufacturing in the country, while at the same time enhancing the quality, security and efficacy of the telecom sector. This will improve India's global competitiveness and seek to establish India as a global manufacturing hub.