

# 8 Communications

## POSTS

THE establishment of the modern postal system in India can be traced back to the second half of the 18<sup>th</sup> century. This postal system, established by Lord Clive in the year 1766, was further developed by Warren Hastings by establishing the Calcutta G.P.O. under a Postmaster General in the year 1774. In the other Presidencies of Madras and Bombay, the General Post Offices came into existence in 1786 and 1793 respectively. The Act of 1837 first regulated the Post Office on a uniform basis to unite the post office organisation throughout the three Presidencies into one all-India Service. The Post Office Act of 1854 reformed the entire fabric of the postal system, and the Post Office of India was placed on the present administrative footing one hundred and fifty four years ago on 1<sup>st</sup> October 1854. The statute presently governing the postal services in the country is the Indian Post Office Act, 1898.

Besides providing postal communication facilities, the post office network has also provided facilities for remittance of funds, banking and insurance services from the latter half of the 19<sup>th</sup> century.

## POSTAL NETWORK

At the time of Independence there were 23,344 post offices throughout the country. Of these 19,184 post offices were in the rural areas and 4,160 in the urban areas. The country has 1.55 lakhs post offices, of which, 1,39,074 are in rural areas and 16,259 in urban areas. As a result of this seven-fold growth in the postal network, today India has the largest postal network in the world.

Expansion of the postal network especially in the rural areas, has to a great extent been brought about by opening part time Extra Departmental Post Offices, a system unique to the Department of Posts. Under this system, local residents are employed, subject to fulfilment of certain criteria, to man the post office for a period not exceeding five hours and to deliver and convey mails on payment of a certain allowance. On an average in India, a post office serves an area of 21.16 sq km, and a population of 6623. Post Offices are opened subject to satisfaction of norms regarding population, income and distance stipulated by the Department. There is an element of subsidy for opening post offices in rural areas, which is to the extent of 85% of the cost in hilly, desert and inaccessible areas, and 67 per cent of the cost in normal rural areas.

The postal network consists of four categories of post offices, viz, Head Post Offices, Sub-Post Offices, Extra Departmental Sub-Post Offices and Extra Departmental Branch Post Offices. All categories of Post Offices retail similar postal services, while delivery function is restricted to specified offices. In terms of management control, accounts are consolidated progressively from Branch Post Offices to Sub-Post Offices and finally in Head Post Offices.

The Department has about 2.47 lakh departmental employees and about 2.93 lakhs Gramin Dak Sevaks. Their training needs are met through a well-developed training infrastructure.

## MAIL SYSTEM

First-class mail, viz., post cards, inland letter cards and envelopes, are given airlift wherever found advantageous, without any surcharge, between stations connected by air. Second-class mail, viz., book packets, registered newspapers and periodicals are carried by surface transport, i.e., trains and road transport.

## INTERNATIONAL MAILS

India is a member of the Universal Postal Union (UPU) since 1876 and of the Asian Pacific Postal Union (APPU) since 1964. These organisations aim at extending, facilitating and improving postal relations among other countries. India exchanges mail with more than 217 countries by air and surface.

Money can be remitted from selected foreign countries to India by way of money orders. India has money order services with 27 countries. India has two way money order service with Bhutan and Nepal, wherein money orders can be sent to and received from these countries. With the remaining 25 countries, only inward service is available where money orders booked in these countries can be paid in India. The Department is considering introduction of electronic International Money Order service to provide fast, reliable and efficient money transmission service.

International EMS, which started in 1986 with five countries, has now been extended to 97 countries. With a view to facilitate export and import to and from foreign destinations, principal foreign offices of exchanges have been set up at Mumbai, Kolkata, Chennai and Delhi. In addition, six sub-foreign post offices have been established at Ahmedabad, Bangalore, Jaipur, Cochin, Srinagar and Noida for both import and export. Export Extension Windows have also been made operative at Varanasi, Kanpur, Surat, Ludhiana, Moradabad and Guwahati to cater to the needs of the exporters/tourists in these areas.

Modernisation and computerisation of foreign mail operations had been taken up in the 10<sup>th</sup> Five Year Plan for improving the quality of service in this area. Taking further steps to improve the quality, the Department of Posts had introduced 13-digit bar code labels for all international accountable articles from September 3, 2003. The application of barcodes on postal articles and the effective use of electronic track and trace systems enables both customers and the postal administrations to check whether the articles are in transmission or these have been delivered much better than is possible through the manual system of tracing such articles.

## BUSINESS DEVELOPMENT ACTIVITIES

A Business Development Directorate was set up in 1996 with the objective of marketing and promoting premium services for meeting the needs of specific customer segments. It was reorganised into Business Development and Marketing Directorate w.e.f 1<sup>st</sup> April 2005, to provide a sharper focus on marketing of the whole continuum of postal products. A separate Parcel and Logistics Division has been created in the Business Development and Marketing Directorate w.e.f. the same date to focus attention on parcel products. Some of the premium services offered by the Department are given below:

**Speed Post:** Speed Post service was introduced on 1<sup>st</sup> August 1986. Under this service, letters, documents and parcels are delivered within a given time frame failing which full refund of postage is given to the customer. The Speed Post Network comprises 266 National and 857 State Speed Post Centres. This service is also available internationally to 97 countries.

An Internet based track and trace service speed net was launched on 3<sup>rd</sup> January 2002. Apart from providing tracking facility for Speed Post articles to the customers, it also provides information to the management about the quality of service, business performance, marketing customer service etc. It is now operational from all 266 National Speed Post Centres and selected State Speed Centres.

**Business Post:** The Department launched Business Post with effect from 1<sup>st</sup> January 1997 in order to meet specific needs of bulk customers for pre-mailing activities. Accordingly, it provides value addition to all traditional services offered by the Post in the form of collection, insertion, addressing, sealing, franking etc. Recently, printing of bills, financial statements, mailers etc. have also been included among the pre-mailing services extended to customers under Business Post.

**Bill Mail Service:** Bill Mail Service was introduced w.e.f 15<sup>th</sup> September, 2003 to provide a cost effective solution for mailing of periodic communication in the nature of financial statements, bills, monthly account bills or other items of similar nature, which may be posted by service providers to their customers.

A National Bill Mail Service was launched in February 2005 that allows Bill Mail Service items meant for outstation destinations also to be bundled in package, which can be sent to destination cities as Speed Post, Express Parcel Post etc. article, on payment by the sender. The individual bills in the package are charged only at Local Bill mail service rates.

**Express Parcel Post:** The Express Parcel Post seeks to provide a reliable and time bound parcel service through surface transport. It provides door-to-door delivery and VPP service upto Rs 50,000 to cater to corporate users and business establishments on contractual basis. Express Parcel Post can be booked in 266 stations in the country, where National Speed Post Centres exist.

**Logistics Post:** A Logistics Post service was introduced by the Department in 2004-05. This service has already started in many Postal Circles. Logistics Post is designed to carry consignments from point to point without any maximum limit. Value added services like pick-up, delivery, track and trace are also being provided in Logistic Post.

**Media Post:** The Department offers a unique media to help the corporate and government organisations reach potential customers through Media Post. Under this facility, customers can use the following for their branding exercise: (a) Advertisement on Postcards, Inland Letter Cards, Aerogram and other Postal Stationery. (b) Space sponsorship options on letter-boxes.

**Retail Post:** Through its vast network of more than 1.5 lakh post offices, the Department offers the facility to collect all public utility bills and sale of application forms for government and other private organisations. Sale of application forms for UPSC etc., surveys through postmen, address verifications through postmen, collection of loan applications through postal network etc. are some of the activities undertaken under Retail Post.

**Direct Post:** Many Countries have identified Direct Marketing / Advertising mail as an important component of business mail with high potential for growth. With high economic growth, Direct Mail volumes are expected to grow significantly in India also. A service called Direct Post was introduced w.e.f. 2<sup>nd</sup> June, 2005 to deal with delivery of un-addressed mail to the doorsteps of the target population. A new Direct Post value addition has also been introduced from 18<sup>th</sup> April, 2006, allowing advertising mail to be combined with transaction mail like bills etc.

**e-Post:** e-post service, launched on 30<sup>th</sup> January, 2004, utilises the last mile advantage provided by the Department to enable people to send and receive message or scanned images through e-mail in all post offices in the country. People who would not normally have access to internet are able to send and receive e-mail messages without possessing an e-mail ID, thereby bridging the digital divide. To make it useful for business also, a corporate version of e-post was also launched on 18th October, 2005, which allows simultaneous sending of e-post to a maximum of 9999 addresses.

**e-Bill Posts :** A new service, called e-bill Post has been launched by the Department as one of the technology enabled services for the customers. Presently this service is available at Bangalore and Kolkata and is likely to start in other cities very soon. This has been designed keeping in view the requirements of the clients. The service is useful for payment of electricity, telephone, mobile, water and other kinds of bills/ dues at the Post Office counters by the users. The user can go to a nearby Post Office and pay their utility bills.

### PHILATELY

Indian postage stamps provide a kaleidoscopic glimpse of our historical and natural heritage and the rich diversity of our culture and traditions. Covering a wide range of themes, the stamps also commemorate important national and international events, the contributions of renowned personalities and institutions and our achievements in various fields like sports, arts, science and technology etc. These stamps are very popular.

The National Philately Museum, New Delhi, also remained a hub of philatelic activities during this period. The concept of thematic exhibition of stamps was introduced with the first such event dedicated on Mahatma Gandhi featuring 'Retrospect on Mahatma Gandhi'. The exhibition was inaugurated by Ms. Nirmala Deshpande, the noted Gandhian. Stamps from India and abroad dedicated to Bapu were on display. A range of sovereigns and gifts were also introduced in the Philatelic Museum on this occasion. Images of stamps were brightly printed on glass, and were nicely framed. It aroused significant public interest. Similarly, stamps on gems and jewellery were beautifully copied on marble. Image of Mahatma Gandhi stamps on piece of Khadi was also appreciated. All these are available for sale in the National Philatelic Museum. The Department revived another philatelic product maxim cards, during this year with the issue of stamps on Endangered Birds of India, Himalayan Lakes and Children's day.

The philatelic items like commemorative postage stamps, miniature sheets, first day covers, information brochures, post cards and maxim cards etc. are available through 68 Philatelic Bureaux and 881 Philatelic Counters across the country.

### FINANCIAL SERVICES

**(i) Post Office Savings Bank:** The Post Office Savings Bank (POSB) operates the Small Savings Schemes of Govt. of India, Ministry of Finance, on an agency basis. In terms of its existing mandate, the POSB is fully geared to meet the banking requirements of small investors, particularly those who cannot readily access the commercial banks. The POSB operates out of more than 1.54 lakh Post Offices spread across the country. The rural network of POSB itself extends to as many as 1,38,529 branches. At present the schemes being operated through POSB are: Savings Account Schemes, Recurring Deposit Schemes, Time Deposit Schemes (1,2,3 & 5 years), Monthly Income Schemes,

Public Provident Fund Schemes, Kisan Vikas Patras Scheme, National Savings Certificate (VIII Issue) and Senior Citizens' Savings Schemes-2004.

**(ii) Money Order:** A "Money Order" is an order issued by the Post Office for payment of a sum of money through the agency of Post Office. The amount for which a single money order may be issued must not exceed Rs. 5000/-. This service is available in more than 1.5 lakh Post Offices covering every hook and corner of the country. This allows customers to remit their money anywhere in India without any haste and with ease and they can receive money at their doorstep.

#### **OTHER NEW FINANCIAL SERVICES**

**(i) International Money Transfer Service:** This service, operated in association with a multinational company, Western Union Financial Services International, provides to customers the facility of receiving remittances from 205 countries and territories on a real time basis. The service is currently available in more than 8565 Post Offices. The service has provided the common man who has no bank account or access to Internet, a viable channel for receiving remittances from their relatives and family members abroad. The Department received the award in the years 2004 and 2005 for "Highest Growth in Transactions".

**(ii) Instant Money Order (iMO):** Instant Money Order (iMO) is an online domestic money transmission service intended for a market clientele requiring instant money remittance. This service enables the customers to receive money in minutes from any of the Post Offices providing iMO service. The service was introduced on 20<sup>th</sup> Jan., 2006. Under this service, a person can send amount from Rs. 1000/- up to Rs. 50000/- in one transaction. Money will be disbursed to the payee at any of the iMO Post Offices in India other than the office of booking on presentation of 16 digit iMO number and photo identity proof. Currently, the service is being offered in more than 400 Post Offices across the country. This service is being further expanded.

**(iii) Postal Finance Marts:** The concept of setting up Postal Finance Marts (PFM) envisages providing specialized value added financial services, in conformity with market standards, in a customer friendly environment, in an ergonomically improved Post Office. The PFM seeks to offer all the financial products and services of the Department under on one roof "One Stop Shop for Financial Services" – in a fully computerized office supported by technology, at par with reputed banking institutions. The PFM is a brand positioning exercise of financial services offered by the Post Office Savings Bank on the lines of the personalized services offered by the banks to customers. Therefore, the facilities offered through PFM are distinct from the services offered through Post Offices not merely in terms of ambience but also in the provision of specialized facilities like ' Investment Desk, AMFI qualified staff etc. The PFM will provide POSB services like Saving sBank, Recurring Deposit, Monthly Income Scheme, Term Deposit, Sr. Citizen Saving Schemes, National Savings Certificate (VIII issue), Kisan Vikas Patra, as well as other financial services like Postal Life Insurance & Non-life insurance, Mutual Funds & Bonds, Government Securities, Pension schemes, International Money Transfer, Money Order etc.

**(iv) Retailing of Mutual Funds and Bonds:** The Mutual Funds industry is making rapid strides with nearly Rs. 3,26,388 crore assets under management as on 31<sup>st</sup> March 2007. Since February 2001, a growing network of over 250 Post Offices are distributing select mutual funds (Principal-PNB/ Prudential-ICICI/UTI/SBI). In September 2004, the Department entered into a tie-up with UTI Mutual Funds, the largest player in the mutual fund market. The Department is retailing mutual funds of SBI, Principal PNB and Franklin Templeton, apart from UTI schemes. The service

while extending the reach of the capital market of the country also provides the common man with easy access to market based investment options.

*(v) Oriental Accidental Death Insurance Cover to POSB account holders:* The Department, in a tie up with Oriental Insurance Company Limited (IOC), is providing Oriental Accidental Death Insurance for SB/MIS/SCSS account holders on request basis. On 20<sup>th</sup> Jan., 2006 this service was launched and is an add on product to the products already provided by OIC for sale from Post Office. It is a step in the direction of providing value addition to Post Office Savings Bank customers.

The schemes provide Accidental Death Insurance cover for one year of Rs. One lakh at low premium of Rs. 15/- for the entire year. It is very attractive to Post Office Savings Bank customers especially in rural and remote areas, as most of them do not have any risk cover whatsoever.

*(vi) National Rural Employment Guarantee Act (NREGA):* The Govt. of India enacted the National Rural Employment Guarantee Act in Sept., 05 that seeks to provide at least 100 days of guaranteed wage employment in every financial year to every household. On 2<sup>nd</sup> Feb. 06 Govt. of India introduced NREGA in 200 identified districts in 27 States in the country beginning with the state of Andhra Pradesh to provide wage employment to skilled/semi-skilled/unskilled labourers. AP circle entered into an agreement with the State Government for the implementation of NREGA through Post Offices in Andhra Pradesh. Under the agreement, the Post Offices in Andhra Pradesh do wage disbursement once in a week or fortnight to the wage earners through Post Office Savings Bank accounts. Subsequently, NREGA has been started in 49 districts of 4 more circles of Jharkhand, Karnataka, Madhya Pradesh and West Bengal

*(vii) ECS Schemes :* The ECS scheme provides an alternative method of effecting bulk payment transaction like periodic (monthly/quarterly/half-yearly/yearly) payment of interest/salary/pension/commission/dividend/refund by Banks/Companies/Corporations/Government Departments. This scheme obviates the need for issuing and handling paper instruments and thereby facilitates improved customer service by the Banks and Companies/Corporations/Government Departments effecting bulk payments. The Scheme is in operation at 15 centres where Reserve Bank of India manages Clearing Houses and 31 centres where State Bank of India/State Bank of Indore is managing them.

The Electronic Clearance Service scheme is being offered in the Department of Posts at all 15 locations of RBI in connection with payment of monthly interest under "Monthly Income Scheme" (MIS).

*(viii) Dematerialization of NSC/KVP :* In October 2003 the Department took an initiative after the approval of Ministry of Finance and the then MOC & IT to start a six-month pilot project on 'Dematerialization of Savings Certificate (NSC/KVP)' as a step towards streamlining of work procedures relating to issue and discharge of certificates, creation of highly secure and centralized records maintenance and MIS system through NSDL, operations through modernisation and rationalization of operations and ensuring investors' convenience. The Dematerialization of Savings Certificate was taken up in 10 Post Offices in Mumbai w.e.f 16<sup>th</sup> October 2003 and further extended to 25 more Post Offices on 12<sup>th</sup> February 2004.

## POSTAL LIFE INSURANCE

Postal Life Insurance (PLI) was introduced in 1884 as a welfare measure for Postal employees. Over the years, it was extended to the employees of Central/State

Governments, Public Sector Undertakings, Universities, Government-aided institutes, nationalised banks, financial institutions and Gramin Dak Sevaks of the Postal Department.

PLI offers six insurance schemes, namely, (1) Suraksha (Whole Life Assurance); (2) Suvidha (Convertible Whole Life Assurance); (3) Santosh (Endowment Assurance); (4) Sumangal (Anticipated Endowment Assurance); and (5) Yugal Suraksha (Joint Life Endowment Assurance for couple) and (6) Children Policy. As on March 2006. The total number of active policies stood at 30,98,248.

The Rural Postal Life Insurance (RPLI) was introduced by the PLI organisation on 24<sup>th</sup> March 1995, to provide insurance cover at low premium to the common man and to weaker sections of the society in rural areas. It is now allowed to continue on permanent basis. There are six types of plans under RPLI, namely, (1) Gram Suraksha (Whole Life Assurance); (2) Gram Suvidha (Convertible Whole Life Assurance); (3) Gram Santosh (Endowment Assurance) (4) Gram Sumangal (Anticipated Endowment Assurance); (5) Gram Priya (10 year Anticipated Endowment Assurance) and (6) Children Assurance. As on March 2006, the total number of active policies were 47,02,776.

## CUSTOMER CARE

Since 1948, the Department of Posts has a well-established system of redressal of public grievances and presently has 1116 Computerised Customer Care Centres (CCCs) at the District Headquarters/Divisional Headquarters. This network covers all Head Post Offices in the country with the objective of providing easy and speedy access to information and help required by the customer, apart from redressal of grievances. Each post office works as a receiving point for complaints making the system readily accessible for the customer. Since 2001, the Department has introduced the facility for customers to register their complaints online at its website [www.indiapost.gov.in](http://www.indiapost.gov.in) and since 2003, it has developed a web-based system to interconnect its Customer Care Centres to redress grievances rapidly. The Department is implementing its Citizen Charter in all Head Post Offices and Large Sub Post Offices. It is implementing the Charter in other sub offices in mission mode. The Department has also initiated proactive steps of reaching out to its customers for their feedback through personal visits, telephone calls and questionnaires.

With a view to bringing about qualitative change in its service, having focus on the customer, India Post has taken the initiative for implementation of "Sarvottam", the Public Service Delivery Excellence Model developed by the Department of Administrative Reforms & Public Grievances and backed by the Service Quality Management System Standard IS 15700:2005. To start with, the New Delhi GPO and Alwar HO (Rajasthan) have been identified for obtaining "Sarvottam" certificate after completion of requisite formalities.

**Right to Information Act, 2005:** In addition to the implementation of RTI Act, 2005 within the Department, India Post is also providing a service to the general public under which the RTI application meant for certain specified central public authorities of other Ministries/Departments and organisations can be submitted to the designated CAPIOs at districts/sub-district level Post Offices. The applications so received would be promptly forwarded by the CAPIO to the concerned public authorities, with an acknowledgement to the applicant. At present, this service is available at 629 district level post offices and about 3000 Tehsil level post offices and in respect of 120 public authorities of Central Government.

## TELECOMMUNICATIONS

The Telecommunication services were introduced in India soon after the invention of telegraphy and telephone. The first Telegraph line between Kolkata and Diamond Harbour was opened for traffic in 1851. By March 1884, telegraph messages could be sent from Agra to Kolkata. By 1900, telegraph and telephone had started serving Indian Railways. As in the case of telegraph, telephone service was also introduced in Kolkata in 1881-82, barely six years after the invention of telephone. The first automatic exchange was commissioned at Shimla in 1913-14 with a capacity of 700 lines.

The Telecommunication services in India have improved significantly since independence. With the opening of Telecom sector to private investment and establishment of an independent regulator, the matter of separation of service provision functions of the Department of Telecommunications (DoT) and providing a level playing field to various service providers including the Government service Provider, has been achieved. On 1 October 2000 a new public Sector Undertaking, viz. Bharat Sanchar Nigam Limited (BSNL), has been formed to take over all the service providing functions of the erstwhile Department of Telecommunication Services (DTS).

The telecommunication services have improved significantly since independence with the sector witnessing a series of reform measures that included, announcement of National Telecom Policy in 1994 that defined certain important objectives, including availability of telephone on demand, provision of world class services at reasonable prices, ensuring India's emergence as major manufacturing / export base of telecom equipment and universal availability of basic telecom services to all villages. Telecom Regulatory Authority of India (TRA), the independent regulator was established in 1997 and New Telecom Policy was announced in 1999, which further laid stress on providing an enabling framework for the development of this sector and to facilitate India's vision of becoming an IT superpower and develop a world class telecom infrastructure in the country.

Since then, Indian telecom sector has come a long way in achieving its dream of proving affordable and effective communication facilities to its citizens. As a result common man today has access to this most needed facility. Larger efforts are continuously being made to provide universal service to all uncovered areas including rural areas. The other thrust areas include, building a modern and efficient telecommunications infrastructure, transforming telecommunications sector to a greater competitive environment with equal opportunities and level playing field for all players, strengthening research and development efforts in the country, achieving efficiency and transparency in spectrum management and enabling Indian telecom companies to become truly global players.

The reform measures coupled with the proactive policies of the Department of Telecommunications have resulted in an unprecedented growth of the telecom sector. Today, the Indian telecommunications network with over 300 million connections is third largest in the world and the second largest among the emerging economies of Asia. India has emerged as a major base for the telecom industry worldwide and it is the endeavor of the Government to facilities further growth of this vital industry as it is not just the growth of a sector but it has 'multiplier effect' on the entire economy.

The structure and composition of telecom growth has undergone a substantial change in terms of mobile vs. fixed phones and public-private participation. The

growth of wireless services has been phenomenal, with wireless subscribers growing at a compound annual growth rate (CAGR) of 87.7 per cent per annum since 2003. Today, the wireless subscribers are not only much more than the wireline subscribers in the country, but also increasing at a much faster pace. The share of wireless phones has increased from 24.3 per cent in March 2003 to 86.88 per cent in March 2008. Improved affordability of wireless phone has made universal access objective more feasible.

The liberalization efforts of the government are evident in the growing share of private sector in total telephone connections, which has increased to 73.5 percent in March 2008 from a mere 5% in 1999.

As on 31 March 2008, the network comprises of 300.49 million telephone connections. There are over 261.08 million Wireless phone subscribers in the country and the Wireless phone customer base is growing at the rate of over eight million per month.

Promotion of rural telephony and accessibility of telephones to remote areas is an important thrust area of the department. It is well recognized that a well spread out provision of telecom services in rural areas enhances the ability of people to participate in the market economy, which, in turn, improves their productivity and contributes to their earnings.

As on March 2008, there are 765 lakh phones in rural areas with a teledensity of 9.46% and the strategy for network expansion in rural areas mainly involves provision of phones in the viable areas through market mechanisms and through Universal Service Obligation Fund (USOD) in the nonviable areas. While Village Public Telephone (VPTs) and Rural Community Phones (RCPs) will enable public access, a scheme of Rural Community Phones (RCPs) has been launched under USOF to create infrastructure in rural and remote areas.

Recognizing the potential of Broadband service in the growth of GDP and creation of an enabling environment for promoting knowledge based society, the Broadband policy announced in October 2004 has a vision of covering 20 million broadband subscribers by the end of 2010. It has been proposed in the Eleventh Plan targets to provide the broadband for all secondary and higher secondary schools, all Public Health Care Centers and Gram Panchayats.

The year 2007 was christened as the 'Year of Broadband' for popularising broadband services in villages. As on March 31, 2008 there are 3.81 million broadband subscribers, which is a substantial increase from 0.18 million as on March 31, 2005.

Foreign direct investment (FDI) is one of the important sources to meet the requirement of huge funds for rapid network expansion. The FDI policy provides an investor-friendly environment for the growth of the telecom sector. The total FDI equity inflows in the telecom sector from April 2000 up to March 2008 have been Rs. 16747 crore which is 6.81% of the total FDI equity inflows in India during the period.

FDI in telecommunication sector has a bright future. Today, it is the third largest recipient of FDI after service (financial & non-financial) and Computer hardware & software, which attract 22.64% and 13.07% respectively.

The government is working steadily towards addressing the issue of releasing additional spectrum from government use for the use of commercial telecom operators so that the growth of this dynamic sector is not constrained by the shortage of this vital resource. The government also recognizes the need to take a forward-looking

approach, based on an appreciation of changing technologies and to accelerate structural changes in this sector in line with trends in other countries to ensure that the telecommunication services are not only made available on the scale needed to sustain rapid growth in the economy as a whole but also that the quality and cost of these services come up to the requirements of a modernizing economy.

### **REGULATORY FRAMEWORK IN THE TELECOM SECTOR**

In early 1997, the telecom Regulatory Authority of India (TRAI) was established under the Telecom Regulatory Authority of India Act, 1997 to regulate the telecommunication services and for matters connected therewith or incidental thereto. The establishment of the regulator was considered necessary in the context of liberalization and private sector participation in the telecom sector and to provide a level playing field for all operators.

By amendments made in early 2000 to the TRAI Act, the entire telecom regulatory framework, and the disputes settlement mechanism were strengthened. Besides bringing about clarity in the role and functions of the Regulator (TRAI), certain additional functions were also entrusted to it. A separate disputes settlement body known as the Telecom Disputes Settlement and Appellate Tribunal was also constituted for expeditious settlement of disputes. Vide a notification dated 9 January 2004 of the Government of India, Broadcasting and Cable Services also have been brought within the definition of "Telecommunication Services".

### **TARIFF REBALANCING MEASURES**

In response to the policy changes in the Indian Telecom Sector, the tariff structure has been altered substantially. The tariff regulation for the telecommunications services in India was initiated with the notification of Telecommunication Tariff Order 1999 by the Regulator (TRAI). This Order provided the broad and long term tariff policy framework for telecommunications services in the country. The tariff envisaged in the Order included rebalancing towards costs while emphasizing the social objective of encouraging low users of telecom to get connected and use the system more intensively. Over a period of time, this rebalancing exercise has resulted in reduction of NLD and ISD tariffs considerably. In the area of Cellular telephony also, the tariff rates have decreased substantially. The impact of the various regulatory measures is very much visible in the Indian telecommunication sector. We have succeeded in achieving affordable tariffs and also putting in place a transparent subsidy mechanism for implementation of policies to meet social objectives. The Policy has succeeded in providing the financial sustainability of the operators, promoting efficiency in the sector and meeting the social objectives. The results are evident from the phenomenal growth in subscriber base and the decline in tariffs. The initiatives taken by TRAI to achieve the set objectives include a cost based Interconnection Usage Charges (IUC) regime and Calling Party Pays (CPP) regime. TRAI continues to monitor tariffs for Telecommunication services and the Quality of Services. While following the policy of tariff forbearance, for segments where the competition is perceived to be insufficient, TRAI has prescribed capping tariffs. Thus, tariff for rural areas, roaming services and leased circuits continue to be regulated.

### **GRAMEEN SANCHAR SEVAK (GSS) SCHEME**

Grameen Sanchar Sevaks (GSSs) carry a mobile fixed wireless terminal (FWT) with display unit and visit door to door to provide telephone facility franchisee basis. It is

implemented in whole country except in A&N, Haryana & Punjab which are already having sufficient/full coverage.

As on 31.5.2008 around 11,709 villages are covered by 2,668 GSSs throughout the country. The GSS is entitled to 20% commission on all outgoing calls. The GSS can charge Rs. 5/- for passing on the message to the concerned persons in the village.

## UNIVERSAL SERVICE OBLIGATION FUND

The Universal Service Support Policy came into effect from 01.04.2002. The guidelines for universal service support policy were issued by DoT and were placed on the DoT website [www.dot.gov.in](http://www.dot.gov.in) on 27th March 2002. Subsequently, the Indian Telegraph (Amendment) Act, 2003 giving statutory status to the Universal Service Obligation Fund (USOF) was passed by both Houses of Parliament in December 2003. The fund is to be utilized exclusively for meeting the Universal Service Obligation and the balance to the credit of the Fund will not lapse at the end of the financial year. Credits to the Fund shall be through Parliamentary approvals. The Rules for administration of the Fund known as Indian Telegraph (Amendment) Rules, 2004 were notified on 26.03.2004.

An Ordinance was promulgated on 30.10.2006 as the Indian Telegraph (Amendment) Ordinance 2006 to amend the Indian Telegraph Act, 1885 in order to enable support for mobile services and broadband connectivity in rural and remote areas of the country. Subsequently, an Act has been passed on 29.12.2006 as the Indian Telegraph (Amendment) Act 2006 to amend the Indian Telegraph Act, 1885. The Rules for administration of the Fund under this Ordinance, Indian Telegraph (Amendment) Rules 2006 have been published on 17.11.2006. Indian Telegraph Rules have further been amended in July 2008 in order to provide support for existing fixed wireline rural telephones in lieu of Access Deficit Charge (ADC) being phased out.

The resources for implementation of USO are raised through a Universal Service Levy (USL) which has presently been fixed at 5% of the Adjusted Gross Revenue (AGR) of all Telecom Service Providers except the Pure value added service providers like Internet, Voice Mail, E-Mail service providers etc. In addition, the Central Govt. may also give grants and loans.

The Universal Service Obligation Fund is headed by the Administrator, USF. He is empowered to formulate procedures for implementation of the USO and disbursement of funds from the USOF. His office functions as an Attached office of the Department of Telecom, Ministry of Communications & IT.

## USO ACTIVITIES

As per the Rules, the following services shall be supported by the Fund, namely -

**Stream-I :** Provision of Public telecom and Information Services -

- (a) Operation and maintenance of Village Public telephone in the revenue villages identified as per Census 1991 and Installation of Village Public Telephone in the additional revenue villages as per Census 2001 :

For installation of Village Public Telephone in the revenue villages, identified as per 1991 Census, only the Operating Expenses and Revenue shall be taken into account for determining the Net Cost. For the additional revenue villages identified as per 2001 Census, Capital Recovery in addition shall also be taken into account for determining the Net Cost :

Provided that in the case of the Village Public Telephone which are still to be installed in the villages identified as per Census 1991, Capital Recovery shall also be taken into account while determining the Net Cost;

- (b) Provision of additional rural community phones in areas after achieving the target of one Village Public Telephone in every revenue village :

Where in a village the population is more than 2000 and no public call office is existing, a second public phone shall be installed and for the purposes of determining the net Cost, Capital Recovery, Operating Expenses and Revenue shall be taken into account;

- (c) Replacement of Multi Access Radio Relay Technology Village Public Telephone installed before 1st day of April 2002:

Capital Recovery, Operating Expenses and Revenue shall be taken into account for determining the Net Cost.

Note - Unless otherwise specified by the Central Government, the Secondary Switching Area shall be taken as a unit for the purpose of arriving at net Cost for activities specified in items (a) to (c) of stream 1.

**Stream-II** - Provision of household telephones in rural and remote areas as may be determined by the Central Government from time to time :

- (a) For household Direct Exchange Lines installed prior to 1st day of April, 2002, the difference in rental actually charged from rural subscribers and rent prescribed by Telecom Regulatory Authority of India for such subscribers shall be reimbursed until such time the Access Deficit Charges prescribed by telecom Regulatory Authority of India from time to time take into account such difference.
- (b) For household direct Exchange Lines installed after 1st day of April , 2002, Capital Recovery, Operational Expenses and Revenue shall be taken into account to determine the Net Cost.

Unless otherwise specified by the Central Government, the Short Distance Charging Area shall be taken as a unit for the purpose of arriving at the Net Cost for activities specified in item (b) of Stream II.

**Stream-III:** Creation of infrastructure for provision of Mobile Services in rural and remote areas:

- (a) The assets constituting the infrastructure for provision of mobile services shall be determined by the Central Government from time-to-time.
- (b) A percentage of the Capital Recovery for the infrastructure for provision of mobile services shall be taken into account to determine the Net Cost.

**Stream-IV:** Provision of Broadband connectivity to villages in a phased manner

A percentage of the Capital Recovery for the infrastructure for broadband connectivity shall be taken into account to determine the Net Cost.

**Stream-V :** Creation of general infrastructure in rural and remote areas for development of telecommunication facilities

- (a) The items of general infrastructure to be taken up for development shall be determined by the Central Government from time to time.
- (b) A percentage of the Capital Recovery for the development of general infrastructure shall be taken into account to determine the Net Cost.

Unless otherwise specified by the Central Government, the revenue district/ group of revenue districts shall be taken as a unit for the purpose of arriving at the Net Cost for the activities specified in Streams III, IV & V.

**Stream-VI:** Induction of new technological developments in the telecom sector in rural and remote areas

Pilot projects to establish new technological developments in the telecom sector, which can be deployed in the rural and remote area, may be supported with the approval of the Central Government.

## IMPLEMENTATION STATUS OF ONGOING USE ACTIVITIES

### PUBLIC ACCESS

Agreements were signed with M/s BSNL and six Private Basic Service Operators (PBSOs) in March 2003 for operation and maintenance of existing Village Public Telephones (VPTs) in the country in the identified revenue villages as per Census 1991. In addition, subsidy support is also admissible for the VPTs installed in additional revenue villages as per census 2001. About 5,29,997 Village Public Telephones (VPTs) (BSNL 5,21,284, PBSO: 8,713) are currently eligible for financial support for operation and maintenance. This includes the VPTs provided under Bharat Nirman Programme mentioned at (b) below.

Agreements were signed with M/s BSNL in November 2004 to provide subsidy support for provision of VPTs in 66822 no. of uncovered villages as per Census 1991 in the country excluding those villages having population less than 100, those lying in deep forests and those affected with insurgency. Out of 66,822 VPTs, 14,183 VPTs were to be provided on satellite based media and the remaining 52,639 were to be provided on other technologies. However, some of the VPTs, which were initially proposed to be provided on DSPTs, are also being provided through the Wireless coverage now available in these villages on account of network expansion. Now about 5000 remotely located villages are to be provided with VPT using satellite technology. The provision of VPTs in these villages has been included as one of activities under Bharat Nirman Programme. As on 30.06.2008, 54635 VPTs have been provided by BSNL. The remaining VPTs are likely to be provided in a phased manner by December 2008. The state-wise number of villages provided with VPT facility as on 30.06. 2008 is given below:

Sl. No.	Name of the Service Area	Total No. of uncovered villages	VPTs provided
1	Andaman & Nicobar	0	0
2	Andhra Pradesh	1074	671
3	Assam	8931	8673
4	Bihar	0	0
5	Jharkhand	1694	1504
6	Gujarat	4144	4048
7	Haryana	0	0
8	Himachal Pradesh	1002	914
9	Jammu & Kashmir	1755	1379
10	Karnataka	0	0
11	Kerala	0	0

12	Madhya Pradesh	11894	11808
13	Chhattisgarh	5043	3325
14	Maharashtra	6441	5946
15	North East-I	2128	440
15A	Meghalaya (NE-1)	1957	311
15B	Mizoram (NE-1)	96	60
15C	Tripura (NE-I)	75	69
16	North East-II	1550	811
16A	Arunachala Pradesh (NE-II)	646	285
16B	Manipur (NE-II)	876	507
16C	Nagaland (NE-II)	28	19
17	Orissa	4899	1643
18	Punjab	0	0
19	Rajasthan	12386	11291
20	Tamil Nadu	0	0
21	Uttar Pradesh (East)	0	0
22	Uttar Pradesh (West)	0	0
23	Uttaranchal	3881	2182
24	West Bengal	0	0
<b>Total</b>		<b>66822</b>	<b>54635</b>

Agreements were signed with M/s BSNL for replacement of 1,82,766 number of VPTs which were earlier dysfunctional due to Multi Access Radio Relay (MARR) technology and installed before 01.04.2002. A total number of 1,80,988 MARR VPTs have been replaced by M/s BSNL till June 2008. The remaining MARR VPTs are likely to be replaced by December 2008.

Agreements were signed on 30.09.2004 for providing 43,409 Rural Community Phones (RCPs) (BSNL: 21,978, RIL: 21,431) in villages with population more than 2000 and without PCO facility. Out of these, 39285 RCPs have been provided (BSNL" 21945, RIL: 17340) till June 2008. The remaining RCPs are likely to be provided by December 2008.

### INDIVIDUAL ACCESS

Support has been extended to nearly 90.5 lakh rural household Direct Exchange Lines (RDELs) installed prior to 01.04.2002 towards the rental differential between the TRAI prescribed rental and the rental charged by the Service Provider. The support was for the limited period of 01.04.2002 to 31.01.2004.

Agreements were signed with M/s BSNL, M/s RIL, M/s TTL and M/s TTL (MH) in March 2005 for installation of Rural Household Direct Exchange Lines (RDELs) to be installed in 1685 Short Distance Charging Areas (SDCAs) (BSNL 1267, RIL-203, TTSL; 172, TTML-43) where cost of providing telephone connections is more than the revenue earned. As on 30.06.2008, about 4094769 RDELs (BSNL - 1363734, RIL: 1340454, TTSL: 1015191, TTML: 375390) have been provided with subsidy support from USO Fund under this scheme.

Subsidy support on the same Representative Rate is also being provided for about 18,65,690 Rural DELs (BSNL: 18,26,923, RIL: 38,767) installed in the eligible

SDCAs during the period 01.04.02 and 31.03.05. Agreements to this effect were signed with M/s BSNL and M/s RIL in May 2005 and August 2005.

### INFRASTRUCTURE SUPPORT FOR MOBILE SERVICES (PHASE-I)

A scheme has recently been launched by USO Fund to provide subsidy support for setting up and managing 7871 number of infrastructure sites (towers) in 500 districts spread over 27 states for provision of mobile services in the specified rural and remote areas, where there is no existing fixed wireless or mobile coverage. The infrastructure so created shall be shared by three service providers for provision of mobile services. The agreements effective from 01.06.2007 have been signed with the successful bidders in May 2007. Mobile services from these towers are likely to be launched in a phased manner by end of year 2008. As on 30.06.2008, about 935 towers have been set up under this scheme. The State-wise number of towers to be setup under this scheme is given below.

Sl. No.	State	No. of Districts	No. of Towers
1	Andhra Pradesh	22	581
2	Andaman & Nicobar	12	62
3	Assam	20	90
4	Bihar	37	489
5	Chhattisgarh	16	560
6	Gujarat	4	66
7	Haryana	8	14
8	Himachal Pradesh	11	295
9	Jammu & Kashmir	12	178
10	Jharkhand	18	305
11	Karnataka	26	427
12	Kerala	11	46
13	Madhya Pradesh	45	985
14	Maharashtra	33	1017
15	Manipur	9	95
16	Meghalaya	7	102
17	Mizoram	8	71
18	Nagaland	7	56
19	Orissa	30	432
20	Punjab	3	13
21	Rajasthan	32	411
22	Sikkim	3	8
23	Tamil Nadu	27	371
24	Tripura	4	147
25	Uttar Pradesh	66	666
26	Uttaranchal	13	217
27	West Bengal	16	167
<b>Countrywide Total</b>		<b>500</b>	<b>7871*</b>

\* The number of towers is subject to change based on actual field survey and coverage achieved thereof as per the terms and conditions of the Agreements.

## PLANNED USF ACTIVITIES

**New VPTs to be provided in the remaining villages as per Census 2001 :** As per the re-verification of the VPTs carried out by BSNL/ DoT as per Census 2001, there are about another 50,000 uncovered villages, which are yet to be provided with VPT facility. Such uncovered villages shall also be provided with VPT facility with subsidy support from USO Fund. Agreements in this regard are likely to be signed with BSNL shortly.

**Infrastructure Support for Mobile Services (Phase-II) :** It is proposed to cover other uncovered areas in the country through mobile services for which additional towers are being identified. About 11000 towers are proposed to be installed under the second phase of the scheme, which is likely to be launched in the second quarter of FY 2008-09.

**Rural Wireline Household DELs installed prior to 01.04.2002 :** Based on the recommendations of TRAI, Indian Telegraph Rules (ITR) have already been amended to provide subsidy support to BSNL for maintenance of Rural Wireline Household DELs installed prior to 01.04.2002, for a period of 3 years with effect from 18.07.2008 subject to a ceiling of Rs. 2000 Crore per annum for the country.

**Broadband Connectivity for Rural Areas :** With the aim to provide e-governance and data services to the rural masses, a proposal is also under consideration of the Government to provide subsidy support for Broadband connectivity in rural and remote areas of the country in a phased manner by utilizing the existing passive and core infrastructure available with the Telecom Service Providers. It is proposed to provide subsidy support for provision of broadband connectivity to Common Service Centers (CSCs) being set up by DIT, Gram Panchayats, Higher secondary schools and primary health centers in order to provide e-governances and data services to the rural areas. This scheme is envisaged to be rolled out in a phased manner during the current Five Year Plan (2007-2012). Under this scheme, 5000 blocks shall be connected by wireless broadband and villages coming within a radius of 10 Kms of the Taluka/ Block headquarters shall be covered by such connectivity. User ministries such as DIT, HRD, Health, VP, MHA are being coordinated to firm up their requirements, make the requisite infrastructure ready and prioritize the block-wise villages. Wireline Broadband shall also be supported by USOF wherever feasible.

**Creation of General Infrastructure Like OFC in Rural Areas :** With a view to provide sufficient back-haul capacity to integrate the voice and data traffic from the access network in the rural areas to their core network, USOF has taken initiative to strengthen the OFC network in the rural and remote areas. This scheme considers OFC Network augmentation between the blocks' HQ and Districts' HQ to begin with. The above Schemes are envisaged to be rolled out in a phased manner during the current Five Year Plan (2007-2012).

**Pilot Projects :** For induction of new technological developments in the telecom sector on a Pilot Project basis in rural and remote areas, USOF has invited applications from the eligible companies to undertake Pilot Projects for demonstrating their products/ services in the field of Rural Telephony. About Five Pilot Projects are likely to be provided subsidy support at an upper sealing of Rs 50 lakh per project during the FY 2008-09.

**STATUS OF DISBURSEMENTS MADE AND AVAILABILITY OF FUNDS**

(Rupees in Crore)

Year	Opening Balance	Funds collected as USL	Funds allocated and disbursed	Balance at the end of the Year
2002-03	0.00	1653.61	300.00	1353.61
2003-04	1353.61	2143.22	200.00	3296.83
2004-05	3296.83	3457.73	1314.59	5439.97
2005-06	5439.97	3533.29	1766.85	7206.41
2006-07	7206.41	4211.13	1500.00	9917.54
2007-08	9917.54	5405.46	1290.00	14033.00
2008-09	14033.00*	-	92.81	
			(As on 30.06.2008)	
<b>Total</b>		<b>20404.44</b>	<b>6464.25</b>	

\* Ministry of Finance has stated that the reimbursement of license fees and spectrum charges to BSNL amounting to Rs. 6948 Crore during the period 2002-03 to 2005-06 for fulfilling rural obligation is required to be taken into account for arriving at the available balance. Taking into account the compensation made to BSNL, the available balance would be Rs. 7085 Crore only (14033-6948) at the beginning of F.Y. 2008-09.

**BASIC TELEPHONE SERVICE, CELLULAR MOBILE TELEPHONE SERVICE (CMTS) AND UNIFIED ACCESS SERVICES (UAS)**

State owned Public Sector Undertakings, Bharat Sanchar Nigam Limited (BSNL) and Mahanagar Telephone Nigam Limited (MTNL) are incumbent operators for Basic Telephone Services. MTNL provides Basis Telephone Services in two Metros, namely, Delhi and Mumbai, BSNL provides basic Telephone Services in rest of India.

78 CMTS licenses, with a maximum of four licenses in a service area, were granted between 1996 and 2001 for provision of mobile services in different service areas.

UAS Licensing Regime was introduced in November 2003 and the New Telecom Policy - 1999 was also amended to this effect. The existing Basic and CMTS licensees were offered migration to UAS Licensing Regime. All other Basic service providers have migrated to Unified Access Services (UAS) Licensing Regime. However, till date 53 CMTS licensees have not migrated to UAS Licensing Regime.

The country is divided into 22 service areas for the purpose of UAS Licensing. Presently, the UAS Licenses are granted under UAS licensing guidelines dated 14.12.2005. For grant of UAS Licenses the applicant is required to pay non-refundable entry fee which varies between Rs. 1 Crore and Rs. 233 Crores depending on the service area. Annual license fee is payable in the form of revenue share which depends on the category of service area. In addition to annual license fee, the service providers are also required to pay spectrum charges, if they are using Wireless frequency spectrum for providing Access Services.

The number of telephone subscribers as on 30th June 2008 is 325.78 million which includes 266.86 million mobile subscribers. The average Teledensity in India

is 28.33. The total number of Access services Licensees in the country including Basic, CMTS and UAS are 279. The number of UAS licensees in each service area varies from 12 to 13.

### **NATIONAL LONG DISTANCE SERVICE**

National Long Distance (NLD) service was opened to the private sector w.e.f. 13 August 2000. Indian registered companies having a net worth of Rs. 2.5 crore and paid up equity of Rs. 2.5 crore are eligible to apply. The total foreign equity in the applicant company must not exceed 74 per cent at any time during the entire licence period. Investment in the equity of the applicant company by an NRI/OCB/International funding agencies is counted towards its foreign equity. The entry fee of Rs. 2.5 crore is to be submitted before signing the licence agreement. There is no restriction on number of operators. An NLD operator can carry inter-circle traffic in the country. The licence for NLDO is issued on non-exclusive basis, for a period of 20 years and is extendable by 10 years at one time. In addition to Bharat Sanchar Nigam Ltd (BSNL) 18 more companies have signed licence agreement for National Long Distance Service. The competition resulted in lowering of tariff.

### **INTERNATIONAL LONG DISTANCE SERVICE**

The International Long Distance (ILD) service is basically a network carriage service, providing International connectivity to the network operated by foreign carriers. In accordance with the New Telecom Policy-1999, the Government opened the International Long Distance Service from 1st April 2002 for private operators. There is no restriction on the number of operators. The Indian registered companies having a net worth of Rs. 2.5 crore are eligible to apply. The total foreign equity in the applicant company must not exceed 74 per cent at any time during the entire licence period. Investment in the equity of the applicant company by an NRI/OCB/International funding agencies is counted towards its foreign equity. The entry fee of Rs. 2.5 crore is to be submitted before signing licence agreement along with Performance Bank Guarantee of Rs. 2.5 crore. The licence is valid for 20 years from the date of licence agreement. So far 18 companies have signed licence agreement for International Long Distance service.

### **INFRASTRUCTURE PROVIDER CATEGORY-I (IP-I)**

The applicant company for IP-I requires registration only with DoT. Companies registered as IP-I can provide assets such as dark fibre, right of way, duct space and tower. All Indian Registered companies are eligible to apply. There is no restriction of foreign equity and number of entrants. There is no entry fee and bank guarantee. The applicant company is required to pay Rs. 5,000 as processing fee along with the application. So far 203 companies have been registered as Infrastructure provider Category-I.

### **CELLULAR SERVICES**

The country is divided into 19 (Nineteen) Telecom Circles Service areas and 4 (Four) Metro Service areas for the Cellular Mobile Telephone Service (CMTS) as well as Unified Access Services (UAS). The Chennai Metro and Tamil Nadu telecom Circle

Service Areas have been merged for the new licences w.e.f. 15th September 2005. There are 5-8 access service providers in each service area. At present there are over 185.13 million (as on 30.06.2007) cellular subscribers and are growing at the rate of six to eight million per month. Presently, there are 60 CMTS licences. The Licence fee, which is in the form of revenue share, is 6 per cent/8 per cent/10 percent of the adjusted gross revenue, depending on the area of their operation.

#### **VOICE MAIL/AUDIOTEX/UNIFIED MESSAGING SERVICE**

New policy for Voice Mail/ Audiotex Service, in terms of NTP-1999 was announced in July 2001 by incorporating a new service, namely, Unified Messaging Service (UMS) is a system by which voice mails, fax and e-mails (all three) can be received from one mail box using telephone instrument, fax machine, mobile phones, internet browsers etc. Presently, eleven companies have 17 licences to provide these services in seven cities.

#### **POLICY FOR PUBLIC MOBILE RADIO TRUNK SERVICE**

Policy for Public Mobile Radio Trunk Service (PMRTS) in terms of NTP-1999 was announced on 1 November 2001. PSTN connectivity is also permitted to PMRTS service. Presently 15 companies are granted 45 licences to provide these services in 3 Metros & 10 Circles. The Licence fee, which is in the form of revenue share, is 5 per cent of the adjusted gross revenue.

#### **POLICY FOR GLOBAL MOBILE PERSONAL COMMUNICATION BY SATELLITE**

Policy for grant of licence for Global Mobile Personal Communication Satellite (GMPCS) service in terms of NTP-1999 was finalized & announced on 2 November 2001.

The process of grant of GMPCS License is a very involved process. The application of GMPCS license containing the entire proposal is submitted to Law Enforcing Agency for Security Clearance. The LOI is issued after the proposal is cleared from security angle by an Inter-Ministerial Committee comprising of Secretary, Cabinet Secretariat, Defence Secretary, Home secretary, Secretary (Deptt. of Space) and Director (Intelligence Bureau).

At present LOI for GMPCS license has been issued to one applicant company and the license is yet to be signed. The process also involved testing of the GMPCS Gateway and Earth Station with respect to Security Monitoring.

The Licence fee, which is in the form of revenue share, is 10 per cent of the adjusted gross revenue and entry fee is Rs 1 crore.

#### **Other service providers**

- (i) Registration of call centers (International & domestic), Network Operation Centres & Vehicle tracking Systems is being done under OSP category.
- (ii) Over 2500 cases have so far been registered under OSP category at DoT HQ.
- (iii) Registration of Call Centres under OSP Category and of Telemarketers under Telemarketing Category was earlier decentralized from DoT HQ to VTM Cells in 10 Circles w.e.f. 01.09.2007. Further w.e.f. 01.06.2008 the work has been decentralized to all VTMs. However, the CS Cell shall handle the policy issues of OSP and Telemarketers.

- (iv) Recently, the OSP Registration Policy has been revised on 05.08.2008 and as per new policy, work from Home concept has been permitted for call center OSP's.

## TRAINING INFRASTRUCTURE

Bharat Sanchar Nigam has an elaborate Training set up of 42 Training centres which includes 3 (Three) Apex level Training centres Viz Advance level Training Centre (ALTTC) at Ghaziabad, Bharat Ratna Bhim Rao Ambedkar Institute of Telecom Training (BRBRAITT) at Jabalpur, National Academy of Telecom Finance and Management (NATFM) at Hyderabad & 39 other Telecom Training centres at Regional, Circle and District levels. These Training Centres cater to the training needs of all BSNL employees i.e.. executives & non-executives in various disciplines viz. Telecommunication Technology, Management, Computer, Finance, Building Science etc.

ALTTC, Ghaziabad established by the Government of India in 1975 with the assistance of United Nations Development Programme (UNDP) and International Telecommunications Union (ITU), is one of the leading telecom training centres of Asia and caters to training needs of BSNL and Telecom Administration of member countries of ESCAP and APT. The centre develops and imparts training in High Tech-telecommunications and Modern Management practices for the Base, Middle and Top level Telecom engineers and Managers. It functions as resource centre in providing developed course materials, audio visual instructional aids, computer based training, software etc. The centre also provides training to trainers. ALTTC, Ghaziabad is an ISO 9001-2000 certified institute.

BRBRAITT, Jabalpur is another premier institute of BSNL providing high quality training in Telecommunication and Information Technology. It is also ISO 9001-2000 certified for quality teaching. Other training centres fall into a hierarchical set up of Regional, Circle & District levels of training.

ISO certification is available for BRBRAITT Jabalpur, ALTTC Ghaziabad, RTTC Thiruvananthapuram, RTTC Mysore, CTTC Mysore, RTTC Hyderabad, RTTC Kalyani, RTTC Chennai, RTTC Ahmedabad, CTTC Ahmedabad, RTTC Jaipur, RTTC Lucknow, RTTC Nagpur, CTTC Indore, RTTC Pune, RTTC Rajpura, CTTC Rajpura, CTTC Sunder Nagar, CTTC Jammu, CTTC Kurukshetra, CTTC Thiruvananthapuram & RGM TTC Chennai. Other training centres are also attempting to certify themselves to ISO standards.

In order to have a centralized facilitation and monitoring of the overall training activities of BSNL, across the country, computerization of these activities have been done through launch of CTMS (Computerised Training Management System) package. A network of training co-ordinators has been put in place covering all the SSA units so as to effectively handle the 'Training Plans' for each of the units, attempting to make the training 'need based' and 'relevant'. With the fast changing technological scenario, BSNL is regularly reviewing its training infrastructure to meet the competitive demands of the sector.

In addition to above, a bottom-up approach of training through 'Staff Empowerment Initiative' has been launched to encourage the staff to directly project their own vision of skill upgradation.

## FDI POLICY FOR THE TELECOM IS AS UNDER

Sr.	Sector/Activity	FDI Cap/Equity	Entry route	Other Conditions	Relevant Press Note
1.	Basic and cellular, Unified Access Services, National/International Long Distance, V- Sat, Public Mobile Radio Trunked Services (PMRTS) Global Mobile Personal Communications Services (GMPCS) and other value added telecom services	74% (including FDI, FII, NRI, FCCBs, ADRs, GDRs, convertible preference shares, and proportionate foreign equity in Indian promoters/ Investing Company) 74%	Automatic upto 49%.  FIPB beyond 49%	Subject to guidelines notified in the Press Note No. 3 (2007 Series)	PN 3/2007
2.	ISP with gateways, radio-paging, end-to-end bandwidth.		Automatic upto 49%	Subject to licensing and security requirements notified by the Department of Telecommunications.	PN 4/2001
3.	a) ISP without gateway,  b) provider providing dark fibre, right of way, duct space, tower (Category-I);	100%  Infrastructure	FIPB beyond 49% Automatic upto 49%	Subject to the condition that such companies shall divest 26% of their equity in favour of Indian public in 5 years, if these companies are listed in other parts of the world. Also subject to licensing and security requirements, where required.	PN 9/2000 and PN 2/2007
4.	c) Electronic mail and voice mail Manufacture of telecom equipments	100%	Automatic	Subject to sectoral requirements.	PN 2/2000

**LIST OF TRAINING CENTRES  
UNDER BSNL**

**APEX LEVEL**

1. ALTTC, GHAZIABAD
2. BRBRAITT, JABALPUR
3. NATFM, HYDERABAD

**REGIONAL TELECOM TRAINING CENTRES**

S. NO.	TRAINING CENTRE	S. NO.	TRAINING CENTRE
1	AHMEDBAD	9	MYSORE
2	BHUBANESHWAR	10	NAGPUR
3	CHENNAI	11	RANCHI
4	GUWAHATI	12	PUNE
5	HYDERABAD	13	RAJPURA
6	JAIPUR	14	THIRUVANANTHAPURAM
7	KALYANI		
8	LUCKNOW		

**CIRCLE TELECOM TRAINING CENTRES**

S. NO.	TRAINING CENTRE	S. NO.	TRAINING CENTRE
1	AHMEDABAD	11	LUCKNOW
2	INDORE	12	MYSORE
3	BHUBANESHWAR	13	MEERUT
4	KOLKATA	14	NASIK
5	CHENNAI	15	PATNA
6	GUWAHATI	16	RAJPURA
7	JAIPUR	17	SHILLONG
8	JAMMU	18	SUNDERNAGAR (HP)
9	KAKINADA	19	THIRUVANANTHAPURAM
10	KURUKSHETRA		

**DISTRICT TELECOM TRAINING CENTRES**

S. NO.	TRAINING CENTRE	S. NO.	TRAINING CENTRE
1	AHMEDABAD	5	HYDERABAD
2	BANGALORE	6	PUNE
3	KOLKATA		
4	CHENNAI		

## TELECOMMUNICATION ENGINEERING CENTRE

### Introduction

Telecommunication Engineering Centre (TEC) is Technical Wing of DoT provides technical advice to DoT, prepares telecom standards and certifies telecom products for manufacturers & service providers. Its mission is to produce National Standards, Specifications and other technical documents for the deployment of telecom products and services in India. TEC's standards and specifications are closely aligned with market needs and are prepared by the participation of all stakeholders (service providers and manufacturers) and subject experts from prestigious educational institutions like IITs. There is wide acceptance of the products and services certified by TEC in India and abroad.

The Roles and activities of TEC are as below:

- Preparation of standards and specifications for growth and seamless interworking between different networks of service providers.
- Initiative and aggressive action for deploying NGN (Next generation Network) in India and set up world-class NGN test-bed. A Focus Group within TEC is working on the study of NGN that could help various stakeholders and users to understand the subject in the larger national and global context.
- National Focus Group on NGN comprising of all stakeholders is being driven by TEC.
- Fast-track rollout of broadband in the country especially in rural areas by using Wi-Max and PON technologies.
- Certification and approval of equipments and services for different manufacturer's and service providers.
- Republic of India and Republic of Singapore have entered into Comprehensive Economic Cooperation Agreement (CECA), accordingly both the parties have agreed on "Mutual Designation Agreement (MRA) in telecom Sector. TEC is nominated as the Designating Authority (DA) for India.
- Setting up of Conformance Assessment Bodies (CAB) for testing and certification of telecom products for use in India, S.E. Asia and SAARC countries.
- Technical support to DoT and technical advice to TRAI and TDSAT.
- Drawing up Fundamental Technical Plans of DoT.
- Coordination with "National Technology Think-Tank" for the development of the entire Telecom eco-system in India.
- Drawing up of National Disaster Relief and Security Control for Telecom networks.
- Encouraging R&D in telecom by participation of public and private telecom sectors and educational institutions to make India R&D hub in the field of telecommunications.
- Certification to promote indigenisation and manufacturing take - off in India. Active co-operation with C-DOT to develop Telecom Technologies aimed specifically for rural areas.
- International cooperation in matters connected with telecommunications including matters relating to all international bodies dealing with telecommunications such as International Telecommunication Union (ITU), its

Radio Regulation Board (RRB), Radio Communication Sector (ITU-R), Telecommunication Standardization Sector (ITU-T), Development Sector (ITU-D), International Telecommunication Satellite Organization (INTELSAT), International Mobile Satellite Organization (INMARSAT), Intersputnik (International Intergovernmental Space Organisation), Asia Pacific Telecommunication (APT).

**TEC has following technical specialised groups :**

- Information Technology (Data and applications, IPv6 Test bed)
- Switching (New technology switches and Next Generation network (NGN))
- Mobile Communication (2G, 3G/WCDMA, CDMA 2000 1X, Wi-Max)
- Value Aided Services (for wireline and wireless networks)
- Network terminals and devices
- Transmission (terrestrial, OFC, GPON, EPON, outdoor Plant)
- Radio and Satellite Transmission
- Spectrum

**Standardisation**

Standardization is an essential requirement for the open exchange of information between equipment and networks. No network can work without standards. TEC prime objective isto support global harmonisation by preparing standards in which all the major stakeholders contribute actively.

TEC evolves generic, interface, service requirements and specifications for various telecomproducts, equipments and services for all the service providers for seamless interworking of different networks of various service providers.

**Tests and Approvals**

TEC tests and approves various telecom products for evaluation of technology and their interconnection in the network, and for service quality testing of licensed service providers.

**Technical Support**

TEC provides support and advice on various technical issues to DoT, for formulating fundamental plans, technology plans, technology plans, technology evaluations etc.

**Publications**

TEC publishes following documents:

- Generic Requirements (GR),
- Interface Requirements (IT)
- Standard Requirements (SD)
- Service Requirements (SR)
- Approval Procedure Documents
- Technology White Papers
- TEC Newsletter: Contains technical articles and highlights TEC Activities
- Compendium on Next Generation Network (under publication)

TEC has launched new website [www.tec.gov.in](http://www.tec.gov.in) and most of the information has been made available on TEC website.

### **CENTRE FOR DEVELOPMENT OF TELEMATICS (C-DOT)**

Centre for Development of Telematics (C-DOT) is the Telecom Research and Development Centre of the Government of India. C-DOT develops total telecom solutions, technologies and applications for the fixed-line, mobile and packet-based converged networks and services. C-DOT's current focus is on projects for defense and security agencies, developing systems for packet based next generation networks including migration solutions. C-DOT is also giving importance to software intensive products and solutions including turnkey and develop, build and operate model projects. Projects to cater to other national requirements to bridge the digital divide and those for North Eastern region and to develop enterprise and broadband solutions are also part of the schemes.

C-DOT's product portfolio includes Advanced Intelligent Network solutions, Access Network products, Wavelength Division Multiplexing (WDM) systems, Satellite Communication systems, Network Management Systems, Operation Support Systems, Cell and Packet technologies for voice & data communications and Rural Wireless Access and Broadband Solutions based on software defined and Cognitive Radio. C-DOT continues upgrade the legacy systems deployed in the field.

C-DOT has chosen various models of cooperation with different partners to pool strength and get closer to the market. The project partnership, co-branding, value addition and adaptation are some of the new strategies besides its earlier methodology of technology transfer adopted for fixed line switching products.

### **WIRELESS PLANNING AND COORDINATION WING**

Wireless Planning and Coordination (WPC) Wing, established in 1952, is the national radio regulatory authority responsible for coordination and regulation of radio spectrum usages in the country. It is a nodal agency for all matters concerning International Telecommunication Union (ITU), a specialized agency of the United Nations for all telecommunication matters and Asia Pacific Telecommunity (APT), an inter-governmental organization of the region, WPC assisted by its Monitoring Organisation performs all functions related to planning, coordination, assignment, regulation and administration of the usage of the radio frequencies in India, clears site for installation of wireless stations and issues licenses for establishment, maintenance and working of wireless stations in India under the Indian Telegraph Act, 1885.

It is responsible for all matters concerning assignment of frequencies for all terrestrial, Geo-stationary Satellite Orbit (GSO) and Non-GSO based satellite networks, including positions in GSO and necessary coordination in this regard both at national and international levels. It also conduct examinations for award of certificate of proficiency for aeronautical and maritime mobile services and for radio amateurs. The decision of Government of India to make available basic mobile as well as value added services, FM Radio & Satellite TV/DTH by the private service providers, increase of broadcast coverage as well as Information Technology Sector with the liberalization of economy, has resulted in a very large increase in demand on the radio spectrum and orbit resources, which are limited natural resources.

The trend of modern telecommunication is towards increased mobility with higher data speeds. Mobile communications are possible through wireless only. This

has placed greater demands on the already scarce resource of RF spectrum. The mobile services have brought about a revolution in the Indian telecom sector, besides immense socio-economic benefits. The WPC Wing is trying to meet the challenge and provide essential spectrum for new services/technologies through spectrum refarming etc.

**ACTUAL INFLOW OF FDI IN TELECOM SECTOR FROM AUGUST 1991 TO MARCH, 2008**

(Rs. in crore)

Year	FDI INFLOW	YEAR	FDI INFLOW
August 1991 to December 1999	50202	2000	3428
		2001	42478
		2002	7749
		2003	6910
		2004	6004
		2005	7062
		2006	41702
		2007	43542
		2008 (till March)	8704
	<b>Total</b>	<b>217,781</b>	

## **PUBLIC SECTOR UNDERTAKINGS**

### **BHARAT SANCHAR NIGAM LIMITED**

The Bharat Sanchar Nigam Limited (BSNL) was formed on 1st October 2000 by corporatization of the erstwhile Department of Telecom services. The company has taken over the erstwhile functions of the Department of Telecom in respect of provision of telecom services across the length and breadth of the country.

BSNL is a 100% Govt. of India owned Public Sector Undertaking with a paid up capital of Rs. 12,500 crore comprising of Rs. 5000 crore of Equity and Rs. 7500 crore of 9% Preference shares & a net worth of Rs. 88,128 crore as on 31.03.2008.

Its annual revenue during 2007-08 was over Rs. 38,053 crore.

BSNL is a technology-oriented company and provides all types of telecom services namely telephone services on landline, WLL and mobile, leased circuits. Internet, Broadband and long distance telecom service.

BSNL employs 3.08 lakh personnel as on 31.03.08, most of whom were transferred from DTS & now has been absorbed in BSNL.

The company has also been in the forefront of technology with 100% digital new technology switching network. The vast switching network for landlines comprises 38,244 exchanges having a capacity of 465.92 lakh lines as on 31.07.2008. BSNL's nation-wide telecom network covers all District Headquarters, Sub-Divisional Headquarters, Tehsil Headquarters and almost all the Block Headquarters. As on 31.07.2008 BSNL has a customer base of 306.57 Lakh telephones on Landlines.

BSNL has deployed equipment of CDMA technology based Wireless in Local Loop (WLL) Network. As on 31.07.2008, 46.17 lakh telephones are working on WLL with a total equipped capacity of 74.39 lakh lines. 2,580 SDCAs out of 2642 SDCAs have been provided with at least one BTS.

BSNL launched its country wide GSM based Cellular Mobile Services on 19.10.2002. BSNL mobile network covers almost all the cities and substantial length of national highways, rail routes and state highways. The Cellular services of BSNL are also providing incidental coverage to the rural areas falling en route to national and important state highways. As on 31.07.2008 BSNL has a customer base 37.92 million and equipped of 34.32 million with incidental coverage in more than two Lakh villages.

BSNL has launched its Broadband services in January 2006 and had provided 24.57 lakhs connections till 31.07.2008, BSNL has provided Broadband services in 589 out of 621 DHQ, 2, 698 out of 6,374 BHQ and 30,124 out of 593,601 villages.

BSNL is providing Internet Service on dial-up. As on 31.07.2008. It has customer base of around 5.5 lakh.

BSNL has provided 2.59 crore telephone connections in rural areas.

Out of 5.94 lakh villages (as per Census 2001) 5.22 lakh villages have already been provided with VPTs by BSNL upto 31.07.2008

Value Added Services: BSNL is providing a lot of Value Added Services on Broadband & Mobile network like News, Finances, Entertainment,. Travel, TV schedule, Shero shayari, Ringtones, Cricket, Jokes, Astrology, Games, Radio, exam results, Religious & spiritual line, Health tips, Matrimonial, Horoscope, Music, phone radio, live chart, Interesting facts, News, Polyphonic tunes, Wallpapers, Cricket, color logos, animations, video clips, etc.

BSNL has wide spread Optical Fibre cable network of more than 5.5. Lakh RKMs. It has more than 50,000 RKMs of Digital Microwave in addition to 216 satellite stations.

BSNL started its ILD operations in the year 2004. Presently BSNL is hering ILD.

BSNL has commissioned submarine cable to Sri Lanka.

### **MAHANAGAR TELEPHONE NIGAM LIMITED**

The Mahanagar Telephone Nigam Limited (MTNL) came into existence on 1 April 1986 as a company wholly-owned by the Government under the Department of Telecommunication, Ministry of Communications. MTNL is entrusted with the Management, Control and Operation of telecom services (excluding public telegraph service) in metropolitan limits of Mumbai & Navi Mumbai (including Kalyan, and Thane, for mobile service) and Delhi (including four towns Noida, Gurgaon, Faridabad & Ghaziabad for mobile service).

The authorized equity share capital of MTNL is Rs. 800 crore, the paid up capital is Rs. 630 crore. The Government now owns about 56.25 percent of MTNL's paid up capital.

The last decade and a half been an eventful period in the existence of MTNL. There has been all round development and growth and improved operational efficiency. MTNL provides a host of telecom services that include fixed telephone service, (GSM based Mobile service, and CDMA based Wireless in Local Loop and

limited mobile, internet Broadband on ADSL 2+ technology and Leased Line services.

MTNL is among the few PSU's listed on New York Stock Exchange (NYSE).

The network of MTNL is now fully digital. MTNL has 343 telephone exchanges in Delhi and 210 in Mumbai as on 31.07.2008. The total Switching capacity is 9.72 million and MTNL is operating 7.43 million direct exchange lines including cellular lines as on 31.07.2008. MTNL has also provided a total 35.37 Lakh GSM connections, 13.69 lakh Internet connections and 5.93 lac Broadband connections as on 31.07.2008.

MTNL started GSM based cellular mobile telephone service in February 2001 both in Delhi and Mumbai under the brand name 'DOLPHINE'. GSM Network has been expanded continuously during the period and is now having GPRS / EDGE facility. The present capacity of the n/w is 3100000 lines with 3537248 working connections (prepaid + Postpaid). Seeing the rising demand, the GSM n/w in Delhi has been expanded by 750 K lines in March 2008 with enhanced capacity on IN, HLR, etc. 500 K GSM in Mumbai are also being added by 09/08. MTNL is also introducing 3G service for which a capacity of 750 K in each Delhi and Mumbai is being ordered. Around 710 Nodes B in each city are being planned in addition to indoor solutions covering the whole area under MTNL Delhi and Mumbai.

MTNL has launched CDMA based limited mobility service in both the cities during the year 2001-02 with the brand name 'GARUDA'. MTNL has also commissioned a state of art 400K CDMA 2000 1X network in each Delhi and Mumbai in 2005-06 which provides voice, high speed data & SMS, VMS other value added service. Nearly 1.26 lakhs and 1.53 lakhs CDMA connections (Fixed + Mobile) are working as on 31.07.08 in Delhi & Mumbai respectively. Lot of Value added services have been offered to CDMA subscribers.

MTNL is also providing Broadband on ADSL 2+ to landline customers. Total customer base is 5.93 lacs as on 31.07.08. Boardbrand service of MTNL is very popular. The Broadband n/w has been expanded by 1.50 lac lines in Delhi and 50 K lines in Mumbai recently & expansion of 50 K lines in Mumbai is in progress. Equipment for another 2.5 lakh capacity has been ordered and further tender for 1 million capacity has been floated.

MTNL has also floated an EOI for introduction of Wi-Max on revenue share basis. Pilot projects have been started in both Delhi and Mumbai for providing Wi-Max services.

MTNL has commissioned a state of art IP/MPLS core network in Delhi and Mumbai to provide a converged IP network for all services. This network is currently carrying MTNL's Broadband, IPTV and GSM traffic.

MTNL has planned to induct next generation Network (NGN) in line with the emerging trends. P.O. has already been placed for 24K Tandem Capacity Tandem Capacity and equipment is under installation.

MTNL has placed a PO for the supply of 42 terminals (for Delhi and Mumbai) of 40 channel 10 GB/channel DWDM equipment to strengthen its transmission network. Presently the testing of the equipment is going on and the installation is expected to start soon.

MTNL is further adding optical fiber in its access network and is planning to introduce FTTH based on G-PON so as to provide all of its important customers with

fiber connectivity to their homes in order to meet their further increased bandwidth requirement of both data and video applications.

A state of the art convergent billing and CRM system is under installation. This will facilitate CDR based billing, single bill for all services to the subscribers. Flexibility in billing, single bill for all services to the subscribers, flexibility in billing and innovative tariff packages for subscribers and thus will help in reducing billing complaints.

In addition to the telephone service, MTNL is providing a variety of services:

- IN based Services which include premium rate service, Pre-paid service, etc.
- Phone plus services such as computerized morning alarm, voice mail, call forwarding, call waiting etc.
- MTNL has introduced lot of Value Added Services like News, Gaming and cricket information in line with the emerging trends in both PSTN/Mobile network.
- Internet based services like E-mail, internet telephony, web hosting, web surfing etc. are also added.
- ITPV to the landline subscribers on the broadband connection has also been launched. Nearly 5000 PTV connections have been subscribed in Delhi and approx 4000 in Mumbai.
- MTNL has also launched VOIP services in Delhi and Mumbai. Nearly 2000 Customers have subscribed the service each in Delhi and Mumbai.
- Recently MTNL has launched M Commerce service in Delhi. Payment of bills (PSTM & GSM) can be made through this platform by a GSM Customer.

MTNL is also taking care of its customer with the measure like:

- MTNL has taken a lot of measures to facilitate easy payment of telephone bills to meet the all segment of society viz. On line. ECS, through Master Card at selected petrol pumps and through automatic teller machines, easy bill centers etc.
- Loyalty scheme & special care of corporate customers.
- MTNL has also launched various CRM service such as automatic rent rebate, charge, changed number announcement service, customer service management system etc.
- MTNL is operating call centre/help lines for the customers to book their grievance.
- MTNL is revising tariffs from time to time to suite all segments of society.
- Online booking of different services and complaints for PSTN, BE, GSM, CDMA (M) are now available.
- MTNL is having Sanchar Haats at Delhi and Customer Service Centers (CSCs) at Mumbai, where customer can get various services like registration for new service, duplicate bills of cellar connection bill payment, VCC cards etc.

MTNL & STPI have joined hands for setting up data centre for Web-Farming application through a newly opened company MTNL-STPI ltd., with 50-50% equity participation. It is proposed to provide exclusive Data center services. Messaging

services, Business application services to the identified sectors of economic activity and thereby also popularizing the *.in domain* in the networked community across the world.

MTNL is keen in expanding its overseas operations and currently is in the process of exploring the potential in a few Asian and African countries. United Telecom Limited (UTL), a joint venture involving MTNL, TCIL, VSNL, and Nepal Ventures Private Limited commenced ILD and Wireless in Local Loop Services as the first private-sector telecommunications operators in Nepal through a 100% subsidiary in Mauritius by the name of Mahanagar Telephone Mauritius Limited (MTML). MTNL has begun to offer ILD services, fixed wireless services and mobile services.

MTNL through Millennium Telecom Ltd. (MTL), joint venture of MTNL and BSNL, is planning to lay Submarine cable, connecting both East & West Coast of India to South-East Asia & Middle-East with an ultimate intent to connect to Europe & USA.

#### **ITI LTD.**

ITI Limited, a Public Sector Undertaking under Department of Telecommunication has six manufacturing units at Bangalore, Rae Bareilly, Naini, Mankapur, Srinagar and Palakkad. They manufacture a range of telecom related equipments. The Company is incurring losses continuously and has been declared sick under section 17/2 of SICA, 1985. However, the Govt. is putting in serious efforts to revive the company. 30% reservation quota from BSNL/MTNL is given to ITI Exemption from provision of bid security and performance band guarantee is also being given by BSNL/MTNL.

Govt. has provided an assistance of Rs. 377 crore to ITI in September 2007 towards outstanding statutory dues of ITI and reimbursement of VRS expenditure etc.

A revival proposal submitted by and ITI Ltd has been referred to Board for Reconstruction for Public Sector Enterprises (BRPSE) in April, 2008.

The major handicap faced by the Company is its high overhead cost by way of around 4800 surplus manpower out of a total of 13045 (as on 31.3.2008). Though this revival plan envisages reducing the surplus manpower by way of Voluntary Retirement Scheme (VRS), it is also working on training and re-deployment to handle latest technology and turnkey solutions.

#### **TELECOMMUNICATION CONSULTANTS INDIA LIMITED**

The Telecommunications Consultants India Limited (TCIL) set up in 1978 is now a multi disciplinary telecom organization which provides complete telecom solutions from concept to completion. The core competence of the company is in turnkey execution of Communication Network Projects. i.e., backbone and access as also IT Networks, for basic, GSM, CDMA, microwave, Satellite, Radio Trunking and either captive networks besides Switching & Transmission, Rural Communications, e-Governance, e-Education. Tele-medicine etc. The company has formed a joint venture in Rajasthan for operation of GSM services in that State and other joint venture in Nepal for operation of CDMA based WLL communication services in that country. TCIL has been awarded the prestigious Pan African Project, which is aimed at providing Tele-education and Tele-medicine to 53 countries in the African Region. TCIL has also got such works to provide tele-medicine facilities for Bhutan and other SAARC countries.

TCIL has executed/is executing projects in 60 countries in the Middle East, South East Asia, Africa, Europe and Central Asia. Starting with a seed equity of Rs. 30 lakh the company through 5 issues of bonus shares has equity of Rs. 28.80 crore as on date. The company achieved a turnover of Rs. 415 crore during the year 2007-08 and has a net worth of about Rs. 400 crore.

### **INTERNET**

As on 31st August 2008 there are 355 Licenses for Provision of internet Services. Based on reports received from Internet Service Providers, there are approx. 11.05 million Internet subscribers in India as on March 2008.

### **VERY SMALL APERTURE TERMINALS (VSATS)**

In total 33 companies / organizations have been issued licenses for setting up and operating captive VSAT network via INSAT Satellite system for their Closed User Group (CUG) Communication. In addition, 11 commercial VSAT licensees are operating commercial VSAT service who are permitted to offer VSATs and 284 Earth stations are operational in India. FDI increased from 49% to 74%.