

**Response to TRAI Consultation Paper No.17/2010 on Encouraging Telecom Equipment Manufacturing in India**

**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 a sector to prosper and grow it must get ahead with innovation which hinges on research and development (R & D). Research seeks to make basic discoveries and uncover new principles or facts so far unknown or unrecognized. Development concerns the most economically feasible method for applying the facts. Industry future growth depends to a large extent on today's research and the fact that money invested now in R & D probably will generate income in the years to come.

Research & Development is also required to deal the telecom issues related to national security. There is a need for development of computational approaches using artificial intelligence techniques, biometric devices, crypto analysis, voice recognition technologies, grid surveillance, encryption/decryption, and mining of data bases etc. for security the telecom and data networks and to provide useful inputs to the national security agencies.

There is an urgent need to start research activity on centralized communication security research and monitoring and subsequently set up "Centre" under the aegis of a government organization. The proposed "Centre" must have central connectivity for each service provider and LEAs. All concerned Government security organizations involved in such activity should have state-of-the-art equipment and requisite technical skills to undertake the activity. It will ensure efficient, secure, transparent and mediation of intercepted information.

In view of the fact that there is a lot of duplication with different LEA having their own processes and the present limitation to share the information with other authorities. This result in a major void in tracking undesirable activities. Further, they do not have evolving technologies to satisfactorily monitor and minimize the security hazards. It is utmost important that there should not be any duplication.

***3.1 What should be the objective and focus of the R&D effort for 2020?***

India should emerge as global R&D hub for the world and shall focus on following:

- a. Making best of the laboratories available for development and testing
- b. Certification labs in India which are recognized globally. Products used in India shall be certified by Indian laboratories.
- c. Creating IPRs
- d. Developing Indigenous Telecom and IT products.

***3.3 What is the level of 'Indian Products' that we should attempt to achieve at the end of 2015 and 2020?***

All telecom operators and government agencies must be encouraged to use Indian Products. It should be made mandatory through license condition to use "INDIAN PRODUCT". Target should be to achieve 70% by 2015 and 100% by 2020.

***3.5 Which Institutions, whether in the Public or private sector, are best suited to carry out this effort? And why?***

Public / Private institutions which have focus on R&D and have the capacity to fund R&D shall be promoted. Enable private/public relationship channels which shall meet the financial aspect of the R&D as well as address the Indian market requirements.

***3.7 What should be the role of the Government and the Industry in regard to the R&D effort? In particular, what should be the investment, if any, by the Government?***

Government need to evolve policies which shall promote Indian manufactured products in the country. It must provide exclusive funds to the R&D and manufacturing organizations to develop technology and related products to meet the Indian and global market needs. For all government projects, preference shall be given to Indian products.

***3.8 Should an R&D fund be set up? If so, how can the fund be managed effectively to meet its objectives?***

R&D fund shall be setup to enable IPR creation and innovation in the country. Central monitoring body including TEC, ITI, and DRDO etc can be evolved to monitor the usage of funds and utilization of the products developed. This body will lay down national standards/specifications and prepare technology roadmap.

***3.10 What are the components that can be manufactured in the country with due consideration to commercial viability?***

List of Identified Products that need to be supported

- a. 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
- b. Transmission systems – IP and Cellular backhaul, Carrier Ethernet
- c. Cellular technology – GSM, CDMA, 3G, LTE, Wi-MAX, Wi-Fi, RF-ID and other BWA technologies, especially small capacity systems for rural areas
- d. Equipment related to security and surveillance (particularly for the state surveillance which is in the interest of the national security), processing of speech, data, image, video
- e. Customer Premises Equipment (CPE) – PBX systems, DSL modems, 3G Routers, VoIP gateways, Residential gateways, Access points, Routers, Broadband CPEs, Mobile handsets, Set-top boxes
- f. VSAT based systems – Broadband, Disaster management

**3.11 What should be the degree of indigenous manufacture of components that we can reasonably achieve a period of 5/10 years?**

Target should be to achieve 70% by 2015 and 100% by 2020.

**3.13 Is the Duty on components currently being levied high? If so, on what components can the duty be reduced? What are the financial implications and the corresponding benefits?**

All R&D projects and related components used for development of products in India by Indian company shall be exempted from all duties.

**3.14 Should electronic Manufacturing service companies be incentivized? If so, how?  
Manufacturing of equipment**

Yes they should be incentivized by following ways:

- a. All components used in the EMS facility should be exempted from all duties
- b. Products manufactured in India and further used in India shall be subsidized
- c. Government should give land in special economic zones to establish EMS houses

**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?**

It should be immediately made mandatory for each telecom operator through license condition to use "INDIAN PRODUCT". Following are the dates, which should be effective immediately. 30% by 2011 50% by 2015 and 70% by 2017 and 100% by 2020.

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

Charge additional 5% R & D Cess from all licensed telecom service providers & than give concession to those who buy "INDIAN PRODUCTS". All licensed telecom service providers should pay 5% of their AGR as contribution towards R&D Fund.

## **Giving Incentives to Telecom Service Providers**

Any telecom operator who buys “Indian Products” will be eligible to a reduced Contribution of up to 0 % in a graded manner on pro-rata basis, getting the maximum reduction of 5%, if he buys more than 75% of purchase value of core telecom equipment.

Any telecom operator who buys “Manufactured in India” products (as per Appendix-1) will be eligible to a reduced Contribution of up to 1 % in a graded manner on pro-rata basis, getting the maximum reduction of 1%, if he buy more than 75% of purchase value of core telecom equipment.

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

The suggestion above is an incentive for using “Indian Product” & also a disincentive for not using an “Indian Product”.

### ***3.19 What could be the duty structure to be imposed on imported goods? Promoting Domestic Manufacture***

There should not be any duties levied on imported goods, as we are bound by WTO rules.

But anti-dumping duties should be imposed on all telecom & IT products, sub-assemblies, manufactured, assembled & shipped from neighboring countries.

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

It should be immediately made mandatory through license condition to use “INDIAN PRODUCT”. It should be made mandatory through license condition to use “INDIAN PRODUCT”.

Target should be to achieve 70% by 2015 and 100% by 2020.