Telecom Equipment Manufacturing Association (TEMA) Response to TRAI Consultation Paper No.17/2010 on Encouraging Telecom Equipment Manufacturing in India Issues for Consultation

TEMA fully endorses the approach of the TRAI Paper, where it is clear that significant emphasis needs to be placed on R&D activities that can create "Indian Products", which is what the country needs for long-term commercial success, self-reliance as well as addressing our security concerns. Just by manufacturing foreign products in India ("Indian Manufactured Products"), we will gain some benefit, but this will not address the long-term commercial and security needs of the country.

Our vision should be that in next 5 years, we will be self-reliant in all areas of core technology required in telecom and in 10 years, India should be amongst the top 3 exporters of telecom equipment in the world.

Research & Development

We have seen an enormous growth in telecom sector in the last one decade in our country. Consumer demands and needs are changing rapidly with time as new technologies are coming up in the world with lot of new features and innovations that attracts the consumer. So to match the pace of growth and demands of consumer a robust infrastructure for R & D is required in our country. For the Indian telecom equipment sector to prosper and grow it must get ahead with innovation which hinges on research and development (R & D). Industry's future growth depends to a large extent on today's research and the fact that money invested now in R & D will generate income in many years to come. Research & Development is also required to deal the telecom issues related to national security of India's telecom and data networks and to provide useful inputs to the national security agencies.

Our specific recommendations for promoting R&D and creating "Indian Products" are:

1) The Government should encourage R&D and development of "Indian Products" in all the core areas of technologies that are required to build a network. Such technologies should not only address the current needs, but also the evolving future needs. A list of such core technology areas is given below:

- IP-based new generation soft-switches/routers, L2 and L3 switches, data networking equipment – copper/optical – consumer and carrier grades, for public and private networks

- Transport systems – DWDM, SDH, PON, Cross-connects, RF over optical fibre, Carrier Ethernet, Packet Optical Transport Platform (P-OTP)
- Wireless technology – GSM, CDMA, 3G, LTE & LTE Advance, Wi-Fi, WiMAX & WiMAX Advance.
- Microwave Radio systems – 6/7/15/18/23/38/60/70 GHz, Software defined radio, Cognitive radio, Distributed antenna systems
- Equipment related to security and surveillance, processing of speech, data, image, video
- Customer Premises Equipment (CPE) – PBX systems, DSL modems, 3G Routers, VoIP gateways, Residential gateways, Access points, Routers, Broadband CPEs, Mobile handsets, Set-top boxes
- Short Range Devices (SRD), Sensors
- VSAT based systems – Broadband, Disaster management
- Non-conventional energy sources, portable mechanical chargers for handsets, computers
- NMS/OSS/BSS systems for all above – SNMP/Openview/CORBA

2) A telecom innovation fund of Rs 5000 Cr should be setup to fund R&D in these core areas. The activities should be coordinated by a public sector agency such as the TEC so that strategic interests are not diluted at any cost. This fund should be available to all companies who are creating Indian Products.

3) In line with global success models, the government should encourage entrepreneurship which leads to innovation and cutting-edge, globally competitive products. Companies who are doing R&D and creating Indian Products in the core areas of technology mentioned above, must be given 1:1 matching grant, for investment made in R&D.

4) Indian Product companies should be given soft loans (at 2% pa) for long-term (up to 7 years) so that they can use it for R&D as well as working capital. This is to effectively compete with foreign companies who get such loans from their governments.

5) Government must create a market pull for Indian Products, and use the growth of our domestic market, to provide volume-base for such companies. Since this is the most important step for successful commercialization of Indian Products a dual pronged approach of incentivising the operators and the manufacturers must be used. Details of our proposal for the same are given in our response subsequently (for points 3.15, 3.16 and 3.17 below).

6) To promote the brand of "Indian Products" in international markets, setup a dedicated fund (of at least 25 Cr per annum) that is used by Indian Products companies to actively promote international business development. Promote the use of Indian Products for all our bi-lateral trade and for supplies against "Indian Lines of Credit" and "Grants in aid" from India.

7) Government should give "deemed export" status to Indian Products that are sold in the domestic market (DTA) and they should be eligible to get all available exports benefits.

Manufacturing of equipment

3.15 Should the concept of mandatory use of Indian products/Indian manufactured products be introduced in the Indian context? If so, can this be introduced immediately or should it be introduced at a later date? If so by what date?

Yes, the concept of mandatory usage of a certain minimum amount of "Indian Products" in the network is a must and should be immediately made applicable for all government/government licensees in telecom. This can be done by suitable modifications to the license condition. We understand that this is OK as per applicable WTO rules for India, since government procurement as well as procurement of equipment having security/national interest (as telecom networks are) is not covered under the WTO agreements signed by India.

In any case, since the first 600 Mn subscribers in India were being serviced by foreign/imported equipment, it is the responsibility of the Government to ensure that the next phase of our domestic telecom growth and broadband infrastructure growth is also used for creating a vibrant R&D driven Indian telecom industry. Hence the recommendation to mandate a certain portion of the capex of the network for Indian Product is a very reasonable stipulation.

3.16 What could be the percentage to be stipulated for both these categories?

We suggest a gradual approach for stipulating the procurement of "Indian Products", as a total percentage of the operator's annual capex, as suggested below:

- 30% by 2011-end
- 50% by 2012-end
- 70% by 2013-end.

In addition, all defence/security/government networks, "Indian Products" should be given first preference, ahead of foreign products (whether imported or manufactured in India). All rural networks should be essentially be built using Indian products only.

Manufacturers in other countries too have been provided privileged access to their domestic markets that has helped create a flourishing domestic telecom industry in those countries. As such, the above recommendations are very reasonable.

3.17 What should be, if any, the incentives to be given to individual service providers for use of Indian equipment?

To provide impetus to R&D driven Indian Products, the government should levy an additional 5% of their AGR as R & D Cess for all licensed telecom service providers & then give incentives to those operators who buy "Indian Products", as is detailed below.

Any telecom operator who buys "Indian Products" should be eligible to a reduced contribution (going down to 0%), in a graded manner on a pro-rata basis, depending on the amount of value of Indian Products that he buys for his core. If he buys more than 75% of purchase value of his core telecom equipment in the form of "Indian Products" then this cess should be zero percent..

Any telecom operator who buys "Manufactured in India" products will be eligible to a reduced Contribution, in a graded manner on pro-rata basis, getting the maximum reduction of 1%, if they buy more than 75% of purchase value of core telecom equipment.

We suggest that the effective rate of R&D Cess contribution for a service provider will be calculated as per the following formula:

Effective Rate Contribution: 5% - (X/75)*5% - (Y/75)*1%

Whereas, X = % of Capex on 'Indian Products' and

Y = % of Capex on 'Manufactured in India' Products.

subject to a maximum incentive of 5% only

As an added incentive, service providers or producers of Indian Telecom products, may be providing low-interest financing (LIBOR + 2%) to purchase "Indian Products".

3.18 Likewise, what could be the disincentives, if any, for use of imported equipment? This is compatible with international agreements?

Norm for purchase of Indian products has been prescribed above and an amount equivalent to 13% of such shortfall will be deposited by the Telco in the R&D cess account. This will create a level playing field for Indian products as they suffer disability to the extent of 13%.

3.19 What could be the duty structure to be imposed on imported goods?

Imports of telecom equipments for Railways & Defense & Infrastructure projects is free from customs duty while on other hand Indian telecom producers have to charge excise duty and GST which results in Indian telecom products becoming uncompetitive compared to equivalent imported products. We strongly suggest that Excise Duty and GST exemptions for sales of Indian telecom products to Indian Defence, Railways & Infrastructure projects that are exempt from payment of customs duty.

There should not be any additional duties levied on imported goods, since we have existing WTO commitments. However anomalies with respect to dual-use inputs components (for use in telecom equipment manufacturing) that are currently charged a higher import duty than the finished products should be immediately eliminated.

Also, anti dumping duties, if applicable, should be imposed on the imported telecom equipment, which could be imported in any form- finished, SKD, CKD, etc. Also, the government procurement should evaluate their bids after considering such duties and then determine L-1, otherwise the entire purpose of anti-dumping duties will be defeated.

Promoting Domestic Manufacture

3.20 Should a percentage of the Indian market be reserved for the Indian manufacturers? If so, what should be the percentage?

3.21 What, if any, could be the implications of such a step?

No percentage should be reserved for "Indian Manufactured Products", beyond what has been suggested in our response 3.15, 3.16, 3.17 above.

In case an operator is nor procuring the minimum stipulated amount of Indian products, than he should be required to pay an amount equivalent to 13% of such shortfall from the prescribed limit for domestic purchases as specified in clause 3.16, in the R&D cess account.

Also, at any time equipment is imported in the country, the foreign manufacturer should undertake that local manufacturing facilities will be set up within a period of 12 months and a repair centre will be setup in India within 12 weeks of getting a purchase order from the buyer agency, to provide after-sales support.

The above conditions will provide the required market pull & also dis-incentivize Telecom & IT companies to freely import products from abroad, which are not adding to any economic benefit to our country.

Setting up of Special Zones or Telecom Clusters

3.22 What, if any, are the advantages of setting up of clusters for manufacture of Telecom equipment within the country?

For more than a decade, Government deliberations on "Boosting local manufacture of Telecom gear" have been influenced by big Telecom companies, who obviously afford a much larger visibility. They have been able to influence decision makers since 1998 – 99 into opening up of economy faster than our international commitments. Also they have been able to divert focus from real ground level issues to talks on:-

1. Creating large Ecosystems,
2. Semi conductor foundry,
3. Centers of Excellence,
4. Big R&D budgets
5. Infrastructure in port & highways to support domestic telecom manufacturers.

"Setting up of manufacturing clusters" will be yet another step to divert the focus from the core issues and pain points of Indian Manufacturers.

Our focus should be to encourage the development and deployment of "Indian Products" in the networks that are being built in India, to begin with. Also the so called investments that many foreign companies have made is only in assembly factories, where the value -add is less than 5%. Even the R & D centers that have opened by some of them are only doing work on a cost-plus basis, taking advantage of the labour arbitrage. In both these cases, the value of the IPR is being captured by the parent companies, and what we are getting in India is only cost-plus, and not the true value of the work being done in India. In return, such companies are taking advantage of India's market and selling several Billion dollars of products, while the benefit to the Indian economy is minimal.

In contrasts, by encouraging "Indian Products" and innovation, we will create significant value in India, which is the long-term mantra for our growth, development, self reliance and security and exports.

3.24 How can the financing of such clusters be best done, based on international experience?

There is no need for any financing. If "market pull" for Indian products is created, then the investments will come automatically.

Testing, Standardisation and Accreditation

TEC and CDOT should be strengthened as nodal regulatory bodies for testing and standardization. They should set the Technology Roadmap for India in the telecom space. It should be made accountable for success of Telecom R&D and Manufacturing in India, as it would be involved in Technology Forecast, R&D funding, Funding for commercialization of local manufacturers, and for laying down specifications for telecom technology implementation in India.

Specifically, TEC should have a charter to:

a. TEC should lay down specifications and prepare technology roadmap which should be mandatory for introduction of any telecom product or service in Indian telecom network (by all operators)

b. Enforce testing and certification of all telecom products, like other countries. Accordingly, DoT should make conformance to GRs/IRs mandatory for all products.
c. TEC shall test/validate all telecom products and services to be deployed in Indian telecom network.
d. User organizations and government purchasers must strictly buy TEC-certified products only.
e. TEC should lead India's participation in global standards bodies along with other Indian companies and influence specs that are suitable for India. For this, a separate fund of at least Rs 20 Cr per annum must be set aside for travel, personnel and other expenses of all stakeholders.
f. TEC should act as a quasi-judicial body for expeditious redressal of all concerns of Indian IPR holders and Indian manufacturers, regarding discriminatory practices adopted in large tenders and government purchases. It should be authorised to instruct all user groups on how Indian products could be promoted in their procurement procedures without compromising on their requirements and its long term adoption. User organizations should not be allowed to make frivolous changes in the tender specifications to eliminate smaller Indian manufacturers.
g. TEC should be a stakeholder in all government funded/aided R&D projects, hence should be accountable for successful adaptation and commercialization of technology.
h. Ensure compliance to security requirements of the country and drive technology for development of encryption algorithms to plug security holes.
i. Scrutinise all software source codes to ensure compliance to all requirements and regulations
j. To execute the activities efficiently, induct suitable manpower at various levels in TEC.

GSM and Mobile Technology Initiatives:

GSM is the dominant technology for telecom adoption across the world. Eco system needs to be created for encouraging technology development in this space, as well as for other BWA technologies. Reserve or de-license a small pool of spectrum in GSM band for setting up low-power transmitters utilising FDD/TDD technologies for deploying small capacity networks for low traffic areas, small private networks, in-building solutions, rural areas, etc,This spectrum may be used by any ISP.

Duties and Levies

3.33 What would you suggest should be the tax structure in respect of imported and indigenous manufacture of telecom equipment, keeping in view the international agreements?

Duties on imported equipment, is already covered in our response to 3.19 above.

For promoting "Indian Products":

a) The government should allow deferred payment of Excise/VAT for 10 years with 1% interest. This will compensate for the handicap that domestic industry has compared to other countries.

b) Total income tax holiday including MAT of 10 years should be given to all "Indian Product" companies in telecom. The total incidence of direct and indirect taxation should be reduced by 13% to account for disability factors related to infrastructure, logistics and power when compared to other emerging economies like China.

c) Anti-dumping duties, where applicable, must be imposed before computing the fair price of equipment in any government tenders.

d) Also, as suggested earlier, the Government should give "deemed export" status to Indian Products that are sold in the domestic market (DTA) and they should be eligible to get all available exports benefits.