

Telecom Sector Profile

1. Background

Indian telecom is more than 160 years old, beginning with the commissioning of the first telegraph line between Kolkata and Diamond Harbour in 1839. In 1948, India had only 0.1 million telephone connections with a telephone density of about 0.02 telephone per hundred population. By June 2006 there were 153.42 million telephone (including cellular mobile) connections in the country with a telephone density of 13.96 telephones per hundred population.

Various administrative and functional aspects of the telecom sector in India are discussed below:

2. Administration and Control

The Telecom Commission, set up in April 1989, has the administrative and financial powers of the Government of India to deal with various aspects of telecommunications. The Commission and the Department of Telecommunications (DoT) are responsible, *inter alia*, for policy formulation, licensing, wireless spectrum management, administrative monitoring and control of the Public Sector Undertakings (PSUs) engaged in telecommunication services, research and development, and standardization/validation of equipment.

In addition to the Telecom Commission, other Government organisations engaged in the telecom sector (as a part of DoT) are the Centre for Development of Telematics (CDOT), the Telecom Engineering Centre (TEC) and the Wireless Planning and Coordination (WPC) wing. CDOT was established in 1984 with the objective of developing a new generation of digital switching items. It has developed a wide range of switching and transmission products both for rural and urban applications. TEC is devoted to product validation and standardization for user agencies. It also provides technical and engineering support to the Telecom Commission and the field units.

The Wireless Planning and Coordination wing deals with the policies of spectrum management, licensing, frequency assignments, international coordination for spectrum management and administration of the Indian Wireless Telegraphy Act, 1933. In order to administer the use of radio frequencies, the licences/renewals for use of wireless equipment and the frequencies are authorised by WPC. The licences are granted for specific periods on payment of prescribed licence fees and royalty in advance and are renewed after expiry of the validity periods.

3. Telecom Reforms

As a part of the continuing process of telecom reforms and in pursuance of the New Telecom Policy 1999 (NTP-99), the Department of Telecom Services (DTS) and the Department of Telecom Operations (DTO) were carved out

from DoT in October 1999 for providing telecommunication services in the country. DTS and DTO were finally corporatised into a wholly owned Government Company namely, the Bharat Sanchar Nigam Limited (BSNL) (incorporated on 15 September 2000) and their business was transferred to this Company with effect from 1 October 2000. The creation of BSNL was expected to provide a level playing field in all areas of telecom services, between Government operators and private operators.

4. Regulatory control

The entry of private service providers in 1992 brought with it the inevitable need for independent regulation. The Telecom Regulatory Authority of India (TRAI) was thus established with effect from 20 February 1997 by an Act of Parliament, called the Telecom Regulatory Authority of India Act, 1997, to regulate telecom services, including fixation/revision of tariffs for telecom services, which were earlier vested in the Central Government. The TRAI Act was amended by an ordinance, effective from 24 January 2000, establishing a Telecommunications Dispute Settlement and Appellate Tribunal (TDSAT) to take over the adjudicatory and disputes functions from TRAI. TDSAT was set up to adjudicate any dispute between a licensor and a licensee, between two or more service providers, between a service provider and a group of consumers, and to hear and dispose of appeals against any direction, decision or order of TRAI.

5. Telecom Policies

The first National Telecom Policy was announced in 1994 with a major thrust on universal service and qualitative improvement in telecom services besides the starting of private sector participation in basic telephone services. In the initial enthusiasm of opening up of the telecommunications sector, the private operators, in their bids, offered much higher amounts of licence fees than they could eventually muster. As a result, by May 1999, they had accumulated arrears totalling Rs 3,779.45 crore payable to the Government. The New Telecom Policy 1999 (NTP-99) allowed the private operators to migrate from the fixed licence fee regime to a revenue-sharing regime. Other provisions of NTP-99 included the permitting of interconnectivity and sharing of infrastructure among various service providers within the same areas of operations; separation of the policy and licensing functions of DoT from the service provision function; opening of National Long Distance (NLD) and International Long Distance (ILD) services to competition and carrying of both voice and data traffic by service providers.

As of 31 March 2002, unrestricted entry was allowed in basic services on a revenue-sharing basis. All telecom services were also opened up for private sector participation; national and international data connectivity were opened to all and internet services were also opened up without any restriction on the number of entrants and without any entry fee.

A National Frequency Allocation Plan (NFAP-2002) was evolved in line with the Radio Regulations of the International Telecom Union (ITU) for catering to the conflicting demands on the spectrum.

6. Other Government organisations in the Telecom Sector

Besides MTNL and BSNL, other public sector undertakings in the telecom sector are ITI Limited (ITI), Telecommunications Consultants India Limited (TCIL), Intelligent Communication Systems India Limited (ICSIL) and Millennium Telecom Limited (MTL). ITI Limited was formed in 1948 for manufacturing a wide range of equipment, which included electronic switching equipment, transmission equipment and telephone instruments of various types. TCIL was established in 1978 for providing know-how in all fields of telecommunications at the global level. The core competence of TCIL is in communications network projects, software support, switching and transmission systems, cellular services, rural telecommunications and optical fibre based backbone network. ICSIL was established in April 1987 for manufacturing computer based communication systems and equipment. It also provides engineering, technical and management consultancy services for computers and communication systems in India and abroad. MTL was established in February 2000 as a wholly owned subsidiary of MTNL for providing internet services in the country. It is pursuing the establishment of broadband internet access for the corporate segment and Voice Over Internet Protocol (VOIP) telephony services throughout India with the use of relevant technologies like Very Small Aperture Terminals (VSATs).

7. Financial performance of PSUs in the Telecom Sector

Some of the important financial performance indicators of the telecom PSUs for the year ended 31 March 2006 were as follows:

PSU	Investment in shares by Government			Govt. Loans	Total income earned	Dividend paid on Govt. investment	Capital employed	Profit before tax (PBT)	Percentage of PBT to capital employed
	Equity shares	Preference shares	Total						
	(Rupees in crore)								
BSNL	5000.00	7500	12500.00	6220	40176.58	1175.00	83023.00	8446.98	10.17
MTNL	354.37	---	354.37	---	6091.00	141.75	10440.63	671.36	6.43
ITI	267.47	---	267.47	100	1771.46	---	3763.73	(427.55)	(11.36)
TCIL	28.80	---	28.80	---	483.49	---	325.89	17.40	5.32
ICSIL	---	---	---	---	32.77	---	1.00	0.05	5.00
MTL	---*	---	---	---	0.24	---	5.24	0.07	1.34
Total	5650.64	7500	13150.64	6320	48555.54	1316.75	97559.49	8708.31	8.93

* Rs 2.88 crore of equity share capital of MTL was fully subscribed by MTNL.

As may be seen from the above table, on capital investment of Rs 13,150.64 crore in these six telecom PSUs, the Government received dividend of Rs 1,316.75 crore, which worked out to 10.01 *per cent*. The total income and

the profit before tax earned by the six telecom PSUs during the year were Rs 48,555.54 crore and Rs 8,708.31 crore respectively. On the total capital employed of Rs 97,559.49 crore in the above PSUs, the overall percentage of profit before tax worked out to 8.93 *per cent*.