



## REPOSES TO TRAI CONSULTATION PAPER ON

### PROMOTING LOCAL TELECOM EQUIPMENT MANUFACTURING

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CUTS is pleased to support the efforts of the Telecom Regulatory Authority of India (TRAI) in identifying challenges and solutions for promoting local manufacturing of telecom equipment in India. Lately, much emphasis has been given to the mobile handset manufacturing, which has been able to garner substantial investment and growth. However, on the other hand, the telecom equipment sector has not witnessed such an impressive growth.

With the Government's ambition of making India as a global manufacturing hub, of which large emphasis has been given to Electronic System & Design Manufacturing (ESDM), the consultation comes out at the most appropriate time. While the electronic manufacturing, in itself is a diverse sector, which includes various segments of IT equipment, telecom equipment, etc., and thus, any public discourse on increasing domestic telecom equipment manufacturing must take into account the complexity and depth of this sector.

The Consultation Paper has captured some of this complexity accurately. However, it also needs to account for the low levels of demand, lack of direct incentives (as South Korea, Taiwan, Hong Kong, and Singapore)) to make local telecom equipment cheaper than foreign products, facilitate cheap access to technology and expanding the horizon for local manufacturing of more products under ESDM.

Thus, any department, committee or association, to be entrusted in bringing reforms for the sector, needs to carefully consider the said complexities and evaluating all possible ramifications of such reforms. With that caveat, we submit our responses to the questions (in the same order), as in TRAI's "Consultation Paper on Promoting Local Telecom Equipment Manufacturing".

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**Question 1:** *Large number of initiatives have been taken by the government to promote electronics manufacturing, while these initiatives have succeeded in attracting significant investments in other sectors like LED, consumer electronics, mobile handsets, automotive electronics etc, they have failed to attract investments in telecom equipment sector e.g PMA has worked very effectively in LED sector but did not work so effectively in telecom. Please enumerate the reasons with justifications for the poor performance of local telecom manufacturing industry inspite of numerous initiatives by the government/industry.*

#### **Response**

Though a few sectors, such as mobile handset and automotive manufacturing, present success stories on progressive growth of manufacturing in India, it may not align perfectly with a strategy for telecom equipment manufacturing, However, cues may be

taken from these sectors. The 300 million smartphone consumers in the country have already created huge demand for mobile phones. Starting from mere assembly of mobile handsets, the value addition to the manufacturing process have risen with time in India. It is envisaged that component level ecosystem along with designing, will start taking place in India. Similar is the case for the automotive industry, which has benefited from similar reasons. This is untrue for telecom equipment manufacturing.

The unfortunate reality of locally produced telecom equipment is it has few consumers or buyers, at prevailing rates. Foreign-made equipment is cheaper and therefore, more commonly bought; leaving local manufacturers with no demand-based incentives. Since the market doesn't provide such incitements, the government must step in instead.

Procurement oriented schemes have provided incentives for equipment that the government needs. However, there is negligible government demand for telecom equipment, and international law precludes the government for prescribed modes of private procurement.

The remaining option then, is to provide more direct incentives to local manufacturing. Emerging economies like Vietnam and Indonesia are already doing this, and it has worked well. In general, we should aim to make it easier for local manufacturers to set up establishments, to obtain capital etc. In existing schemes like the Modified Special Incentive Package Scheme (M-SIPS), design and implementation issues should be ironed out.

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**Question 2:** *What policy measures are required to be instituted to boost Innovation and productivity of local Telecom manufacturing in our country? Please provide details in terms of Short-Term, Medium-Term and Long-Term objectives.*

### **Response**

India routinely produces some of the best innovators in the world, however, the statistics do not suggest many patents being filed in India, as well as from Indian Organisations. Patented innovations from Indians are more or less associated with their linkages with foreign organisations or universities. Thus, it is essential to promote inventions happening in India, by Indians and for Indian organisations, and subsequently applying for patents in India.

This may be achieved by strengthening the research and development (R&D) environment in India. This would require reforms in the education system as well as capacity building of technical institution to undertake technical research. This would also require substantial increment in investment on R&D. Accordingly, policy should enable them to undertake R&D within India, especially in the field of telecom equipment.

Unfortunately, R&D, even in critical sectors like healthcare, receives very little government funding or incentives right now. This must be changed by providing easy capital, training to the labour force, and directly investing in targeted research.

**Question 3.** *Are the existing patent laws in India sufficient to address the issues of local manufacturers? If No, then suggest the measures to be adopted and amendments that need to be incorporated for supporting the local telecom manufacturing industry.*

Promoting local manufacturing of telecom equipment has more to do with lack of fiscal incentives than lacunas in patent laws. Indian Intellectual Property Regime (IPR) may be considered as of the strongest across the world. Though it may be debatable on the aspect of indigenous innovation, there doesn't seem any visible and urgent reforms sought in patent act.

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**Question 4:** *Is the existing mechanism of Standardisation, Certification and Testing of Telecom Equipments adequate to support the local telecom manufacturing? If not, then please list out the short-comings and suggest a framework for Standardisation, Certification and Testing of Telecom Equipments.*

### **Response**

Like the patent law in India, the existing standardisation mechanism is also not a problem area for local telecom manufacturing. Whatever local tweaking of the standardisation mechanism needs to be done is already being spearheaded by the Telecommunications Standards Development Society, India (TSDSI). The TSDSI is constitutes of government and industry representatives, so that it is able to formulate a mosaic opinion reflecting diverse needs, while performing its functions.

Although existing mechanisms of certification and testing are sufficient to support local telecom manufacturing, they are fairly time consuming. To make things hassle-free, the government may allow self-certification by manufacturers. This would require them to run tests on their equipment to ensure that it is safe, and then to self-certify the equipment, if it complies with relevant standards. The practice seems to have simplified processes, globally and would benefit Indian players, if adopted.

However, looking at the current market scenario, the markets in India are not mature enough to carry out the self-certification. In this context, it may be useful to have a 3<sup>rd</sup> party certification mechanism in place, at least for a short term, allowing the markets to develop and mature. In a long term, it may be envisaged to adopt self-certification mechanism, while incorporating 3<sup>rd</sup> party auditing.

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**Question 5:** *Please suggest a dispute resolution mechanism for determination of royalty distribution on FRAND (Fair Reasonable and Non Discriminatory) basis.*

### **Response**

The idea of FRAND has been evolved by standard setting organisations (SSO), which have formulated processes and methods on the aspect of licensing standard essential patents (SEP). The approach taken by SSO's is based on transparency, democratic and

collaborative ways of evolving their processes and standards. They are constantly working towards evolving mechanisms and methods which entice innovation and the world has seen fast adoption of new technologies in telecom sector. The general rule should be *to avoid* interventionist policies, such as those which define how patent holders license their technologies and also determine FRAND royalty rates in an ex-ante manner. A general rule favouring a non-interventionist approach would ensure that incentives to innovate are kept intact, while access to technology is not impeded.

FRAND or royalty issues are not predominant in the telecom equipment sector, which suggests that there are no major interventions needed. However, if the scale of manufacturing of telecom equipment is to rise in future, the government should ensure that it is not impeded by any IP issues. This calls for establishment of a mechanism which promotes good-faith negotiations and also adjudicates SEP and non-SEP licensing behaviour on an ex-post and on a case to case basis.

There has been a high frequency of repeated failed negotiations (which have unfortunately occurred in India and abroad), on royalty setting and injunctions being granted for the mobile handset manufacturing. It will be unwise to adopt a similar practice for a sector, which is in nascent stages. More focus on an alternate dispute resolution (ADR) mechanism may mean that it would perform similar to mobile handset industry, where bad-faith negotiations have led to creating needless controversies.

Hence, there is no requirement of ADR at present, and the policies should promote the sector without much interventions. Market forces should be able to manage the conflicts and dynamics on their own. However, in case of a market failure, alternative ways of dispute resolutions may be considered.

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**Question 6:** *Are the current fiscal incentives sufficient to promote the local telecom manufacturing? Please suggest the fiscal incentives required to be instituted along with the suitable mechanism for implementation of these incentives?*

**Response:**

Taking cue from Indonesia, Vietnam and other countries, where fiscal incentives have indeed promoted local level manufacturing, additional fiscal incentives should be provided to promote local telecom manufacturing in India. For example, In July 2017, the Government of India had introduced 10% customs duty on imported mobile phones, which led to accruing more benefits to local manufacturers, under the GST regime. Similarly, it may be expanded to other telecom equipment segments, for a limited time period, to boost local manufacturing.

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**Question 7:** *Are there any issues under ITA which need to be addressed for making the local Telecom Manufacturing more competitive and robust*

**Response**

India had initially entered into the ITA to foster priority growth of its IT sector. With very few IT products being manufactured in India, there was a need to provide local consumers and low income sectors with access to world-class technology. Reduced customs duties on products such as computers led to India's growth as a software hub. The products which were sold at low prices in India included computers, flat panel display devices, monitors and set-top boxes, on account of zero-rated import duty on them.

Therefore, under the ITA, foreign exporters had been enjoying a fiscal advantage over locally manufactured products. This was in accordance with India's obligations under international law and the WTO. This past tax treatment has hitherto resulted in imported telecom equipment doing better than local equipment, and the impact of this legacy of better fiscal treatment of foreign products is currently evident in the poor performance of the local telecom manufacturing industry.

However, since India is not a party to the ITA of 2015, newer telecom equipment no longer enjoys the benefits that were available under the older regime. Consequently, imports media gateways, gateway controllers and session border controllers, optical transport equipment and IP radios, carrier, multi-protocol label switching-transport profile products and multiple input/output products are taxed at higher rates, which will give local manufacturing a much-needed advantage.

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**Question 8:** *Should an export oriented/promotion approach be adopted in the telecom equipment manufacturing sector? If yes, Please suggest the steps to be taken to create suitable environment to attract foreign investment players for setting up establishments which in turn can result in technology dissemination, innovation, generation of jobs, skilled labour force, etc.?*

**Response:**

In order to attract foreign investments, there is a need for the following:

- Improvement in quality of products, while keeping them reasonably priced.
- Conducive and simple tax regime
- Well-functioning and capacitated judiciary for efficient resolution of disputes
- Streamlined labour laws
- Easy access to capital
- Drafting local commercial laws, similar to international best practices but localising them.

It was with this in mind that the M-SIPS was set up to encourage setting up of microchip manufacturing units. The scheme was fraught with interministerial delays, and the subsidised capital expenditure thereunder, was capped. The government should try to circumvent these problems while introducing any new scheme, in the near future.

**Question 9:** *Does the existing PMA policy require any change? If yes, then please provide complete details with justifications.*

**Response:**

India's PMA policy for Information and Communication Technology (ICT) & electronics, in place since 2012, was a welcome move to promote domestic manufacturing industry. While many telecom products are already included under this policy, the sector also expects the government to enhance its own procurements, in order to make this engagement meaningful. With the vision of net-zero import by 2020 under the Digital India programme and the fact that India is also being looked upon as a major player in cybersecurity in the near future, it the most appropriate time to use PMA for the best advantage. This may be achieved through more focus on enhancing demand and quality products from the domestic ICT industry, to serve the public interest and making India a preferred investment destination for all ICT & electronic products and services.

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**Question 10.** *Any other relevant issues that needs to be addressed to encourage local telecom manufacturing in our country.*

**Response:**

It is essential to build capacity of the local telecom equipment manufacturing industry, so as to ensure that the successful players are able to compete in a global market, and not just India. While the vision of India may be net-zero imports, ideally the nation also needs to target a substantial increase in exports, which may be achieved by reaching out to international consumers. However, for this, it is also essential to focus on quality of products and associated consumer satisfaction. In order to achieve this, there is a strong requirement of strengthening and investing in local research and development and infrastructure. There should also exist forums of interaction and cross-learning between local and global industry players. This will ensure the transfer of best practices and business models, which may be beneficial for the industry, holistically.

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For any clarifications, kindly contact Udai S Mehta ([usm@cuts.org](mailto:usm@cuts.org)) and/or Rohit Singh ([rhs@cuts.org](mailto:rhs@cuts.org))

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