

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

Research & Development

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

India is considered to be second largest telecom market in the world. It is estimated that by 2015 there will be over 1.1 billion mobile subscribers and over 125 million mobile broadband connections in the country. India got the independence from the British in 1947, but, even after 63 years, India is still dependent on imports in telecom sector, to meet its domestic requirement.

The objective and focus of the R&D effort for the year 2020 should be :

- Design & develop complete range of telecom / IT infrastructure products.
- Establish the infrastructure to work on the evolving telecom new generation technologies.
- Build the competence in the core technological areas.
- IPR creation
- Total design control and productionization of indigenous technologies.
- To build test and validation infrastructure for new technologies.

3.2 Flowing from the above, what should be the objective and focus of the R&D effort for 2015?

By the year 2015, we should target to achieve:

- To have control of the latest technology
- R&D efforts to evolve next generation technologies to have edge on the global telecom market.

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

To be an Indian Product, IPR (total design control) should be held by and Indian registered company.

We believe that by 2013, about 70 % of the total requirement of telecom products shall be met by indigenously developed Indian Products and 100 % by year 2015

List of Products which should be developed indigenously to meet market requirement.

- 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)
- Cellular technology – GSM, CDMA, 3G, LTE, Wi-MAX, Wi-Fi, and other BWA technologies, especially small capacity systems for rural areas
- 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
- 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

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

In our opinion, autonomous government institutions and Private sector companies with core competence in the respective field are best suited to carry out the R&D efforts.

3.6 What can be the linkages established with Institutions or Indians abroad? Will this reduce time delays?

Linkages should be established with India's engineering / research institutions with indigenous manufacturing concerns to have their products developed and manufactured locally.

Indians settled abroad with technology competence should be encouraged to provide know-how to Indian companies. This will certainly reduce time delays.

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 should form an **Administrator** to closely monitor the R&D efforts in the public and private sector in the country. They should monitor the R&D developments, its applicability in Indian context and give timely directives and support to ensure uninterrupted R&D efforts.

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

In our opinion, a separate R&D fund should be created under the Ministry of Telecommunications, and managed by the 'Technology Administrator' in the lines of USO Fund. Telecom Engineering Center (TEC) may be entrusted with the responsibility, being the technology centre of government of India.

It is suggested to charge fixed percentage of about 5%, may be levied upon as R&D Cess on all service providers towards the R&D fund.

Incentives in form of VAT exemption may be given to those who use Indian products in their networks based on pro-rata basis.

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?

In our opinion, 30, 50 & 70% usage of Indian product should be mandated by 2012, 2013 and 2015 respectively.

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

In our opinion, 30, 50 & 70% usage of Indian product should be mandated by 2012, 2013 and 2015 respectively.

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

The individual service providers who use Indian products or Indian manufactured products in their core network should be given incentives in the form of rebates in the USO/R&D Fund contribution and / or tax holidays. Such incentives should be linked with the amount of Indian products used in their network

It is suggested to charge fixed percentage of about 5%, may be levied upon as R&D Cess on all service providers towards the R&D fund and given concession to those who use Indian Products in their network, in a reduced contribution of up to 0% in a graded manner on pro-rata basis.

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

As we are bound by WTO regulations, appropriate duties should be levied on imported goods.

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?

We suggest that 30-70% of the requirements should be mandated for the use of Indian products, developed indigenously, by the service providers.

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

The implications with such a step would be :

1. Encouragement to R&D efforts in India to develop products suitable for indian environment.
2. Boost to the Indian economy due to manufacturing in India.
3. Create employment opportunities.
4. Reduce Capex & Opex of the operator / user.

Testing, Standardization and Accreditation

We recommend that Telecommunication Engineering Centre (TEC) which is already responsible for developing standards for Indian telecommunication Industry, should continue to be nodal agency for standardization. TEC also should take up the testing and accreditation of the products developed indigenously and productionized.

We strongly recommend that all the imported products should also be tested and approved by TEC. This will also help the address the national security issues relating to imported equipments in core network.

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?***

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

Also government should allow deferred payment of Excise/VAT for 10 years with 1% interest. This will compensate for the other duties, taxes and levies within the domestic tariff area like ST/Octroi/service tax/entry tax etc.