Industry 4.0 Can Boost Implementation Of Semiconductor Manufacturing
— Sunil Banwari, Advantest

What's New In Soldering Systems

₹ 100

APRIL 2022

electronics FOR YOU

Indian Rupee Going Digital

**What does it mean for crypto-currencies?
For entrepreneurs?
For electronics industry?
For You?**

FOR TECHIES

An EFY GROUP Publication
Vol. 54 No. 4
ISSN 0013-516X
Pages: 110
UK £5; US $10

Telecom Policy Amendment Creating Confusion: **NO R&D, NO VALUE ADDITION REQUIRED?**

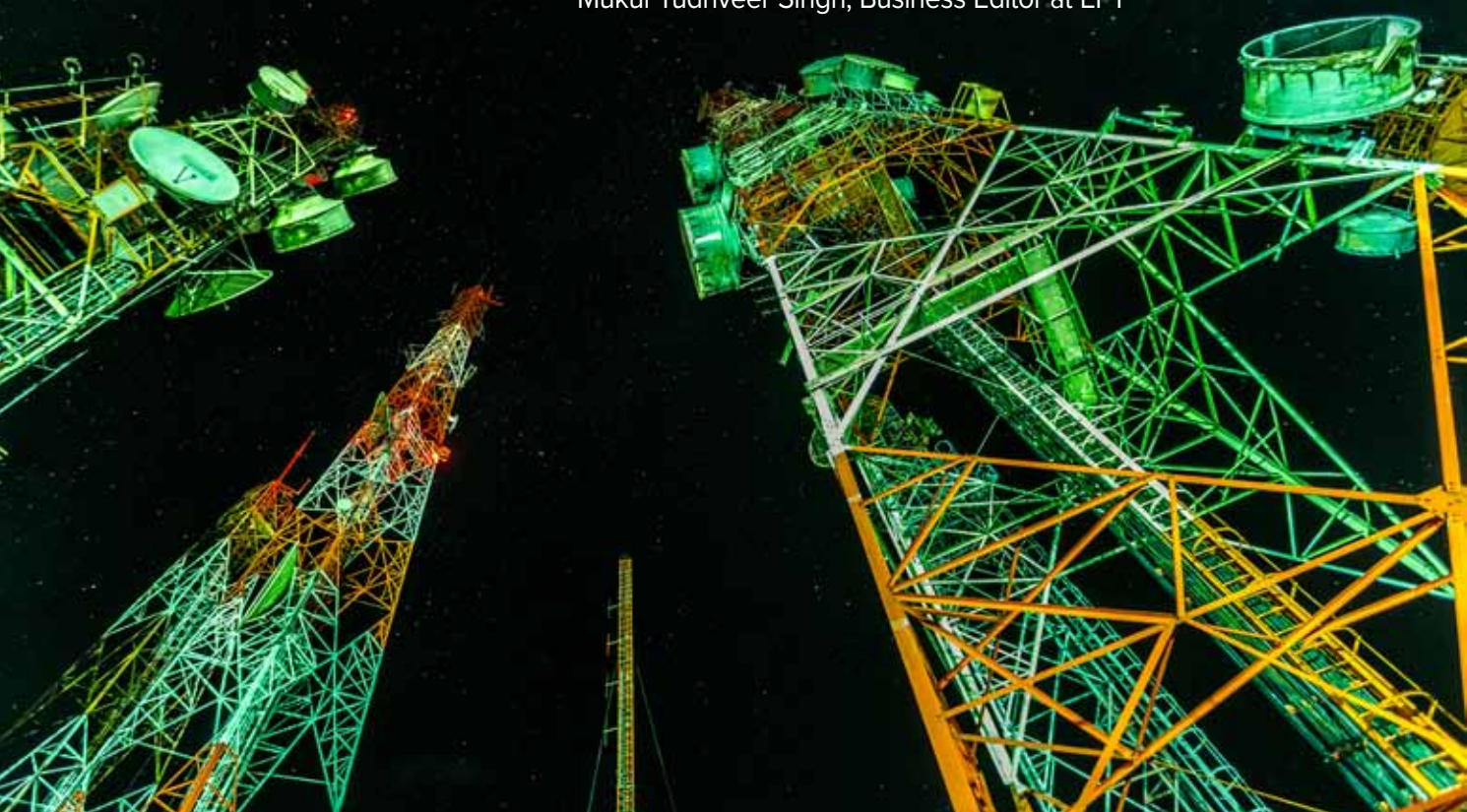
PROF. N.K. GOYAL,
Chairman Emeritus, Telecom Equipment Manufacturers Association of India (TEMA)

Should the manufacturers of telecom products in India, and those planning to start their manufacture, invest in setting up a local manufacturing ecosystem or just import the components and stick to assembling only with no value addition or local content. The Department of Telecommunication (DoT) seems to be encouraging imports through recent amendments to its DPIIT Notified Public Procurement Policy 2017, which may hit domestic manufacture of the telecom components and parts!

It seems, national and international companies in India can now just assemble imported parts and components and the entire cost of imports plus local assembly would be considered as local manufacture cost. The companies would thus become eligible as Class I manufacturers and qualify for preference for public procurements and get all the benefits under PPP MII.

This would also eliminate the need of the Indian specifications notified by DoT themselves through Telecommunication Engineering Centre (TEC). On the other hand, there are PLI schemes offering incentives for promoting electronics manufacture within the country. Is the new amendment against the dream and vision of India's Prime Minister Narendra Modi?

Given below are the views of Prof. N.K. Goyal, Chairman Emeritus, Telecom Equipment Manufacturers Association of India (TEMA) as told to Mukul Yudhveer Singh, Business Editor at EFY



India, during the last two years, has emerged as one of the most ambitious countries of the world. The Covid-19 outbreak, which caused havoc all over the world, continues to be one of the prime reasons fueling the dreams of achieving self-sufficiency (*AtmaNirbhar Bharat*) for the country. During the last eighteen months or so, the country has announced production linked incentive (PLI) schemes one after another, and electronics is being given great importance for self-sufficiency. The amount promised as incentives for the electronics sector is north of 900 billion rupees (₹90,000 crore).

However, with the recent amendments made to the Public Procurement Policy 2017, we seem to be taking a step back. The Telecom Equipment Manufacturers Association of India (TEMA) is of the view that the new notification dated 31st August 2021 issued by DoT in supersession of the notification dated 29th August 2018 is beyond the scope of mother policy notification issued by DPIIT, known as Public Procurement (Preference to Make in India) Order 2017, or PPP MII, and is not in harmony with the Prime Minister's dream of *AtmaNirbhar Bharat*.

The issue of reducing the number of products from 36 to 25 in the amendment is understandable, as more than a year was invested by DoT on this, but the logic behind allowing 100% import of components to qualify for PPP MII is not clear. Likewise, the issues of R&D, Indian design, and local content have always been supported by the authorities. In its order of August 2018 DoT had certified that the 36 products "have sufficient local capacity and local competition." The list is now reduced to 25, which means either the earlier list was wrong or the present list is non exhaustive.

The latest amendment notes that all telecom equipment will count as local content, even if they constitute 100% imported components. Surprisingly, this also applies to 25 products listed in the order for which DoT declared that they have sufficient local capacity and local competition.

The notification also eliminates the requirement to follow DoT's own specifications of telecom equipment as notified by TEC, thus enabling procurement with any specifications, which could be restrictive or foreign based. The notification enables public procurement of such goods for even Defence, Smart Cities, Metros, Police, Railways, BSNL, etc with 100% imported components, which would be considered as local products for these public projects.

TEMA considers this to be a retrograde step that has permitted 100% import from China and other countries and made them eligible for PPP-MII, by simple assembling without even having 0.1% of local components and without any emphasis on local R&D, designing, or IPR.

It may be noted that as per Clause 5 of DoT notification dated 29th August 2018, "the local supplier has to manufacture equipment from components level in India and also develop local vendors for procurement of raw materials, components and parts for increasing local content." Further, local content was specified as "Minimum Local Content as a percentage of total bill of material (Cost of production) to qualify as Make in India Telecom products, services or works." Both these provisions now stand superseded. The moot question raised here is, for whose benefit these conditions have been removed ?

While the list of 25 telecom products that can be made from the imported components includes satellite phones, broadband equipment, optical fibre cable, modems, routers, core network routers, broadband equipment, mobile antennas, and more, there is also a PLI scheme for telecom products running which aims to promote local manufacturing of the same.

The amendment for several years

Though the amendment made to the policy has drawn flak from various associations and individuals, the DoT in its notification has clarified that the same will be reviewed once a semiconductor fab is operational in India. It might simply mean that the amendment will be in place for next three to five years at least given that India is chasing fabs for last several years.

A semiconductor fab, to be set up, tested, and operational, gener-

Amendment to the Public Procurement Policy 2017

What's the amendment? All telecom products where companies assembling them here in India with zero local value add are eligible for supplying these as local products to public projects falling under organisations such as Indian Defence, Railways, or BSNL.

What's the concern? 1. India might earn the tag of a country famous for offering assembling services for telecom products. All the hard work of design, R&D, innovations done by the industry—including the likes of Tejas Networks, Coral Telecom, Vihaan Telecom Limited, Sterlite, Paramount, and more—goes into vain.

2. The statement "to be reviewed once FAB in India is operational." A semiconductor fab takes a minimum of three to five years to be set up, tested and become operational. Till that happens, anyone can assemble in India and supply to government agencies. This is a guarantee that 100% import of components will be allowed almost in perpetuity.

3. National security is at stake. India, in the past, has permanently banned more than 50 Chinese apps for national security. The new amendment makes importing and selling from China, even to government agencies, 100% legal.

4. Several local companies have given in writing that they have successfully reached more than 50% local value add in products. This is not needed now and they can revert back to imports.

ally takes at least three to five years and millions of dollars' worth of investment. It is good to know that the authorities of the country have requested expression of interest for setting up such fabs in the country, but it has been more than nine months since work on that front has also stalled due to reasons only known to the government of India.

As a matter of fact, Israel based Tower Semiconductor had recently written to Prime Minister Narendra Modi, requesting intervention on fast tracking their EOI (expression of interest). The company had expressed concerns over the delay in the project and said that it might be unable to stay active for the semiconductor project in India. On the better side, ISEA has noted that more than 20 countries had shown interest in setting up a semiconductor fab in the country. Specifically mentioning that review will be done when a fab in India is operational is a commitment to allow 100% imports for several years due to uncertainties of fab.

The progress of any country depends upon its local manufacturing power. That is why the likes of China, the USA, South Korea, Finland, Sweden, Japan, France, etc are way ahead of other nations as their imports are way less than the exports due to their local manufacturing capacity.

These countries have progressed due to support by their governments to the local companies. That is why these countries are large net exporters of electronic goods and components.

Assembly or manufacturing

While there is no rocket science in understanding the fact that every nation imports electronic components for fulfilling its needs, it takes a little brain exercise to gauge that despite these imports such countries manage to stay on top of the table because their export revenue is much bigger than their import. Besides, a lot of the government agencies working in such countries make it mandatory to procure goods from local companies for establishing public projects.

For instance, China imported electrical equipment and machinery worth US$548.7 billion in 2020. It exported electronic equipment worth US$710.12 billion during the same year. India, in FY 2020, imported electronic products valued at over ₹3.7 trillion. These included telecom instruments, electronics components, consumer electronics, and a lot of other things. The country, in the same year, exported electronics goods worth over ₹829 billion only.

THIS POLICY IS COMPLETELY AGAINST DOMESTIC INDUSTRY, ANTI-ATMANIRBHAR BHARAT, AND AGAINST THE WELL-KNOWN POLICIES OF PRIME MINISTER MODI. SO TEMA REQUESTS THAT DoT SHOULD TAKE NOTE OF THIS AND RECALL IT IMMEDIATELY.

The difference between the exports and import figures of the two countries is mainly due to the local value addition factor. In simple words, countries like China are doing much more than mere assembly of products.

Now, the new amendment to the policy states that if printed circuit board assembly (PCBA) and testing of imported/domestically manufactured parts and components using surface mount technology (SMT) process is done in India, then imported/domestically manufactured parts and components will be qualified for the purpose of Local Content. If the basic components of the assembly are 100% imported but assembled here locally, then by virtue of the above clause it would be considered as locally manufactured product duly qualified for PPP-MII.

Notifications like these will surely suppress the zeal and motivation of local companies to put in efforts to add more value than mere assembly and packaging. TEMA is of the view that the new amendment will lead to India's domestic add (local value add) reducing to zero. And India will be seen as a country for low-cost assembling where the assembling cost is paid by the government through different PLI schemes. This is despite the fact that many companies in India have the capabilities and capacities to manufacture in India with much less foreign imports.

This policy encourages CKD assembly with 100% imported components (irrespective of country of import, including China) as an Indian product qualified for all government purchases as a Class 1 Domestic Manufacturer. This is because there is no requirement or percentage prescribed for domestic components. It has done away with any need of domestic IPR, or Indian technology, or even design requirements, for which industry has fought tooth and nail for the last several years. So, now India will graduate from being an importer to CKD assembler where the assembly charges are paid by the government, if eligible for PLI.

Without naming any telecom products manufacturing company, TEMA clarifies that several of them have already confirmed that they have successfully managed to achieve over 50% domestic content. In high technology telecom products, active imported components constitute about 30% of the cost. Hence, more than 50% domestic value addition is achievable by these Indian companies.

The new amendment, as TEMA

debates, has put an end to all the efforts made by the Indian companies by eliminating requirements of local value addition. The amendment also seems to have overridden the DPIIT policy where Class 1/Class 2 supplier is mandated to offer products with a minimum of 50/20% local value add in terms of domestic content, as under the new amendment no amount of domestic content is needed

This indicates that somehow the decision has been misled by some officers in DoT for some pecuniary benefits and vested interests. This new policy puts fully imported products assembled in India at par with Indian designed and manufactured products, thus giving a severe blow to the Prime Minister's vision of creating AtmaNirbhar Bharat. Now the Indian design and manufacturing industry will die a natural death.

The new amendment might result in a lot of local players losing business in terms of procurement orders for government projects. Reason being, international players—especially from China—can now easily offer at much lower prices than their Indian counterparts even those telecom products in the list for which sufficient local capacity and local companies exist. They have a developed ecosystem of building such products back in their country, whereas such an ecosystem has only recently started opening its wings in India.

It is worth mentioning here that the likes of Cisco, Nokia, and Ericsson have demanded to be treated at par with their Indian counterparts in the past. TEMA welcomes that as government allows 100% FDI in telecom sector and clarifies that all government orders apply equally to Indian and foreign manufacturers in India. BSNL, the state-run telecommunications company, had earlier notified that it will be testing the quality of telecom equipment manufactured by Indian companies before letting them participate in the upcoming 4G tender.

National security

The USA became the first nation to set an example when it comes to doing technology business and setting the expectations straight when it comes to national security. There are several China based firms that have been barred from doing any type of business with the companies and authorities based in the USA. Not only that, the USA mandated organisations to take prior approval of the Pentagon if any kind of technology transfer is scheduled or required with China, and the USA openly promotes Made in America.

India, on the other hand, has now made it possible for companies to sell telecom products assembled entirely from components sourced from China. Such companies will also be eligible to supply to Indian authorities for public projects as a domestic product. This is despite the fact that the government of India has permanently banned more than 55 Chinese apps and has notified restrictions to procure equipment from border countries under General Financial Rules Rule 144 xi. So, in a way, the DoT notification even overrides GFR. These apps were banned as they were seen as "prejudicial" to India's sovereignty, integrity, and national security. And the GFR Rule 144 xi was introduced on 23rd July 2020 on grounds of defence of India, or "matters directly or indirectly related thereto including national security."

All talks of need for domestically designed products for national security will now get sidelined. It is now possible to import all the components from China or other foreign countries and just assemble them in India in a contract manufacturing EMS company and become eligible for Make in India PPP MII. Of course, in case of procurement by TSPs, the National Directive on Security in Telecom will be applied, but for non-TSPs, the field is wide open.

Moreover, the compulsory specifications in TEC's clause have also been removed in the new amendment. TEC was also mandated to implement testing under Indian Telegraph Amendment Rules, 2017. This paves way for the procurement to be made based on any standard and specifications prepared by self or by anybody of any nature. Of course, foreign specifications are barred in DPIIT PPP MII.

No consultation with associations

DoT did not consult with the likes of TEMA or TEPC, or any other such organisation before announcing this mandate. These associations represent the likes of Tejas Networks, Coral Telecom, Vihaan Telecom Limited, Sterlite, Paramount, Fibcom, and more when it comes to policy making or interacting with the government on behalf of the industry. The general practice has been to consult such associations, as it enables the local industry to give their suggestions to the government.

Surprisingly, the 100% import of components not only has been allowed but has also been ensured at least for next four to five years by putting a statement in Clause 5 of the policy, which states, "This shall be reviewed when the semiconductor FAB in India is operational." We all know the availability of fab in India has been under discussion for the last ten years. Of course, it has received more emphasis now, but it is a mirage because of several international ramifications.

This policy is completely against domestic industry, anti-AtmaNirbhar Bharat, and against the well-known policies of Prime Minister Modi. So TEMA requests that DoT should take note of this and recall it immediately, and remove the anomalies to support Indian companies. EFY

The views expressed here are entirely of Prof. Goyal, Chairman Emiritus, TEMA.