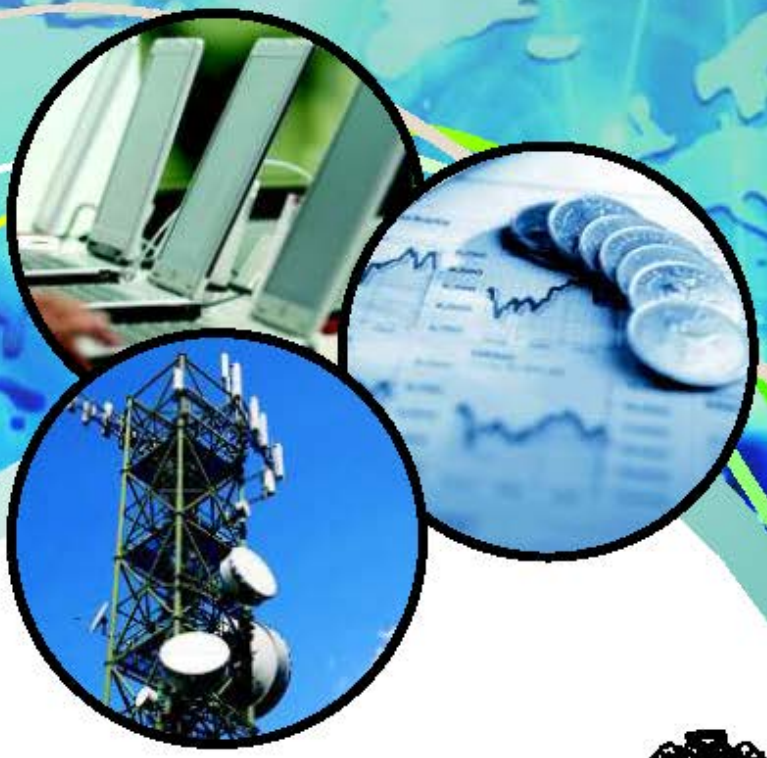
# ANNUAL REPORT
# 2012-13



**Department of Telecommunications**
**Ministry of Communications & Information Technology**
**Government of India**
**New Delhi**

# ANNUAL REPORT
# 2012-13


**DEPARTMENT OF TELECOMMUNICATIONS**
**MINISTRY OF COMMUNICATIONS &**
**INFORMATION TECHNOLOGY**
**GOVERNMENT OF INDIA**
**NEW DELHI**

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# I. INDIAN TELECOM SECTOR : AN OVERVIEW

Telecommunications has evolved as a basic infrastructure like electricity, roads, water etc. and has also emerged as one of the critical components of economic growth required for overall socio economic development of the country. The Indian telecom sector has registered a phenomenal growth during the past few years and has become second largest telephone network in the world, only after China. A series of reform measures by the Government, the wireless technology and active participation by private sector played an important role in the exponential growth of telecom sector in the country. National Telecom Policy-2012 (NTP-2012) has been announced during the current year with the primary objective of maximizing public good by making available affordable, reliable and secure telecommunication and broadband services across the entire country.

## Present Status

The Indian telecom network with 895.51 million telephone connections, including 864.72 million wireless telephone connections, at the end of December 2012 is second largest network in the world after China. Out of this, 338.59 million telephone connections are in rural areas and 556.92 million are in urban areas of the country. There were 24.01 million Internet subscribers including 14.68 million Broadband subscribers at the end of September 2012. The number of Broadband subscribers increased to 14.98 million, end of December 2012.

### Present Status of the Telecommunication Sector (As on December 31, 2012)

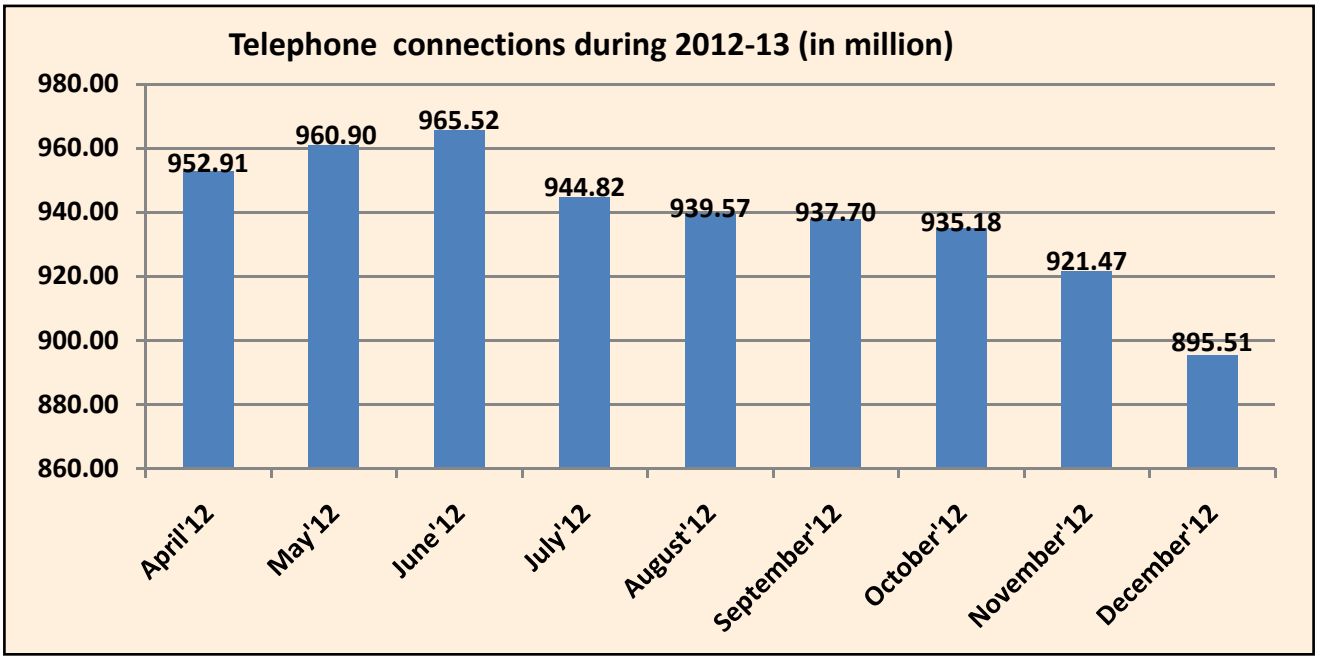
- Indian telecom network is second largest in the world after China.
- The country has 895.51 million telephone connections, including 864.72 million wireless telephone connections.
- Overall tele-density in the country is 73.34%.
- Urban tele-density is 149.55%, whereas rural tele-density is 39.90%.
- The share of wireless telephones in total telephones is 96.56%.
- The share of private sector in total telephones is 85.51%.
- Number of Broadband connections is 14.98 million.

## Network status during current financial year (2012-13)

The total number of telephones continued to increase till June 2012 and increased from 951.35 million to 965.52 million during the period April to June 2012. Thereafter, number of telephone

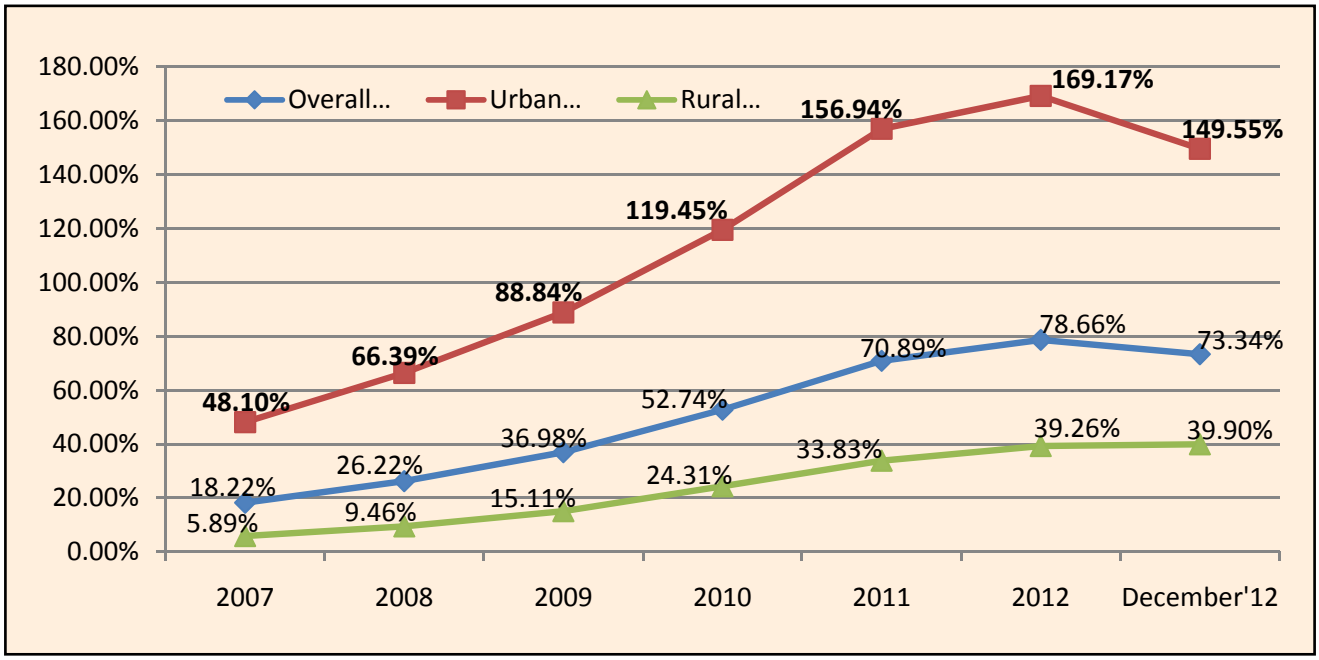
connections declined to 895.51 million by the end of December 2012. The decline in telecom user base after June 2012 has been primarily due to the removal of inactive mobile telephone connections by the service providers. The rural telephones have increased from 330.83 million to 343.88 million during the period April to June 2012 and declined thereafter to 338.59 million by the end of December 2012. The urban telephones increased from 620.52 million to 621.65 million during the period April to June 2012 and then declined to 556.92 million by the end of December 2012.

The Chart below indicates the number of connections at the end of each month during the year 2012-13 (April - December 2012).




## Tele-density

Tele-density, which shows the number of telephones per 100 population, is an important indicator of telecom penetration in the country. Tele-density, which was 78.66% at the end of March 2012, increased to 79.58% by the end of June 2012 and then declined to 73.34% by the end of December 2012. Among the service areas, Tamil Nadu (109.64%) has the highest tele-density followed by Himachal Pradesh (102.76%), Punjab (101.92%), Kerala (100.76%) and Karnataka (91.26%). Among the three metros, Delhi tops with 220.00% tele-density, followed by Mumbai (159.57%) and Kolkata (155.10%). On the other hand, the service areas such as Assam (46.50%), Bihar (46.53%), M.P. (52.23%), U.P. (56.20%), West Bengal (56.85%) and J&K (58.41%) have comparatively low tele-density. There has been slight improvement in the rural tele-density during 2012-13 and it increased from 39.26% at the end of March 2012 to 39.90% at the end of December 2012. However, the urban tele-density decreased from 169.17% to 149.55% during this period.




## Composition of telephones

### A. Public vs Private

Operator-wise classification, at the end of December 2012, reveals that PSUs still have a large share of nearly 79.57% in the wire line segment. Private operators, on the other hand, have a share of 87.83% in the wireless segment. Overall, Bharti Group with 20.68% of the total telephones, both landlines and mobiles taken together, in the country has the largest share followed by Vodafone Group (16.47%), two PSUs BSNL & MTNL put together (14.49%), Reliance (13.38%) and Idea (12.72%) etc.

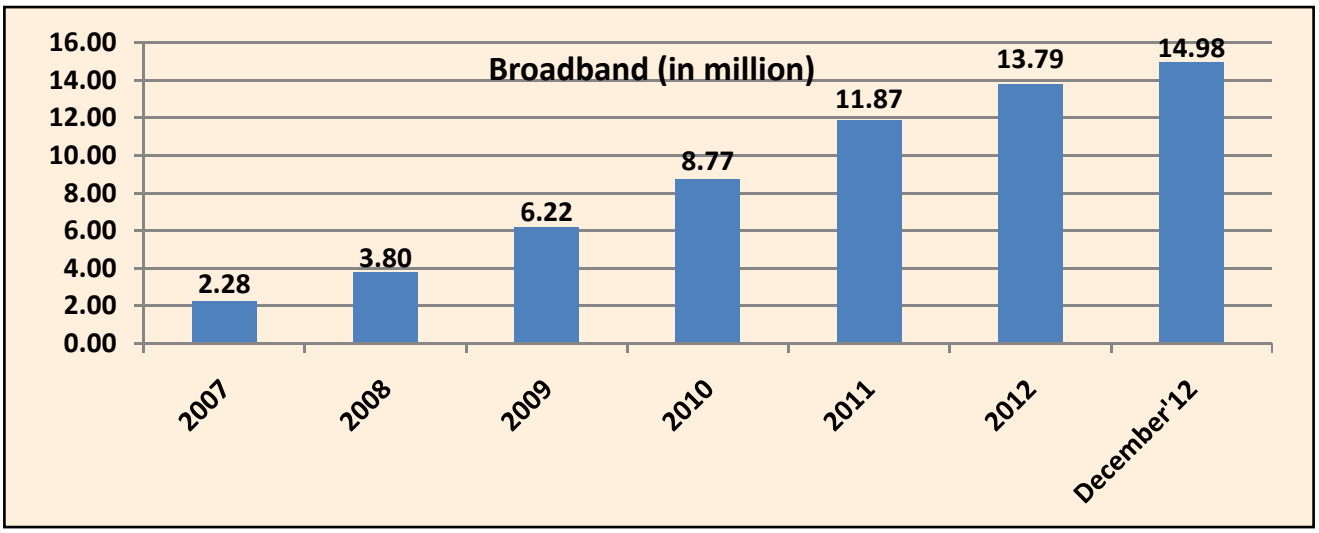
The share of private sector, in terms of number of subscribers, increased from 86.31% to 86.64% during the period from April to June 2012 and thereafter declined to 85.51% by the end of December 2012. On the other hand, share of public sector declined from 13.69% to 13.36% during the period April to June 2012 and then increased to 14.49% by the end of December 2012.

### B. Wire line vs Wireless

As far as the technology is concerned, the preference for use of wireless telephony continues. The share of wireless telephones increased from 96.62% as on 31.03.2012 to 96.74% by the end of June 2012 and thereafter slightly declined to 96.56% by the end of December 2012. On the other hand, the share of landline telephones slightly increased from 3.38% to 3.44% during the period from April to December 2012.

## Broadband

Increase in Broadband connectivity is being seen as an integral driver of improved socio-economic performance. Broadband services empower masses and allow individuals to access new career and educational opportunities, help businesses reach new markets and improve efficiency and enhance the Government's capacity to deliver critical services like health, banking and commerce to all of its citizens. There were 14.98 million Broadband subscribers in the country by the end of December 2012.




Provision of Broadband in rural and remote areas will also help in bridging 'digital divide' and the widespread adoption of broadband in rural areas will have a multiplier effect over the long-term. It will help improve productivity in rural areas, help overcome the constraints of an inadequate transport infrastructure and overall improve the quality of life in rural areas. Given the significant economic and social benefits, expanding affordable access to broadband has become a high priority for the Government. Various schemes have been launched by USOF for providing broadband connectivity to rural & remote areas.

## National Telecom Policy-2012 (NTP-2012)

The Government approved National Telecom Policy-2012 (NTP-2012) on 31st May 2012 which addresses the Vision, Strategic direction and the various medium term and long term issues related to telecom sector. The primary objective of NTP-2012 is maximizing public good by making available affordable, reliable and secure telecommunication and broadband services across the entire country. The main thrust of the Policy is on the multiplier effect and transformational impact of such services on the overall economy. It recognizes the role of such services in furthering the national development agenda while enhancing equity and inclusiveness. Availability of affordable and effective communications for the citizens is at the core of the vision and goal of the NTP-2012. The Policy also recognizes the predominant role

of the private sector in this field and the consequent policy imperative of ensuring continued viability of service providers in a competitive environment. Pursuant to NTP-2012, these principles would guide decisions needed to strike a balance between the interests of users/ consumers, service providers and government revenue.

The objectives of the NTP-2012, inter-alia, include the following:

- Provide secure, affordable and high quality telecommunication services to all citizens.
- Strive to create ***One Nation - One License*** across services and service areas.
- Achieve ***One Nation - Full Mobile Number Portability*** and work towards ***One Nation - Free Roaming***.
- Increase rural tele-density from the current level of around 39 to 70 by the year 2017 and 100 by the year 2020.
- To recognize telecom, including broadband connectivity as a basic necessity like education and health and work towards **'Right to Broadband'**.
- *Provide affordable and reliable* broadband-on-demand by the year 2015 and to achieve 175 million broadband connections by the year 2017 and 600 million by the year 2020 at minimum 2 Mbps download speed and making available higher speeds of at least 100 Mbps on demand.
- Provide high speed and high quality broadband access to all village panchayats through a combination of technologies by the year 2014 and progressively to all villages and habitations by 2020.
- Recognize telecom as Infrastructure Sector to realize true potential of ICT for development
- Address the Right of Way (RoW) issues in setting up of telecom infrastructure.
- Mandate an ecosystem to ensure setting up of a common platform for interconnection of various networks for providing non-exclusive and non-discriminatory access.
- Enhanced and continued adoption of green policy in telecom and incentivize use of renewable resources for sustainability.
- Achieve substantial transition to new Internet Protocol (IPv 6) in the country in a phased and time bound manner by 2020 and encourage an ecosystem for provision of a significantly large bouquet of services on IP platform.

## Manufacturing of Telecom Equipment

With the advent of next-generation technologies and operators rolling out 3G and broadband wireless access services, the demand for telecom equipment has increased rapidly. In an attempt to capitalize on this opportunity, the government and policy makers are focusing on developing the domestic manufacturing industry. Promotion of Telecom Equipment Manufacturing has also been included in the objectives of NTP-2012.

With a view to increase share of domestically manufactured electronic products which includes telecom equipment also, the Government has laid down the policy for providing preference to domestically manufactured electronic products (including telecom equipment) in procurement. Department of Telecommunications has accordingly notified telecom products to be procured by all the Ministries or Departments (except the Ministry of Defence) of Government and the agencies under their administrative control and for all Government funded telecom projects. The notification proposes 50% to 100% preferential market access for domestically manufactured telecom equipment with minimum value addition of 25% to 65%.

The import of Telecom equipments including mobile phones, parts and telecom cables during 2011-12 was ₹543146 million and during 2012-13 (upto September 2012) was ₹272235 million. The Export of Telecom equipments including mobile phones, parts and telecom cables during 2011-12 was ₹201989 million and during 2012-13 (upto September, 2012) was ₹109266 million.

## Universal Service Obligation Fund (USOF)

To give impetus to the rural telephony, Government formed a Universal Service Obligation Fund (USOF) by an Act of Parliament. Various schemes have been launched by USOF with a view to improve the penetration of telecom facilities in rural and remote areas of the country.

A total amount of ₹47273.77 crore has been collected under USOF, out of which ₹22472.21 crore has been utilized, till 31.12.2012 and available potential balance was ₹24801.56 crore.

## National Optical Fiber Network (NOFN)

Government approved a project, at a cost of ₹20,000 crore, for creating a 'National Optical Fiber Network' (NOFN) to connect all the 2,50,000 Gram panchayats in the country through optical fiber using which the telecom service providers like mobile operators, Internet Service Providers (ISPs), cable TV operators, content providers can launch various services in rural areas. Various applications for e-health, e-education, e-governance etc. will be provided using this network. The project is being funded by USOF and is being executed by a Special Purpose Vehicle (SPV) namely 'Bharat Broadband Network Limited' (BBNL), which has been incorporated on 25.02.2012 under Indian Companies Act 1956.

NOFN Project is envisaged as a Centre-State joint effort. State Governments are expected to contribute by way of not levying any RoW charges. This requires suitable tri-partite MoU to be signed by GOI, State Governments and BBNL. Tri-partite MoU has been signed on 26.10.2012 with 13 States viz. Andhra Pradesh, Arunachal Pradesh, Chhattisgarh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Manipur, Mizoram, Rajasthan, Tripura, Uttar Pradesh, Uttarakhand and 3 Union Territories viz. Dadra & Nagar Haveli, Daman & Diu and Puducherry. A total of about 1,40,727 Gram Panchayats will get covered by Optical Fibre Network in these

States and UTs.

Three Pilot Projects have been completed to cover all Gram Panchayats of Arain Block in Ajmer District (Rajasthan), Panisagar Block in North Tripura District (Tripura), Paravada Block in Vishakhapatnam District (A.P.). As on 15.10.2012, each of the 58 Gram Panchayats in these three Pilot Project Blocks have been provided with 100 Mbps bandwidth.

## Transition to New Internet Protocol (IPv6)

IPv6 (Internet Protocol Version 6) is next generation Internet Protocol. With depletion and exhaustion of address space provided by IPv4 (Internet Protocol Version 4), it becomes essential to transit to IPv6 which provides huge address space and many features for future needs. Countries around the world have started transition to IPv6. India is the first country in the world where any Government has released National IPv6 deployment roadmap with the policy decisions.

## Regulatory Framework

The Telecom Regulatory Authority of India (TRAI) has always endeavored to encourage greater competition in the telecom sector together with better quality and affordable prices in order to meet the objectives of New Telecom Policy, 1999. A number of recommendations on various telecom issues were made by TRAI during 2012-13 which, inter-alia, included recommendation on guidelines for unified licence, auction of spectrum and support for rural wire-line connections installed before 01.04.2002. TRAI also issued various regulations such as Mobile Number Portability (Third Amendment) Regulation 2012, Telecommunication Interconnection (Port Charges) (Second Amendment) Regulations 2012, Telecom Consumers Protection (Fifth Amendment) Regulations 2012, The International Telecommunication Cable Landing Station Access Facilitation Charges and Co-location Charges Regulations 2012, Quality of Service of Broadband Service (Amendment) Regulations, 2012 etc.

TRAI has also taken steps to ensure the quality of service provided by the service providers by way of monitoring the performance of Basic and Cellular Mobile Telephone Service on quarterly basis and also point of interconnection(POI) congestion through monthly reports. The above regulatory measures are expected to facilitate orderly growth of telecom sector by promoting healthy competition and enhancing investment efficiency besides protecting interests of consumers.

## Research & Development

C-DoT, an autonomous body, is Department of Telecom's R&D arm, set-up 26 years back, committed to providing a wide range of cost-effective, indigenously developed and state-of-the-art total telecom solutions.

Starting from the single mission of providing a dial tone, C-DoT has grown, over the last 26 years, to the level of a national centre for Research and Development in communication technology in many areas –Satellite communications, IN, ATM, DWDM, NMS, Wireless Broadband, GPON, NGN and Mobile Cellular systems. C-DoT's ATM technology has been mandated for use for onboard communication in Indian Navy ships. The GPON is expected to play a lead role in bringing broadband pipes to rural India. The SG-RAN product, based on sharing of active GSM infrastructure, will bring affordable mobile telephony to the rural market. The MAX-NG will breathe fresh life into the fixed line infrastructure of the country by bringing new service features to POTS (Plain Old Telephony Service) together with VoIP and broadband access to C-DoT's MAX / RAX subscribers. C-DoT has also been active in the area of providing telecom software solutions. C-DoT's umbrella NMS (Network Management System) solutions have made it possible to manage networks with elements from multiple vendors. The Data Clearing House (CLH) solution of C-DoT is commercially deployed for reconciling the roaming records between BSNL and MTNL.

C-DoT is also entrusted with the projects of national importance, like Central Monitoring System for telecom security and Secure Network for strategic applications.

## Public Sector Undertakings (PSUs)

DoT has four PSUs under its administrative control. These are:

i) Mahanagar Telephone Nigam Limited (MTNL)

ii) Bharat Sanchar Nigam Limtied (BSNL)

iii) ITI Limited

iv) Telecommunications Consultants India Limited (TCIL)

MTNL, set up in 1986, is a Navratna PSU and provides telecommunication facilities in India's key metros - Delhi and Mumbai. MTNL is the principal provider of fixed-line telecommunication service in these two Metropolitan Cities of Delhi and Mumbai and for GSM Mobile services Four peripheral towns Noida, Gurgaon, Faridabad & Ghaziabad along with Delhi city and the areas falling under the Mumbai Municipal Corporation, New Mumbai Corporation and Thane Municipal Corporation along with Mumbai city, also come under the jurisdiction of the company. MTNL is providing triple play services i.e. voice, high speed internet and IPTV on its Broadband network. At present, 56.25% equity shares are held by Government of India and remaining 43.75% shares are held by FIIs, Financial Institutions, Banks, Mutual Funds and others including individual investors. MTNL's financial turnover was ₹3374 crore during the year 2011-12, as compared to the previous year's turnover of ₹3674 crore. MTNL posted a loss of ₹4110 crore during the year 2011-12. Turnover during the first nine months of the year 2012-13 was ₹2510 crore. MTNL posted a loss of ₹3335 crore during this period.

BSNL, fully owned by Government of India, formed in October 2000, provides telecom services across the length and breadth of the country excluding Delhi and Mumbai. BSNL is providing all types of telecom services namely telephone services on landline, WLL and GSM mobile, Broadband, Internet, leased circuits and long distance telecom service. Rural telephony is one of the focus areas of BSNL and provided Village Public Telephones (VPTs) in 581602 villages by the end of December 2012. BSNL also pays special emphasis on development of telecommunication facilities in North-Eastern region and in tribal areas. BSNL had a turnover of ₹27933 crore and incurred a loss of ₹8851 crore during the year 2011-12. As per the provisional un-audited figures, BSNL had an income of ₹13465 crore and losses of ₹3655 crore during the first six months of the year 2012-13.

ITI Limited was established in 1948, to supply telecom equipments to the then telecom service provider, Department of Telecommunications. ITI started its operations in Bangalore in 1948, which were further extended to other areas by setting up manufacturing plants at Srinagar in Jammu and Kashmir, Naini, Rae Bareli and Mankapur, all in Uttar Pradesh and Palakkad in Kerala. The establishment of these plants at various locations was not only aimed at augmentation of manufacturing capacity but also development of social infrastructure. The Company achieved a gross turnover of ₹922 crore and incurred a loss of ₹370 crore during the year 2011-12. Gross turnover and losses of the company were ₹134 crore and ₹105 crore respectively in the first quarter of the year 2012-13.

TCIL, fully owned by Government of India, was set up in 1978 with the main objective of providing world class technology in all fields of telecommunications and information technology, to excel in its operations in overseas and in domestic markets by developing proper marketing strategies and to acquire state-of-the-art technology on a continuous basis. TCIL is a profit making PSU. The company earned a profit of ₹8.03 crore on a turnover of ₹680.79 crore during the year 2011-12. Profit and turnover was ₹1.68 crore and ₹278.47 crore respectively during the first six months of the year 2012-13.

## Vision

Vision of the Department of Telecommunications is to provide secure, reliable, affordable and high quality converged telecommunication services anytime, anywhere for an accelerated inclusive socio-economic development. The department is working towards the objective of maximizing public good by making available affordable, reliable and secure telecommunication and broadband services across the entire country. Availability of affordable and effective communications for the citizens is at the core of the vision.

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***Hon'ble Prime Minister of India Shri Manmohan Singh, inaugurating the 7th edition of "India Telecom 2012" in the presence of Hon'ble MoC&IT Shri Kapil Sibal, MoSC&IT Shri Milind Deora and MoSC&IT Dr. (Smt.) Kruparani Killi from 13th to 15th December, 2012 New Delhi.***

# II. TELECOM COMMISSION

The Telecom Commission was set up by the Government of India vide Resolution dated April 11, 1989 with administrative and financial powers of the Government of India to deal with various aspects of Telecommunications. The Commission consists of a Chairman and four full time Members, who are ex-officio Secretaries to the Government of India in the Department of Telecommunications, besides there are four part time Members who are the Secretaries to the Government of India of the Departments concerned. The present composition of the Commission is as follows: -

| | | |
|---|---|---|
| Chairman | Shri R. Chandrashekhar | w.e.f. September 24, 2010 |
| Member (Finance) | Ms. Sadhana Dikshit,<br>[Advisor (Finance) looking after the work of Member (Finance)] | w.e.f. April 01, 2011 |
| Member (Production) | Vacant | w.e.f. January 01, 2006 |
| Member (Services) | Shri S. C. Misra | w.e.f. March 17, 2010 |
| Member (Technology) | Shri J.K.Roy | w.e.f. March 28, 2012 |

The part time Members are Secretary (Department Electronics and Information Technology), Secretary (Department of Economic Affairs), Secretary (Planning Commission) and Secretary (Department Industrial Policy and Promotion).

The functions of the Telecom Commission are:

a) formulating the policy of Department of Telecommunications for approval of the Government;

b) preparing the budget for the Department of Telecommunications for each financial year and getting it approved by the Government; and

c) Implementation of Government's policy in all matters concerning telecommunication.

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# III. DEPARTMENT OF TELECOMMUNICATIONS

The Department of Telecommunications (DoT) is responsible for policy formulation, performance review, monitoring, international cooperation, research & development. The Department also allocates frequency and manages radio communications in close coordination with the International bodies. It is also responsible for enforcing wireless regulatory measures and monitoring the wireless transmission of all users in the country. The office of Administrator Universal Service Obligation (USO) Fund was set up w.e.f. June 1, 2002 for the purpose of implementation of Universal Service Support Policy. After formation of Bharat Sanchar Nigam Ltd (BSNL) in October 2000, following are the functions assigned to the DoT under Government of India (Allocation of Business), Rules, 1961.

1. Policy formulation, Licensing and Coordination matters relating to telegraphs, telephones, wireless, data, facsimile and telematics services and other like forms of communications.
2. 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) and Asia Pacific Telecommunication (APT).
3. Promotion of standardization, research and development in telecommunications.
4. Promotion of private investment in Telecommunications.
5. Financial assistance for the furtherance of research and study in telecommunications technology and for building up adequately trained manpower for telecom programme, including –
   (a) Assistance to institutions/ scientific institutions and to universities for advanced scientific study and research; and
   (b) Grant of scholarships to students in educational institutions and other forms of financial aid to individuals including those going abroad for studies in the field of telecommunications.
6. Procurement of stores and equipment required by the Department of Telecommunications.
7. Telecom Commission.
8. Telecom Regulatory Authority of India.
9. Telecom Disputes Settlement and Appellate Tribunal.
10. Administration of laws with respect to any of the matters specified in this list, namely:-
    (a) The Indian Telegraph Act, 1885 (13 of 1885);
    (b) The Indian Wireless Telegraphy Act, 1933 (17 of 1933);
    And

(c) The Telecom Regulatory Authority of India Act, 1997 (24 of 1997).

11. Indian Telephone Industries Limited.
12. Post disinvestments matters relating to M/s Hindustan Teleprinters Limited.
13. Bharat Sanchar Nigam Limited.
14. Mahanagar Telephone Nigam Limited.
15. Videsh Sanchar Nigam Limited and Telecommunications Consultants (India) Limited
16. All matters relating to Centre for Development of Telematics (C-DOT).
17. Residual work relating to the erstwhile Department of Telecom Services and Department of Telecom Operations, including matters relating to the following:
    (a) Cadre controlling functions of Group 'A' and other categories of personnel till their absorption in Bharat Sanchar Nigam Limited;
    (b) Administration and payment of terminal benefits.
18. Execution of works, purchase and acquisition of land debitable to the capital Budget pertaining to telecommunications.

## GRANT OF LICENSES

The department grants licences to operators for providing basic and value added services in various cities and telecom circles as per approved policy of the Government.

### Unified Access Services

The country is divided into 22 Service Areas consisting of 19 Telecom service areas and 3 Metro service areas for providing Unified Access Services (UAS). A UAS licensee can provide wireline as well as wireless services in a service area. Wireless services include Full Mobile, Limited Mobile and Fixed Wireless services. The licensee can also provide various Value Added Services. There were 240 UAS, 2 Basic Service and 37 Cellular Mobile Telecom Service (CMTS) Licenses as on December 26, 2012.

### National Long Distance Service

National Long Distance (NLD) Service was opened to the private sector w.e.f. August 13, 2000. Indian registered companies having a net worth of ₹ 2.5 crore and paid up equity of ₹2.5 crore are eligible to apply. The total foreign equity in the applicant company must not exceed 74% 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 ₹ 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), 32 companies have signed licence agreement for National Long Distance Service as on 31.12.2012. 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 to the private operators. There is no restriction on the number of operators. The Indian registered companies having a net worth of ₹ 2.5 crore are eligible to apply. The total foreign equity in the applicant company must not exceed 74 percent 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 ₹2.5 crore is to be submitted before signing the licence agreement along with Performance Bank Guarantee of ₹2.5 crore. The licence is valid for a period of 20 years from the date of licence agreement. As on 31.12.2012, 27 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, dust space and tower. All Indian Registered companies are eligible to apply. There is no restriction on foreign equity and number of entrants. There is no entry fee and bank guarantee. The applicant company is required to pay ₹ 5,000 as processing fee along with the application. As on 31.12.2012, 403 companies have been registered as Infrastructure Provider Category – I.

## 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). UMS is a system by which voice mails, tax and e-mails (all the three) can be received by one mailbox using telephone instrument, fax machine, mobile phone, internet browsers etc.

Presently, there are 29 licences in 8 service areas for providing Voice Mail/Audiotex/Unified Messaging Service.

There is neither an entry fee nor licence fee for Voice Mail/Audiotex/UMS.

## Public Mobile Radio Trunking Service

Policy for Public Mobile Radio Trunk Service (PMRTS) in terms of NTP-1999 was announced on November 1, 2001. The new PMRTS licenses are granted on non-exclusive 'first come first service' basis.

Presently, there are 22 licences in 4 metros and 9 circles for providing Public Mobile Radio Trunking Service.

## Global Mobile Personal Communication By Satellite

Policy for grant of license for Global Mobile Personal Communications Satellite (GMPCS) service in terms of NTP-1999 was finalised & announced on 2 November 2001. The application of GMPCS license containing the entire proposal is submitted to Law Enforcing Agency for Security Clearance. The Letter of Intent (LOI) is issued after the proposal is cleared from security angle by Inter-Ministerial Committee comprising of Secretary (T), Cabinet Secretariat, Defence Secretary, Home Secretary, Secretary (Department of Space) Secretary (Intelligence Bureau). The process also involves testing of the GMPCS Gateway Earth Station with respect to Security Monitoring. The entry fee is ₹ 1 crore and the License fee, which is in the form of revenue sharing is 8 % of the adjusted gross revenue (AGR) w.e.f. 1.4.2013. At present no GMPCS license has been granted.

## Very Small Aperture Terminal (VSAT) Service

As envisaged in the NTP'99, licenses are granted on non exclusive basis for Very Small Aperture Terminal (VSAT) services using INSAT satellite system within the territorial boundaries of India. Under the VSAT license, the licensees provide data connectivity within Closed User Group (CUG) between various sites scattered throughout India using VSATs and central hub. There are two categories of VSAT licenses:

(i) Captive CUG VSAT license wherein the licensee company can set up VSAT network for its internal use only. As on 31.12.2012 there were 36 captive CUG VSAT networks and the number of VSATs under this service was around 7500 as on 31.12.2012.

(ii) Commercial CUG VSAT license wherein the licensee company can provide CUG VSAT service to a number of CUGs on commercial basis. As on 31.12.2012 there were 13 licenses for commercial CUG VSAT services and the number of VSATs under this service was around 165000 as on 31.12.2012.

## Internet and Broadband Services

As on December 31, 2012 there were 392 Licensees for Internet Services which include 103 Category "A" Licensees, 161 Category "B" Licensees and 128 Category "C" Licensees. Further, there were 24.01 million internet subscribers as on September 30, 2012 including 14.68 million broadband subscribers as on September 30, 2012.

## NETWORKS & TECHNOLOGIES CELL (NT CELL)

NT Cell was created in DoT in December, 2010 with prime responsibility to implement the IPv6 policy across all stakeholders including Private and Government sector. Timely IPv6 implementation is crucial for the country due to exhaustion of IPv4 addresses in the world and specially in APNIC region. NT cell is also responsible for all new technology policy matters in DoT. Various steps have been taken to implement IPv6 in a well planned manner across all stakeholders through various meeting, awareness workshops and IPv6 world Launch day programmes/ events etc. Due to the concerted efforts of the DoT's NT cell, now major service

providers have started offering IPv6 to the customers specially to the enterprise customers and they are in the process of starting the same for retail customers. Government organisations have also been sensitised and they have also started to move to IPv6.

Further update about the activities being undertaken by NT cell is as below:

**Policy for IPv6**

After release of National IPv6 deployment Roadmap (v-1) in July, 2010, India became the first country in the World where any Government has released such type of roadmap. It addressed the following issues:

a. All Central and State Government ministries and departments, including its PSUs, shall start using IPv6 services by March-2012.

b. Formation of the India IPv6 Task Force: 3-tier structure consisting of Oversight Committee, Steering Committee & 10 Working Groups with each tier having members from different organizations / stakeholders in PPP mode.

**Status & Challenges**

IPv6 services are gradually being made available to customers on pan India basis across all segments (Fixed, Mobile and Enterprise) as majority of the major Service Providers are ready to handle traffic & offer IPv6 services.

Proliferation is not encouraging despite ISPs readiness due to bottlenecks in certain segments like:

- ✓ Delay in readiness of the content providers- Now issue is being tackled through various meetings with applications and content providers in the country.
- ✓ Delay by equipment vendors— Now meetings are also being conducted with equipment vendors and they are getting ready with the IPv6 ready equipment.
- ✓ End user devices – conducted various meetings in DoT and more meeting are planned to pursue them.

All Central and State Government ministries/ departments/ their PSUs are being sensitised and geared up for migration to IPv6 through various meetings (30) and workshops (26) across the length and breadth of the country.

***Sh. R Chandrashekhar, Secretary (T) & Sh. J K Roy, Member (T), DoT on the occasion of World IPv6 Launch Day event on 06th June, 2012 in Sanchar Bhawan, New Delhi.***

**World IPv6 Launch Day Event**

An event was organised by DoT on the occasion of World IPv6 Launch Day on 6th June, 2012 at Sanchar Bhawan, New Delhi. The event was

chaired by Secretary (T), DoT. There were around 100 invitees from DoT, DeitY, Telecom Service Providers, Content & Application Providers, ICT Vendors, Telecom Industry Associations, BSNL, MTNL, C-DOT etc. Besides, invitees from press and media were also present.

**National IPv6 Deployment Roadmap Version-II**

Further, the Government has planned to achieve substantial transition to IPv6 in the country in a phased and time bound manner under the NTP-2012. Accordingly, a "National IPv6 Deployment Roadmap Version-II" has been formulated and is planned to be released by March, 2013 with a focus to make complete eco-system ready in the country.

**Centre of Innovation (CoI)**

In NTP-2012 establishment of an IPv6 "Centre of Innovation" (CoI) is incorporated. This Centre is planned with the vision to provide an environment of end to end IPv6 Services under a single umbrella right from Training, Consulting, Implementation, Research, Standards and Testing.

**Other Activities**

An interactive one hour session with Dr. Vinton G. Cerf Member, National Science Board, USA was organised by DoT on 28.01.2013 at 11:30 hrs. in DoT Hq., New Delhi. Dr. Cerf who is also known as one of the "Fathers of the Internet" as he is the co-designer of TCP/IP protocol and the architecture of the Internet, said that the main challenge today is to counter the security and other threats to Internet while at the same time preserving the original structure of Internet that has made it successful like openness, transparency, participatory policy & technology development etc. He said that the content is going to be critical factor and emphasized the need of developing content in local languages. He further added that the Internet of Things (IoT) offers an immense opportunity for a country like India whereby products and services based on IPv6 can be manufactured here and exported globally.

***Shri S C Misra, Member(S), Sh. J K Roy, Member (T), Dr. Vinton G. Cerf, Sh. R Chandrashekhar, Secretary (T), Ms. Sadhna Dikshit, Member (F) during the interactive session 28th January, 2013 organised by NT Cell, DoT in Sanchar Bhawan, New Delhi.***

## INVESTMENT POLICY

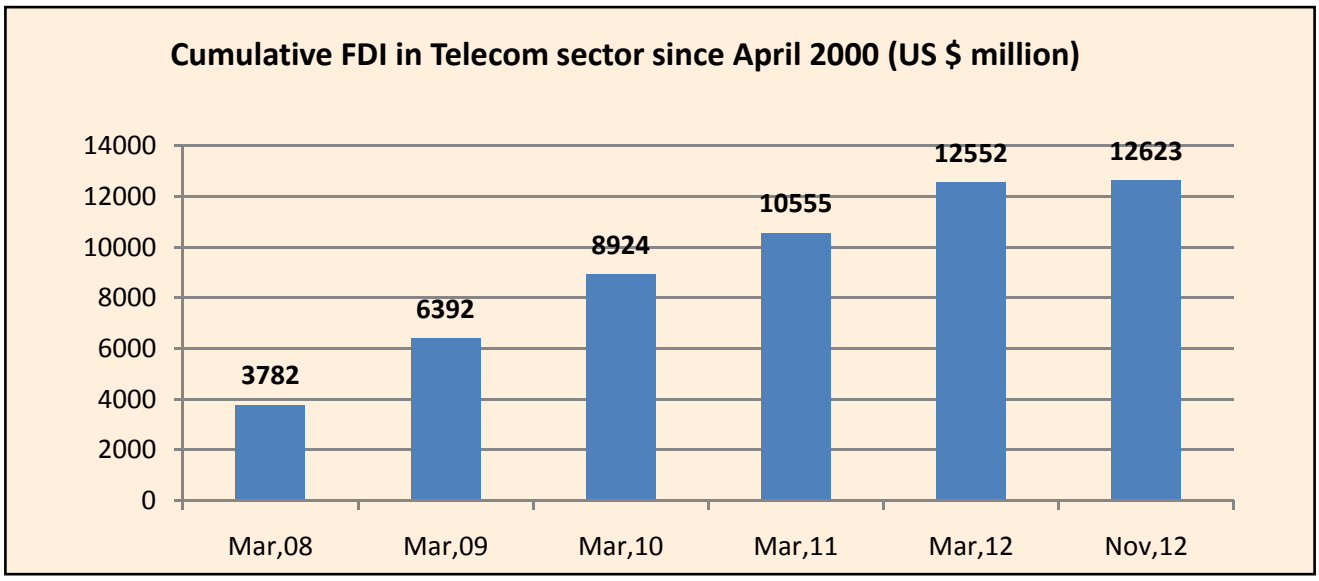
The present Foreign Direct Investment (FDI) policy for the Telecom sector, subject to licensing and security requirements notified by the Department of Telecommunications, is as under:

| S. No. | Sector/Activity | FDI Cap/Equity (Direct + Indirect) | Entry route |
|---|---|---|---|
| 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% | Automatic up to 49%<br><br>FIPB beyond 49%. |
| 2. | ISP with gateways, *ISP without gateway, Radio-paging, End-to-End Bandwidth provider. | 74% | Automatic up to 49%<br>FIPB beyond 49% |
| 3. | a)** Infrastructure Provider providing dark fibre, right of way, duct space, tower (Category –I);<br>b)** Electronic Mail and Voice Mail | 100% | Automatic up to 49%<br>FIPB beyond 49% |
| 4. | Manufacture of Telecom Equipments | 100% | Automatic |

* The government has revised guidelines for ISP's on 24-8-2007 and new guidelines provide for ISP licenses with 74% composite FDI only.

** subject to the conditions that such companies will divest 26% of their equity in favour of Indian public in 5 years, if these companies are listed in other parts of the world.

Actual Inflow of FDI in Telecom Sector from April 2000 to November 2012 is 12,623 million US dollar. The Cumulative FDI data for last five years and current year is as under:




**Source: DIPP web-site**

## MANUFACTURING OF TELECOM EQUIPMENT

With the advent of next-generation technologies and operators looking to roll out 3G and broadband wireless access services, the demand for telecom equipment has increased rapidly. In an attempt to capitalize on this opportunity, the government and policy makers are focusing on developing the domestic manufacturing industry.

With a view to increase domestic telecom equipment manufacturing industry and making India a manufacturing hub, the National Telecom Policy-2012 (NTP 2012), inter-alia, has following objectives to promote R&D, Manufacturing and Standardization of Telecommunication Equipment:

- Promote innovation, indigenous R&D and manufacturing to serve domestic and global markets, by increasing skills and competencies.
- Create a corpus to promote indigenous R&D, IPR creation, entrepreneurship, manufacturing, commercialisation and deployment of state-of-the-art telecom products and services during the 12th five year plan period.
- Promote the ecosystem for design, Research and Development, IPR creation, testing, standardization and manufacturing i.e. complete value chain for domestic production of telecommunication equipment to meet Indian telecom sector demand to the extent of 60% and 80% with a minimum value addition of 45% and 65% by the year 2017 and 2020 respectively.
- Provide preference to domestically manufactured telecommunication products, in procurement of those telecommunication products which have security implications for the country and in Government procurement for its own use, consistent with our World Trade Organization (WTO) commitments.

The Government, vide Notification No. 8(78)/2010-IPHW dated 10th February 2012 laid down the Policy for providing preference to domestically manufactured electronic products (including telecom equipment) in Government procurement and in procurement having security implications.

In furtherance of the above notified policy, Department of Telecommunications has notified telecom products to be procured by Government vide notification No. 18-07/2012-IP dated 5th October 2012 as amended. The notification provides 50% to 100% preferential market access for domestically manufactured telecom equipment with minimum value addition of 25% to 65%.

### Import and Export of Telecom equipments including mobile phones, parts and telecom cables

The import of Telecom equipments including mobile phones, parts and telecom cables during 2011-12 is ₹543146 million and 2012-13 (upto September 2012) is ₹272235 million. The Export of Telecom equipments including mobile phones, parts and telecom cables during 2011-12 is

₹201989 million and 2012-13(upto September, 2012) is ₹109266 million. The details of import and export are as under:

**Import & Export of Telecom equipments including mobile phones, parts and telecom cables**

| HS Code | Description | Value (₹ Million) | | | |
|---|---|---|---|---|---|
| | | Import | | Export | |
| | | 2011-12 | 2012-13 (upto Sept' 12) | 2011-12 | 2012-13 (upto Sept' 12) |
| 851711 | Line telephone sets with cordless handsets | 2493 | 1373 | 8966 | 2478 |
| 851712 | Telephones for cellular networks or for other Wireless networks | 277158 | 118964 | 131560 | 74817 |
| 851718 | Others | 2521 | 1632 | 655 | 564 |
| 851761 | Base stations | 7723 | 887 | 78 | 39 |
| 851762 | Machines for the reception, conversion and Transmission or regeneration of voice, images or Other data, including switching | 58238 | 28124 | 5298 | 2393 |
| 851769 | Others | 44011 | 26366 | 5460 | 3437 |
| 851770 | Parts | 128694 | 83556 | 37928 | 19059 |
| 852560 | Transmission apparatus incorporating reception apparatus | 3574 | 1324 | 508 | 293 |
| 854420 | Co-axial cable & other coaxial electric conductors | 4705 | 2821 | 2433 | 744 |
| 854449 | Other electric conductors for voltage <= 80 v | 11854 | 5962 | 2359 | 1157 |
| 90011000 | Optical fibres, optical fibre bundles & cables | 2175 | 1226 | 6744 | 4285 |
| | **TOTAL** | **543146** | **272235** | **201989** | **109266** |

**Source: DGFT web-site**


***On the occasion of Reverse Buyer Seller Meet of Telecom Equipment & Services Export Promotion Council on 12th December, 2012.***

## INDIA TELECOM 2012

The Department of Telecommunications in association with Federation of Indian Chambers of Commerce and Industry (FICCI) organized the 7th edition of India Telecom exhibition and conference i.e. "India Telecom 2012" from 13th to 15th December, 2012 at Pragati Maidan, New Delhi with the objective of promoting and showcasing the capabilities and opportunities in Indian Telecom sector. The theme of "India Telecom 2012" was "New Policy Framework: Envisioning the Next Telecom Revolution". The conference brought the government, policy makers, potential investors, operators, manufacturers, infrastructure providers, content providers, academia and non-governmental organization together at a common platform to discuss how telecommunications can lead to an "all-inclusive growth" of the Indian economy in terms of GDP, Growth, employment and revenues, among others. Hon'ble Prime Minister of India graced the occasion by addressing the participants of the event during the inaugural ceremony on 13th December, 2012. The exhibition witnessed a huge success with more than 203 domestic and international IT/Telecom companies from 21 countries and there were Group Country Pavilion/ Technology Pavilion formed by Canada, Sweden, China, TCOE and 12,215 visitors from 38 countries visited the exhibition.


***Hon'ble Prime Minister at 7th edition of "India Telecom 2012" at Pragati Maidan, New Delhi.***

## INTERNATIONAL COOPERATION

In the field of international cooperation, workshops, seminars and training programmes are held within the country and outside. Deliberations were held with the visiting foreign dignitaries, apart from the visits. Some of these are listed below:

The period April –December 2012 was marked with several important activities and visits in the sphere of International Relations for DoT. There were significant activities in multilateral cooperation with Intergovernmental Organizations such as ITU, APT, ITSO, CTO etc. Indian high level delegations visited foreign countries in strengthening the bilateral relations and technological cooperation and several foreign dignitaries also visited India reflecting the growing prominence of India.

### Bilateral Cooperation

The details of Indian Delegations' foreign visits are as given below:

i. **Israel:** A high level delegation led by Hon'ble Minister of Communications & IT accompanied by DG(CERT), DeitY and DDG(Security), DoT visited Tel Aviv, Israel from 3rd – 7th April, 2012. Focus was bilateral cooperation on security of ICTs and Technologies.

ii. **USA:** The DDG Security, DoT participated in the Indo-Strategic Dialogue on Cyber Crime and Indo-US ICT working group meeting held at Washington during 4-8 June.

iii. **Pakistan:** The DDG (CS), DoT was part of the Indian delegation led by Commerce Secretary visited Pakistan for a bilateral meeting from 20-21 September. There were deliberations on mobile roaming implementation between the countries.

iv. **Canada:** The DDG IP, DoT participated in the India – Canada Comprehensive Economic Partnership Agreement (CEPA) meeting held at Ottawa, Canada during 15-17th November as part of an Indian composite delegation. Both sides discussed the draft text in respect of cooperation in the field of Telecommunications and IT to be incorporated in CEPA.

Important foreign delegations that visited India are as given below:

i. **Japan:** H.E. Mr. Kimiaki Matsuzaki, Senior Vice Minister for Internal Affairs and Communications, Japan met Hon'ble MoC&IT on April 30 in Shastri-Bhawan, New Delhi. Both leaders discussed various issues for enhancing cooperation between two countries in the field of Telecommunications and IT in the years to come.

ii. **Finland:** Ambassador Ms Terhi Hakala met Hon'ble MoC&IT on July 24 in Sanchar-Bhawan, New Delhi. Ms Hakala paid courtesy visit after completion of her assignment in India.

iii. **Lao PDR:** Mr. Hiem Phommachanh, Lao PDR Minister of Post-Telecommunications and Communication visited New Delhi to participate in India-ASEAN Meeting held under the aegis of Ministry of External Affairs. During his visit to India, he met with the Top Management of MTNL on December 21 and also visited MTNL's Network Operation Centre (NoC) and Data Centre.

## Important joint commission meetings

Inputs from Department of Telecommunications were given to various Joint Commission Meeting happened under the aegis of Ministry of Commerce & Industry and Ministry of External Affairs. Some of the important of which includes

I. India-Japan 1st Economic Strategic Dialogue held on April 30 under the aegis of MEA. India- Bangladesh Joint Consultative Committee (JCC) meeting held on 7 May 2012 under the aegis of Minister of External Affairs.

II. 7th Meeting of the India-EU Joint Working Group on SPS/TBT held on July 19 held under the aegis of Ministry of Commerce and Industry.

III. Foreign Office Consultation Meeting for India-Myanmar (September) & India-Sweden (October) held under the MEA

IV. Joint Economic Commission Meetings between India –Bosnia, India-Herzegovina, India-Bulgaria, India-Czech, India-Switzerland, India-Cyprus, held under the aegis of Ministry of Commerce and Industry.

## Multilateral Cooperation

i. **Visit of Secretary General (SG), ITU:** Secretary General, ITU, Dr.Hamadoun Toure, was on his first official mission to India during 7-9th May. He had meetings with Hon'ble MoC& IT, Hon'ble MoSC& IT (D) and top officials of DoT. He also met industry leaders, industry associations. Several key areas of cooperation between ITU and India were discussed in the context of inviting Indian partnership in ITU Development projects in the region, WCIT etc.

ii. **SASEC Information Highway:** The DDG (CS) participated in the South Asia Sub-regional Economic Cooperation (SASEC) Information Highway Bilateral Interconnection Agreement Meeting during 25-27th April, 2012 at Manila, Philippines. The technical and financial issues of the project were deliberated.

*Sh. Kapil Sibal, Hon'ble MoC&IT with Dr. Hamadoun Toure, Secretary General, ITU.*

*Sh. Milind Deora, Hon'ble MoSC&IT with Dr. Hamadoun Toure, Secretary General, ITU.*

iii. **International Telecommunications Satellite Organization (ITSO):** The Member (Services), Telecom Commission participated in the 35th ITSO Assembly Parties meeting held at Kampala from 3-6th July accompanied by Director, DS-I DoT. The ITSO Assembly deliberated important aspects of continuation of ITSO structures and agreement. India also voted in favour of continuation of ITSO agreement beyond 2013.

iv. **World Summit on Information Society (WSIS):** The DDG (IR), DoT participated in the WSIS meeting at Geneva, Switzerland from 15-18th May 2012. On the sidelines of WSIS, there was a meeting conducted by CSTD (UN - Commission on Science and Technology for Development) on issues related to governance of internet. During this meeting the Permanent Representative (PR) of India to UN gave a statement highlighting the necessary actions required to be taken to achieve enhanced cooperation in the overall governance of Internet as envisaged in the WSIS outcome.

v. **World Telecommunication / ICT Indicators Meeting (WTIM):** The Advisor (Eco), DoT and Director (IR-II), DoT participated in the WTIM at Bangkok in September. The WTIM and the Expert Group on Telecommunication / ICT Indicators (EGTI) meeting focused on the inclusion of new indicators on Telecommunication / ICT and mechanisms to strengthen the data gathering and analysis for providing inputs to policy makers and enterprises in the direction of enhanced ICT penetration and usage.

vi. **Number Portability Global Summit:** Sr. DDG (AS), DoT participated in this global summit during 22-24th October that deliberated on the important aspects of technology, regulatory and policy trends in Number Portability regimes.

vii. **Management Committee (MC) meeting of Asia Pacific Centres of Excellence (ASP CoE) of ITU:** The DDG (BB), USOF participated in the MC meeting of ASP CoE at Busan during 8-12th October. The MC meeting reviewed the activities of the current year and explored the new plans for the coming year with the Member countries. India is in the MC of ASP COEs which work on Capacity Building on ICTs in the regional member countries. There have been proposals to upgrade and offer these technical trainings from DOT/ BSNL/MTNL training centres to share the Indian expertise and success story in telecommunications.

viii. **Information session on WCIT and World Telecom Policy Forum meetings:** The DDG (IR) participated in the meetings at Geneva during 8-12th October as a precursor to the upcoming historical World Conference on International Telecommunication (WCIT) to review the International Telecommunication Regulations (ITRs). This program gained significance to understand individual countries' position on ITRs draft provisions.

ix. **Management Committee meeting of Asia Pacific Tele-community (APT):** A high level delegation led by Member (Finance) accompanied by Advisor (Technology), Director (IR-I) participated in the meeting at Bangkok during 6-9th November. During the meeting which takes place annually, various issues pertaining to APT annual programmes and necessary agreements between the Telecommunity and Governments were discussed.

The committee reviewed and approved the work programme, annual training programmes and budget for 2013 year.

x. **52nd Session of CTO meeting and Annual Forum Oct 22-26, 2012, Mauritius:** Indian delegation led by the Advisor (Technology) participated in the CTO meeting and Annual forum as an Observer. After a gap of several years, India participated in the CTO event to renew the relationship with Commonwealth Tele-community.

The theme of the Forum was "Mobile Broadband for Development", and it was attended by delegates from over 30 countries.

xi. **World Conference on International Telecommunication (WCIT) 2012:**

This historical conference took place at Dubai during 3-14th December to review the ITRs originally prepared in 1988 at Melbourne in view of transformation in Telecommunication Technology, Services and Market structures. The ITRs provide general principles in International Telecommunication Regulations for harmonious growth of International telecommunication facilities and services.

After several consultations with public and private stakeholders at different levels, the Hon'ble Minister of Communications and IT also took a stakeholder meeting in November involving the industry associations, Civil society members and took inputs for deliberations at WCIT-12.A high level delegation led by Secretary (T) accompanied by Advisor (Technology), DDG (IR), Director (IR-II) and a large contingent of members from Industry attended this significant conference that produced the ITRs-12 outcome document, which is under consideration by India.

## International Telecommunication Exhibitions and Promoting Events

i. **6th International Conference on Telecommunications Telemetry and IT, TurkmenTEL 2012:**

A delegation led by Hon'ble MoC&IT visited Ashgabat, Turkmenistan during September 17-18, 2012 to participate in International Conference on ICT, TurkmenTEL 2012. During his two day visit to Turkmenistan, Hon'ble MoC&IT had bilateral discussions with the Ministers of Turkmenistan in-charge of Education/IT and Transport/ Communications.

During the course of discussion, Hon'ble Minister offered India's support in setting up

***Hon'ble MoC&IT delivering his keynote address during the Plenary Session of TurkmenTEL 2012***

telecommunication infrastructure in Turkmenistan, particularly, Satellite system & OFC Network. He also offered India's support in building infrastructure for providing better education to the younger generation through ICT application and services such as by providing low cost tablet "AKASH" to Turkmenistan Students based on Turkmenistan side's requirement.

ii. **ITU Telecom World 2012 at Dubai:** A high level delegation led by Hon'ble MoC&IT participated in the ITU Telecom World 2012 at Dubai during 14-15th October. The delegation consisted of Secretary (T), Sr. DDG (TEC), PS to Hon'ble MoC& IT and Director (IR-II).

The Hon'ble Minister participated in the high level plenaries viz. Presidential session and a session on Cyber Warfare. The Indian pavilion for the GITEX 2012 was inaugurated by the Hon'ble Minister. On the side lines of ITU Telecom world, The Hon'ble Minister had high level meetings with Secretary General – ITU, Minister of Communications Azerbaijan and INTELSAT senior management. The ITU carried out an exclusive video interview with the Hon'ble MoC& IT during the event.

### High Level Presidents Session

iii. **Shanghai Exhibition:** The Director (T) visited Shanghai, China during 20-22nd June for International Promotion of the India Telecom 2012 Exhibition and Conference.

iv. **Futurecomm:** The DDG (IP) participated in the Futurecom 2012 event at Rio De Janeiro, Brazil during 08-11th October.

v. **GITEX-2012:** The Director (IP) participated in the GITEX 2012 fair held at Dubai during 14-18th October.

vi. **Promotion of India Telecom 2012:** The Director (T) visited Canada during 23-27 October 2012 for overseas promotion of India Telecom 2012.

## Capacity building programs with ITU / APT and ITU-T study group meetings and other conferences

### Speaking in ITU and APT sessions

i. **Green Initiatives at 12th APT Policy & Regulatory Forum:** The Sr. DDG (BW), DoT attended as a speaker in the session 6 on Green Initiatives at the 12th APT Policy and Regulatory Forum meeting at Bangkok, Thailand during 21-23rd May.

ii. **Workshop on Designing National Frequency Allocation Tables:** The Joint Wireless Advisor, WPC, Kolkata, DOT attended as a speaker in the ITU ASP CoE training workshop on Designing National Frequency Allocation Tables and International Spectrum Regulations held at Isfahan, Islamic Republic of Iran during 20-23rd May.

## ITU Study Group Meetings

i. **ITU-T Study Group 12:** The DDG (N), TEC participated in the ITU-T study group meeting held in Geneva form 29th May – 7th June on Performance QoS and QoE.

ii. **ITU-T study group 11 meeting:** The Director (SW), TEC participated in the ITU-T study group 11 meeting on Signalling Requirement Protocols and Test Specifications held at Geneva during 11-15th June.

iii. **WTSA, Dubai:** A delegation led by DDG (NGN), TEC accompanied by Director (M-II), TEC participated in the World Telecommunication Standardization Assembly WTSA-12 at Dubai, UAE from 19-29 November, 2012.

iv. **Setting up of Specific Absorption Rate (SAR) Lab:** A TEC delegation containing six officers of TEC, Delhi and Regional TECs visited the OEM's premises in Zurich from 29th October to 2nd November for setting up the SAR lab at TEC.

v. **Training Programs:** Further 13 officers attended various training programmes at ASP CoE, JICA on various Telecommunication Technology and Policy programmes under ITU/ APT/ JICA fellowships.

## OFFICIAL LANGUAGE (HINDI)

The Official Language Division is under the overall administrative charge of Joint Secretary (Admn.). It is headed by a Joint Director assisted by two Deputy Directors, Two Assistant Directors, One Section Officer and other supporting staff.

## ACTIVITIES

During the period 2012-13 (April-December), the following items of important work relating to the progressive use of Hindi were undertaken by the Official Language Division.

### Implementation of the Official Language Policy and the Annual Programme of the Govt. of India.

All Sections, attached and subordinate Offices and Public Sector Undertakings under the administrative control of the Department were advised to comply with the provisions of the Official Language Act, Rules and instructions issued there under for achieving the targets fixed by the Official Language Department in their Annual Programme for the year 2012-13. Quarterly Progress Reports regarding progressive use of Hindi in the Department, its attached and subordinate units and the PSUs under its administrative control were reviewed and necessary instructions issued for taking corrective measures. Section 3(3) of the Official Language Act, 1963 was fully complied with during the period under review.

## Monitoring and Inspection

The Official Language Division worked as a co-ordinator during the course of inspections conducted by the Second Sub Committee of the Committee of Parliament on Official Language of the various Offices/Corporates under the Department. In the Parliamentary Committee Meetings, the Department was represented by Joint Secretary (Admn.). During the period under review fourteen such inspections were carried out throughout India. The O.L. Division independently conducted eight inspections of Subordinate/Attached Offices/PSUs to ensure the compliance of the provisions of Official Language related instructions issued there under.

## Participation in Workshop/Conference

Joint Secretary (Admn.), Joint Director(OL) and Addl. P.S. to MOS (Communications & I.T.) of this Department participated in "World Hindi Conference" conducted by Ministry of External Affairs" at Johannesburg in South Africa from 22nd to 24th September, 2012.

## Training in Hindi Language, Hindi Computer/Typewriting

Seven L.D.Cs., One U.D.C and two Assistants were nominated for training in Hindi Typewriting commencing from August, 2012. Apart from these ten P.As. were also nominated for Hindi Stenography Classes during this Session.

## Official Language Implementation Committee

Quarterly meetings of the Official Language Implementation Committee of the Department were held at regular intervals wherein the progress relating to the use of Hindi in official work in the Department was reviewed. During the year, four such meetings were held.

## Hindi Workshop

During the period under review three Hindi Workshops regarding the use of softwares and Unicode facility for facilitating the use of Hindi on computers were organised.

## Celebration of Hindi Pakhwara

Hindi Pakhwara was organized from 1.9.2012 to 14.9.2012 in the Department. Fourteen competitions for the purpose of the promotion of Official Language in the Department were organized. 115 officers/officials in this event out of which 87 were declared successful for Cash Award with Certificate of Appreciation. Prizes were distributed to the successful participants by the Joint Secretary (Admn.) in the Prize Distribution Function of Hindi Pakhwara held on 09.10.2012.

## Hindi Salahakar Samiti

Hindi Salahakar Samiti of this Department was re-constituted on 11th December, 2010 as per the guidelines issued by the Department of Official Language. Its first meeting under the Chairmanship of Hon'ble Minister of State for Home, Communications & I.T. was held on 29.3.2011 at Bangalore. Second meeting of Hindi Salahakar Samiti was held on 17.11.2011 in New Delhi at Sanchar Bhawan under the Chairmanship of Hon'ble Minister of Communication & I.T., the third meeting was held on 24.07.2012 in Mumbai under the Chairmanship of Hon'ble Minister of State for Communications & I.T. and the fourth meeting was held on 20th February, 2013 at Sanchar Bhawan, New Delhi under the chairmanship of Hon'ble Minister of Communication & I.T.

## Translation Work

During the period under report a number of documents relating to Joint Parliament Committee Meetings/ Standing Committee/ Demand for Grants/Parliamentary Assurances etc. were translated from English to Hindi and vice versa.

The Division was also actively involved in the Hindi Translation of the Website of the Department. Apart from routine translation, important documents specified in Section 3 (3) of the Official Language Act, 1963 (including papers/reports to be laid by the Department on the table of both the Houses of Parliament were translated and prepared in bilingual form.


***Sh. Milind Deora, Hon'ble MoSC&IT in the meeting of Hindi Advisory Committee held on 24.07.2012 in Mumbai.***

## STAFF WELFARE AND SPORTS ACTIVITIES

Under the Welfare Programmes, scholarships, book-awards and incentives are granted to meritorious school/college going children of the DoT employees. Besides this, conveyance allowance/hostel subsidy is also granted to mentally/physically challenged children of the employees. The programme also includes financial assistance to employees in distress and provides subsidies for recreation tours etc. Besides the activities of the previous year, the following activities were undertaken under the Welfare programme during year (April-December - 2012):

- Financial Assistance of ₹1,20,000/- (Rupees One lakh twenty thousand only) was provided to the families of deceased employees.
- Officials of DoT were deputed to participate in different sports events conducted by Northern Telecom Region (NTR)/ Bharat Sanchar Nigam Limited and Inter Ministry Tournaments.
- Book Award (₹6,93,500/- for 472 wards), Scholarship (₹3,82,600/- for 78 wards) and Incentive (₹75,300/- for 113 wards) were distributed to the meritorious school going children of DoT employee.

### Welfare schemes and provisions for SCs & STs.

The welfare schemes' are largely gender neutral and composite in nature. However, some of the schemes namely Book Award, Scholarship Award contains pro women and SC/ST orientation by way of relaxation in marks for these categories. There is no earmarked amount for these categories as Book Awards/scholarships are awarded to the deserving applicants fulfilling the eligibility criteria. The expenditure incurred out of Staff Welfare Fund in respect of women and SC/ST is as under:

- Expenditure incurred on Women Welfare: ₹6,07,200/-
- Expenditure incurred on Development of SC/ST: ₹2,42,500/-

An assistance of ₹17,400/- was also provided on women day for various activities. Further, in order to provide fillip to women empowerment of down trodden category, exhibition was also organized at Sanchar Bhawan.

## GENDER BUDGETING

In the Department of Telecommunications the Gender Budget Cell was constituted in November 2006. The Cell was further reconstituted in April 2010. The Gender Budgeting Cell of the department is trying to generate awareness about the gender budgeting initiative of the Government and the manner in which the Department of Telecom can play a role in mainstreaming gender concern at the planning and formulation stage of various schemes in the sector.

Allotment of funds under plan and non-plan head for the benefit of women for 2011-12 and 2012-13 are given below:

(₹ in crore)

| Details of the scheme | BE 2011-12 | | RE 2011-12 | | BE 2012-13 | |
|---|---|---|---|---|---|---|
| | Plan | Non-Plan | Plan | Non-Plan | Plan | Non-Plan |
| Amenities to staff | - | 0.08 | - | 0.10 | - | 0.10 |
| Universal Service Obligation Scheme | 0.50 | - | - | - | 2.20 | - |

## COMPUTERISATION & IT INTIATIVES

Some of the initiatives of the department on different e-governance/IT activities are as under:

(i) Video Conferencing Facility

The facility of Video Conferencing was introduced in DoT Headquarters in this year. In one such initiative, Meeting of Hindi Advisory Committee was held on 24-07-2012 in Mumbai. Using the Video Conferencing facility officers of DOT/BSNL/MTNL and other PSUs based in New Delhi participated in the proceedings of the meeting headed by Hon'ble MOS (C&IT) at Mumbai.

(ii) E-receipt System

This application will enable to receive license fees/spectrum charges and other form of revenue receipts directly through NEFT/RTGS/credit cards either in on-line or off-line form.

The application is in final stages of implementation and it is likely to be completed by end of March, 2013.

(iii) E-office

Through E-office application, following facilities will be made available to computer users in DoT:

1. e-File /FTS
2. Document or Knowledge management system (KMS)
3. E-Leave
4. e-Appointment services
5. PIS is a web-based Personnel Information System
6. Pay role

E-office application will be implemented by NIC with total estimated cost of ₹20.48 lakhs for a period of 5 years. The cost quoted includes annual maintenance and other administrative charges. The project commenced successfully with simultaneous start of

File Tracking System and e- Receipt w.e.f. 01.10.2012. Several HR Services like Pay-slips, Income Tax statements (Form-16) and Appointments can now be readily viewed on e-Office application. Implementation of knowledge Management System has already begun in C&A division w.e.f. 01.12.2012. This module would be replicated in other Divisions of DoT HQ by the end of this financial year i.e. 31-03-2012.

(iv) Disbursement of Telecom Pension through Public Sector Banks under Single Window System: A Memorandum of Understanding between Department of Telecom and 24 Public Sector Banks has been signed on 19 September 2012 for disbursement of Telecom pension under Single Window System with effect from 01 October 2012 through Central Pension Processing Centers (CPPC) of Public Sector Banks. This will curtail the delay in sending PPOs to paying branch and timely disbursement of pension. It will also enable the Public Sector Banks to get easy re-imbursement of the amount disbursed to Telecom Pensioners from RBI (CAS), Nagpur. This mechanism of pension disbursement would definitely reduce pension related grievances.

(v) E-payments: As per the instructions issued by the Ministry of Finance all payments exceeding ₹25000/- are to be carried out through e-payment. This is being implemented in Department of Telecommunications, necessary infrastructure and readiness for implementing the e-payment using GePG website has been initiated by DoT.

## RIGHT TO INFORMATION ACT

A separate RTI Unit has been established in this Department and is functional since January 1, 2007.

RTI Unit of Department of Telecommunications is continuously in the process of strengthening the system of disposal of RTI applications to the satisfaction of the public. An RTI Unit with Deputy Secretary/ Director as CPIO, Under Secretary as APIO and Section headed by a Section Officer is functioning as the Nodal Unit for the Department, its PSUs and autonomous bodies and other Departments/Ministries. In addition to the above, 69 CPIOs with First Appellate Authorities are functioning in DoT to facilitate quick disposal of RTI applications/appeals.

During the period April-December 2012, 2442 applications were received in the Department of Telecommunications, out of which 650 were transferred to other departmental Public Authorities and PSUs. Disposal of applications with information was approximately 99%. There was no denial of information except as per the provisions of the RTI Act.

## PUBLIC GRIEVANCES AND REDRESSAL

Department of Telecom receives complaints directly in its Public Grievances Cell from the office of the Hon'ble Prime Minister, Minister of Communications and IT, MPs, MLAs, VIPs, Chairman's Office, Department of Administrative Reforms and Public Grievances (DARP&G)

and from the public. Public Grievance Cell of DoT monitors complaints for their early and timely settlements. The details in respect of complaints handled for the year 2012-13 (upto December 31) are given as under:-

| Opening Balance as on April 01,2012 | Grievances booked during the period (April-Dec,2012) | Total | Grievances closed during the period (April-December 2012) | Balance as on January 01,2013 |
|---|---|---|---|---|
| 4055 | 61070 | 65125 | 60293 | 4832 |

## IMPLEMENTATION OF RESERVATIONS ORDERS FOR SCHEDULED CASTES/ SCHEDULED TRIBES AND OBC EMPLOYEES

In accordance with the policy of the Government of India, SCT Cell is functioning in the Department of Telecommunications under the supervision of Director (Staff Relations) who has been appointed as Liaison Officer for SC/STs in the Department of Telecommunications. The Liaison Officer provides relevant guidelines not only to the officers in the Department but also to all Public Sector Undertakings, Autonomous Bodies, Statutory Bodies, Attached and Subordinate Offices under the Department of Telecommunications.

## IMPLEMENTATION OF JUDGEMENTS/ORDERS OF CENTRAL ADMINISTRATIVE TRIBUNAL (CAT)

During the period 2012-13 (upto Dec'12), 60 judgments/orders of Central Administrative Tribunal were implemented by the Department of Telecommunications.

## RESULT FRAMEWORK DOCUMENT

The High Power Committee (HPC) on Government Performance reviewed the performance of the Department of Telecommunications on the basis of the data submitted by the department and approved the Composite Score of 63.69 for the year 2011-2012. This Score is lower by 1.48 from the Composite Score submitted by the department due to reduction in the score in respect of Independent Audit of Implementation of Grievances Redressal Mechanism. Result Framework Document showing inter-se priority among key objectives, success indicators, targets and performance for the year 2011-12, is at **Annexure-I.**

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# III. 1 WIRELESS PLANNING AND COORDINATION

The Wireless Planning and Coordination Wing of the Department of Telecommunications deals with the spectrum management, wireless licensing, frequency assignments, international coordination for spectrum management and administration of Indian Telegraph Act 1885, (ITA, 1885), for radiocommunication systems and Indian Wireless Telegraphy Act 1933, (IWTA, 1933).

## Spectrum Management

Spectrum Management is the combination of administrative and technical procedures necessary to ensure the efficient operation of radio communication services. Spectrum management is carried out in line with International Frequency Allocation Table of Radio Regulation of International Telecommunication Union (ITU), National Frequency Allocation Plan (NFAP) and also ensuring Electromagnetic Interference (EMI)/ Electromagnetic Compatibility (EMC). The details are given below:

a. Cellular Mobile Service using CDMA technology uses frequencies in 800 MHz frequency band (869-889 MHz paired with 824-844 MHz).

b. Cellular Mobile Service using GSM technology uses frequencies in 900 MHz frequency band (890-915 MHz paired with 935-960 MHz) and 1800 MHz band (1710-1785 paired with 1805 -1880 MHz).

c. Mobile Services using WCDMA (3G) technology use 2.1 GHz band (1920-1980 MHz paired with 2110-2170 MHz).

d. BWA service uses frequencies in the frequency band 2.3 -2.4 GHz and 2.5 -2.69 GHz.

e. Point to point fixed Microwave Access for these networks uses frequency bands 15/18/21/23 GHz as appropriate for establishing compatibility of electromagnetic radiation to ensure interference free operation of all such networks with other available networks.

f. Backbone Microwave Access for these networks uses 6/7 GHz frequency bands.

g. One of the BWA service providers has launched BWA services in Kolkata and Bangalore service area.

h. Internet Service Provider (ISP) service uses frequency bands 2.7-2.9 GHz and 3.3-3.4 GHz.

i. Frequencies are also assigned for Captive usages to Govt., PSUs and Private entities in different frequency bands.

j. Spectrum in the 2G bands of 800 MHz and 1800 MHz were put to auction. The auction was conducted as a Simultaneous Multiple Rounds Ascending (SMRA) e-auction over the internet. In the auction conducted, no bidding interest was expressed for spectrum in the 800 MHz band. The auction for spectrum in the 1800 MHz which commenced on 12.11.2012, concluded on 14.11.2012 with each participant that bid for spectrum

securing the same. No bids were received in four service areas namely Delhi, Mumbai, Karnataka and Rajasthan in the 1800 MHz band. The total value of blocks allocated in the auction of 1800 MHz band was ₹9407.64 crore.

k. Orders for levying one time spectrum charge on spectrum holding by existing GSM operators beyond 6.2 MHz with effect from 01.07.2008 and beyond 4.4 MHz from 01.01.2013 have been issued.

l. Auction of spectrum in 1800 MHz band in 4 service areas i.e. Delhi, Mumbai, Karnataka and Rajasthan where no bids were received in the last auction held in November, 2012, auction of spectrum in 900 MHz band in three Metro service area i.e. Delhi, Mumbai and Kolkata and auction of spectrum in 800 MHz band in 21 service areas are scheduled to be held in March, 2013.

m. SACFA clearances are granted for fixed wireless stations ensuring aviation safety, interference free operations and line of sight obstruction.

n. Delicensing of frequency band 433-434 MHz: Based on the requests received from various applicants, a Gazette Notification G.S.R.680 (E) dated 12th September, 2012 for delicensing frequency band 433-434 MHz has been issued for the usage of low power devices or equipments for indoor applications in the 433 to 434 MHz frequency range, on non-interference, non-protection and shared (non exclusive) basis.

## International Coordination

International coordination of satellite systems is required to be undertaken as per the provisions of the International Radio Regulations (RR) of the International Telecommunications Union (ITU). Coordination of frequency assignments for the individual satellite networks is necessary with satellite networks of other administrations for mutual coexistence and interference free operations of these networks. Operator level coordination meeting took place during September, 2012 with Asia Broadcast Satellite (ABS) to resolve technical issues.

## Coordination with ITU

### a. Notifications

Frequency notices for registration requests for IRS-P5 (NGSO) and IRS CARTOSAT-2 (NGSO) satellite networks have been forwarded to BR for publication in BR IFIC of Radio communication Bureau and the same were published by BR in concerned special section of BR IFIC.

Frequency notices for registration requests for INSAT-2(83), INSAT-KU10(111.5)E, INSAT-KU10(55)E, INSAT-NAV-GS (NGSO) and INSAT-NAV-A-GS (NGSO) satellite networks have been forwarded to BR for publication in BR IFIC of Radio communication Bureau and the same was published by BR in concerned special section of BR IFIC.

**b. Administrative Due-diligence**

Administrative Due-diligence in respect of satellite networks INSAT-KU11(55)E (55)E has been forwarded to ITU for publication in BR IFIC of Radiocommunication Bureau and the same was published by BR in concerned special section of BR IFIC.

**c. Co-ordination Request**

Additional information on Mars Mission of India, RISAT (NGSO), INSAT-NAV-GS (NGSO) and INSAT-NAV-A-GS (NGSO) satellite networks of Indian Administration was submitted to ITU and the same was published by BR in concerned special section of BR IFIC.

Coordination requests in respect of INSAT-NAV-NGSA (NGSO) and INSAT-NAVR_GS (NGSO), INSAT-NAVR (32.5), INSAT-NAVR (83), INSAT-NAVR (120.5), INSAT-NAVR (121.5), INSAT-NAVR (123.5), INSAT-NAVR (126.5), INSAT-NAVR (127.5) and INSAT-NAVR (129.5) were submitted to ITU for publication in BR IFIC of Radio communication Bureau and the same were published by BR in concerned special section of BR IFIC.

**d. Advanced Publication Information**

Advanced Publication Information of Moon Mission (NGSO), CHANDRAYAAN-2, INSAT-NAVR-GS (NGSO), Mars Mission, RISAT and MEGHA-TROPIQUES (NGSO) satellite network were sent to BR for publication in IFIC and the same were published by BR in concerned special section of BR IFIC.

Advanced Publication Information of INSAT-NAV(93.5) (93.5E) and ASTROSAT (NGSO) and Modified API in respect of MARS MISSION (NGSO) satellite network were sent to BR for publication in IFIC and the same were published by BR in concerned special section of BR IFIC.

e. BSS Plan as per Appendix-AP30/30A:- BSS Plan modification and associated feeder links in respect of INSAT-KUP-BSS (58.5E), INSAT-KUP-BSS (68E) on 58.5E and 68E were submitted to BR.

Advanced Publication Information (API/s) published in BR IFIC in respect of satellite networks of Israel, UK, Malaysia, Japan, Luxemburg, China, France, Norway, Russia, Azerbaijan, Germany, USA, Kazakhstan, UAE, PNG, Quatar, Iraq, Korea, Australia, Spain, Italy and Vietnam Administrations were objected in view of existing and planned INSAT satellite networks.

Coordination requests (CR/Cs):- Frequency assignments published in BR IFIC in respect of satellite networks of Russia, Japan, China, UK, Vietnam, Korea, ISRAEL, LUX, Kazakhstan, Holland, Sweden, Singapore, USA, UAE, Azerbaizan, China, France and PNG Administrations were objected in view of existing and planned INSAT satellite networks.

Frequency notices for registration (Part I-S):- Frequency assignments published in BR IFIC in respect of satellite networks of China, Russia, Italy, Japan, UK, Turkey, Japan, Nigeria, Italy,

UAE, Australia and Canada Administrations were objected in view of existing and planned INSAT satellite networks.

FSS Plan as per Appendix-AP30B:- Frequency assignments in respect of satellite networks of Belarus, Israel, Bangladesh, China, ISRAEL, Holland, Russian, France, PNG and Russian Administrations were objected in view of existing and planned INSAT satellite networks.

BSS Plan as per Appendix-30/30A:- Frequency assignments in respect of satellite networks of PNG, Holland, ISRAEL, Luxemburg and China Administration were objected in view of existing and planned INSAT satellite networks.

### Conferences

National Preparations, participation and follow-up action for various international and regional conferences under the aegis of International Telecommunication Union (ITU) and Asia-Pacific Telecommunity (APT) were undertaken to protect national interests especially in the context of spectrum management and radio communication related matters.

### World Radiocommunication Conference 2015 (WRC-15)

National Preparatory Committee has been constituted for WRC-15. NPC will coordinate and harmonise the views of stakeholders to finalise national viewpoints on various agenda items of WRC-15.

### APT Preparatory Group -2015

The regional coordination in respect of Agenda items of WRC-12 are also undertaken by APG -2015. In this connection WPC Wing Officers attended first meeting of APG -2015 held in Vietnam.

### National Frequency Allocation Plan (NFAP)

National Frequency allocation plan is a policy document which provides basis of development, manufacturing and spectrum utilisation activities in country, both for Government and private sector. NFAP is revised generally every two years. At Present NFAP-2011 is in force.

NFAP Review/ Revision Committee has been constituted to review the NFAP-2011.

## PROJECT IMPLEMENTATION

### Actual achievements from April to December 2012

a. Arbitration Tribunal for settlement of disputes relating to NRSMMS Project between M/s HFCL, India and WPC Wing, Department of Telecom, Ministry of Communications & IT has been setup. The Tribunal heard the matter four times up to December 2012 and it is still under consideration of the Tribunal.

b. The case for repairing of UPS unit installed for ASMS server and maintenance of V/UHF MMS vehicles have been processed and repairing work has also been done.

## Anticipated achievements from January to March 2013

a. Follow up of Arbitration

b. Monitoring of maintenance of facilities installed under NRSMMS project

c. Making spill over payments, to the Contractors as decided by Arbitrator

## Achievements of WPC Wing

| Achievements | April-December 2012 | Anticipated achievements during January-March 2013 |
|---|---|---|
| 1.1 Radio Frequency Spectrum Management | | |
| • New Radio Frequency authorized to various users | 9691 | 3033 |
| • Frequency assignments intimated to Radio-communication Bureau of ITU for registration | 150 | 50 |
| • Radio Frequency Assigned for visits of VVIPs | 45 | 08 |
| • SACFA (Standing Advisory Committee on Frequency Allocations) meeting held | 01 | 01 |
| • Inter-departmental meetings held | 10 | 06 |
| • Sites cleared for new wireless stations | 1,60,608 | 54,000 |
| 1.2 Wireless Licences Issued | | |
| • No. of Import Licences Issued | 2190 | 605 |
| • No. of Licences issued to new Wireless Stations | 83,142 | 5366 |
| • No. of Licences Renewed (for Wireless Stations) | 60491 | 19318 |
| 1.3 Certificate of Proficiency (COP) Examination/Licences | | |
| • No. of COP Examination conducted | 41 | 13 |
| • No. of candidates admitted | 13025 | 4780 |
| • No. of Licences issued | 2703 | 1043 |
| • No. of Licences renewed | 417 | 200 |
| • No. of Licences issued to New Radio Amateur Stations | 240 | 40 |
| • No. of Licences renewed for Old Radio Amateur Stations | 230 | 60 |

## WIRELESS MONITORING ORGANISATION (WMO)

Wireless Monitoring Organisation continues to provide interference-free wireless services in the increasingly crowded radio environment besides providing vital technical data for the introduction of new services such as 3G, BWA etc. to WPC Wing. Statistical performance data during first nine months of the current year i.e. 01-04-2012 to 31-12-2012 and anticipated performance during 01-01-2013 to 31-03-2013 is as given below:-

| S. No. | Particulars | Actual achievements during 01-04-2012 to 31-12-2012 | Anticipated achievement during 01-01-2013 to 31-03-2013 |
|---|---|---|---|
| 1. | Monitoring Assignments Handled. | 8303 | 2760 |
| 2. | No. of Wireless Transmission monitored. | 88166 | 29300 |
| 3. | Technical assistance to users to maintain their operation within specified standards. | 395 | 130 |
| 4. | Infringements communicated to various wireless users for remedial action. | 1786 | 590 |
| 5. | Channel days utilized for Radio Monitoring. | 4492 | 1500 |
| 6. | No. of Wireless Stations Inspected. | 1646 | 550 |
| 7. | No. of Radio Noise measurements. | 308322 | 50000 |
| 8. | No. of high priority interference complaint resolved. | 95 | 50 |
| 9. | No. of standard interference complaint resolved. | 3 | 5 |
| 10. | Man days devoted for high level technical work. | 356 | 120 |
| 11. | No. of training courses conducted. | 06 | 02 |
| 12. | No. of man days for training. | 521 | 200 |

## a. Radio Monitoring — a regulatory and treaty requirement

Radio monitoring, a regulatory and treaty requirement, is carried out by the Wireless Monitoring Organization of the Wireless Planning & Co-ordination Wing (WPC Wing), Ministry of Communications and IT, for the Government of India. It is essentially technical in nature and its broad objectives are derived from the international treaty document — *Radio Regulations of the International Telecommunication Union.*

## b. Major functions of Wireless Monitoring Organisation (WMO)

The major functions of the WMO are as under:

(i) Resolution of the harmful interference;

(ii) Monitoring for identification of frequency sub-bands for introduction of new services and/ or for additional allocation to existing services;

(iii) Monitoring for spectrum recovery — unused/ under-used frequency authorizations;

(iv) Monitoring for ensuring adherence to licensing conditions;

(v) Monitoring / measurements for sharing studies;

(vi) Assistance to domestic wireless users;

(vii) Assistance to foreign administrations;

(viii) Participation in special monitoring campaigns of the International Telecommunication Union;

(ix) Measurements on radio emissions (intentional & non-intentional) for the possible introduction of new radio communication standards, and also for studying the EMC compatibility of the proposed new installations;

(x) Inspection of licensed installations; and

(xi) Monitoring of space emissions to protect authorized satellite transmissions.

## c. Challenges before WMO

i. The increasing dependence of the society (the Government and the public alike) on the wireless communications demands WMO to ensure interference free radio communication environment. Therefore, WMO's primary focus, at present, is on public mobile radio communication services, public broadcasting services and safety-of-life services. WMO is earnestly gearing up its resources — manpower and machine-power — to ensure that these services continue to operate in interference-free environment. The primary reason for the interference protection to these services lies in their critical importance to the society as a whole. With respect to public mobile cellular service, WMO has twin objectives: (i) to identify and eliminate the sources of interference occurring due to a multitude of reasons, and (ii) to find unused spectrum for expansion of existing 2G services and for the 3G services. In so far as public broadcasting is concerned,

its transmissions have been found to be affecting aeronautical mobile communications (civil aviation) and also infringing licensing parameters. To address the needs of such crucial services, WMO is in the process of procuring custom-designed radio monitoring products. Beside the service-aspect of radio monitoring, WMO has to ensure the quality of the spectrum.

ii. After having completed all the formalities, six new Wireless Monitoring Stations have been established at Bhubaneswar, Dehardun, Lucknow, Patna, Raipur & Vijayawada under 11th Five Year Plan (2007-12). One technical staff has been posted at each of six new monitoring stations to procure the necessary facilities for running the office. The technical infrastructure for these six additional Wireless Monitoring Stations would more effectively address the monitoring needs of public mobile and broadcasting services than what is currently available to other Wireless Monitoring Stations. To this end, WMO has initiated the process of finalizing tender document after the necessary approval by competent authority for the procurement "Six Vehicle mounted Monitoring Terminals with Portable Monitoring equipments and network analysis and coverage measurement equipments". The expected cost of these facilities is about ₹28.0 crore and the procurement is to be effected in 2013-14.

iii. The case for the procurement of land for the new Wireless Monitoring Stations was taken up with the respective State Governments in 2007. With continuous persuasion, WMO has already procured land at Bhubneshwar, Dehradun & Raipur from the respective State Governments for establishing Wireless Monitoring Stations. WMO is also pursuing the matter for transfer of spare land/assets with BSNL at WMS's Bangalore, Hyderabad, Ranchi and Patna.

iv. WMO effectively and efficiently addresses new monitoring challenges emerging from the increasingly crowded radio frequency spectrum. WMO has taken steps to introduce new technologies and capacity-building. As for new technologies, procurement of software and hardware has already been initiated. Intensive training on monitoring as well as information technology is aimed at capacity-building. These two aspects are being jointly handled by the Monitoring Headquarter and Training & Development Centre, New Delhi.

v. Satellite Monitoring Earth Station at Jalna (Maharashtra) continues the monitoring of signals from all satellites located in the Geo-arc of interest to India. Its measurement functionality is planned to be enhanced in the near future.

vi. Wireless Monitoring Stations have started functioning from the newly constructed buildings at Bhopal & Visakhapatnam. The construction of the office buildings is in progress at WMSs Jallandhar, Mangalore and Siliguri. Construction of office building of Wireless Monitoring Station, Mangalore is in completion stage. The land dispute in respect of WMS Goa has been resolved with the intervention of Hon'ble Chief Minister of Goa. WMO is initiating action to construct new office building for WMS Goa.

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# III. 2 TELECOMMUNICATIONS ENGINEERING CENTRE

Telecommunications Engineering Centre (TEC) is the technical wing of the Department of Telecommunications. Its responsibilities, among other things, include:

I. Preparing Standards and Specifications for harmonious growth of the Indian Telecom Network and Services for the public as well as private sector operators.

II. Carrying out evaluation of equipment and services.

III. According approvals for equipment, technology and services.

IV. Studying new technology and services and give technical advice to DoT for their introduction in the Indian Telecom Network.

V. Technical support for DoT.

VI. Technical advice to TRAI, TDSAT, USOF, BSNL and MTNL, on request of DoT.

VII. Drawing up Fundamental Technical Plans of DoT.

VIII. Interaction with multilateral agencies like APT, ETSI and ITU through DoT.

IX. Creating facilities to further the objectives of MRA.

X. Develop necessary expertise to imbibe the latest technologies and results of R & D.

XI. Coordinate with C-DoT to provide details on the technological developments in the Telecom Sector for policy planning at DoT level.

## Quality Policy

TEC is committed to develop standards for the telecommunication sector in India, to ensure development of world class telecom network and smooth interconnection of individual networks. It discharges its function as a testing & certification body. TEC will endeavor to do continual improvement in its processes by means of ICT implementation and will strive to achieve e-TEC system. It is committed to provide timely support and advice to DoT on technical and licensing issues in addition to the core issues mentioned above.

This shall be achieved through proactive, stakeholder sensitive & responsive approach, technological and infrastructural up-gradation, knowledge sharing, competency enhancement and continuance of a conducive work culture.

## Quality Objectives

TEC has set its Quality Objectives as follows:

I. To ensure timely preparation & updating of new & existing GRs/ IRs /Test Schedules as per the Annual Action Plan.

II. To ensure timely conduct of field trials/testing/validation/ certification.

III. To ensure timely issue of Interface/type Approval and certification.

IV. To establish Next Generation Network (NGN) Lab in TEC to herald the deployment of such networks in the country: also, setting up of labs for the EMF radiation measurements.

V. To ensure continual competency development through training of employees.

VI. To develop TEC's infrastructure to achieve e-TEC. This will lead to paperless office working.

VII. To continually improve the stakeholders' satisfaction.

## Achievements:

The achievements of TEC during April – December, 2012 are given as under:

**1.** 11 new GRs/IRs were issued and 18 GRs/IRs were revised. Apart from this 5 GRs/IRs were amendmed.

**2.** Formulation of following National Plans:

I. Standard Operating Procedure for Co-ordination of Telecom Support and Provision of Human Services during Emergency of Natural Disasters

II. Radio waves and safety in our daily life - Dos and Don’ts

**3.** Study/Papers Study on various topics done and White Papers issued such as to Cell, Wireless communication using multiple-input multiple-output (MIMO), Near Field Communications, Carrier Grade Network Address Translation for IPv6 adoption by Service Providers, Green switches, 10 G EPON, Security Testing in Telecom Network, PMRTS (Public Mobile Trunking System), DIAMETER Protocol.

**4.** Installation of Next Generation Network Lab:

TEC completed installation and validation of NGN Lab for IPv6 testing of Telecom and ICT equipment.

**5.** TEC actively contributed to the releasing of Guidelines on Professional Market Access (PMA) for telecommunication equipment manufacturing in India.

**6.** TEC has submitted report on location accuracy for Mobile phones- Location Based Services (LBS).

**7.** Testing & Certification:

21 Certificate of Approval, 62 Interface Approval and 3 Type Approval were given. Revenue of Rs. 1.09 crore was collected on account of testing and certification.

**8.** 23 Training Courses have been conducted by NTIPRIT

**9.** Other activities undertaken by TEC are given as under:

I. Organisation of meeting with Manufactures for Mandatory Certification

II. Organisation of meeting with Service Providers for Green Telecom targets

III. Organisation of meeting with Afghanistan Telecom Regulatory Authority

IV. Attending Public Meetings on EMR at Jaipur and Mumbai

V. Organisation of Seminar on Spectrum

VI. Meetings with stakeholders and LBS solution providers

VII. Surveillance Audit of TEC by STQC for ISO 9001:2008

VIII. Internal audit and management review for ISO 9001:2008

IX. Upgradation of connectivity of TEC LAN to 100 Mbps STM-1 from BSNL NIB

X. Validation of IPv6 Traffic Generator and Analyzer developed by BITCOE

XI. Validation of 2 sites of PMRTS of M/s Inative Networks Pvt. Ltd.

XII. Organisation of various events under Rajbhasha Pakhwada

XIII. Organisation of 2 Rajbhasha Karyashala

XIV. Release of Newsletters on

- NGN Transport Lab
- M2M Communication

XV. Online Sale of TEC Documents:

- Payment gateway connectivity between NIC & SBI checked and found working
- Data entry work for “online Sale Project “in progress
- Uploading of document on production server.
- Testing of Software on production server

XVI. Online collection of test fees:

- Draft proposal received from NIC, after verification, draft proposal sent to NIC to give the final proposal. Final proposal received from NIC AND UNDER PROCESS FOR Project approval
- Project of online collection of Test Fee, submitted for approval.

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# III. 3 UNIVERSAL SERVICE OBLIGATION FUND

The Universal Service Obligation Fund formed by an Act of Parliament is headed by the Administrator USO Fund, appointed by the Central Government, for the administration of the Fund. He is empowered to formulate procedures for implementation of USO Fund schemes and disbursement of funds from USOF. His office works as an attached office of the Department of Telecommunications.

## Current status of ongoing activities

### Creation of General OFC Infrastructure

**a) National Optical Fibre Network (NOFN):** The optical fibre has predominantly reached state capitals, districts and blocks, at present. NOFN is planned to connect all the 2,50,000 Gram panchayats in the country through optical fibre utilizing existing fibers of PSUs viz. BSNL, RailTel and Power Grid and laying incremental fiber wherever necessary to bridge the connectivity gap between Gram Panchayats and Blocks, for providing broadband connectivity.

Length of the incremental network is approx. 5 lakh Km. Dark fiber network thus created will be lit by appropriate technology to ensure a bandwidth of at least 100 Mbps at each Gram Panchayat.

Non-discriminatory access to the network will be provided to all categories of service providers. These access providers/service providers like mobile operators, Internet Service Providers (ISPs), cable TV operators, content providers can launch various services in rural areas.

Various applications for e-health, e-education, e-governance etc. will be provided. The project is being funded by USOF and initial estimated cost of project is ₹20,000 crore in two years.

The project is being executed by a Special Purpose Vehicle (SPV) namely Bharat Broadband Network Limited (BBNL), which has been incorporated on 25.02.2012 under Indian Companies Act 1956.

### Present Status

NOFN Project is envisaged as a Centre-State joint effort. State Governments are expected to contribute by way of not levying any RoW charges. This requires suitable tri-partite MoU to be signed by GOI, State Governments and BBNL.

Tri-partite MoU has been signed on 26.10.2012 with 13 States viz. Andhra Pradesh, Arunachal Pradesh, Chhattisgarh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Manipur, Mizoram, Rajasthan, Tripura, Uttar Pradesh, Uttarakhand and 3 Union Territories viz. Dadra & Nagar Haveli, Daman & Diu and Puducherry. A total of about 1,40,727 Gram Panchayats will get

covered by Optical Fibre Network in these States and UTs.

Three Pilot Projects have been completed to cover all Gram Panchayats of Arain Block in Ajmer District (Rajasthan), Panisagar Block in North Tripura District (Tripura), Paravada Block in Vishakhapatnam District (A.P.). As on 15.10.2012, each of the 58 Gram Panchayats in these three Pilot Project Blocks have been provided with 100 Mbps bandwidth.

**b) Optical Fibre Network Augmentation, Creation and Management of Intra-District SDHQ-DHQ OFC Network in North Eastern Region**

- Scheme has been launched, in Assam to start with, 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 by strengthening the OFC network.
- OFC Schemes in North Eastern region are undertaken on BOO model, i.e. build, operate & own basis.
- The scheme considers OFC Network augmentation between the blocks' HQ and Districts' HQ. USOF provides subsidy support on the condition that it will be shared with other Telecom Operators at the rates prescribed in the Agreement.

**(i) Scheme for Assam**

- This OFC scheme would connect 354 locations in 27 districts. Agreement has signed with BSNL on 12.02.2010 in this respect. The Agreement shall be valid for a period of seven years from the date of signing of the agreement. USOF will provide a subsidy support of ₹98.89 crore. As on 31.01.2013, 280 locations out of the targeted 354 locations have been connected with OFC.
- At least 70% of the subsidized bandwidth capacity, created under the scheme, shall be shared with the licensed service providers in the area of ASSAM at a rate not more than 26.22% of the current TRAI ceiling tariffs.

**(ii) Scheme for North East - I Circle [Meghalaya, Mizoram & Tripura]**

- This OFC scheme would connect 188 locations in 19 districts. Agreement has been signed with Railtel on 16.01.2012 in this respect. The Agreement shall be valid for a period of eight years from the date of signing of the agreement. USOF will provide a subsidy support of ₹89.50 crore. Work of OFC laying under the scheme is yet to be started.
- At least 70% of the subsidized bandwidth capacity, created under the scheme, shall be shared with the licensed service providers at a rate not more than 12% of the current TRAI ceiling tariffs.

**(iii) Scheme for North East - II Circle [Arunachal Pradesh, Manipur & Nagaland]**

- This OFC scheme would connect 407 locations in 30 districts. Agreement has been signed with Railtel on 16.01.2012 in this respect. The Agreement shall be valid for a

period of eight years from the date of signing of the agreement. USOF will provide a subsidy support of ₹298.50 crore. Work of OFC laying under the scheme is yet to be started.

- At least 70% of the subsidized bandwidth capacity, created under the scheme, shall be shared with the licensed service providers at a rate not more than 27% of the current TRAI ceiling tariffs.

## Rural Broadband Scheme for expanding provision of Wireline Broadband Connectivity upto village level

For providing broadband connectivity to rural & remote areas, USOF has signed an Agreement with BSNL on January 20, 2009 under the Rural Wireline Broadband Scheme to provide wire-line broadband connectivity to rural & remote areas by leveraging the existing rural exchanges infrastructure and copper wire-line network. The speed of each of the broadband connections shall be at least 512 kbps always on.

Under this scheme, BSNL will provide 8,88,832 wire-line Broadband connections to individual users and Government Institutions and will set up 28,672 Kiosks over a period of 5-years, i.e. by 2014. The subsidy disbursement is for (i) broadband connections, Customer Premises Equipment (CPE), Computer/Computing devices (ii) setting up of Kiosks for public access to broadband services. The estimated subsidy outflow is ₹1,500 crore in 5 years' time that includes subsidy for about 9 lakh broadband connections, CPEs, computers/computing devices and Kiosks.

As on 31.12.2012, a total of 4,33,018 broadband connections have been provided and 10,713 kiosks have been set up in rural and remote areas.

## Infrastructure Support for Mobile Services

USO Fund launched a scheme to provide subsidy support for setting up and managing 7,353 infrastructure sites/ towers in 500 districts spread over 27 states for provision of mobile services in the specified rural and remote areas, where there was no existing fixed wireless or mobile coverage. Villages or cluster of villages having population of 2000 or more and not having mobile coverage were taken into consideration for installation of the tower under this scheme. The agreements effective from 01.06.2007 were signed with the successful bidders in May 2007, which are valid till November, 2013.

As on 31.12.2012, 7,310 towers i.e. about 99.42% have been set up under this scheme. The infrastructure so created is being shared by three service providers for provision of mobile services. As on 31.12.2012, 16,023 Base Transceiver Stations have been commissioned by Service Providers at these towers for provisioning of mobile services.

## Public Access: Village Public Telephones (VPTs)

As on 31.12.2012, 5,81,602 villages i.e. 97.97% of the Census 2001 inhabited revenue villages have been covered with Village Public Telephones (VPTs). VPTs are likely to be provided in remaining inhabited revenue villages by March 2013 through on-going USOF scheme of VPTs in newly identified uncovered villages as per Census 2001.

### a) USOF Scheme for VPTs in newly identified uncovered villages as per Census 2001

Reconciliation of the VPTs working in the inhabited villages as per Census 2001 was carried out taking into account the existing VPT and those provided under Bharat Nirman. All the remaining 62,443 inhabited villages as on 01.10.2007 as per Census 2001 irrespective of criteria of population, remoteness, accessibility and law &order situations have been included for provision of VPTs with subsidy support from USO Fund under this scheme. Agreements in this regard were signed with BSNL on 27.02.2009. As per the terms and conditions of the agreement the VPTs installed between the periods 01.10.2007 to 26.02.2009 are also eligible for subsidy support. As on 31.12.2012, 55,160 VPTs out of the 62,443 i.e. 88.33% VPTs have been provided under this scheme.

### b) Provisioning of VPTs under Bharat Nirman-I

Agreements were signed with BSNL in November 2004 to provide subsidy support for provision of VPTs in 62,302 uncovered villages in the country excluding those villages having population less than 100, those lying in deep forests and those affected with insurgency.

The provision of VPTs in these villages has been included as one of activities under Bharat Nirman Programme. 62,101 VPTs have been provided under this scheme till the closure of rollout period on 31.08.2012.

Remaining villages of the scheme would be provided with VPT facility under USOF scheme of VPTs in newly identified uncovered villages as per Census 2001.

### c) Replacement of MARR based VPTs (MARR-A & MARR-B)

Agreements were signed with BSNL in the year 2003 for replacement of 1,85,121 number of VPTs with reliable technologies, which were earlier working on Multi Access Radio Relay (MARR) technology and installed before 01.04.2002. These included 47,075 MARR VPTs already replaced before 30.06.2003 (MARR-B) and 1,38,046 MARR VPTs to be replaced from 01.07.2003 onwards (MARR-A).

A total number of 1,84,794 MARR VPTs (99.83%) have been replaced till the closure of the scheme on 30.06.2012. Remaining villages of the scheme would be provided with VPT facility under USOF scheme of VPTs in newly identified uncovered villages as per Census 2001.

## Status of fund collection and subsidy disbursement

Financial Year wise status of collection of fund and disbursement of subsidy is is given in the table. A total fund of ₹47273.77 crore has been collected under USOF till 31.12.2012. A subsidy of ₹15523.57 crore has been disbursed through USOF till 31.12.2012 and a payment of ₹6948.64 crore has been made to BSNL towards reimbursement of License Fee and Spectrum Charges. A subsidy of ₹364.17 crore has been disbursed through USOF during the year 2012-13 till 31.12.2012. Thus, a total amount of ₹22472.21 crore of USOF has been utilized till 31.12.2012 and available potential balance is ₹24801.56 crore. National Optical Fibre Network (NOFN) for providing broadband connectivity to 2.5 lakh Gram Panchayats is being funded by USOF with an estimated cost of ₹20000 crore in two years. Remaining amount will be utilized for implementation of other ongoing & upcoming schemes of USOF.

### Status of Disbursement and Availability of Funds as on 31.12.2012.

(₹ in crore)

| Financial Year | Funds collected as USL (as per DoT A/Cs) | Funds allocated | Funds disbursed | Reimbursement of LF and Spectrum Charges to BSNL | Balance |
|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) |
| 2002-03 | 1653.61 | 300.00 | 300.00 | 2300.00 | -943.39 |
| 2003-04 | 2143.22 | 200.00 | 200.00 | 2300.00 | -356.78 |
| 2004-05 | 3457.73 | 1314.59 | 1314.59 | 1765.68 | 377.46 |
| 2005-06 | 3215.13 | 1766.85 | 1766.85 | 582.96 | 865.32 |
| 2006-07 | 3940.73 | 1500.00 | 1500.00 | 0 | 2440.73 |
| 2007-08 | 5405.80 | 1290.00 | 1290.00 | 0 | 4115.80 |
| 2008-09 | 5515.14 | 1600.00 | 1600.00 | 0 | 3915.14 |
| 2009-10 | 5778.00 | 2400.00 | 2400.00 | 0 | 3378.00 |
| 2010-11 | 6114.56 | 3100.00 | 3100.00 | 0 | 3014.56 |
| 2011-12 | 6723.57 | 1687.96 | 1687.96 | 0 | 5035.61 |
| 2012-13* | 3326.28 | 625.00 | 364.17 | 0 | 2962.11 |
| Total | 47273.77 | 15784.40 | 15523.57 | 6948.64 | 24801.56 |

*2012-13 based on collections and disbursement upto 31.12.2012.

Notes:

1. USL collection started from the year 2002-03.
2. The USL collection figures in col. (2) have been taken from booked figures of DoT A/C.
3. Payments made under col. (5) are as per the decision of Ministry of Finance vide letter no. F.1 (20)-B (AC)/2007 dated 04.06.2008.

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# III. 4 CONTROLLER OF COMMUNICATION ACCOUNTS OFFICES

There are 26 Controller of Communication Accounts (CCA) Offices located across the length and breadth of the country, headed by the Principal CCA/CCA. Initially established with a view to settling the pension and terminal benefits of Department of Telecommunications and BSNL absorbed employees, the CCA offices now play an important role as a critical interface between the Department and its various stakeholders. The CCA offices also implement and administer the policy decisions/initiatives of the Govt. on issues such as the License Fee and Spectrum Usage Charges, USO Fund management, USO activities progress review, Asset management (particularly land and building), Arbitration under section 7(b) of the Indian Telegraph Act, 1885 and representing the Department in various judicial fora, etc.

## FUNCTIONS PERFORMED BY THE CCA OFFICES

Various functions performed by the CCAs are as under:

### Disbursement of terminal benefits

Various terminal benefits for which disbursements are made by CCAs are as under:

(i) Pension: With the promulgation of Rule 37(A) of the CCS Pension Rules, the government has a critical role in the payment of pension to the erstwhile government servants absorbed in BSNL. The CCA Unit is responsible for budgeting of pension expenditure and authorization of retirement benefits on CDA and IDA scale. Presently, the CCA offices are disbursing pension to over 2 lakh pensioners. The updated figures are as under:-

| Financial Year | No. of Pensioners (in lakh) | Pension disbursed (₹ in crore) |
|---|---|---|
| 2011-12 | 2.37 | 4822.97 |
| April,12 to Sept, 2012 | 2.42 (upto Sept,12) | 3416.39 (upto Nov,12) |
| Anticipated (January-March,2013) | NA | 1602.00 |

(ii) Pension contribution and leave salary: The CCA offices carry out the functions of collection, scrutiny and monitoring of the amounts to be received as pension contribution and leave salary by the government.

(iii) GPF & Long Term Loans Accounting: The CCA offices are also responsible for the maintenance of GPF, long term loans and advances and their recovery/accounting.

(iv) Audit functions: The CCA Offices have been exercising post audit on the disbursements made by the designated banks and post offices on account of the pension and allied benefits of the pensioners. The CCA offices carry out the internal audit of field offices

comprising of Wireless Monitoring Services, Telecom Enforcement Resource & Monitoring Cells, Regional Telecom Engineering Centers and Regional Licensing offices.

(v) Functioning as CPIOs under RTI Act, 2005: Officers in the offices of CCA have been designated as Central Public Information Officers (CPIO) and Departmental Appellate Authorities (DAA) for ensuring smooth provisioning of information under the RTI Act 2005 for all matters being dealt with by CCA offices.

## Accounts

CCA office is the basic unit of departmentalized accounts organization and performs the PAO and DDO functions for field office like TERM, WMO and RLO. Preparation and submission of the accounts has been greatly streamlined by employing information systems effectively in the CCA offices. Department of Telecom in 2011-2012 achieved complete integration of submission of accounts through COMPACT software, with “e-lekha”. E-lekha is an e-governance initiative of CGA office, wherein the accounts are uploaded by all the Ministries online. Following this integration, online accounting information is available upto object head level to the management from the e-lakha site. Manual input of date has been completely done away with in the Principal Accounts Office (DOT Accounts HQ). e-payment process is being introduced in the department as per the instructions of Ministry of Finance by using GePG website. As a pilot project, CCA, Delhi and PAO (HQ) in DOT HQ are selected for implementation of the system. Remaining CCA offices will be taken in to fold in a phased manner.

## Assessment & Revenue Functions

The details are as under:

(i) Collection Of Licence Fee: CCAs are responsible for the Management of VSAT License Fees, assessment & collection of license fee as a percentage on revenue share from all cellular, basic and unified access service licensees together with the scrutiny of documents submitted by them viz. AGR (Adjusted Gross Revenue) statements and Affidavits, billing & collection and filing of periodical returns to HQ. CCA offices deal with license fee related work of licensees under the VSAT/UASL/basic/CMTS/NLD/other services.

(ii) Verification of deductions: As per the license agreement, licensees claim deductions while arriving at the AGR for the license fee payment. These deductions, (on account of pass through charges, roaming service charges, sales tax, and service tax) are verified on a quarterly basis by the CCAs. The deductions claimed by the licensees vary from 25% to over 90% of the gross revenue under different categories of licenses.

(iii) Collection of spectrum charges: The work relating to collection of spectrum charges in respect of cellular operators on revenue sharing basis has been delegated to CCA offices since 1st April, 2004. The spectrum fee at a prescribed percentage of the revenue is collected in advance in each quarter.

(iv) Maintenance of financial bank guarantees: The work of maintenance, renewal, revision and invocation of the financial bank guarantees submitted by the licensees has been entrusted to the CCAs.

The license fee and the spectrum charges collected from the Telecom Service Providers are a major source of non-tax revenue to the Govt. of India. Amount collected during the last three years on this account is given in the following Table.

(₹ in crore)

| | 2009-10 | 2010-11 | 2011-12 | 2012-13 (up to 3rd Quarters) | Anticipated (January to March, 2013) |
|---|---|---|---|---|---|
| License Fee | 9778.52 | 10286.44 | 11790.93 | 5749.42 | 5582.85 |
| Spectrum Charges | 3809.54 | 3433.23 | 5192.30 | 5912.04 | 1397 |
| Auction Revenue | | 106264.73 | | 1722.24 | |

## USO related functions:

Implementation of USOF schemes is monitored at the State level by the offices of CCAs being Designated Monitoring Agency of USOF Schemes. The CCA offices disburse USOF subsidy to Service Providers on behalf of Administrator, USOF. They check and verify the correctness of the subsidy claims submitted by the Service Providers before disbursing the funds. They also carry out physical inspection of USOF sites for establishing the veracity of the claims. In addition, the CCAs act as an interface between service providers. They also interact with State Governments to facilitate smooth implementation of the schemes.

## Arbitration

Arbitrators are appointed by the Department in accordance with the provisions of Section 7-B of Indian Telegraph Act, 1885 to determine a dispute that arises between the Telegraph Authority and user of the facility. On an average, close to 300 arbitrators are appointed every year by the Department. Recently, the Department has delegated its power to appoint arbitrators under Section 7-B of Indian Telegraph Act, 1885, for billing related disputes in respect of BSNL & MTNL, to the Principal Controllers/Controllers of Communications Accounts with a view to increase the accessibility for the consumers and to expedite the process of grievance redressal.

## Asset management

Department of Telecommunications being the owner of huge amount of assets in the form of land & building has embarked on the process of preparing an asset register of land & building.

CCA offices have carried out verification of the DoT/BSNL/MTNL land in association with the officers of the BSNL/MTNL. The Maintenance of the asset register/transfer of land to BSNL is to be carried out by CCAs. DoT land & building asset register has been prepared in DoT asset website developed by National Informatics Centre. The GIS mapping of the land & building assets has been completed by NIC.

## NATIONAL INSTITUTE OF COMMUNICATION FINANCE (NICF)

National Institute of Communication Finance (NICF) is a Central Training Institute (CTI) recognized by Department of Personnel and Training (DoPT). This apex level training institute of Ministry of Communications &IT is an attached office of Department of Telecom. It caters to the training needs of Indian P&T Accounts & Finance Service (IP&TAFS) Officers and officials posted in Department of Telecom and Department of Posts. However, being CTI it aims at fulfilling sectoral training, development and research needs of communication sector and other organized civil services as well.

### Workshops/Seminars

NICF serves as a nodal Training and Research centre for Telecom policies, Planning & licensing, USO regulation, Postal Accounts and Postal Finance. It has organized many workshops and seminars on issues like 'Impact Assessment of Universal Service Schemes', 'Annual Performance Appraisal Report', 'Sustainable Development of Infrastructure', 'Internal Audit of TERM Cell', 'Training of Trainers', 'Revenue Management' and 'Implementation of COMPACT' etc.. NICF also organized lectures by eminent practitioners on subjects like "Finance Advice" and "Special Audit of Licenses of Telecom Sector", 'Motivation' etc.

Seminar on "Sustainable Development of Infrastructure" was organized on 7.6.2012 with the help of TERI at India Habitat Centre, New Delhi.

### Induction and In-Service Training

NICF conducts induction training of IP&TAFS Group 'A' Probationers. At NICF, they are trained in Telecom & Postal Accounts & Finance functions and procedures along with various facets of Administration, IT, Government rules & regulations.

***Shri R.Chandrashekhar, Secretary (T) addressing Probationers of IP&TAFS 2010 Batch during valedictory session on 28.8.2012 at Sanchar Bhawan, New Delhi.***

The induction training and in-service courses are conducted for Group 'B' and 'C' officers

as well. Induction Training of three batches of Group 'B' and two batches of Group 'C' have been conducted so far.

## MID CAREER TRAINING

NICF also conducts mandatory Mid Career Trainings (MCT) of Group 'A' IP&TAFS officers as per the guidelines issued by DoPT. Mid Career Training Phase IV for IP&TAFS Gr. 'A' officers has been successfully organized by NICF during Sept. - Nov. 2012. Exposure in the field of Public Policy, Good Governance, Spectrum Auctioning, Spectrum allocation and pricing, Regulation in Telecom, HR Management, Universal Service Obligation, Financial Management, Accounting practices, Cyber Security and Cyber Laws, Corporate Governance etc. were given to the participant officers in the form of classroom training, field visits and international exposure to know the best practices on the subject.

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# III. 5. VIGILANCE ACTIVITIES

Complaints are received by the vigilance wing of the Department from various sources like public, Ministries, Members of Parliament, MLAs, Prime Minister's Office, Central Vigilance Commission, CBI and the field units of MTNL/BSNL. These complaints are then taken up for investigation to verify allegations, identify the delinquent officers/officials and fix responsibility. During the period from April 2012 to December 2012, 264 complaints [other than CVC] were received, 45 of which were investigated. 51 Officers/Officials were charge-sheeted, 52 Officers/ Officials were punished for Major/minor penalty after conclusion of disciplinary proceeding, 4 prosecution sanctions were issued and 10 appeal cases were settled during the period.

## Staff Training

To keep the staff aware of the different activities which attract vigilance angle, a training schedule is prepared every year. Different Telecom Circles are covered every year for this 5 days' 'Vigilance & Disciplinary Proceedings' training course. The course is being conducted as per schedule at the various Telecom Training Centers of BSNL/MTNL. Officers at different levels trained in this training get acquainted with various aspects relating to vigilance and disciplinary proceedings and subsequently provide a pool of officers to work as Inquiry/Presenting Officers and Vigilance Officers. The number of officers trained during the period is 345.

## Vigilance Clearances

This is an important activity of the vigilance wing because it is required at the time of promotion, training/deputation abroad, deputation to other Organizations/Departments and obtaining passports etc. During the period April-December 2012, 2,971 officials were granted vigilance clearance for various purposes and tentative figure for rest of the period up to March 2013 is 1200.

## Consultation with the Central Vigilance Commission

CVC is the nodal agency of the Government of India having jurisdiction over all Ministries/ Departments/PSUs etc for vigilance related matters. Action against Government officers/ Officials are taken after following the due consultation process with the CVC. The vigilance wing of the Department coordinates with the CVC for the vigilance related matters. After examination, 40 cases were referred to CVC for advice during the period from 01.04.2012 to 31.12.2012.

## Vigilance Awareness Week

Vigilance Awareness Week was observed from 29th October to 3rd November 2012. Essays, Quiz and Debate competitions were conducted for spreading the awareness among the staff. Prizes were given and certificates awarded to the winners.

## Statistical Summary

i. The statistical summary of the various activities is as below:

| Activities | From 01.04.12 to 31.12.12 |
|---|---|
| Total No. of Complaint received during April 1, 2012 to December 31, 2012 | 264 |
| Total No. of Complaints investigated | 45 |
| Total No. of Disciplinary/Other action taken | 228 |
| Total No. of Officers/officials charge sheeted | 51 |
| Total No. of Major Penalty recommended | 32 |
| Total No. of Minor Penalty recommended | 19 |
| Total No. of Vigilance Clearance issued | 2971 |

ii. CVC complaints received, and disposed of during the period from April 2012- December 2012

| Opening Balance as on April 1, 2012 | Received up to December 31,2012 | Disposed of up to December 31, 2012 | Closing balance December 31, 2012 |
|---|---|---|---|
| 44 | 50 | 80 | 14 |

*Pledge being administrated by Secretary (T) on 29-10-2012*

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# III. 6 TELECOM ENFORCEMENT RESOURCE AND MONITORING (TERM)

With the increasing number of telecom service providers in the country, the Government felt the need for presence of Telegraph Authority in all the Licensed Service areas and Large Telecom districts of the country. With the growth of access service providers and ISPs, an increase in illegal/clandestine telecom operations, was also observed. To tackle this menace, the Government has created Vigilance Telecom Monitoring (VTM) cells renamed as TERM (Telecom Enforcement, Resource & Monitoring) Cells to reflect their entire gamut of functions. As on date there are 34 TERM Cells spread across the country each headed by a Senior Administrative Grade (SAG) level officer, termed as Dy. Director General (DDG), TERM.

## Functions assigned to TERM Cells

### Monitoring of compliance to prescribed norms regarding acquisition of subscribers:

In the year 2007, it was decided to have a continuous monitoring of compliance to prescribed norms regarding acquisition of subscribers for security related concerns. For this it was decided to verify the Customer Acquisition Forms (CAFs) of all the active subscribers on sample basis every month. In the year 2008 the sample size was revised to 0.1% based on the recommendation of NSSO. Penalties are also being imposed on TSPs for non-compliance to the norms. As a result of this activity the compliance percentage of CAFs which was approx. 74% have been increased to approx 95%. Till 31st Dec 2012 more than ₹2.9 crore number of CAFs have been audited and a penalty of more than ₹407 crore have been collected from the TSPs for non-compliance.

Apart from above, TERM Cells are also carrying out following activities and penalties are being imposed for non-compliance:

i. Analysis of subscriber databases submitted by TSPs
ii. Inspections of warehouses of the TSPs for having samples directly from the storage
iii. Investigation of subscriber verification cases reported by various sources including LEAs

More than ₹20 crore have been collected in cases other than monthly CAF audit. In cases where forgery has been observed in CAFs/ documents complaints against more than 78000 connections have been lodged with local police till 31-12-2012.

**Service Testing:** As per the license agreement all the Access Service Licensees are required to roll out their services within prescribed time periods. For this they have to offer their services in the districts selected by them for crosschecking the quality/ coverage and other parameters by DoT which is termed as Service Testing. In the year 2007 it was decided

that TERM Cells may be entrusted the responsibility to carry out the service testing of the cases offered by TSPs till that time as well as to register/test the new cases. These are very exhaustive testing and DoT has prescribed charges for these testing. TERM Cells are also issuing Service Test Result Certificates (STRCs) against the cases tested by them. Till 31st Dec 2012, more than 14000 Base Transreceiver Stations have been tested by TERM Cells which have resulted into a revenue generation of more than ₹55 crore as testing fee.

Apart from this TERM Cells are also sending compiled data pertaining to roll out obligation for imposing Liquidated Damage (LD) Charges on the TSPs who are not complying to Roll-out obligation conditions.

**Checking of compliance to EMF radiation norms:** With the increasing concerns over harmful effects of Electromagnetic Radiation on human health, in the year 2010 it was decided that the TERM Cells may be entrusted the work of cross checking the compliance of EMF radiation norms as prescribed by Government. In this regard specific procedures along with testing fee have also been formulated.

Till 31st Dec 2012, more than 47000 BTSs have been tested for compliance to radiation norms which have resulted into a revenue generation of more than ₹47 crore as testing fee.

**Handling of Public Grievance (PG) cases:** TERM Cells are representing licensor in the field and complaints received through PG portal or from other sources are being analyzed and resolved by TERM Cells. Till 31st Dec 2012 more than 4500 PG cases have been dealt by TERM Cells.

**Curbing of illegal set ups causing financial loss to the exchequer:** One of the major purposes of creation of TERM Cells was to curb the illegal operations (not permitted under Indian Telegraph Act) and to catch hold of the culprits. Till now more than 500 such illegal setups have been unearthed and raided with the concerned Law Enforcement Agencies (LEAs) i.e. local police, CBI, DRI etc. to catch hold of the culprits. These cases have been handed over to Law Enforcement Agencies (LEAs) for further actions against the culprits.

**Registration of Other Service Providers (OSPs):** With the growth of BPO industry in the country it was decided to decentralize the registration of Other Service Providers (OSPs) which was being done by DoT, HQ. TERM Cells were given the job of OSP registration and also the registration of Tele-marketers. The work regarding registration of Tele-marketers is now being looked after by TRAI. In view of the increase in applications for registration of OSPs, one software has been developed with the help of NIC to have a more transparent, convenient and fast mechanism to dispose-off the applications of OSP registration. The government had also prescribed a nominal processing fee of ₹1000/- for Tele-marketer registration and ₹15000/- for OSP registration. Till 31st Dec 2012 more than 20,000 Telemarketers/OSPs have been registered by TERM Cells which has resulted into revenue generation of more than ₹2.09 crore.

**Inspections of TSPs/ Subscribers:** TERM Cells are carrying out following type of inspections for checking compliance to the various guidelines issued by DoT, HQ from time to time

i. Inspection of UASL/CMTS/Basic licensees
ii. Inspection of NLD/ILD licensees:
iii. Inspection of ISPs
iv. Inspection of OSPs/ Tele-marketers
v. Inspection of Infrastructure Providers-1 (IP-1)
vi. Inspection of customers like Bulk customers, Heavy users, Internet Leased Lines, V-SAT customers etc.
vii. Inspection of retailers/ distributors

Till 31st Dec 2012 more than 5400 such inspections have been carried out by TERM Cells and the discrepancies have been rectified in coordination with TSPs.

**Centralized Monitoring System:** Government has decided to set up Centralized Monitoring System (CMS) for lawful interception and monitoring which will enable the electronic provisioning of the targets as required by Law Enforcement Agencies (LEAs) thereby reducing the manual intervention at many stages as well saving of time. The system is to be installed by C-DoT. After commissioning of CMS, TERM Cells will be responsible for operation of CMS.

## Other major works:

a. Appointment of franchisee of TSPs in sensitive states (Assam, North-East & J&K): Till 31st Dec 2012 more than 28,000 clearances have been issues.
b. Coordination among various network operators, telecomm service providers in the field and monitoring of network parameters.
c. Checking of compliance by the licensee of any directions issued by the licensor in public interest.
d. Maintenance and update of the Subscriber Database in the respective Licensed Service Area.
e. Maintenance and update of the Cell Site / BTS registers of the respective licensed service area.
f. Perform such other functions as may be entrusted to it from time to time by the DoT in overall interest of the country and consumers.
g. Checking of compliance by the companies in respect of NOC issued by the DOT selling of the global calling cards, international SIM Cards etc.
h. Checking of compliance by the companies who have registered by the DOT under OSP, IP-I, IP-II etc. category.
i. To monitor inter operator connectivity to ensure optimum Call Completion Ratio (CCR) for inter operator calls.

j. Matters related to national security/ Coordination with LEAs and assisting various security agencies / LEAs in providing the information related to the customers, CDRs, exchange records etc.

k. Technical arrangement for the lawful interception/ monitoring of all communications passing through the licensee' network as and when offered by the licensee.

l. Disaster Management: Taking over of network in the events of natural calamities or the other emergency situations.

m. Analysis of call details records/exchange records/ subscription/traffic data of various licensees.

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# III. 7 EMPOWERMENT OF WOMEN

In accordance with the strategic approach of the Government to achieve the goals of gender mainstreaming and gender justice laid down in the National Policy for Empowerment of Women, certain steps have been taken by the Department of Telecommunications and the Public Sector Enterprises under its administrative control.

The Department of Telecommunications is effectively implementing the guidelines/instructions of the Supreme Court on prevention of sexual harassment of women at work place in all its units. In pursuance of the orders of the apex court, it has setup a committee on the sexual harassment of women, headed by a woman.

The steps taken for empowerment of women by various functional wings of the Department are given below:

## DoT-USOF's Sanchar Shakti Scheme

DoT-USOF's Gender Budget Programme: Recognizing the vital role that Information and Communication Technology (ICT) can play in the empowerment of rural women, a scheme has been launched for pilot projects aimed at facilitating Self Help Groups (SHGs) access to ICT enabled services. The Sanchar Shakti scheme covers the following categories of projects:

a. Provision of a mobile VAS subscription to SHGs with a service validity/warranty of at least one year.

b. Setting up of SHG run mobile repair centres in rural areas.

c. Setting up of SHG run modem repair centres in rural areas.

d. Setting up of SHG run solar based mobile/CDMA FWT charging centres in rural areas.

Financial support from USO Fund is to be provided towards VAS subscriptions for SHGs in accordance with the provisions of underlying subsidy Agreements. At present, MoUs have been signed for Proof of Concept (PoC) for 9 mobile VAS projects in the state of Tamilnadu, Kerala, Maharashtra, Uttar Pradesh, Uttarakhand, Andhra Pradesh, Rajasthan and the Union Territory of Puducherry.

Agreements for 4 Pilot Projects under Sanchar Shakti scheme are to be signed with 3 Service Providers. Draft agreements have already been vetted by Legal and Finance wings of DoT. Hon'ble MOC&IT has accorded approval for entering into agreements with Service Providers. At present, three service providers are profiling the targeted individual beneficiaries in preparation for signing the agreements.

## CENTRE FOR DEVELOPMENT OF TELEMATICS (C-DoT)

### Gender Sensitivity

C-DoT has always been sensitive to gender issues and consistently works towards gender equality. Presently, about 33% of staff in C-DoT is women.

### Existing Policies

a. All female staff members are allowed to avail up to 180 days maternity leaves for delivery and up to 270 days leaves subsequent to that (inclusive of 180 days maternity leave). For miscarriage/abortion, leave of a total of 45 days in the entire service is permissible.

b. C-DOT offers accommodation and transport benefits to all its women employees with different options that may be availed as per individual suitability. This ensures the safety and security of all women employees in the company.

c. Reimbursement for residential telephone expenses is admissible to about 61 % of the women staff. Multifunctional allowance is admissible to 30% of the women employees.

d. Career growth opportunities for women are available to women employees in C-DOT. In the last financial year, of the total employees promoted to higher grades, 37% of them were women. In management cadres (Team Leaders, Group Leaders, Technical Experts and Sr. Technical Experts) about 24% are women.

e. In order to address issues relating to Sexual Harassment of women staff at work place, a Committee has been constituted by CDOT Board to take a fair and justified view of the cases and recommend suitable action on the same.

## BHARAT SANCHAR NIGAM LIMITED (BSNL)

In respect of schemes for the benefit of women employees, the following schemes are existing in BSNL:

a. Maternity leave of 180 days are given to all women employees.

b. Special allowance for child care for women employees with disabilities @ ₹1,000 per month per child maximum for two children till the child attains two years.

## MAHANAGAR TELEPHONE NIGAM LIMITED (MTNL)

Mahanagar Telephone Nigam Limited has always endeavored towards upliftment of social status of women by innovating and executing action plans falling under its realm. As on 31.12.12, 21.87% of total manpower are women.

In addition, MTNL has also taken several steps towards furthering empowerment of woman employees. A few of those are enumerated below:

a. For women working in the same positions, same remuneration is paid and there is no discrimination whatsoever in payment of compensation on the basis of Caste, Gender, Religion etc. Special care has been taken in case of female employee working in night shift. They are provided with rest rooms/Dormitory to seat. Night Shift Allowance is also paid to them. Night shifts are organized in such a fashion that they report for duty and go off in day time. This type of duty is performed only once in a week and after performing night duty, the staff is required to perform day duty on third day only, the 2nd day being an off day. Effectively this works out to be two continuous days break.

b. In order to redress and prohibit sexual harassment at work place Sexual Harassment Complaint Committee has been constituted at Unit level as well as in Corporate Office.

a. The service conditions are uniform and there is no gender bias.

b. Maternity leave is also available to employees.

c. Crèche facility has also been provided for women employees with infants.

d. Special grant is being sanctioned on annual basis for MTNL Woman Welfare Organisation, which in turn provides vocational training to kith and kin of working as well as retired/ deceased employees.

## ITI LIMITED

ITI Limited, being a socially conscious Public Sector Undertaking, has from its inception been committed to the concept of employees' welfare. Due importance is given to the welfare of its women employees and persons with disabilities. There were 716 women employees as on September 1, 2012.

The major facilities being provided to the women employees are as follows:

a. Separate lunch room in Canteen, rest rooms and Crèches have been provided in the Units.

b. The company has comprehensive health care scheme providing medical treatment/ reimbursement to the employees and their families. Hospitals have been set up in Bangalore, Naini, Mankapur and Rae Bareli Plants, which emphasize women and child welfare.

c. In the light of the Supreme Court Judgment on sexual harassment in the work place, the Standing Orders applicable to Women Employees have been amended to incorporate the clause on sexual harassment and during the year 2004-05, CDA rules were amended accordingly.

d. Complaints Committee formed in each Unit to inquire into complaints of sexual harassment, made by any women employees in the Company.

e. Care is taken to ensure that women employees are nominated for training programmes, which are need based.

## TELECOMMUNICATIONS CONSULTANTS INDIA LIMITED (TCIL)

Various Schemes for Benefit of Women in TCIL are given as under:

a. Maternity leave has been enhanced from 3 months to 6 months for female employees to take care of their new born children.

b. No discrimination on the basis of gender is done and Women employees are treated equally in line with other male employees.

c. A Sexual harassment Committee is also formed consisting of female members for handling/solving such cases and avoiding the occurrence of such cases.

d. It is proposed to provide for crèche facility, near to office premises, to women employees whose children are small.

e. Many Compassionate appointments have also been done in TCIL to support the wives of the expired employees.

f. Constructed 10 toilets in girl's schools in Kota, Rajasthan

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# III. 8 PERSONS WITH DISABILITIES

Department of Telecommunications provides reservation to the physically challenged in appointments for effective implementation of the Persons with Disabilities Act, 1995.

## Centre for Development of Telematics (C-DOT)

C-DoT follows guidelines issued by the Government of India with respect to reservations in jobs for persons with disabilities and candidates belonging to SC/ST category. C-DoT also has a system in-place to look after the welfare of persons belonging to these categories and address any problems / complaints that may come up. Further, the C-DoT Campus at Delhi has been constructed in such a manner so as to ensure barrier free environment for the persons with disabilities. The main entrance / exit can be approached through a ramp together with stepped entry. Even elevators connecting the various working areas have been installed in way to facilitate persons with disabilities to move around freely from one wing to another.

## Bharat Sanchar Nigam Limited (BSNL)

BSNL is running various programmes for persons with disabilities and their family members as part of BSNL's welfare measures for the year 2012-13. Under this programme, BSNL is giving priority for allotment of PCOs to Persons with Disabilities. In addition, under Corporate Social Responsibility Scheme, Telecom Circles are providing PCs with Printer and Broadband connection to the schools for the physically handicapped/ mentally retarded children and orphanages.

Double the rates of Transport Allowance are allowed for eligible Physically Handicapped employees. As far as possible these persons are posted near their places within the region.

## Mahanagar Telephone Nigam Limited (MTNL)

Mahanagar Telephone Nigam Limited has always endeavored towards upliftment of social status of physically disabled people by innovating and executing action plans falling under its realm. There were 199 persons with Disabilities as on December 31, 2012, constituting 0.49% of the total manpower.

The provisions of reservation for PH candidates, as per Government of India Rules, have been made in recruitment of Officers in various streams. Further, to avoid delay in allotment of PCOs, mobile Booths are being provided to Physically Challenged people based on CDMA/ GSM technology.

These are the several steps taken by MTNL in fulfilling its social responsibility and few other innovative schemes are being devised for providing a respected status in the society.

## ITI Limited

As per the Government directives, ITI has been maintaining 3% reservation for physically challenged in recruitment and the reservation in promotion has also been maintained wherever applicable. Physically challenged employees who are residing in the township are given special allowance at the rate of 5% of the Basic Pay subject to maximum of ₹75/- per month. Those employees who are not residing in the Company's township but are utilizing Company's transport for commuting between residence and factory are given special allowance at the rate of 5% of basic pay subject to maximum of ₹100/- per month. Physically challenged employees are permitted 10 minutes grace time to punch in and out at the commencement and closure of the shift respectively. They are allotted quarters on "Out of Turn" basis. The Company has been relaxing 10 years in age in case of recruitment for Group C & D posts and 5 years in case of Group A & B posts. In case of candidates belonging to SC/ST/OBC, an additional relaxation in age by 5 years for SC/ST and 3 years for OBC is given for posts in Group A and B. The physically challenged employees need not pay any application fee for applying to any job in the Company.

## Telecommunications Consultants India Limited (TCIL)

In TCIL no discrimination is done with physically disabled employees and they are treated at par with other employees. To help them, a number of steps have been taken. Some are listed as under:

a. Forwarding cases /representations of disabled persons if any, and they are considered favourably subject to administrative constraints.

b. No discrimination is done with physically disabled employees and they are treated equally in line with other employees.

c. No physically disabled employee is posted in remote sites where harsh conditions/ hardships are involved. Whenever possible, they are mostly put in non technical jobs.

d. A liberal view is taken while forwarding application of physically disabled candidates outside.

e. Every time, Campus Recruitments are done in a year, selection of physically disabled is considered as per Govt. of India reservation guidelines. There is no disparity between general and physically disabled candidates in TCIL. Everybody is given equal opportunity.

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# III. 9 CITIZEN'S CHARTER & GRIEVANCE REDRESSAL MECHANISM

The Citizen's/Client's Charter is a written declaration by a Government department that highlights the standards of service delivery to subscribes availability of choice for consumers, avenues for grievance redressal and other related information. In other words, it is a set of commitments made by a department regarding the standards of service which it delivers.

The Citizen's/Client Charter is intended to empower citizens and clients so that they can demand committed standards of service and avail remedies in case of non-compliance by service provider organizations. The basic thrust of the Citizen's/Client's Charter is to render citizen centric public services by making them demand driven rather than supply driven.

DoT has formulated its Citizen/Client Charter listing 39 main services being delivered by it in Result framework document (RFD) Format. All these services have been documented with associated process details which include details of documents required, applicable fees, if any, along with its mode of payment for availing each of the service. The Charter specifies the standard of Service delivery, the contact details of the centres responsible for delivery of these services, performance evaluation criterion in respect of delivered services, etc. The Charter also contains the details of clients, expectations from them for availing the service and the details of Grievance Redressal Mechanism in accordance with the guidelines of DARPG on the subject matter.

The Citizen/Client Charter of Deparment of Telecommunication has been placed in public domain on DoT's website **www.dot.gov.in** under "Citizen Charter-RFD Format" link. Some of the services included therein are:

1. Issue of Internet License, Issue of IP TV permission under Internet License, Security clearance for foreign nationals under Internet License, Merger/demergers and amalgamation of licensee company holding Internet License, Request for Name change for company holding Internet License, Request for registered office address change for company holding Internet License, Issuing of direction to Internet service providers for blocking of website/URL/IP address.
2. Issue of CUG VSAT License, Issuance of Mobile Satellite Service-Reporting (MSS-R) License, Issuance of Permission for Private Captive CUG networks on OFC or Wireless, Issue of In-principle Clearance to Licensees for addition of new satellite services / network.

3. Issue of National Long Distance (NLD) License, Issue of International Long Distance (ILD) License, Security clearance for foreign nationals under NLD/ILD License, Request for Name change, registered office address change for company holding NLD/ILD License, Issue of PMRTS/CMRTS License, Issue of GMPCS License, Issue of Registration Certificate to Infrastructure Provider Category-I,Issue of Voice Mail/Audiotex/Unified Messaging Service(UMS) License, Request for Renewal of the NOC for Sale/Rent of International Roaming Cards and Global Calling Cards, Issue of NOC for Sale/Rent of International Roaming SIM Cards and Global Calling Cards.
4. Grant of Wireless Licenses (above 806MHz), Granting of Wireless Operating Licenses (below 806 MHz), Grant of Wireless Operating Licenses (GSM/CDMA/3G/PMRTS), Grant of Wireless Operating Licenses for Satellite Services, Issue of Amateur Station Operator's Certificate (ASOC) licenses/Certificate of Proficiency (COP) licenses, Issue of Standing Advisory Committee on Frequency Allocation (SACFA) Clearance Certificate.

## Grievances Redressal Mechanism

The responsibility of redressal of grievances lies with the concerned service provider organizations/ subordinate units/ PSUs/ administrative sections of the Ministry/ Department (in case of a service grievance). However, Public Grievance cell of DoT, without prejudice to the right of a complainant to approach an appropriate court of law against the said organisation, acts as a facilitator for resolution of grievances so received. A complainant may approach to Public Grievance Cell of Department of Telecommunications (DoT), Sanchar Bhawan, 20, Ashoka Road, New Delhi-110 001 along with documentary evidence for non-redressal of his grievance at concerned Organisation/Service Provider level through following means:

(a) By Post: Public Grievances Cell, Department of Telecommunications, Room No.518, Sanchar Bhawan, 20, Ashoka Road, New Delhi 110001.

(b) By Hand: Information & Facilitation Counter, Sanchar Bhawan, 20, Ashoka Road, New Delhi-110001.

(c) By Web Portal: **www.pgportal.gov.in**

Centralised Public Grievance Redress And Monitoring System:

i) With an objective of speedy redressal, fast access and effective monitoring of grievances, DoT has implemented an integrated application system; based on Web technology (CPGRAMS) which primarily aims at submission of grievances by the Citizens from anywhere and anytime (24 x 7) basis for instant and easy communication between DoT & Citizens.

ii) The system facilitates generation of unique registration number upon the online submission of grievances from aggrieved citizens (to DoT) through internet.

iii) The system provides the online facility to a citizen to monitor the progress of redressal process in respect of the grievance lodged by him.

## HEAD OF DEPARTMENT

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210, Sanchar Bhawan, New Delhi-110001
Tel.No. 011-23719898, Fax No. 23711514
**E-mail id secy-dot@nic.in**

## CONTACT POINTS

Deputy Director General (Public Grievances),
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1210, Sanchar Bhawan, New Delhi-110001,
Tel.No. 011-23372131 Fax No. 23372605
**E-mail id ddgpg-dot@nic.in**

**Our website - www.dot.gov.in**

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# IV. TELECOM REGULATORY AUTHORITY OF INDIA

The Telecom Regulatory Authority of India (TRAI) has always endeavored to encourage greater competition in the telecom sector together with better quality and affordable prices in order to meet the objectives of New Telecom Policy, 1999. Vide a Notification dated January 9, 2004 of the Government; Broadcasting and Cable Services also have been brought within the definition of 'telecommunication service' in terms of section 2(k) of the Telecom Regulatory Authority of India Act, 1997 as amended by the TRAI (Amendment) Act, 2000.

The mission of TRAI is to ensure that the interests of consumers are protected and at the same time to nurture conditions for growth of telecommunications, broadcasting and cable services in a manner and at a pace which will enable India to play a leading role in the emerging global information society.

## ACTUAL ACHIEVEMENTS DURING APRIL-DECEMBER 2012

### Recommendations

During the first Nine months of the current financial year (April-December 2012), the Authority made following Recommendations to the Government on the various issues of Telecommunications.

I. Recommendations on Guidelines for Unified Licence/ Class Licence and Migration of Existing Licences dated 16th April 2012.

II. Recommendations on "Exit-Policy for various telecom licences" dated 18th April 2012.

III. Recommendations on "Auction of Spectrum" dated 23rd April 2012.

IV. Recommendations dated 12th May 2012 in response to DoT's reference on TRAI's recommendations on "Guidelines dated 16th April 2012 for Unified Licence/Class Licence and Migration of Existing Licences"

V. Recommendations dated 14th May 2012 regarding Support for Rural Wire-line Connections, Installed Before 01.04.2002.

VI. Recommendations dated 14th May 2012 on 'Application Services (MVAS)'

VII. Recommendations dated 21st June 2012 on Auction of Spectrum Analysis of Effect on costs Tariffs and financial returns

VIII. Recommendations dated 12th October 2012 on "Allocations of Spectrum Resources for Residential and Enterprise Intra-telecommunication Requirements/cordless telecommunications system (CTS)"

IX. Recommendation 22nd November 2012 on Amendment in the ISP Licence Agreement for incorporating the terms and conditions mentioned in Notice Inviting Applications (NIA) dated 25.02.2010 for use of Broadband Wireless Access

## Regulations

The following regulations were issued by TRAI during April-December 2012:

I. Regulation on "The Reporting System on Accounting Separation Regulations, 2012 dated 11th April 2012

II. The Mobile Banking (QoS) Regulation dated 17th April 2012

III. Ninth Amendment to "The Telecom Commercial Communications Customer Preference Regulations, 2010" dated 14th May 2012

IV. Telecommunication Mobile Number Portability (Third Amendment) Regulation, 2012 dated 8th June, 2012

V. Intelligent Network Services in Multi Operator and Multi Network Scenario (Amendment) Regulations, 2012 dated 18th September 2012

VI. The Telecommunication Interconnection (Port Charges) (Second Amendment) Regulations, 2012 dated 18th September 2012

VII. Telecommunication Mobile Number Portability (fourth Amendment) Regulation, 2012 dated 19th September, 2012

VIII. The Reporting System on Accounting Separation (Amendment) Regulations 2012 dated 15th October 2012

IX. International telecommunication Access to Essential facilities at Cable Landing station (Amendment) Regulations, 2012 dated 19th October 2012

X. Tenth Amendment to "The Telecom Commercial Communications Customer Preference Regulations, 2010" dated 5th November 2012

XI. The Standard of Quality of Service of Basic Telephone Service (Wireless) and Cellular Mobile Telephone Service (Second Amendment) Regulations, 2012 dated 8th November 2012

XII. Telecom Consumers Protection (Fifth Amendment) Regulations, 2012 dated 27th November 2012

XIII. The Standards of Quality of Service for Wireless Data Services Regulations, 2012 dated 4th December 2012

XIV. The International Telecommunication Cable Landing Station Access Facilitation Charges and Co-location Charges Regulations 2012, dated 21st December 2012

XV. Quality of Service of Broadband Service (Amendment) Regulations, 2012 dated 24th December 2012

## Telecom Tariff Orders

During April-December 2012, TRAI also issued Amendments to the Telecommunication Tariff Orders. These are as follows:

I. 50th Amendment to Telecommunication Tariff Order, 1999 was issued on 19.04.2012 enhancing the ceiling on processing fee from ₹ 2/- to ₹ 3/- for certain categories of top-up vouchers.

II. 51st Amendment to Telecommunication Tariff Order, 1999 was issued on 20.04.2012 mandating provision of "Per Second Pulse Rate" by every service provider, putting a ceiling on tariff for calls and SMSs meant for participating in contests and games; and giving flexibility to the service providers for implementing ILD tariff for Life time subscribers.

III. 52nd Amendment to Telecommunication Tariff Order, 1999 was issued on 19.09.2012 prescribing financial disincentives on the service providers in the case of violation of reporting requirements and levy of excess charge.

IV. 53rd Amendment to Telecommunication Tariff Order, 1999 was issued on 01.10.2012 to review Processing Fee on Talktime Top-ups and tariff for Premium Rate Services.

V. 54th Amendment to Telecommunication Tariff Order, 1999 was issued on 05.11.2012 to prescribe a floor tariff of 50 paisa per SMS for SMS exceeding 100 SMS per day.

## Other activities

Following are the other activities undertaken by TRAI:

i. Study Report on "Telecommunications in select countries policies-statistics"

A Report on "Telecommunications in select countries policies-statistics" has been compiled, covering India and 22 other countries. The compilation provides a quick overview of trends of telecom development, policies and practices across the world, particularly in the field of telecom growth and penetration, quality of service performance, spectrum management and financial performance of the leading telecom sector companies in selected countries.

ii. Indian Telecom Services Performance Indicator Report

During the period, the Indian Telecom Services Performance Indicator Report for the quarter ending March 2012 and June 2012 were released. The reports provide an update on growth trend for the telecom and broadcasting services in the country and quality of Service performance of various service providers for the quarters. These reports bring out quarterly updates on key indicators of Indian Telecom Sector and present a broad perspective on the telecom and broadcast services to serve as reference document for various stakeholders.

iii. NCAER Study Report namely "Telecom Sector in India: A Decadal Profile"

On the request of TRAI, NCAER undertook a Study Report namely "Telecom Sector in India: A Decadal Profile" on the growth story in telecom sector in India covering the years 2001 to 2011.

The report presents the evolution of telecommunications sector in India in the last decade. Study shows that in comparison to other countries, India has one of the lowest mobile tariffs

in the world. Conducive regulatory environment through policies of the Government and regulatory measures put in place by TRAI have contributed to a competitive environment for the service providers and accessibility to telecom services at affordable tariff to the consumers.

iv. Guidelines on "The Reporting System on Accounting Separation Regulations, 2012

The Guidelines on "The Reporting System on Accounting Separation Regulations, 2012" was uploaded on TRAI's website on 22nd August, 2012. These guidelines were issued in order to provide guidance and assistance to Service Providers (SPs) in preparation of Accounting Separation Manuals (required under the Regulation) and Accounting Separation Reports.

v. Monthly Technology Digest

TRAI has issued the 'Monthly technology digests' on the following topics:

a. Wireless Sensor Networks, April 2012.

b. 100 Gigabit Ethernet and Beyond, May 2012.

c. Distributed Antenna Systems, June 2012.

d. Mobile Offloading, July 2012.

vi. MIS project:

TRAI is developing MIS application software for online data collection from service providers and report generation. The system will be launched during the year (2012-13).

vii. Framework for Next Generation Network

TRAI has hired a consultancy firm to assist in establishing appropriate policy and regulatory frameworks on Next Generation Networks (NGN). During the period work on Exhaustive report and consultation Paper on NGN was taken up and drafts for both the documents were prepared.

## Visit of International Delegation

a. The first group of three member delegation led by Mr. Abdul Wakil Shergul, Chairman of Afghanistan Telecommunications Regulatory Authority (ATRA) visited TRAI from 9th to 13th April 2012 and the Second Group of five member delegation led by Mr. Eng. Khair Mohammad Faizi, Vice Chairman and Board Member of Afghanistan Telecommunications Regulatory Authority (ATRA) visited TRAI from 1st to 8th June 2012 for discussion on various regulatory issues.

b. A Swedish delegation from Swedish National Credits Guarantee Board (Export kreditnamnden, EKN) and Swedish Export Credit Corporation (SEK) visited TRAI on 17th April 2012 for bilateral discussions with TRAI.

c. A Six Member Delegation led by Mr. Kimiaki MATSUZAKI, Senior Vice Minister for Internal affairs and Communications, Japan visited TRAI for bilateral discussion with Chairman TRAI on 30th April 2012.

## International Events

a. Telecom Regulatory Authority of India organized ITU-TRAI International Training Programme (ITP) at Hyderabad, India from 2nd April to 4th April 2012.

b. TRAI organized South Asian Telecommunications Regulators Council (SATRC) Workshop on Spectrum at New Delhi from 18-20 December 2012.

## Anticipated achievements for the month of January-March 2013

a. Recommendations on 'Terms and Conditions of the Unified Licence (Access Services)' on the reference made by the DoT vide letter dated 21.12.2012

b. Recommendations on Telecom network failures during Emergencies/Disasters – Priority routing of calls of persons engaged in 'response and recovery'

c. Recommendations on "IMT-Advanced Mobile Wireless Broadband services"

d. Recommendation on "Definition of Adjusted Gross Revenue (AGR) in Licence Agreements for provision of Internet Services and minimum presumptive AGR"

e. On a reference received from Deptt. of Telecommunications seeking TRAI's Recommendations on the definition of AGR, a Consultation paper on "Definition of Adjusted Gross Revenue (AGR) in Licence Agreements for provision of Internet Services and minimum presumptive AGR" was released on 28.12.2012. The last date for submitting the comments & counter comments for stakeholders is 18.01.2012 & 25.01.2012 respectively. TRAI is expected to give its Recommendations on this issue soon after analyzing the comments & counter comments received from stakeholders.

f. Consultation on Next Generation Networks:

g. Final consultation paper on NGN to engage the stakeholders in an exhaustive consultation process on all relevant issues will be released in January– March 2013.

h. Consultation on Telecommunication for Persons with different abilities:

The Telecom Regulatory Authority of India is in the process of preparing a consultation paper to engage the stakeholders in evolving mechanisms to assess telecommunication facility by disabled people and to deliberate on the need of a suitable policy in this regard. Two D.O. letters were issued to Secretary, DoT and Secretary, Department of Disability Affairs for their opinions before taking up consultation with service providers and other stakeholders.

i. Consultation on Emergency Communication System (ECS).

j. MIS project will be launched during this quarter.

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# V. TELECOM DISPUTES SETTLEMENTS AND APPELLATE TRIBUNAL

The Telecom Regulatory Authority of India (TRAI) Act, 1997 (as amended) provides for the establishment of the TRAI and the Telecom Disputes Settlement and Appellate Tribunal (TDSAT) to regulate the telecommunication services, adjudicate disputes, dispose appeals and to protect the interests of service providers and consumers of the telecom sector, to promote and ensure orderly growth of the telecom sector and for matters connected therewith or incidental thereto.

The TDSAT was created in the year 2000 by the Central Government under the TRAI Act, 1997 to settle and adjudicate disputes involving licensor and licensee, between service providers and between a group of consumers and service providers. In January, 2004 the jurisdiction of TDSAT was extended to include broadcasting and cable services besides telecommunication services. TDSAT exercises appellate jurisdiction over regulations, determinations, orders and directions of the TRAI.

The jurisdiction of TDSAT is exclusive and its orders can be challenged before Supreme Court of India on points of law only. Statutory appeal does not lie against the interim orders of TDSAT. TDSAT is an expert body and comprises of a Chairperson and two Members. The Chairperson is a retired Judge of the Supreme Court of India while two Members are experts in the field of administration/telecommunications.

TDSAT is not bound by the provisions of Civil Procedure Code. It has formulated its own Procedure (TDSAT Procedure 2005) which is simple and is based on the principles of natural justice. Court fee for filing a petition, appeal and Misc. application before TDSAT is ₹ 5000/-, ₹ 10,000/- and ₹ 1,000/- respectively.

World over the disputes in telecom and broadcasting sector are resolved by the regulator or normal courts. However, in India the unique Institution in the form of TDSAT exists for speedy settlement and adjudication of disputes on telecom and broadcasting sector. As such, dispute resolution in India is outside the purview of the telecom regulator.

The number of cases in the Tribunal has been increasing every year since its establishment in May, 2000. The total number of cases filed before TDSAT in the year 2001 were 105, which increased to 851 in 2010. From 01.01.2011 to 31.12.2011, a total No. of 910 cases have been filed in TDSAT. In the current year i.e. from 01.01.2012 to 31.12.2012 a total of 1786 cases have been filed. The disposal of cases has kept pace with the filing and all efforts are made to ensure that there is speedy disposal. This is corroborated by the fact that till 31.12.2012, 5133 cases have been disposed of out of 6623 cases instituted during that period.

TDSAT, since its inception, has delivered landmark judgments in the cases of Telecom as well as Broadcasting & Cable Sectors.

TDSAT has been organizing seminars in different parts of the country to bring awareness amongst various stakeholders including consumers about the dispute redressal mechanism in the Telecom, Broadcasting and Cable Sectors and to find ways and means to strengthen the grievance redressal system in these sectors.

During the years i.e. 2010-11 & 2011-2012, the Tribunal had organized the Seminars at Shimla, Raipur, Puducherry, Bangalore, Bombay (Thane), Kochi Gauhati, Bhubaneshwar, Chandigarh, Ahemedabad, Goa, Srinagar and Patna. The distinguished speakers including Hon'ble Judges of the Supreme Court, during various seminars organized by TDSAT, have commended the delivery system of TDSAT.

As sector Member of International Telecommunication Union (ITU), TDSAT has been participating in the international seminars, conferences and events organized by ITU and other international bodies.

TDSAT maintains its own website with all judgments and other activities of the Tribunal uploaded on it at **www.tdsat.nic.in**. TDSAT also interacts with stake holders, lawyers, consumers etc extending advice on various issues through email at **tdsat1@yahoo.co.in**. TDSAT has also developed an SMS Alert System for the purpose of informing the parties to the litigation about the daily cases listed before the Tribunal.

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# VI. AUDIT OBSERVATION OF C AND AG

## Status of C&AG Audit Para's of CAG's Report No. 1 for the year 2011-12 on Accounts for the year 2010-11 of the Union Government

### Ministry of Communications and Information Technology

### 1. Para 2.2.1 (Report 1 of 2011-12)

**Para No. 2.2.1: Universal Service Obligation Fund**

Universal Access Levy totaling ₹37,223.92 crore was collected during the period 2002-03 to 2010-11 by the department of telecommunications for achieving universal service objectives as envisaged in the National Telecom Policy (NTP) 1999. Transfers to and disbursements from the Universal Service Obligation Fund (USO Fund), though, were made only of ₹13,471.44 crore. There was, therefore, short transfer of levy and understatement of the closing balance of ₹23,752.48 crore in the USO Fund. The levy being collected was, therefore, not being utilized for the intended purposes. Short transfer of collected levy to the USO Fund each year implied a lower revenue expenditure and resultantly, a lower revenue deficit. During the financial year 2010-11, the revenue deficit on this account was thus understated by ₹3,015 crore. Revenue deficit over the period 2002-03 to 2010-11 was understated by the amount of short transfer to the Fund.

Present Status: Under modification since 20.09.2012

### Department of Telecommunications

### 2. Para 2.8 (Report 13 of 2012-13)

Summary of important audit observations in Audit Reports for the year ended March 2011 for inclusion in the Annual Reports of the concerned Ministries/Departments.

**Recovery of excess subsidy paid at the instance of audit**

Subsidy of ₹2.17 crore to service providers for Rural Community Phones (RCP) was incorrectly paid by West Bengal and Uttar Pradesh (East) circles. Of this, ₹1.62 crore was recovered at the instance of Audit.

Present status: closed since 11.01.2013

## 3. Audit report No. 8 of 2012-13, Union Government (Commercial) (Compliance Audit Observations)

### Bharat Sanchar Nigam Limited (BSNL)

### Para No. 5.1

**Excess procurement of Mobile Switching Centre based wireless in Local Loop system equipment.**

Improper planning and consequent excess procurement of equipment by Bharat Sanchar Nigam Limited to expand Mobile Switching Centre base Wireless in Local Loop System led to avoidable expenditure of ₹65.51 crore.

ATN: Not framed.

### Para No. 5.2

**Inefficient management of procurement of costly Microwave equipment**

Unjustified deviation from prescribed procedures in procurement of Microwave equipment for North East and Jammu & Kashmir regions resulted in abnormal delay and unsatisfactory compliance by the vendors.

ATN: Sent to Audit for vetting.

### Para No.5.3

**Loss due to non execution of agreement while providing PRI trunks**

Failure of BSNL Jamnagar to exercise due diligence while executing special package to Reliance Industries Limited which resulted in loss of revenue amounting to ₹7.66 crore.

ATN: Sent to Audit.

### Para No.5.4

**Avoidable payment of interest on delayed payment for BWA spectrum.**

Delay in payment of ₹8,313.80 crore by BSNL to Department of Telecommunications for Broadband Wireless Access spectrum allotted resulted in avoidable payment of interest of ₹6.26 crore.

ATN: Not framed.

## Mahanagar Telephone Nigam Limited (MTNL)

## Para No. 5.5

## Interconnect Usage Charges relating to MTNL

Non execution of Interconnect agreements, inefficiencies in billing and revenue realization contributed to huge outstanding of Interconnect Usage Charges (IUC) receivables and payables for MTNL.

### Status of C&AG Audit Paras pending as on 31st December 2012

| S. No. | Year | Report No. | No. of paras / PAC on Reports which ATNs have been submitted to PAC after vetting by Audit (from April-December, 2012) | Details of the Paras/ PAC reports on which ATNs are pending as on 31st December 2012. | | |
|---|---|---|---|---|---|---|
| | | | | No. of ATNs not sent by the Ministry even for the first time. | No. of ATNs sent but returned with observation and Audit is awaiting their resubmission by the Ministry. | No. of ATNs which have been finally vetted by audit but have not been submitted by the Ministry to PAC |
| 1 | 1996-97 | 6 of 1998 | Nil | Nil | 1 | 1 |
| 2 | 1998-99 | 6 of 2000 | 01 | Nil | 1 | 3 |
| 3 | 1999-00 | 6 of 2001 | Nil | Nil | Nil | 1 |
| 4 | 2000-01 | 6 of 2002 | Nil | Nil | Nil | 2 |
| 5 | 2002-03 | 2 of 2004 | Nil | Nil | 3 | Nil |
| 6 | 2003-04 | 2 of 2005 | Nil | Nil | 1 | Nil |
| 7 | 2004-05 | 9 of 2006 (NTR) | 01 | Nil | 1 | Nil |
| 8 | 2006-07 | CA 1 of 2008 | Nil | Nil | 1 | Nil |
| 9 | 2009-10 | 19 of 2010-11 | Nil | Nil | 3 | Nil |
| **Total** | | | **02** | **Nil** | **11** | **7** |

1. Total C&AG Audit Paras of DoT (excluding C-DoT) pending as on 31st December 2012 **= 11**
2. Total Paras of PAC Report pending as on 31st December 2012 = 3 Paras pending for the 49th Report of PAC on **'Administration of Universal Service Obligation (USO) Fund'**. Advance copies of ATNs furnished.

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# VII. CENTRE FOR DEVELOPMENT OF TELEMATICS (C-DOT)

C-DoT, DoT's R&D centre, set-up 26 years back, is committed to providing a wide range of cost-effective, indigenously developed and state-of-the-art total telecom solutions.

Starting from the single mission of providing a dial tone, C-DoT has grown, over the last 26 years, to the level of a national centre for Research and Development in communication technology in many areas –Satellite communications, IN, ATM, DWDM, NMS, Wireless Broadband, GPON, NGN and Mobile Cellular systems. C-DoT's ATM technology has been mandated for use for onboard communication in Indian Navy ships. The GPON is expected to play a lead role in bringing broadband pipes to rural India. The SG-RAN product, based on sharing of active GSM infrastructure, will bring affordable mobile telephony to the rural market. The MAX-NG will breathe fresh life into the fixed line infrastructure of the country by bringing new service features to POTS (Plain Old Telephony Service) together with VoIP and broadband access to C-DoT's MAX / RAX subscribers. C-DoT has also been active in the area of providing telecom software solutions. C-DoT's umbrella NMS (Network Management System) solutions have made it possible to manage networks with elements from multiple vendors. The Data Clearing House (CLH) solution of C-DoT is commercially deployed for reconciling the roaming records between BSNL and MTNL and is holding its own against competitive pressures of the market.

C-DoT is also entrusted with the projects of national importance, like Central Monitoring System for telecom security and Secure Network for strategic applications.

## Achievements during 2012-13

The major technology programs, which have progressed significantly in the 1st nine months of the year 2012-13, are Centralized Monitoring System (CMS) development enhancements as well roll-out activity commencement in the field, pilot deployment of SG-RAN (Shared GSM Radio Access Network) system in the BSNL network, design implementation commencement for various cutting-edge technologies such as LTE (Long Term Evolution) – next generation mobile technology, commercial-grade terabit routing system – for building high capacity network transmission system to fulfill the needs of defense, security, national knowledge, 10G-GPOPN (Gigabit Passive Optical network) – next generation GPON, converged / universal network system to cater various networks e.g. wireless, optical etc. A brief overview on the progress made in these technology programs are given as under.

### • Communication and Security Research and Monitoring

Activities progressed under the project include enhancements/ software customization as well as progressive roll-out in the field. The development activities carried in the 1st three quarters of the financial year focused on CMS software customization, which includes development of

LEMF (Law Enforcement Monitoring Function) software solution for LEAs (Law Enforcement Agencies), support for LEMF, MNPO (Mobile Number Portability Operator) in the RMC (Remote Monitoring Centre) software, and CMC (Centralized Monitoring Centre). Besides, ISF software was also enhanced complying with new hardware (SGTK – indigenously developed interface hardware towards TSPs). Development of SNMP agent for SGTK EMS (Element Management System) is in the advance stages. CMS- NMS has also been implemented. Further, development activity also undertaken for providing support for multiple codec for 3G as well as customization for LIS (Lawful Interception System) in the ISF software. Load testing of ISF (Interception Store-and-Forward) and RMC has been initiated. RMC-DR (RMC - Disaster Recovery) design is finalized.

The progress in the CMS roll-out for field deployment include MNPO integration with CMS software and installation of the equipment in the CMS data centre, upgradation of existing pilot CMC data centre with equipment presently undergoing installation and testing. Data Centre build work awarded and activities initiated. Roll-out activity commenced in the 7 LSAs (Licensed Service Area), namely, Delhi, Haryana, Kolkatta, Karnataka, Mumbai, Rajsthan, Tamilnadu with installation of ISF (Intercept Store-&-forward server) at the TSP premises of the respective LSA and integrating these ISFs with the corresponding pilot RMCs (Remote Monitoring Centres), designated for the LSAs.

During the 4$^{th}$ quarter (Jan.-Mar., 13) of the year 2012-13, it is planned to complete development of multiple codec support for 3G, LIS customization for 6 circles, and the installation activities in the 7 LSAs as part of CMS roll-out in the LSAs.

- ## Rural Technologies

The focus on the rural technologies include field / pilot deployment of SG-RAN (Shared GSM Radio Access Network) system as well as development program, namely, Enhanced Active Infrastructure Sharing (EAIS) to augment the capability of SG-RAN system with GPRS and E-GPRS functionality. Further, GPRS functionality has also been implemented over SG-RAN under EAIS (Enhanced Active Infrastructure Sharing) development program, and presently testing is in-progress. In the period Jan. – Mar.'13, the SG-RAN system installed in the field shall be upgraded with GPRS functionality for field testing.

- ## Broadband Technologies

The broadband technology aims at development of broadband CPE (Customer Premises Equipment) with 3G wireless fallback and commercial-grade multi-terabit routing system and routing platform for NKN (National Knowledge network), required for building a high capacity network addressing the application needs of networks of defence, security and national knowledge etc..

The routing platform with 80 Gbps throughput (full duplex) for NKN is ready and its user-interface development activities presently ongoing. Additionally, multiple prototypes of

these routing platforms are also being fabricated for various trials. Further, commercial-grade multi-terabit routing system has also progressed as planned with completion of its architecture and engineering design and commencement of its design implementation activities, which is presently ongoing. Further, 3G-HSDPA (High-Speed Data Packet Access) modem has been interfaced to Broadband ADSL (Asymmetric Digital Subscriber Line) modem over USB connector and internet access is setup though this 3G-HSDPA modem and ADSL fallback to 3G is under testing. In the 4th quarter of the year 2012-13, routing platform with 80 Gbps throughput and 3G- HSPDA shall be installed in the field for trial. It is also planned to upgrade the routing platform in the field with 300 Gbps (full duplex) by the end of the financial year.

- **Next Generation Mobile Technologies**

The development in the mobile technology is progressing at an exciting pace. In the coming years, mobile networks may well support services beyond those that are available on today's multi-megabit fixed connections.

The R&D thrust during the year will be on design and development of LTE (Long-Term Evolution) technology with focus on Femto eNodeB access node and all the elements of core networks – EPC (Evolved packet Core). The Femto eNodeB hardware development activity has progressed significantly with lab-realization of its prototype hardware. Besides, EPC architecture also finalized and EPC nodes, namely, Mobility Management Entity (MME), Serving Gateway (SGW), Packet Data Network Gateway (PGW), Home subscriber Server (HSS), Policy and Charging Rules Function (PCRF), are under implementation. Further, audio call, video call and video streaming have also been demonstrated on the Femto eNodeB prototype using some of the developed EPC functionalities. Pilot trial of LTE Femto solution is also planned in the 4th quarter of the year.

- **Carrier Networks' Transport Technologies**

The carrier network transport technology is planned to address the needs of the emerging applications that are data-centric, demanding high bandwidth and large data rate for flow of information, requiring transport / backhaul, metro /aggregation, access networks to evolve with upcoming technology trends.

Presently, development activities have been completed and validations are ongoing for IEEE 1588 compliant CPE (Customer Premises Equipment), that is ONT9 (Optical Network Termination, type-9) for network backhaul, cost-effective OLT (Optical Line Termination) that is Bhawan Damini, with optical interfaces. Besides, development has also progressed well for C-DOT line card (COLT), required for proprietary chassis as well as necessary preparations for demonstration of services over 10G-GPON. During the 4th quarter of the year, IEEE 1588 complaint ONT9 CPE, cost-effective OLT etc. are planned to be ready for field /pilot trial including demonstration of services over 10G-GPON.

- **Telecom Services and Applications**

The development program focus on software intensive services and applications catering to changing technology trends towards convergence of applications, networks, contents and value-added services crating differentiation. The software applications progressed during period include finalization of converged network management system platform architecture and enhancements of platform, namely, CSMP (Customized Service Management Platform) with functionalities like XML (Extensible Markup Language), APIs (Application Program Interface) for NGN, development of telecom asset management system and piloting it for CMS-NMS, Unified Network Management System (UNMS) base release with provisioning and number management system, and PoC / demonstration / prototype design of NMS applications for varied networks, namely, NOFN (National Fibre Optical Network), management of broadband wireless network based on C-DOT nodes / terminals (BBWT – Broadband Wireless Terminal), IP-based Managed Lease Line Network (MLLN) for BSNL etc. Besides, system architecture also finalized for Customized Platform for Rural Services (CPRS) supporting host of features and functions e.g. gesture / speech recognition, near-field-communication etc. for providing application oriented services like adhar authentication, e-agriculture, e-doctor consultation etc. During the period, speech recognition and adhar authentication features have been implemented, testing in-progress and by the end of 4$^{th}$ quarter, client system is planned to be demonstrated with these advanced features.

- **Power Efficient and Green Telecom Technologies**

A high efficiency RF amplification technology to improve the efficiency of legacy power amplifier used in existing and future BTS (such as in LTE etc.) especially in the remote/ rural areas has been envisaged for development. The specification formulation and architecture has been finalized. Design implementation presently ongoing for hardware realization in the lab. Proof-of-Concept (PoC) is planned by the end of 4$^{th}$ quarter of the year.

- **Enhancements, New Features, Upgradations, Adaptations, Technical Support for developed Technologies including north-east program**

The existing developed/ deployed technologies in the network are being constantly enhanced through value additions, technology upgradations, bug-fixes, alternative solutions against component obsolescence etc. Besides, field/ pilot trials are also being carried-out at multiple locations to fulfill the requirements of technology applications for different networks. Some of the technologies requiring regular support for upgradation/ field support include GPON, MAX, ATM, SG-RAN, MAX-NG/ IMS – compliant MAX-NG, BBWT, SDCN and NMS etc.

- **Business Promotion**

During the period significant efforts made in the promotion of C-DoT technologies, which include PoC (Proof-of-Concept), exhibiting/ demo technologies in various exhibitions/ seminar

e.g. DEFEXPO- 2012, India Telecom, Defense & Aerospace SES 2012 (Strategic Electronics Summit), International Convention on Modern Train Control for Capacity and Safety Enhancement, Manufacturers/ Vendors Meet, IETE ATC 2012 Seminar and Expo etc. Besides, C-DoT also celebrated commemoration of 25 years of first C-DoT RAX at Kittur, Karnataka on 7th August 2012 and its up-gradation to MAX-NG for NGN services. The function was held simultaneously at C-DoT Centers - Delhi, Bangalore and Kittur and was well linked by Videoconferencing. Hon'ble, MoC, Shri Kapil Sibal addressed the gathering via mobile telecom.

***DEFEXPO- 2012***

These efforts resulted into following major accomplishments during the period.

a. M/s Bharat Broadband Network Limited (BBNL) allocated 3-sites, namely, Parwada (Vishakhapattanam), Panisagar (North Tripura) and Arain (Ajmer), total covering about 59 grampanchayats for trial of GPON technology in the National Optical Fibre Network (NOFN). M/s BSNL, Railtel, PGCIL approved C-DoT GPON technology for the trial and system has been installed at the field sites.

b. GPON field trial under active consideration in the Indian defense sector , that is, Indian Army for its CNDS (Communication Secure Network for Defense Sector) network as well at Sena Bhawan, Indian Airforce in its AFNET (Airforce network) at Vayu Bhawan;

c. The e-panchayat project with e-panchayat network comprising of 20 schools in Ajmer district, Rajasthan, is being implemented using C-DoT BBWT technology (Broadband Wireless Terminal). The wireless equipments BBWT and associated hardware along with computers, printers, installed in the designated e-panchayat network. The trial is ongoing;

d. C-DoT BBWT technology was also presented followed by a detailed technology field trial at IGNOU and C-DoT campus to emulate a real case scenario, for distribution of educational content for NME-ICT (National Mission on Education through Information and Communication Technology) project (for country-wise adaptation). The technology under active consideration of NME-ICT for deployment;

e. C- DoT received purchase orders for its BBWT systems from WESEE (Weapons and Systems Engineering Establishment), an R&D organization of IHQ MoD, Govt. of India, Delhi for wireless Wi-Fi connectivity for Navy's use;

f. C- DoT DRAX application installed at Ramanagara district Zilla Parishad and Shimoga district Zilla Parishads in Karnataka for field trial and capability demonstration to KSCST (Karnatka State Council for Science & Technology). DRAX application has received STQC (Standardization Testing & Quality Certification) certificate for application usability.

## • MoUs / NDAs/ ToT Agreements Signed

The agreements signed for technology commercialization, technology trials, know-how/ knowledge sharing during the period include as follows.

a. MoU signed with M/s BSNL for migration of C-DOT fixed-line technology (MAX switches) to the MAX next generation network.

b. MoU signed with M/s Bharat Broadband Network Limited (BBNL) for various activities, which include design, development, deployment and setting-up NOC (Network Operation Centre) for the management of National Optical Fibre network, technology planning tool & services, trials & deployment of BBWT, security of network, etc.

c. MOU signed with USOFA for providing technical consultancy about provisioning of mobile communication services in uncovered villages.

d. Addendum to GPON ToT agreements signed with existing ToT partners – M/s BEL, HFCL, ITI, UTL and VMC, for transfer of technology for C-DOT Bhawan Damini, product for building/ residential sector.

e. ToT agreement with M/s ITI for IP-MLLN (Managed Lease Line Network) technology: in-discussions for C-DOT MLLN product.

f. MoU signed with M/s MTNL for execution/ field trials of C-DOT technologies and possible induction in M/s MTNL network. Some of the trials in technologies like BBWT in Nangloi, Delhi, and IMS compliant NGN-based solution for MTNL etc. are anyway in the advance stage of completion.

g. MoU signed with M/s BSNL for technology support of C-DOT MAX technology (fixed-line switches) in the field.

h. An umbrella MoU signed with M/s BEL for joint co-operation in communication R&D, manufacturing, etc.

i. Total no. 27 NDAs (Non Disclosure Agreements) signed with strategic partners for contractual relationships with respect to various technology.

## • IPRs, Papers presented/ Publications etc.

Following patents have been filed during the year 2012-13:

a. System and method for detecting cuts in working fibre and switching to another fibre.

b. GSM-EDGE modulators for 2.5G system, an efficient parallel implementation on FPGA.

Following papers have been presented in the national/ international conferences/ seminars:

a. Crest Factor Reduction for Carrier Aggregated OFDM (Orthogonal Frequency Division Multiplexing) Systems – SoftCom2012, 20th International Conference on Software, Telecommunications and Computer Networks.

b. Performance improvement in PAPR (Peak-to-Average Power Ratio) reduction with combined Partial Transmit Sequence and Noise shaping Algorithm – at Radio 2012, The Radio and Antenna Days of the Indian Ocean, Mauritius.

c. Some Experimental Investigations in the WiMAX Band and Comparison of Propagation Models in Mixed Urban Environments of Western India - Springer, Annals of telecommunications, 2012, DOI: 10.1007/s12243-012-0298-7.

d. Experimental Investigation of GSM 900 MHz Results Over Northern India with Awas Electromagnetic Code and Other Prediction Models - Progress In Electromagnetic Research, Vol. 125, 559-581, 2012, DOI:10.2528/PIER11123003.

e. Tuning of COST-231 Hata Model for Radio Wave Propagation Predictions - Second International Conference in Computer Science, Engineering and Applications, CCSEA-2012, 26-27 May'2012, New Delhi.

One more patent is planned to be filed in the 4th quarter of the year.

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# PUBLIC SECTOR UNDERTAKINGS (PSUS)

# VIII. 1 BHARAT SANCHAR NIGAM LIMITED

Bharat Sanchar Nigam Limited (BSNL) was formed on 1st October 2000 by Corporatisation of the erstwhile Department of Telecom operation & Department 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 excluding Delhi and Mumbai. BSNL has large base of skilled work force of around 2.56 lakh as on 31st December 2012. BSNL is a 100% Govt. of India owned Public Sector Undertaking.

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

The company has also been in the forefront of technology with 100% digital new technology switching network. BSNL nation-wide telecom network covers all District headquarters, Sub-Divisional headquarters, Tehsil headquarters and almost all the Block Headquarters.

## Targets and Achievements

The details of targets and achievements during the current year upto 31st December 2012 are as under:

| S. No. | Item | Unit | MOU Target (2012-13) | Status as on 31.03.2012 | Status as on 31.12.2012 | Achievement |
|---|---|---|---|---|---|---|
| 1 | Total Telephone Connections | Lakh | 100 | 1209.81 | 1209.63 | -0.17 |
| 1 (a) | Wire-line | Lakh | 0 | 224.68 | 210.41 | -14.27 |
| 1 (b) | WLL | Lakh | 0 | 40.04 | 28.3 | -11.74 |
| 1 (c) | Mobile | Lakh | 100 | 945.09 | 970.93 | 25.84 |
| 2 | Broadband (DSL) | Lakh | 30 | 89.11 | 98.96 | 9.85 |
| 3 | Rural Telephone | Lakh | - | 420.2 | 414.37 | -5.83 |
| 4 | VPT * | No. | - | 5,77,131 | 5,77,516 | 385 |

** Figures of VPT's as on 31st March 2012 have been revised.*

## FINANCIAL PERFORMANCE

The details of profit/ loss figure for the year 2011-12 & 2012-13 (up to 30.09.2012) are as under:

(₹ in crore)

| Parameter | 2011-12 | 2012-13 (Upto 30.09.2012)* |
|---|---|---|
| Total income | 27,933 | 13,465 |
| Total expenditure | 36,586 | 17,104 |
| Net profit (after tax) | (-) 8,851 | (-) 3,655 |

Note: *Provisional & Un-audited

## Computerisation & Information Technology

### a. Call Data Records (CDR) Project

As on 31st March 2012, 333 Secondary Switching Areas (SSAs) out of total 334 SSAs have already migrated to CDR System. However, by the end of April, 2012, all the 334 SSAs migrated to CDR System.

### b. Setting up of IDC (Internet Data Centre)

During the year 2011-12, 7 Internet Data Centres located at Faridabad, Ludhiana, Bangalore, Hyderabad, Cherthala, Mumbai and Ghaziabad were installed and made functional. Two more Internet Data Centres at Ahmedabad and Jaipur were installed and made functional by 31.12.2012. One more IDC is also planned at Chennai for which process has been initiated.

### c. ERP System Implementation

The ERP is one of the most important critical IT initiatives taken by the Company. The ERP has been implemented in 4 Proof of Concept Circles viz; TF Mumbai, ALTTC Ghaziabad, WTP Mumbai and STR. ERP implementation in next POC Circle viz; Karnataka is under way. Thereafter implementation of ERP in remaining two POC Circles viz; Corporate Office and Maharashtra will be taken up which is expected to be completed by Sept' 2013 thereby completing phase - I of the work.

## Rural Telephony

## Village Public Telephones (VPTs)

a. BSNL has covered 5,77,516 villages (including 4086 covered by PBSOs) as per census 2001 with VPT facility in the country up to 31.12.2012 out of the 5,93,601 inhabited villages.

b. BSNL has entered into agreement with Universal Service Obligation Fund (USOF), DoT for provision of VPTs in 62,302 (Revised) undisputed, undisturbed, accessible and inhabited villages having population more than 100 as per Census 1991 in the country. 47 VPTs have been provided during 2012-13 (up to December, 2012).

c. BSNL has entered into an agreement with USOF, for provisioning of VPT facility in 62,443 newly identified uncovered inhabited villages of Census 2001. 1306 VPTs have been provided during the current year up to December, 2012.

## Replacement of Multi Access Radio Relay (MARR) VPTs

BSNL had signed agreement with USOF for replacement of 185,121 number (revised from earlier allotted 1,86,872) of VPTs which were earlier working on Multi Access Radio Relay (MARR) technology. 15 MARR have been replaced during the current year up to December, 2012. Remaining MARRs are likely to be replaced by March, 2013.

## Telecom Factories

BSNL Telecom factories located at Kolkata, Gopalpur, Kharagpur, Jabalpur, Bhilai, Richhai and Mumbai are in-house manufacturing units of the company.

Amidst various constraints posed by declining demand of Towers & other conventional products & decreasing work force factories have supplied Telecom goods worth ₹100 crore including more than 1.34 crore SIM Cards during first nine months of the current financial year.

## International Relation

A total of 26 BSNL officers during the financial year 2011-12 and 30 officers during 2012-13 were deputed abroad for various events like Training, Exhibitions, Meetings and Conferences.

## Training

BSNL has 35 Telecom Training Centres countrywide comprising of three Apex level Training Centres namely Advanced Level Telecom Training Centre (ALTTC), Ghaziabad, Bharat Ratna Bhim Rao Ambedkar Institute of Telecom Training (BRBRAITT), Jabalpur and National Academy of Telecom Finance and Management (NATFM) Hyderabad. The number of personnel trained are as under:

a. During the previous year 2011-12 around 88,555 number of personnel were imparted training totaling to 5,78,228 man days. In addition, around 6,41,401 man days of training was imparted to external trainees, of which a significant group was of engineering students.

b. During the current year 2012-13 (April-December) around 53,966 of personnel have been imparted training totaling to 2,24,757 man days. In addition 4,55,566 man days of training has been accorded to external trainees.

## DEVELOPMENT OF TELECOMMUNICATION FACILITIES IN SELECTED AREAS

**Special Component Plans:** Annual Plan of BSNL pays special emphasis on accelerated growth of telecommunication facilities under Special Component Plans in (i) North Eastern Region and (ii) Tribal Sub-plan in Tribal Areas.

**Network Status of NE Region States:** The status of telecom facilities as on 31st December 2012 in each of the state of North East Region is shown in the following table:

| Sl. No. | Name of State | Telephone Exchange (Wireline) | Total Capacity (Wireline + Wireless) | Total DELs (Wireline + Wireless) | Broadband Connection | VPTs (As per census 2001) |
|---|---|---|---|---|---|---|
| 1 | Assam | **585** | **21,34,461** | **14,22,194** | **92,392** | **24,679** |
| 2 | **NE-1** | | | | | |
| (2a) | Meghalaya | 118 | 3,51,431 | 3,19,225 | 12,386 | 5,106 |
| (2b) | Mizoram | 105 | 2,25,982 | 2,46,556 | 11,439 | 704 |
| (2c) | Tripura | 135 | 3,95,567 | 4,81,498 | 13,414 | 858 |
| | **Total** | **358** | **9,72,980** | **10,47,279** | **37,239** | **6,668** |
| 3 | **NE-2** | | | | | |
| (3a) | Arunachal Pradesh | 104 | 3,29,926 | 3,58,704 | 7,781 | 2,774 |
| (3b) | Manipur | 50 | 2,60,488 | 2,25,837 | 7,077 | 2,171 |
| (3 c) | Nagaland | 64 | 3,21,217 | 3,22,038 | 5,131 | 1,263 |
| | **Total** | **218** | **9,11,631** | **9,06,579** | **19,989** | **6,208** |
| 4 | **Sikkim** | **47** | **1,65,800** | **1,37,597** | **4,316** | **429** |
| | **NE Region** | **1,208** | **41,84,872** | **35,13,649** | **1,53,936** | **37,984** |

**Development Status:** Target and achievements during the year 2012-13 for the North East Region are as follows:

| Item | 2012-13 | |
|---|---|---|
| | Target (As per MOU) | Achievements up to 31st December 2012 |
| * Net Switching Capacity (Wired +WLL+CMTS) | - | - |
| DELs (Nos.) | 4,84,400 | 21,544 |
| (i) Fixed | 0 | (-) 85,293 |
| (ii) Mobile | 4,84,400 | 1,06,837 |
| VPTs (Nos.) as per census 2001 | 0 | 399 |
| Broadband Capacity (ports) | - | - |
| Broadband Connections (Nos.) | 74,400 | 13,576 |

* As per of MoU signed with DoT for the financial year 2012-13, there is no target for Switching Capacity, VPT and Broadband capacity.

## Tribal Sub Plan

The Tribal Sub Plan (TSP) is a part of the Annual Plan for providing telecom facilities in the tribal areas. For a balance and faster development of telecom facilities in tribal areas, these areas are treated as special focus areas. The main objectives of the Tribal Sub Plan areas are (i) to provide the telephone facility on demand in tribal areas (ii) to provide NSD facility to all exchanges in tribal areas and (iii) to provide public telephone in all tribal villages.

Tribal areas fall in the States of Andaman & Nicobar, Andhra Pradesh, Assam, Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Maharashtra, Madhya Pradesh, NE-I, NE-II, Orissa, Rajasthan, Tamil Nadu, Uttaranchal, U.P (East) & West Bengal.

## Targets and achievements for the year 2012-13 under Tribal-sub-plan (TSP) are as follows

| Sl. No. | Items | 2012-13 | |
|---|---|---|---|
| | | Target | Achievement during 2012-13 (up to 30.09.2012) |
| 1. | Wireline Telephone Exchanges | - | (-)15 |
| 2. | Switching Capacity (Wireline + Wireless) | - | 1,61,864 |
| 3. | DELs (Wireline + Wireless) | - | 23,342 |
| 4 | OFC (RKms) | 3,497 | 1,842 |

## WELFARE MEASURES/ FACILITIES UNDERTAKEN BY BSNL

BSNL is running various welfare programmers for its employees and their family members as part of BSNL's welfare measures for the year 2012-13. Some of the salient welfare schemes are reproduced below:

- Grants of Scholarship/ Book Awards/ Incentives to the wards of BSNL Employees.
- Financial assistance of up to ₹25,000 in case of serious illness or major surgical treatments.
- Immediate Financial assistance of ₹15,000 to the family of BSNL employees who die in harness irrespective of basic pay limit.
- Financial assistance to the tune of ₹5000 per employee who are the victims of Natural Calamities/ Communal riots/ terrorist attacks etc.
- Organizing of Cultural Functions, Drawing Competition & Slogan Writing competitions.
- Transport subsidy to the tune of 75% for organization of Excursion trip.
- Grant in Aid to Recreation Clubs in each Circle/ SSA.
- Grant in Aid to RWA's
- Grant in Aid to TWCO/ TWWO: The main role/objective of this organization is promotion of welfare of the families of the employees and its main activities are:

a. Setting up of Crèches for child care in P&T residential colony and in offices.

b. TWCO/TWWO have been allowed usage of computer facilities of telecom Training Centre for imparting training to the children and spouses of BSNL employees.

**Holiday Homes:** There are 38 Holiday Homes all over the country for use by its employees and their family members.

**Special Dispensation:** Relaxation of 10% marks is given in respect of students who are wards of SC, ST, OBC & Physically Handicapped employees in the grant of Scholarship and Book Awards. In the case of girl student 15% relaxation is being given for grant of scholarship Book awards.

### Staff Strength

Total number of employees as on 31st December 2012

| Group | Number of employees | Scheduled Caste | Scheduled Tribe | Ex-Servicemen | Women Employees |
|---|---|---|---|---|---|
| Executive | 50,598 | 8,093 | 2,433 | 116 | 7,840 |
| Non-Executive | 2,05,490 | 38,501 | 10,823 | 556 | 29,153 |
| Total | 2,56,088 | 46,594 | 13,256 | 672 | 36,993 |

No. of Disabled employees as on 31st December 2012 was 563.

## Table

## Status of Village Public Telephones (VPTs) provided by BSNL as per Census 2001 as on 31st March 2012 & 31st December 2012

| S. No. | Name of Circle | Total Villages as per census 2001 | As on 31st March 2012 | | As on 31st December 2012 | |
|---|---|---|---|---|---|---|
| | | | Villages Covered by VPTs | %age of villages covered | Villages Covered by VPTs | %age of villages covered |
| 1 | Andaman & Nicobar | 501 | 350 | 69.86 | 352 | 70.26 |
| 2 | Andhra Pradesh | 26,613 | 24,040 | 90.33 | 25,102 | 94.32 |
| 3 | Assam | 25,124 | 24,411 | 97.16 | 24,679 | 98.23 |
| 4 | Bihar | 39,032 | 38,932 | 99.74 | 38,932 | 99.74 |
| 5 | Chhattisgarh | 19,744 | 18,178 | 92.07 | 18,192 | 92.14 |
| 6 | Gujarat | 18,159 | 16,932 | 93.24 | 16,260 | 89.54 |
| 7 | Haryana | 6,764 | 6,678 | 98.73 | 6,678 | 98.73 |
| 8 | Himachal Pradesh | 17,495 | 17,406 | 99.49 | 17,408 | 99.50 |
| 9 | Jammu & Kashmir | 6,417 | 6,363 | 99.16 | 6,383 | 99.47 |
| 10 | Jharkhand | 29,354 | 28,807 | 98.14 | 28,807 | 98.14 |
| 11 | Karnataka | 27,481 | 27,449 | 99.88 | 27,449 | 99.88 |
| 12 | Kerala | 1,372 | 1,372 | 100.00 | 1,372 | 100.00 |
| 13 | Madhya Pradesh | 52,117 | 51,986 | 99.75 | 51,986 | 99.75 |
| 14 | Maharashtra | 41,442 | 39,746 | 95.91 | 39,766 | 95.96 |
| 15 | North East – 1 | 7,347 | 6,592 | 89.72 | 6,668 | 90.76 |
| 16 | North East – 2 | 7,456 | 6,153 | 82.52 | 6,208 | 83.26 |
| 17 | Orissa | 47,529 | 44,858 | 94.38 | 44,935 | 94.54 |
| 18 | Punjab | 12,301 | 12,065 | 98.08 | 12,065 | 98.08 |
| 19 | Rajasthan | 39,753 | 38,838 | 97.70 | 38,699 | 98.10 |
| 20 | Tamilnadu | 13,837 | 13,837 | 100.00 | 13,837 | 100.00 |
| 21 | Uttaranchal | 15,761 | 15,365 | 97.49 | 15,366 | 97.49 |
| 22 | Uttar Pradesh (East) | 76,993 | 74,121 | 96.27 | 74,145 | 96.30 |
| 23 | Uttar Pradesh (West) | 23,781 | 23,629 | 99.36 | 23,597 | 99.23 |
| 24 | West Bengal | 37,512 | 36,801 | 98.10 | 36,910 | 98.40 |
| 25 | Kolkata | 893 | 567 | 63.49 | 613 | 68.65 |
| 26 | Chennai | 1,655 | 1,655 | 100.00 | 1,655 | 100.00 |
| **BSNL TOTAL** | | **593,601** | **577,131** | **97.23** | **577,516** | **97.29** |

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# VIII. 2 MAHANAGAR TELEPHONE NIGAM LIMITED

Mahanagar Telephone Nigam Limited (MTNL) was incorporated on Feb.28, 1986 under the Companies Act as a wholly owned Govt. Company and on April, 01 1986, assumed responsibility for the control, management, operation of the telecommunications Networks in Delhi & Mumbai. MTNL is the principal provider of fixed-line telecommunication service in these two Metropolitan Cities of Delhi and Mumbai and for GSM Mobile services (four peripheral towns Noida, Gurgaon, Faridabad & Ghaziabad along with Delhi city) and the areas falling under the Mumbai Municipal Corporation, New Mumbai Corporation and Thane Municipal Corporation along with Mumbai city, also come under the jurisdiction of the company.

The authorized capital of the Company is ₹800 crore. The Paid up Share Capital is ₹630 crore divided into ₹63 crore share of ₹10 each. At present, 56.25% equity shares are held by President of India & his nominees and remaining 43.75% shares are held by FIIs, Financial Institutions, Banks, Mutual Funds and others including individual investors.

MTNL was given Navratna status in 1997 and was listed in New York Stock Exchange in 2001.

Further MTNL is providing dial up internet services in Delhi and Mumbai under separate non-exclusive license agreement. MTNL launched Broadband service based on the state of the art ADSL2+ technology in the year 2005. MTNL is providing Triple play services ie voice (including VOIP), high speed internet and IPTV on this broadband network. MTNL launched 3G services on 11th December 2008 against the spectrum allotted in August 2008.

## Physical Performance

### Tele Services

A variety of phone plus services have been made available by MTNL to the customers connected to modern state of art technology digital exchanges e.g. computerized morning alarm, voice mail, automatic changed number announcement, computerized fault booking/ payment system etc.

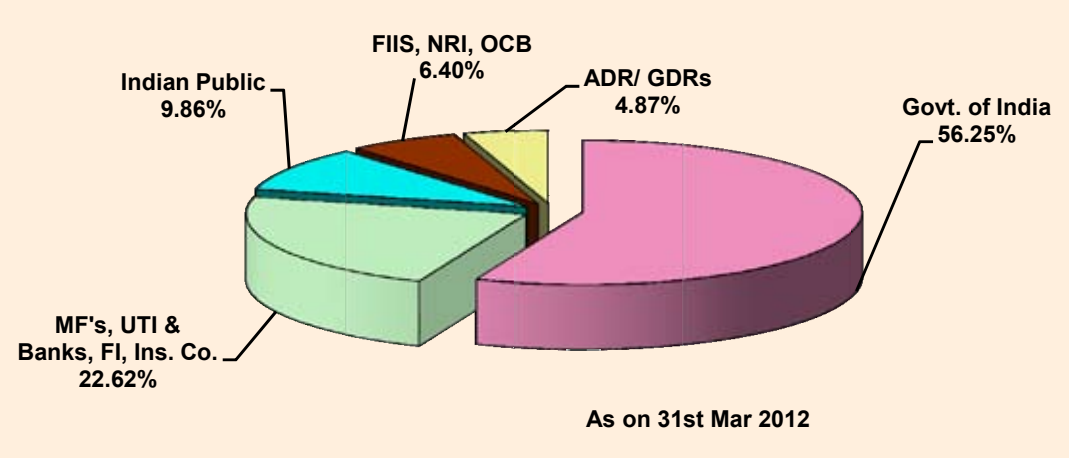
MTNL is also providing a host of value added services like Call Waiting, Call forwarding, wake up calls, absent subscriber service, caller identification, friend and family, night talk, call conference and voice mail etc. to the customers.

MTNL has taken several steps to improve its interface with the customers. MTNL has introduced improved bill collection and payment procedures (including bill payment over the Internet and via credit card), opened Tele-marts at which most subscriber services are available, introduced telephone directories on the Internet and on CD-ROM and implemented a customer service

management system. MTNL's customer service management system enables our staff to provide customers with access to a range of "on-line" services, including registration for new telephone lines, changes of address and issuances of bills, and allows us to monitor complaints from a single point of contact. MTNL has identified high usage "commercially important persons" and are making all efforts to strengthen our relationship with these subscribers. In addition to this, Telephone Adalats and Open House Sessions are being held for both way effective communications with the customers.

During 2012-13 (upto December 2012) even though MTNL added 504814 new connections (including fixed line, WLL & GSM), however, due to deletion of large number of GSM subscribers who were inactive for more than one year (around 6-7 lakh), the net growth has been negative i.e. – 5.32 lakh connections (including fixed line, WLL & GSM). The disconnection of GSM Subscribers lying dormant over a long period of time i.e. those customers who have not used the services for more than one year, became necessary to rationalize the use of the capacity and to be able to acquire more customers using the existing resources. However, MTNL maintained positive growth in Broadband subscribers where it has added net 59280 Broadband subscribers during this period.

## Share Holding pattern




## Different Services and projects

### 1. GSM Cellular Mobile Services

The 3G technology which is the natural evolution of 2G services not only facilitated better and efficient utilization of spectrum but also provided higher speed and data throughputs. 3G technology provided faster internet surfing and enable MTNL to provide a host of video related & enriched value added services like Video telephony, High Speed Mobile Broadband, Mobile TV, Video Streaming, Video On Demand , On line Gaming , M-commerce etc. to its subscribers.

3G services with the brand name “Jadoo” are available in entire service area of MTNL Delhi & Mumbai. As 3G being a new technology in India, it had taken some time to fully educate and convince the customers to go for 3G connections. To make the 3G services popular among its subscribers, MTNL has allowed all its GSM mobile subscriber access to 3G services. After this step, the data usage by GSM subscribers has increased exponentially.

Host of SMS /IVRS / GPRS based VAS are available to MTNL’s GSM / 3G subscribers. Some of these are listed below:

a. Caller Ring Back Tone (CRBT)
b. Missed Call Alert
c. Voice SMS
d. Save your Contents (Dolphin Vault)
e. M-Commerce (Bill Payment through Mobile)
f. Mobile TV
g. Closed User Group (CUG)
h. Status of Railway reservation, passport, etc.
i. News, Cricket, Matrimony, etc.
j. Map and Direction
k. Interactive Voice Response Service (IVRS)

To meet the ever increasing demands/ aspiration of its customers, MTNL is giving major thrust on the expansion of capacity as well as capability of its GSM/ 3G Networks.

Steps are being taken to generate fresh demands by providing quality services, customer care & satisfaction, introduction of new services/ schemes and innovative marketing strategies. Steps taken by MTNL to increase the subscriber base of 3G service are as under:

- To boost the demand for its 3G services, MTNL is bundling its services with data cards & handsets from various vendors. In this case, MTNL allows suppliers to sell their 3G data cards bundled with MTNL's 3G services. Before allowing such data cards with MTNL's 3G services, MTNL thoroughly tests the data card for its performance in MTNL's 3G network.
- In addition, MTNL is also providing data cards to the customers under various packages for its 3G data connections. For this MTNL has purchased 3G data cards from M/s Teracom.

## 2. Broadband Network

Broadband services based on ADSL2+ are being provided by MTNL. Triple play services i.e. voice (including VOIP), high speed Internet and IPTV are being offered on this broadband network. The service is very popular with the subscribers and since launch of its ADSL2+

based Broadband services, MTNL has maintained a healthy positive growth in Broadband subscriber base. MTNL presently have a installed broadband capacity of around 16.32 lakh ports and customer base of around 10.99 lakh (as on 31st December2012).

## 3. Fiber to the Home (FTTH)

To meet the ever increasing demand for the bandwidth, achieve higher level of customer satisfaction and providing wide range of services to its esteemed customers MTNL is aggressively laying and extending the reach of optical fiber in its network and is deploying GPON based FTTH network. It is a centrally managed network designed to provide reliable fiber routes to cover all possible destinations within MTNL. This will help in meeting the increased bandwidth requirement for both data and video applications. The company intends to create POP (through which data, voice, enterprise and other services will be provided to the subscribers) on fiber within a 1Km radius of the subscriber.

The work of deployment of active network portion of GPON based FTTH network has been awarded to M/s ITI and FTTH passive network to M/s Sterlite Technologies Limited. The project is in the advance stage of its completion. FTTH offers Broadband up to 100 Mbps, High-speed Internet, Voice, IPTV, Video on Demand and other content-based services, such as, e-education, gaming and video surveillance, advertisement, etc.

By the end of December 2012, MTNL Delhi had 1127 FTTH connections while MTNL Mumbai had 369 connections.

## 4. Femtocell deployment in MTNL

For efficient utilization of 3G Spectrum, MTNL has planned to deploy Femto Cell which is a small cellular base station specialy designed for use in residential and small business environments. After deployment of Femto cell network, when a 3G subscriber is within Femto cell range, its traffic will be routed through fixed line network. A trial of Femtocell solution was successfully conducted by M/s Alcatel Lucent in Mumbai network.

The work for preparation of EOI for empanelment of vendors for wi-fi hotspot is under progress.

## 5. IT Initiatives

Following initiatives have been taken to facilitate in house developments for the purpose of ease of operations/monitoring management.

i. Launch of new website of MTNL corporate office
ii. Launch of customer friendly website of MTNL Delhi
iii. Launch of common intranet site of MTNL
iv. Providing facility for capturing of leads for new landline/broadband on MTNL website

v. Lead capture for new connections on SMS code 52121
vi. “Quick pay” facility for MTNL mobile subscribers
vii. Implementation of in-house broadband billing system
viii. Launch of Human resource information system (HRIS)
ix. Intranet based Dash board fault reports management system for broadband/landline
x. Development of Do-it-yourself (DIY) videos related to MTNL services.

## 6. IPv4 to IPv6 Migration

Department of Telecommunications has directed all major service providers to make their core network infrastructure ready latest by December 2012, so that they are able to offer IPv6 services across all segment. IPv6 migration is a challenging task as MTNL has many legacy networks and equipments for various line of business i.e. broadband, wireless, leased circuit etc. Given these challenges, MTNL is striving hard to achieve the objective. MTNL has taken proactive steps in this direction and has already replaced its core network (IPv4 only) with dual stack MPLS network and has also done testing for its Broad-band network along with other equipments. The broadband network of MTNL is IPv6 ready on dual stack, without NATing.

## 7. Utilization of MTNL’s Assets

MTNL has been making conscious efforts to maximize revenue by gainful utilization of its assets. Along with other initiatives, MTNL has started sharing its assets such as staff quarters, office space with other Govt., semi-Govt., autonomous organizations & public sector Banks. MTNL has already rented out around 4.24 lakh sq. ft. of space which has resulted in earning of ₹4.15 crore monthly rental revenue. In addition, MTNL has let out 40 staff quarters.

## 8. Deployment of new technology state of art exchanges and Next Generation Networks (NGN)/ IMS

MTNL currently has over 5 million installed capacity of fixed line in its Delhi & Mumbai networks and has around 3.5 million customers. The present Fixed Line technology was introduced about 20 years back and currently having difficulties in its day to day maintenance. Due to withdrawal of the maintenance contract from the vendors citing obsolescence of the technology as the main reason, MTNL has planned to replace TDM Fixed line switches with NGN / IMS in phased manner during 12th Five year plan. Introduction of NGN / IMS based services will not only help MTNL in saving Opex, space but also enable us to offer all data / video centric services which are currently enjoyed by Mobile subscribers to our fixed line subscribers also ultimately leading to convergence of fixed and mobile services.

## 9. Launch of Voice & Video Over Broadband Services

MTNL has recently enabled Video Telephony over its vast wire-line network in Delhi and Mumbai. This service was launched by Hon’ble Minister of Communications & IT, Shri Kapil

Sibal and Hon'ble MoS (C&IT) Shri Milind Deora on 17th January 2013. Video telephony is an ad – on service that can be activated over existing landline connections. This service can help in effective communication, interactive grievance handling, and better monitoring of delivery of services. It also helps save time and money.

## JOINT VENTURES

**1. MTNL-STPI IT Services (MSITS):** MTNL-STPI IT Services Ltd. is a 50:50 Joint Venture between Software Technology Parks of India (STPI) and Mahanagar Telephone Nigam Limited, (MTNL). The JV formed in 2006 combines the STPIs rich experience as an ISP and MTNL's track record of being India's leading telecom operating company to offer niche portal services to the Indian community. The JV aims 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.

Keeping in view of smooth operation and expansion needs of the Data Center, MSITS created suitable infrastructure components like LT extension panel, UPS panel, PAC panel and Server DB which were installed and integrated in the live Data Center. Also MSITS is in the process of doing the caging in the Data center to support other collocation requirements. The service uptime is 99.98% with technical experts maintaining the data center 24×7×365.

Company has also decided to establish green data center of Tier-III standard at Delhi and Hyderabad with approximately 20,000 Sq Ft. area. EOI for the same is being floated.

**2. United Telecom Limited (UTL):** UTL is a joint venture company of MTNL, Tata Communications Limited and TCIL along with partner Nepal Ventures (P) Limited (NVPL). The company provides basic, Mobile, NLD, ILD and data services in Nepal. The Company is operational since 10th October, 2001 with initial offerings of WLL based basic services in Nepal. The tariff to India was costing around NRs 75/minute, UTL has brought down to NRS2.59/ minute. The company has set up CDMA 1X EVDO infrastructure to cater to growing data and VAS needs of its customers in Nepal. The company has also launched RUIM cards for its CDMA subscribers to have better control over fault rates. UTL network has its presence in 46 districts.

As on date MTNL, TCIL and TCL are holding 26.68%, 26.66% and 26.66% respectively while NVPL is holding 20% of equity capital in the company. UTL has contributed in expansion of the telecom sector & towards GDP of the Country.

**3. Millennium Telecom Limited:** Millenium Telecom Ltd (MTL) a wholly owned subsidiary of MTNL with registered office located in Mumbai was incorporated in February 2000. The Board of MTL decided to enter into new line of business and started exploring the new different business prospects viz., Infrastructure Sharing, Data Centre Outsourcing Application including Web Hosting, Cloud computing etc., Providing Turn Key Solution in response to Various Tenders in Central Govts./State Govts./PSU/Banks/ Private Corporate etc. or directly on GFR basis. Business cases like providing Broad Band services in Wi-fi environment, leasing out

spare optical fibre capacity, sharing spare CDMA Switch capacity to other operators is under process. MTL is also exploring the possibility of forming Joint Venture (JV)/Collaboration and making Telecom partners through Expressions of interests and also signing of MoUs for this purpose.

## Subsidiary Companies

1. **Mahanagar Telephone Mauritius Limited (MTML):** MTML a 100% subsidiary company of MTNL was incorporated as a private domestic company in November 2003 at Mauritius. Registered with Authorized capital of 600Millon MUR and paid up capital of 300M at the time of inception. The Authorized capital was enhanced to MUR 1500 Million in 2009. Company got Licences from the ICTA (Telecom regulatory at Mauritius) to operate Fixed Wireless Services, Mobile Services, International Long Distance Services and Internet Services.

   MTML continue to provide telecom services viz., Fixed Wireless Phone, Mobile (Post paid & Prepaid), Internet Services through Fixed Wireless Phones, High Speed Data cards and International Long Distance Call Services through CAC, VCC/ACC cards. MTML's customer base has increased from INR 33.87 million in 2010-11 to INR 41.51 million in 2011-12. MTML has achieved a turn-over of INR 459 Million during fiscal year 2011-12. 110K capacity switch of CDMA Technology (CDMA 1x and EVDO) + 200K GSM is installed in Port Louis & island is covered through 53 towers installed as a part of radio network. 10 Customer care services all over the island and one call centre are operational to meet the customer requirements. CDMA Network was upgraded in May 2011. Company is Providing Fixed, Mobile, international Long Distance and Internet services to the people of Mauritius at most competitive rates. Around $20 million have been invested by MTNL in MTML. High Speed Data Network expanded all over the island from Limited areas. Steps are being taken for implementing international roaming for MTML Mauritius GSM network.

## Financial Performance

The Financial Summary during the last three year and the current year (upto December 2012) is as below:

(₹ in crore)

| Items | 2009-10 | 2010-11 | 2011-12 | 2012-13 (upto December 2012) |
|---|---|---|---|---|
| Income from services | 3656 | 3674 | 3373 | 2510 |
| Other Income | 1402 | 318 | 251 | 172 |
| Total Income | 5058 | 3992 | 3624 | 2682 |
| Expenditure | 8476 | 6766 | 7669 | 4048 |
| PBT | -3418 | -2775 | -4044 | -3321 |
| Net Profit | -2610 | -2802 | -4109 | -3335 |

Despite stiff competition from other operators, MTNL achieved a financial turnover of ₹3373.52 crore during the year 2011-12, as compared to the previous year's turnover of ₹3673.95 crore. During the said period MTNL posted a loss of ₹4109.78 crore basically because of the following reason:

- MTNL paid interest of ₹949.16 crore on the long term / temporary loans, taken for the purpose of payment of 3G & BWA spectrum and Over Draft (OD) for meeting its day to day requirements.
- ₹1460.09 crore was booked as actuarial valuation towards retirement benefits though this amount was not actual cash out flow.
- MTNL had to pay pensionary benefits of ₹481.44 crore to absorbed retirees.
- General reduction in tariff including per second tariff plan.
- MTNL is providing services in Delhi and Mumbai only and unable to offer Pan India tariff plans unlike its competitors who have presence in other circles.
- Increase in competition from private Operators.
- Churn in landline / Mobile Number portability

Following steps have taken by the company to improve operation and to earn more revenue:

- Focus on Broadband and Enterprise business.
- New streams of revenue from sharing of resources with other service providers.
- Introduction of various schemes to attract new landline subscribers and sustaining existing landline base.
- More emphasis on adding GSM and Broadband.
- Introduction of Flexible tariff policies.
- Rationalization of expenditure to reduce administrative and operative cost.
- Close monitoring of faults is being maintained. Emphasis has been given on the improvement of the quality of service.
- Stress has been given on the redressal of the subscriber's complaints by increasing number of positions in Customer Care centre, providing single window at the Sanchar haats.

However, third quarter yearly results for the financial year 2012-13 show a loss of ₹ (-) 3335.19 crore.

## Revenue Assurance

A revenue assurance programme has been implemented in MTNL towards ensuring that all billable activities occurring on the network are accurately captured, rated, billed and realized accordingly.

A Convergent billing system is under installation, which contains a significant component of Revenue Assurance. This is expected to improve revenue assurance efforts of MTNL further. TRAI has also mandated various telecom operators to conduct Audit of Metering and Billing system by the auditors empanelled by TRAI itself, which supplements to revenue assurance program being implemented by MTNL.

As per provisional figures of current financial year upto November 2012, MTNL achieved 12.68% growth in broadband revenue of Delhi and 5.12% in Mumbai in comparison to previous year in spite of tough competition from private players.

Revenue of Leased Circuit & Enterprise Business has also grown at 19.79% in Delhi and 14.24% in Mumbai. MTNL has managed to add top Corporate in its subscriber list. MTNL and Welingkar Institute of Management Development & Research (WeSchool) in a joint press conference announced their strategic alliance to launch two new management courses for Telecom sector. The announcement was marked with signing of a Memorandum of Association (MoU) between WeSchool and MTNL–CETTM (Center for Excellence in Telecom Technology and Management), a Government of India enterprise.

Outstanding amount has been consistently reduced by MTNL through vigorous efforts, ensuring prompt revenue realization. In recent time various management meetings were held and several steps are in process for execution in next few months like implementing revenue realization cum write-off policy, comprehensive payment mechanism, streamlining of collection process and reconciliation and proper billing of leased circuit data to further reduce the outstanding amount.

## Manpower

The total employees of MTNL as on 31st December 2012 were 39,813 belonging to different categories. Employees belonging to Scheduled Caste were 7164, which constitute 17.99% of the total employees. The total number of employees belonging to Scheduled Tribes was 1368, which is 3.43% of total employees.

### Manpower of MTNL (as on 31st December 2012)

| Group | Total Working Strength | SC | ST |
|---|---|---|---|
| A | 1002 | 137 | 56 |
| B | 4591 | 583 | 89 |
| C | 23637 | 3971 | 412 |
| D | 10583 | 2473 | 811 |
| **Total** | **39813** | **7164** | **1368** |

## Trading of MTNL Shares

Shares of MTNL are listed with principal stock exchanges in the country such as Delhi, Calcutta, Mumbai and Chennai exchanges as well as National Stock Exchange of India. The shares are being traded regularly in the National Stock Exchange and Bombay Stock Exchange (NSE & BSE). ADRs issued by the company are listed with New York Stock Exchange (NYSE) and are regularly traded there.

**Annexure-I**

## Development Targets/Achievements -Delhi

| S.No | Items | Achievements 2011-12 | Achievements 2012-13 (upto December 2012) |
|---|---|---|---|
| **A** | **Switching Capacity** | | |
| (i) | Net Capacity Landline | 0 | 0 |
| (ii) | Net Capacity GSM | 0 | 0 |
| (iii) | Net Capacity WLL | 0 | 0 |
| **B** | **DELs ( in '000 )** | | |
| (i) | Gross | 450699 | 315743 |
| (ii) | Net | 259451 | -272474 |
| **C** | **Tax / Tandem** | 0 | 0 |
| **D** | **Transmission** | | |
| (a) | SDH System | | |
| (i) | STM-16 | 5 | 0 |
| (ii) | STM-4 | 5 | 0 |
| (iii) | ADM-1/STM-1 | 14 | 18 |
| (iv) | TMs-1 | 40 | 0 |
| **E** | **Optical fiber Cable (in Route Kms)** | 216.37 | 89.68 |
| **F** | **Optical fiber Cable (in Fiber Kms)** | 8911.68 | 3998.24 |
| **G** | **ISDN** | -150 | -47 |
| **H** | **Waiting List** | 0 | 0 |
| **I** | **Broadband subscribers** | 49355 | 33157 |
| **J** | **Internet connections** | -600662 | -19976 |
| **K** | **IPTV subscribers** | 3136 | 109 |
| **L** | **VOIP** | -273 | -193 |

**Annexure-II**

## Development Targets/ achievements - Mumbai

| S.No | Items | Achievements 2011-12 | Achievements 2012-13 (December 2012) |
|---|---|---|---|
| **A** | **Switching (in '000 lines)** | | |
| (i) | Net Capacity Landline | -106138.00 | -1079.00 |
| (ii) | Net Capacity GSM | -300000.00 | -225000.00 |
| (iii) | Net Capacity WLL | 0.00 | 0.00 |
| **B** | **DELs ( in '000)** | | |
| (i) | Gross | 302398.00 | 189071.00 |
| (ii) | Net | 87701.00 | -260232.00 |
| **C** | **Tax /tandem (In '000 lines)** | 7440 | -76660 |
| **D** | **Transmission** | | |
| (a) | SDH System | | |
| (i) | STM-16 | 24 | 2 |
| (ii) | STM-4 | 11 | 4 |
| (iii) | ADM-1/STM-1 | 122 | 40 |
| **E** | **Optical fiber Cable(in Route Kms)** | 393.76 | 68.78 |
| **F** | **Optical fiber Cable(in Fiber Kms)** | 29567.3 | 5097.83 |
| **G** | **ISDN** | -801 | -562 |
| **H** | **Waiting List** | 0 | 0 |
| **I** | **Broadband subscribers** | 48519 | 26123 |
| **J** | **Internet connections** | 1037 | 336 |
| **K** | **IPTV subscribers** | 131 | 93 |
| **L** | **VOIP** | -814 | -1779 |

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# VIII. 3 ITI LIMITED

ITI Limited, is the first Public Sector Undertaking of independent India, established in 1948, to supply telecom equipments to the then telecom service provider, Department of Telecommunications. ITI started its operations in Bangalore in 1948, which was further extended to other areas by setting up Manufacturing Plants at Srinagar in Jammu and Kashmir (1968), Naini (1971), Rae Bareli (1973) and Mankapur (1984) all in Uttar Pradesh and Palakkad (1976) in Kerala. The establishment of Manufacturing Plants at various remote locations was not only aimed at augmentation of manufacturing capacity but also development of social infrastructure.

In addition to the Manufacturing Plants, ITI has a dedicated Network Systems Unit at Bangalore for execution of turnkey projects and installation and maintenance support of all products of ITI, three Project Divisions at Mumbai, Pune and Bangalore for deployment of GSM equipments of BSNL and MTNL and Marketing Division with 8 Regional Offices and 27 Area Offices spread across the country.

The Company achieved a gross turnover of ₹922 crore for the year 2011-12. Even though this is lower than that of the previous year 2010-11, the operating losses have been brought down compared to that of previous years.

The main contribution to the above revenues came from the diversified areas of business rightly pursued by ITI very effectively and executed by the Plants. The Palakkad unit has been successfully executing the National Population Register (NPR-57) project under the Ministry of Home Affairs and Socio Economic & Caste Census (SECC) project under the Ministry of Rural Development as a member of the Consortium of three PSUs, other members being BEL & ECIL. The value of these two Projects is ₹ 1,400 crore. As an extension of these Projects, ITI is expecting another order where ITI's share is estimated to be around ₹1,300 crore for manufacturing of cards, which is to be executed in a period of three years.

ITI entered into ToT Agreement for manufacturing of GPoN equipment to improve the business especially in Broad Band segment. On 5th December 2011 at New Delhi, Shri. Kapil Sibal, Hon'ble Union Minister of Communications & IT and HRD handed over the Transfer of Technology (ToT) Agreement for GPoN product to ITI.

ITI's foray into IT segment is also yielding results. Many IT projects have been executed through eight Regional Offices (ROs) including Accelerated Power Development and Reforms Programme (APDRP) for Tamil Nadu Electricity Board, State Wide Area Network (SWAN) for the state of Maharashtra, Odisha and Mizoram.

ITI Naini Plant has established New Solar Photo Voltaic (SPV) Module manufacturing line of capacity 6 MW. Major equipments like Sun Simulator, Laminator, Solar Cell Tester and RFID

system are installed including in-house development of Solar Jigs, accessories and Inspection system.

## MISSION / VISION:

To attain leadership position in concept, design, manufacture and supply of telecom products and solutions based on state-of-the-art technology.

## CAPITAL STRUCTURE:

The Authorized Share Capital of the Company as on 31.03.2012 was ₹700 crore. The paid-up Share Capital as on that date was ₹ 588 crore. (₹ 288 crore equity shares of ₹10/- each and ₹300 crore as preference shares of ₹100/- each). The percentage share of Central Government in equity as on 31.03.2011 is 92.87%.

## FINANCIALS AND TURNOVER

(₹ in crore)

| Year | Turnover | Profit / (Loss) |
|---|---|---|
| **2009-10** | 4660 | (459.00) |
| **2010-11** | 2139 | (358.00) |
| **2011-12** | 922 | (370.00) |
| **Qtr-1 (2012-13)** | 134 | (105.00) |

## IMPORTANT ACTIVITIES / EVENTS

a. ITI Limited's 62nd Annual General Meeting was held on 28th September 2012 at Tamil Sangam, Bangalore.

b. ITI Palakkad Plant bagged First Prize in Industrial Safety from National Safety Council, Kerala Chapter for Medium Size Engineering Industries and also from Dept. of Factories and Boilers, Govt. of Kerala.

c. ITI Limited has bagged the prestigious "National Safety Award" from Shri Mallikarjun Kharge, Ministry for Labour & Employment at a function in Vigyan Bhavan, New Delhi on September 17, 2012.

d. The Department related Parliamentary Standing Committee on Industry headed by Rajya Sabha Member, Shri Tiruchi Siva visited Srinagar Plant from 9th June to 12th June 2012 to assess the MoU performance of various PSEs in J&K including ITI Limited.

e. The 66th "INDEPENDENCE DAY" was celebrated with great enthusiasm across ITI by its employees.

f. Shri N.K. Joshi, DDG-SU, DoT visited Srinagar Plant on 13th June 2012.

g. ITI Mankapur Plant has bagged Prime Minister's Shram Awards, Shram Devi Award for 2008 & Shram Devi Award for 2009.

h. Shri O.P. Rawat, Secretary, Department of Public Enterprises (DPE), visited ITI's Corporate Office and Bangalore Plant on April 27, 2012.

i. ITI Limited celebrated 3rd Public Sector Day from 10th April to 17th April 2012. The week long celebrations highlighted the excellent achievements by ITI in different fields through various programmes.

j. World Telecommunications and Information Society day – 2012 was celebrated on 17.5.2012 across ITI and the theme selected by International Telecommunication Union (ITU) was "WOMEN AND GIRLS IN ICT".

k. All the manufacturing Plants of ITI Limited have obtained Re-certification of ISO 9001:2008 Quality Management Systems from NVTQC, Bangalore.

l. Shri A.K. Antony, Hon'ble Minister of Defence visited ITI Stall in DEFEXPO 2012 held in New Delhi from 29th March to 1st April 2012 and showcased Products & services relevant to Defence Sector.

m. Palakkad Plant along with Public Sector Units and Ministry of Rural Development, Government of India signed agreement on Socio Economic & Caste Census (SECC) on 14th February 2012 for undertaking the preparation of Digital Database for identifying the BPL people.

n. ITI signed Memorandum of Understanding (MoU) with Government of India for the year 2012-13 on 12th March 2012.

o. Shri Kapil Sibal, Hon'ble Union Minister of Communications & IT and HRD visited Bangalore Plant on 6th February 2012 and inaugurated the New Products Lab at Bangalore Plant.

p. Shri R. Chandrashekhar, Secretary, Department of Telecommunications visited ITI Bangalore Plant on 6th February 2012.

## Projects / Products under Execution

- **National Population Registration (NPR) and Socio Economic & Caste Census (SECC) projects:** ITI is one among the consortium of three PSUs (other two PSUs being M/s BEL & M/s ECIL) selected for the execution of prestigious National Population Register (NPR) Project under Ministry of Home Affairs (MHA). The job involves collection of citizen data including biometrics followed by issue of ID cards, which is under execution.

  The above consortium is also executing SECC project for the Ministry of Rural Development. This project involves collection of additional census data of all the citizens in the Country.

- **Solar Project:** There has been special emphasis by the Government of India to implement the renewable energy sources including solar to overcome the environmental hazards. ITI is having requisite expertise and experience for implementing solar solutions. ITI Naini plant is planning to install equipments required for assembly and testing of solar module for 40 MW capacity.

- **Banking Automation Products:** ITI Mankapur Plant has set up manufacturing of Banking automation products and products like Note counting machines, Note bundling machines and Fake note detectors are under manufacture.

- **GSM:** ITI has been implementing GSM Projects in BSNL West Zone & South Zone and MTNL-Mumbai, in technology alliance with M/s Alcatel-Lucent [BSNL-West Zone & MTNL] and with M/s Huawei [BSNL-South Zone]. Huge demands are anticipated for GSM-3G equipments for expansion of BSNL/MTNL networks and other private operator's networks. ITI is planning to manufacture BSS network equipments in-house.

- **G-PON:** (Gigabit Passive Optical Network) G-PON is a promising transmission technology in terms of its low operating expenses, low power requirements and ease of network deployment. Huge requirements are anticipated from projects like NOFN, NFS and others. ITI has already been a major supplier of this product to BSNL and MTNL using the technology from M/s Alphion, USA. ITI has now entered into a ToT agreement with M/s C-DoT and plans are afoot to take up manufacture of G-PON equipments from component level at Rae Bareli Pant using C-DoT technology. This will boost indigenous manufacturing in India.

# FUTURE OUTLOOK

## Brief evaluation of new initiatives

- **Carrier Ethernet:** Carrier Ethernet is the next generation transport technology for high bandwidth packet access for internet and business communication. ITI has identified

a technology partner to address anticipated tender from BSNL. The NFS (Network for Spectrum) project is expected to have a huge requirement for Carrier Ethernet equipments.

- **Next Generation Networks:** Next Generation Network (NGN) is a Soft Switch based Telecommunication network capable of providing services, viz., Voice, Data & Video by encapsulating them into packets. Manufacturing of IP TAX equipment - Class IV, Trunk automatic exchange and Class V, local exchange, based on Soft Switch architecture is planned. BSNL and MTNL plans to migrate their TDM switches to NGN in order to provide new services to customers, will boost the NGN market.

- **Data Center:** ITI has already established Tier 3+ state-of-art Data center at Bangalore on PPP model. Presently this Data Center is fully booked for co-location services.
  Big scope exists in the market of Data center considering the immense potential in the Government sector to store data for projects of national importance like NPR, UIDAI and other Projects/Schemes envisaged by Government agencies & PSUs. In view of the business opportunities, ITI is planning to build its own Data centers as main and disaster recovery sites at 2-3 locations.

- **IT Projects:** ITI has already executed SWAN (State Wide Area Network) projects of Maharashtra, Odisha and Mizoram. ITI is also executing Accelerated Power Development and Reform Programme (APDRP) of Tamil Nadu state. E-Tendering is another major project being executed by ITI.

- **Defence products / projects:** ITI has already supplied telecom equipments like Encryption equipments, Telephones, Ruggedized Telephone Exchanges, etc. to the Defence sector. ITI has successfully implemented communication network to Indian Army viz. Army Static Communication Network (ASCON) Phase-I, II, III on turnkey basis and also maintaining the project under AMC. Orders for ASCON Phase IV is also anticipated.

To enhance product portfolio in Defence segment, the following products / technologies are being planned by ITI:

- Satellite Trans-Receiver and Access equipments.
- RADARs and Allied Equipments.
- Navigation Systems and Equipment.
- Missile systems and Equipments.
- Electronic fuzes.

**Details of physical achievements for the year 2011-12 (April 2011 – March 2012), performance during the first nine months (April to December 2012) and anticipated achievement for January to March 2013, for the FY 2012-13 are as under:**

(₹ in crore)

| Sl. No. | Product / Projects | Achievement in 2011-12 | Achievement in First Nine months (April-Dec. 2012) for FY 2012-13 | Anticipated achievement for January to March 2013 |
|---|---|---|---|---|
| 1 | Radio Modem | 17.50 | | |
| 2 | Solar Panel | 6.87 | 22.87 | 1.00 |
| 3 | SSTP/IPTAX | 12.28 | 6.01 | 10.00 |
| 4 | C-DoT Products | 4.57 | 1.63 | 1.0 |
| 5 | Diversified Products/ Cont. Mfg. | 4.15 | 3.07 | 2.0 |
| 6 | PCM MUX | 3.84 | 0.43 | 1.50 |
| 7 | DWDM | 9.21 | | |
| 8 | MLLN | - | | 40.00 |
| 9 | GSM_WZ(incl. BTS,RTT Shelter) | 32.70 | 11.22 | 50.00 |
| 10 | GSM-MTNL | 18.44 | | 5.0 |
| 11 | GSM-SZ | 13.64 | 13.20 | 3.0 |
| 12 | WLL-INFRA | - 14.88 | | |
| 13 | Data Centre | 10.69 | 8.89 | 1.50 |
| 14 | ADSL-CPE | 5.13 | 3.00 | 5.00 |
| 15 | Misc. Products | 34.37 | 16.43 | 10.00 |
| 16 | DEFENCE / ASCON | 52.20 | 28.38 | 15.00 |
| 17 | OCB AMC BUSINESS | 47.14 | 26.91 | 20.00 |
| 18 | SIM / USIM / Smart Cards | 0.28 | 9.38 | 50.00 |
| 19 | NPR / SECC | 438.08 | 291.26 | 200.00 |
| 20 | SMPS | 3.76 | 1.22 | 1.00 |
| 21 | G-PoN | 24.24 | 16.29 | 25.00 |
| 22 | Ros/CCO/IT | 197.89 | 79.64 | 125.00 |
| | **TOTAL** | **922.10** | **539.83** | **566.00** |

## Human Resources Development (HRD)

The Enterprise employed about 8717 employees (Executives – 4226 & Non-Executives – 4491) as on 1.1.2013. About 11.75% of the employees were having professional qualifications in the field of Engineering, Finance, Human Resources and Medical; around 11.55% were Graduates and Post Graduates; 16.94% were Diploma Holders and 37.56% were Trade Certificate Holders. Around 48% employees come under the age bracket of 51 and above years.

Manpower strength, as on 1st January 2013 is, 8717 employees and details are as follows:

| Group | Total Working Strength | SC | ST | Women | Persons with Disabilities |
|---|---|---|---|---|---|
| Officers | 4226 | 668 | 47 | 398 | 33 |
| Non Officers | 4491 | 814 | 32 | 294 | 76 |
| **Total** | **8717** | **1482** | **79** | **692** | **109** |

***ITI signed a Memorandum of Understanding (MoU) with the Government for the year 2012-13. Mr. R.Chandrashekhar, Secretary, DoT and Chairman, Telecom Commission and Mr. K.L. Dhingra, CMD, ITI Ltd. signed the MoU in New Delhi.***

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# VIII. 4 TELECOMMUNICATIONS CONSULTANTS INDIA LIMITED

Telecommunications Consultants India (TCIL) was set-up on 10.03.1978 with the main objective to provide world class technology in all fields of telecommunications and information technology to excel in its operations in Overseas and in the domestic markets by developing proper marketing strategies, to acquire State of the Art technology on a continuing basis and maintain leadership. It has also aims to diversify into Cyber Parks / Cyber Cities and upgrading legacy networks by focusing on Broadband Multimedia Convergent Service Networks, entering new areas of IT as systems integrator in Telecom billing customer care value added services; e-governance networks and Telecom fields by utilizing TCIL's expert technical manpower, Developing Telecom and IT training infrastructure in countries abroad and aggressively participating in SWAN projects in various States.

TCIL is a Schedule-A Miniratna CPSE in Industrial Development and Technical Consultancy service sector, under the administrative control of Ministry of Communications & IT and Department of Telecommunications with 100% shareholding by the Government of India. Its registered and corporate offices are at New Delhi.

## Vision/Mission

The vision of the company is "To excel in providing solutions in Information and Communication Technology, Power and Infrastructure Sectors globally by anticipating opportunities in technology"

The mission of the company is 'To excel and maintain leadership in providing Communication solutions on turnkey basis in Telecommunications and Information Technology Service Sector globally and to diversify by providing excellent Infrastructure facilities particularly in the high tech areas.'

## Industrial/ Business Operations

TCIL is undertaking turnkey projects in all fields of Telecommunications & IT in India and abroad. The core competence of the company is in core and access network projects, Telecom Software, Switching and Transmission Systems, Cellular Services, Rural Telecommunications, Optical Fibre based Backbone Transmission System, IT and Networking solutions, E-governance, Civil and Architectural Consultancy for Cyber Cities, Telecom Complex etc. The company has also diversified into Architectural Consultancy and Civil Construction.

The company operates through its 11 Units/ Branches. It also has 4 Joint Ventures namely Bharti Hexacom Ltd., United Telecom Ltd., TCIL Bellsouth Ltd. and TCIL Saudi Co. Ltd. In addition the company has 3 subsidiary companies namely Intelligent Communication System India Ltd., TCIL Oman LLC and Tamilnadu Telecommunications Ltd.

The physical performance of the company during the period from 2009-10 to 2011-12 are mentioned below:-

(₹ in crore)

| Main Services / Segments | 2011-12 | 2010-11 | 2009-10 |
|---|---|---|---|
| Telecom | 497.92 | 477.18 | 462.13 |
| Civil | 182.87 | 373.72 | 270.64 |
| Total | 680.79 | 850.90 | 732.77 |

## Strategic Issues

The company has diversified in hi-tech areas like WLL Fiber to the home cyber park, Cyber city e-Medicine, E-education and also in civil construction business.

## Performance Highlights

Despite global slowdown, TCIL faced the new challenges with great determination and was able to maintain its overall performance and achieved turnover of ₹680.79 crore. The standalone profit before tax increased to ₹19.16 crore as against ₹19.01 crore of previous year.

## Human Resources Management

The enterprise employed 915 regular employees as on 31.03.2012. The retirement age in the company is 60 years. Category wise employment status for last 3 years is given below:

Nos.

| Particulars | 31st December 2012 | | 2011-12 | 2010-11 | 2009-10 |
|---|---|---|---|---|---|
| | Sanctioned | Working | | | |
| Executives (Nos.) | 418 | 418 | 412 | 373 | 370 |
| Non Executive (Nos.) | 490 | 490 | 503 | 472 | 480 |
| Total Employees | **908** | **908** | **915** | **845** | **850** |

## Achievements, activities and performance during the first Nine months (April – December 2012)

During the year 2012-13, till December 2012, Company has secured orders of over ₹ 287.00 crore. The major orders booked during the year are as under:

- Laying of Electric Cables for Saudi Electric Company on turnkey basis valuing ₹18.00 crore.
- Construction of ESIC dispensary at Mira Road, Thane, Maharashtra valuing ₹15 crore.

- Multi order contract for civil engineering and cable works valuing ₹5.59 crore in Mauritius.
- Supply of OFC and other accessories to NCELL Pvt. Ltd. valuing ₹7.78 crore in Nepal.
- Advance Purchase Order from BSNL for Supply & Installation of Digital Satellite Phone Terminal valuing ₹38 crore.
- Work of AMC for NIB-II P-3 Year-2 Project from BSNL valuing ₹10.08 Crore and Add on Project valuing ₹16.81 crore.
- Work of shifting Public Utilities and Sewer Project in PARIKARMA under beatification project, Nathwara valuing ₹9.75 crore.
- Implementation of Crime & Criminal Tracking Network System (CCTNS) valuing ₹16.95 crore.
- Annual Maintenance contract for 2 years of Afghanistan Tele-medicine project valuing ₹1.90 crore.
- Work awarded in AP TRANSO (Andhra Pradesh) for the Value ₹ 4.17 Crores and ₹13.81 crore.
- In Nepal, TCIL has been awarded work for NCELL OFC Project for the value of ₹4.59 crore.
- In KSA, TCIL has been awarded work for Fiber Infrastructure Network (OSP) from Mobily-Estisalat, Riyadh, for the Value of ₹3.87 crore.
- TCIL has been awarded work for GETCO project for the work of survey, planning, design/ engineering, supply, erection testing & commissioning of OPGW cable, for the value of ₹2.15 crore.
- TCIL has been awarded work for Construction of Road for Package No. MMDMT-01, 02, 03, 04, 05, 06 District Dhamtari, for the value of ₹18.767 crore.
- TCIL has been awarded work for Supply of CCTV System for UP Police, Lucknow, for the value of ₹3.51 crore.
- TCIL has been awarded work for State Project Monitoring Unit for implementation of CCTNS project for Jharkhand Police for the value of ₹3.63 crore.
- In Saudi Arabia, work awarded by Mobily-Etisalat, Riyadh, for the value of ₹4.13 crore.

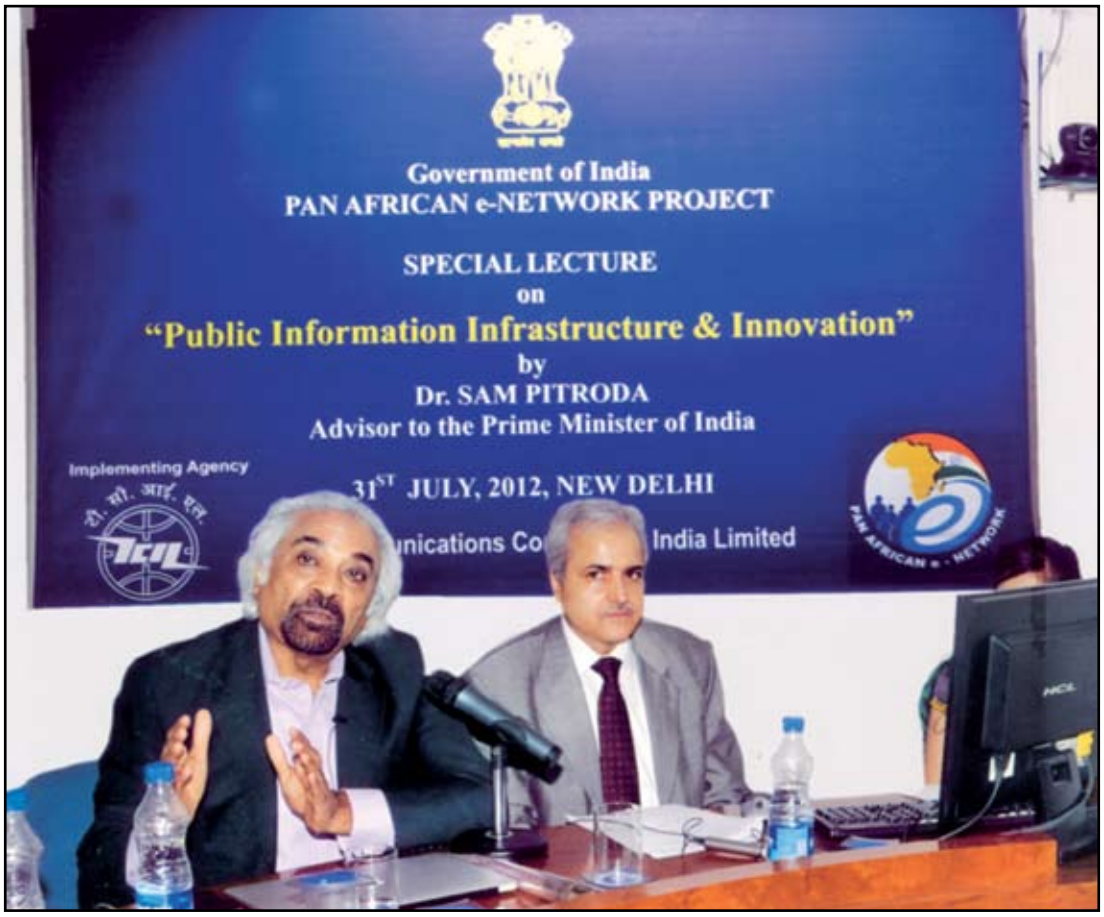
The company earned a profit of ₹8.03 crore on a turnover of ₹680.79 crore during the year 2011-12. Profit and turnover was ₹1.68 crore and ₹278.47 crore respectively during the first six months of the year 2012-13.

## Anticipated achievements for the months of January-March 2013

- TCIL has been awarded “Supply of 4450 DSPTs along with 1.2 Meter Satellite Antenna (In Ku Band), Solar Photovoltaic Panel and Accessories”. In this Project material is categorized in three different packages namely Package A, B & C, which is to be supplied

to different remote locations of India. The execution process is underway and the will be implemented before 31st March 2013.

- The Metro Link Express for Gandhinagar and Ahmedabad (MEGA) project valuing ₹83.7 crore is expected to start during quarter.
- Project in Sierra Leone valuing ₹119 crore is expected to run in full swing during the quarter.




***Special Lecture on "Public Information Infrastructure & Innovation" by Dr. Sam Pitroda Advisor to the Prime Minister of India on 31.07.2012.***

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# IX. STATISTICAL SUPPLEMENT

## Table - 1
## Major Highlights of Telecom Sector

| S.No. | Description | | Position at the End of | | | | %age Growth during | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | March' 12 | November' 12 | December' 11 | December' 12 | Month | Current Year | Yearly |
| 1 | 2 | | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | Phones (In Lakh) | Total | 9513.46 | 9214.75 | 9265.48 | 8955.08 | -2.82% | -5.87% | -3.35% |
| | | Wireline | 321.71 | 308.69 | 326.85 | 307.87 | -0.27% | -4.30% | -5.81% |
| | | Wireless | 9191.75 | 8906.06 | 8938.63 | 8647.21 | -2.91% | -5.92% | -3.26% |
| | | Public | 1302.71 | 1298.04 | 1289.17 | 1297.21 | -0.06% | -0.42% | 0.62% |
| | | Private | 8210.75 | 7916.71 | 7976.31 | 7657.87 | -3.27% | -6.73% | -3.99% |
| | | Rural | 3308.29 | 3437.40 | 3153.90 | 3385.92 | -1.50% | 2.35% | 7.36% |
| | | Urban | 6205.17 | 5777.35 | 6111.58 | 5569.16 | -3.60% | -10.25% | -8.88% |
| 2 | Teledensity | Overall | 78.66% | 75.55% | 76.86% | 73.34% | -2.93% | -6.76% | -4.58% |
| | | Public | 10.77% | 10.64% | 10.69% | 10.62% | -0.19% | -1.39% | -0.65% |
| | | Private | 67.89% | 64.91% | 66.17% | 62.72% | -3.37% | -7.62% | -5.21% |
| | | Rural | 39.26% | 40.54% | 37.52% | 39.90% | -1.58% | 1.63% | 6.34% |
| | | Urban | 169.17% | 155.40% | 167.46% | 149.55% | -3.76% | -11.60% | -10.70% |
| 3 | %age share of | Public | 13.69% | 14.09% | 13.91% | 14.49% | - | - | - |
| | | Private | 86.31% | 85.91% | 86.09% | 85.51% | - | - | - |
| | | Rural | 34.77% | 37.30% | 34.04% | 37.81% | - | - | - |
| | | Urban | 65.23% | 62.70% | 65.96% | 62.19% | - | - | - |
| 4 | Switching Capacity (In Lakh) | Public | 1379.11 | 1368.78 | 1382.05 | 1368.90 | 0.01% | -0.74% | -0.95% |
| 5 | Village Public Telephones [VPTs] | Public | 577131 | 581572 | 576463 | 581602 | 0.01% | 0.77% | 0.89% |
| 6 | PCOs (In Lakh) | Public | 12.41 | 10.82 | 13.54 | 10.62 | -1.85% | -14.42% | -21.57% |
| 7 | OFC Route kms | Public | 714367 | 720101 | 708052 | 721541 | 0.20% | 1.00% | 1.91% |
| 8 | TAX Lines (In Lakh) | Public | 110.48 | 110.48 | 110.48 | 110.48 | 0.00% | 0.00% | 0.00% |



## Table - 2

## Telephone per 100 Population-Urban/Rural (Tele-density) as on 31st March and December 2012.

| Sl. No. | Service Area | Tele-Density | | | | | | Telephones | | | | | | % of Rural Phones to Overall Phones | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Overall | | Urban | | Rural | | Overall | | Urban | | Rural | | | |
| | | March '12 | December '12 | March '12 | December '12 | March '12 | December '12 | March '12 | December '12 | March '12 | December '12 | March '12 | December '12 | March '12 | December '12 |
| 1 | ANDHRA PRADESH | 80.87 | 76.88 | 189.26 | 169.97 | 39.21 | 41.04 | 69188451 | 66197540 | 44953653 | 40678961 | 24234798 | 25518579 | 35.03% | 38.55% |
| 2 | ASSAM | 46.61 | 46.50 | 148.54 | 136.38 | 28.35 | 30.18 | 14437929 | 14533025 | 6991653 | 6547733 | 7446276 | 7985292 | 51.57% | 54.95% |
| 3 | BIHAR[1] | 48.90 | 46.53 | 196.24 | 170.32 | 25.58 | 26.90 | 64091344 | 61580358 | 35145945 | 30854740 | 28945399 | 30725618 | 45.16% | 49.90% |
| 4 | GUJARAT | 91.13 | 85.19 | 145.50 | 133.70 | 53.89 | 51.64 | 55152783 | 52067098 | 35798520 | 33408952 | 19354263 | 18658146 | 35.09% | 35.83% |
| 5 | HARYANA | 89.42 | 76.72 | 153.96 | 116.44 | 55.92 | 55.76 | 23150186 | 20099216 | 13619554 | 10537036 | 9530632 | 9562180 | 41.17% | 47.57% |
| 6 | HIMACHAL PRADESH | 120.68 | 102.76 | 469.57 | 336.30 | 76.76 | 73.08 | 8279632 | 7098381 | 3601611 | 2619811 | 4678021 | 4478570 | 56.50% | 63.09% |
| 7 | JAMMU & KASHMIR | 54.82 | 58.41 | 119.52 | 118.45 | 30.84 | 35.98 | 6511147 | 7001425 | 3839010 | 3861530 | 2672137 | 3139895 | 41.04% | 44.85% |
| 8 | KARNATAKA | 97.22 | 91.26 | 185.62 | 170.84 | 44.08 | 42.92 | 58405069 | 55233315 | 41867248 | 39075369 | 16537821 | 16157946 | 28.32% | 29.25% |
| 9 | KERALA | 106.61 | 100.76 | 237.08 | 212.43 | 61.94 | 62.59 | 37205908 | 35339777 | 21102076 | 18978331 | 16103832 | 16361446 | 43.28% | 46.30% |
| 10 | MADHYA PRADESH[2] | 53.81 | 52.23 | 130.38 | 114.15 | 25.90 | 29.51 | 52761099 | 51788859 | 34149159 | 30384149 | 18611940 | 21404710 | 35.28% | 41.33% |
| 11 | MAHARASHTRA | 77.19 | 72.62 | 124.23 | 112.21 | 52.03 | 51.19 | 73115412 | 69379818 | 41011076 | 37652194 | 32104336 | 31727624 | 43.91% | 45.73% |
| 12 | NORTH-EAST[3] | 65.72 | 66.53 | 153.90 | 149.59 | 37.38 | 39.62 | 8770690 | 8956382 | 4995729 | 4927441 | 3774961 | 4028941 | 43.04% | 44.98% |
| 13 | ORISSA | 65.84 | 59.70 | 216.24 | 167.62 | 35.11 | 37.43 | 27081758 | 24712145 | 15091434 | 11870503 | 11990324 | 12841642 | 44.27% | 51.96% |
| 14 | PUNJAB | 113.13 | 101.92 | 180.53 | 152.90 | 64.90 | 64.82 | 33396037 | 30369488 | 22228745 | 19190038 | 11167292 | 11179450 | 33.44% | 36.81% |
| 15 | RAJASTHAN | 72.96 | 68.31 | 165.30 | 149.04 | 43.86 | 42.81 | 50324361 | 47656665 | 27321713 | 24956027 | 23002648 | 22700638 | 45.71% | 47.63% |
| 16 | TAMIL NADU[4] | 116.61 | 109.64 | 164.40 | 147.35 | 56.20 | 60.46 | 80869853 | 76419045 | 63655455 | 58129258 | 17214398 | 18289787 | 21.29% | 23.93% |
| 17 | UTTAR PRADESH - [East] | 60.93 | 56.20 | 161.32 | 140.36 | 31.98 | 31.79 | 76346581 | 73038477 | 42101240 | 40154507 | 34245341 | 32883970 | 44.86% | 45.02% |
| 18 | UTTAR PRADESH - [West][5] | | | | | | | 54434197 | 49111744 | 35409134 | 28427154 | 19025063 | 20684590 | 34.95% | 42.12% |
| 19 | WEST BENGAL[6] | 61.52 | 56.85 | 178.63 | 150.82 | 42.05 | 41.19 | 46953522 | 43670341 | 19441618 | 16555259 | 27511904 | 27115082 | 58.59% | 62.09% |
| 20 | KOLKATTA | 172.22 | 155.10 | # | # | # | # | 26172986 | 23761910 | 25271422 | 22793606 | 901564 | 968304 | 3.44% | 4.08% |
| 21 | DELHI | 238.59 | 220.00 | # | # | # | # | 45402224 | 42762913 | 43626089 | 40583614 | 1776135 | 2179299 | 3.91% | 5.10% |
| 22 | MUMBAI | 183.52 | 159.57 | # | # | # | # | 39294837 | 34729704 | 39294837 | 34729704 | 0 | 0 | 0.00% | 0.00% |
| ALL- INDIA | | 78.66 | 73.34 | 169.17 | 149.55 | 39.26 | 39.90 | 951346006 | 895507626 | 620516921 | 556915917 | 330829085 | 338591709 | 34.77% | 37.81% |

Note:Teledensity is calculated for UP(E) & UP(W) jointly due to non availabilty of separate population data for UP(E&W). 1.Includes Jharkhand, 2.Includes Chhattisgarh, 3.Includes North East I&II, 4. includes Chennai, 5.Includes Uttrakhand and 6.Includes A&N Islands. # Rural-urban break up of population for Kolkata, Delhi and Mumbai service areas is not available.

Source: Population Projections for India & States 2001-2026,O/o the Registrar General of India and subscribers' data from BSNL(PSU), MTNL(PSU), AUSPI (Private-Wireline,WLL & GSM) and COAI (Private-GSM).

## Table - 3
## Number of Telephones as on 31st March and December 2012.

| Sl. No. | Service Area | Wireline Phones | | | | | | Wireless Phones | | | | | | TOTAL TELEPHONES | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOTAL | | PSUs' Operators | | Private Operators | | TOTAL | | PSUs | | Private Operators | | | |
| | | March' 12 | December '12 | March '12 | December '12 | March '12 | December '12 | March '12 | December '12 | March '12 | December '12 | March '12 | December '12 | March '12 | December '12 |
| 1 | ANDHRA PRADESH | 2360993 | 2261524 | 1970060 | 1871305 | 390933 | 390219 | 66827458 | 63936016 | 9020241 | 9219802 | 57807217 | 54716214 | 69188451 | 66197540 |
| 2 | ASSAM | 229854 | 196741 | 227229 | 193952 | 2625 | 2789 | 14208075 | 14336284 | 1265379 | 1228242 | 12942696 | 13108042 | 14437929 | 14533025 |
| 3 | BIHAR[1] | 610323 | 560061 | 595139 | 543899 | 15184 | 16162 | 63481021 | 61020297 | 6134678 | 6003257 | 57346343 | 55017040 | 64091344 | 61580358 |
| 4 | GUJARAT | 1830897 | 1786975 | 1598630 | 1561561 | 232267 | 225414 | 53321886 | 50280123 | 4232626 | 4254238 | 49089260 | 46025885 | 55152783 | 52067098 |
| 5 | HARYANA | 591881 | 571344 | 542975 | 515927 | 48906 | 55417 | 22558305 | 19527872 | 2998922 | 3043033 | 19559383 | 16484839 | 23150186 | 20099216 |
| 6 | HIMACHAL PRADESH | 308298 | 292670 | 301845 | 285983 | 6453 | 6687 | 7971334 | 6805711 | 1677576 | 1586782 | 6293758 | 5218929 | 8279632 | 7098381 |
| 7 | JAMMU & KASHMIR | 204312 | 199085 | 203969 | 198715 | 343 | 370 | 6306835 | 6802340 | 1046435 | 1153690 | 5260400 | 5648650 | 6511147 | 7001425 |
| 8 | KARNATAKA | 2691075 | 2451120 | 1963247 | 1705830 | 727828 | 745290 | 55713994 | 52782195 | 6914688 | 6998146 | 48799306 | 45784049 | 58405069 | 55233315 |
| 9 | KERALA | 3189796 | 3094549 | 3065384 | 2972537 | 124412 | 122012 | 34016112 | 32245228 | 7112450 | 7621921 | 26903662 | 24623307 | 37205908 | 35339777 |
| 10 | MADHYA PRADESH[2] | 1138732 | 1120266 | 851068 | 834788 | 287664 | 285478 | 51622367 | 50668593 | 4819853 | 5030107 | 46802514 | 45638486 | 52761099 | 51788859 |
| 11 | MAHARASHTRA | 2646027 | 2534516 | 2240187 | 2113234 | 405840 | 421282 | 70469385 | 66845302 | 6226065 | 6687309 | 64243320 | 60157993 | 73115412 | 69379818 |
| 12 | NORTH-EAST[3] | 252373 | 217803 | 252129 | 217565 | 244 | 238 | 8518317 | 8738579 | 1616348 | 1736293 | 6901969 | 7002286 | 8770690 | 8956382 |
| 13 | ORISSA | 462823 | 395106 | 451480 | 384670 | 11343 | 10436 | 26618935 | 24317039 | 4444614 | 4438237 | 22174321 | 19878802 | 27081758 | 24712145 |
| 14 | PUNJAB | 1442460 | 1370149 | 1089917 | 1037448 | 352543 | 332701 | 31953577 | 28999339 | 4687337 | 4389946 | 27266240 | 24609393 | 33396037 | 30369488 |
| 15 | RAJASTHAN | 1164397 | 1084336 | 1046625 | 963456 | 117772 | 120880 | 49159964 | 46572329 | 5651850 | 5930085 | 43508114 | 40642244 | 50324361 | 47656665 |
| 16 | TAMIL NADU[4] | 3191523 | 3135074 | 2493352 | 2426680 | 698171 | 708394 | 77678330 | 73283971 | 9722314 | 9439883 | 67956016 | 63844088 | 80869853 | 76419045 |
| 17 | UTTAR PRADESH - [East] | 1272212 | 1059067 | 1167606 | 954373 | 104606 | 104694 | 75074369 | 71979410 | 10116763 | 10295513 | 64957606 | 61683897 | 76346581 | 73038477 |
| 18 | UTTAR PRADESH - [West][5] | 796836 | 773660 | 759356 | 735439 | 37480 | 38221 | 53637361 | 48338084 | 4800137 | 4928465 | 48837224 | 43409619 | 54434197 | 49111744 |
| 19 | WEST BENGAL[6] | 680679 | 593443 | 672411 | 585158 | 8268 | 8285 | 46272843 | 43076898 | 3598434 | 3622095 | 42674409 | 39454803 | 46953522 | 43670341 |
| 20 | KOLKATTA | 1182861 | 1151669 | 975123 | 938584 | 207738 | 213085 | 24990125 | 22610241 | 2426278 | 2315303 | 22563847 | 20294938 | 26172986 | 23761910 |
| 21 | DELHI | 2912937 | 2949893 | 1563034 | 1584555 | 1349903 | 1365338 | 42489287 | 39813020 | 2885959 | 2591964 | 39603328 | 37221056 | 45402224 | 42762913 |
| 22 | MUMBAI | 3010182 | 2987658 | 1894695 | 1870948 | 1115487 | 1116710 | 36284655 | 31742046 | 2946439 | 2709954 | 33338216 | 29032092 | 39294837 | 34729704 |
| ALL- INDIA | | 32171471 | 30786709 | 25925461 | 24496607 | 6246010 | 6290102 | 919174535 | 864720917 | 104345386 | 105224265 | 814829149 | 759496652 | 951346006 | 895507626 |

Note: 1.Includes Jharkhand, 2.Includes Chhattisgarh, 3.Includes North East I&II, 4. includes Chennai, 5.Includes Uttrakhand and 6.Includes A&N Islands.

Source: Population Projections for India & States 2001-2026,O/o the Registrar General of India and subscribers' data from BSNL(PSU), MTNL(PSU), AUSPI (Private-Wireline,WLL & GSM) and COAI (Private-GSM).



## Table - 4

## Number of Employees-Total, Scheduled Caste/Tribe, Ex-servicemen (Abled & Disabled), Women as on 31st March 2012

| Group | No. of Employees DOT | Scheduled Caste | % to Total Employees | Scheduled Tribe | % to Total Employees | Ex-service men (Abled) | % to Total Employees | Ex-servicemen (Disabled) | % to Total Employees | Women Employees | % to Total Employees |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 574 | 83 | 14.46% | 32 | 5.57% | 0 | 0.00% | 0 | 0.00% | 54 | 9.41% |
| B | 617 | 70 | 11.35% | 19 | 3.08% | 0 | 0.00% | 0 | 0.00% | 152 | 24.64% |
| C | 1033 | 223 | 21.59% | 60 | 5.81% | 22 | 2.13% | 0 | 0.00% | 120 | 11.62% |
| D | 6 | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| **Total** | **2230** | **376** | **16.86%** | **111** | **4.98%** | **22** | **0.99%** | **0** | **0.00%** | **326** | **14.62%** |

## Table - 5

## Number of Disabled Employees as on 31st March 2012

| Class | Strength | | Difference |
|---|---|---|---|
| | % of Sanctioned | Working | |
| Blindness of Low Vision | 4 | 3 | 1 |
| Hearing Impairment | 3 | 0 | 3 |
| Locomotors Disability or Cerebral Palsy | 9 | 11 | -2 |
| **Total** | **16** | **14** | **2** |

# X ACRONYMS

| | |
|---|---|
| ACC | Accounts Calling Card |
| ADC | Access Deficit Charge |
| ADSL | Asymmetrical Digital Subscriber Line |
| ALTTC | Advanced Level Telecom Training Centre |
| APT | Asia Pacific Telecommunications |
| ATM | Asynchronous Transfer Mode |
| BRBRAITT | Bharat Ratna Bhim Rao Ambedkar Institute of Telecom Training |
| CACT | Component Approval Centre for Telecom |
| CAD | Computer Aided Design |
| C-DoT | Centre for Development of Telematics |
| CDMA | Code Division Multiple Access |
| CIDA | Canadian International Development Agency |
| CLIP | Callers Line Identification Protocol |
| CMPs | Cellular Mobile Phones |
| COMAC | Centralised Operation & Maintenance Centre |
| CSMS | Customer Service Management System |
| DCC | Development Coordination Committee |
| DCME | Digital Circuit Multiplication Equipment |
| DECT | Digital Enhanced Cordless Telephone |
| DIAS | Direct Internet Access System |
| DLC | Digital Loop Carrier |
| DWDM | Dense Wavelength Division Multiplexing |
| EMTS | Express Money Transfer Service |
| FAS | Fibre Access System |
| FDMA | Frequency Division Multiple Access |

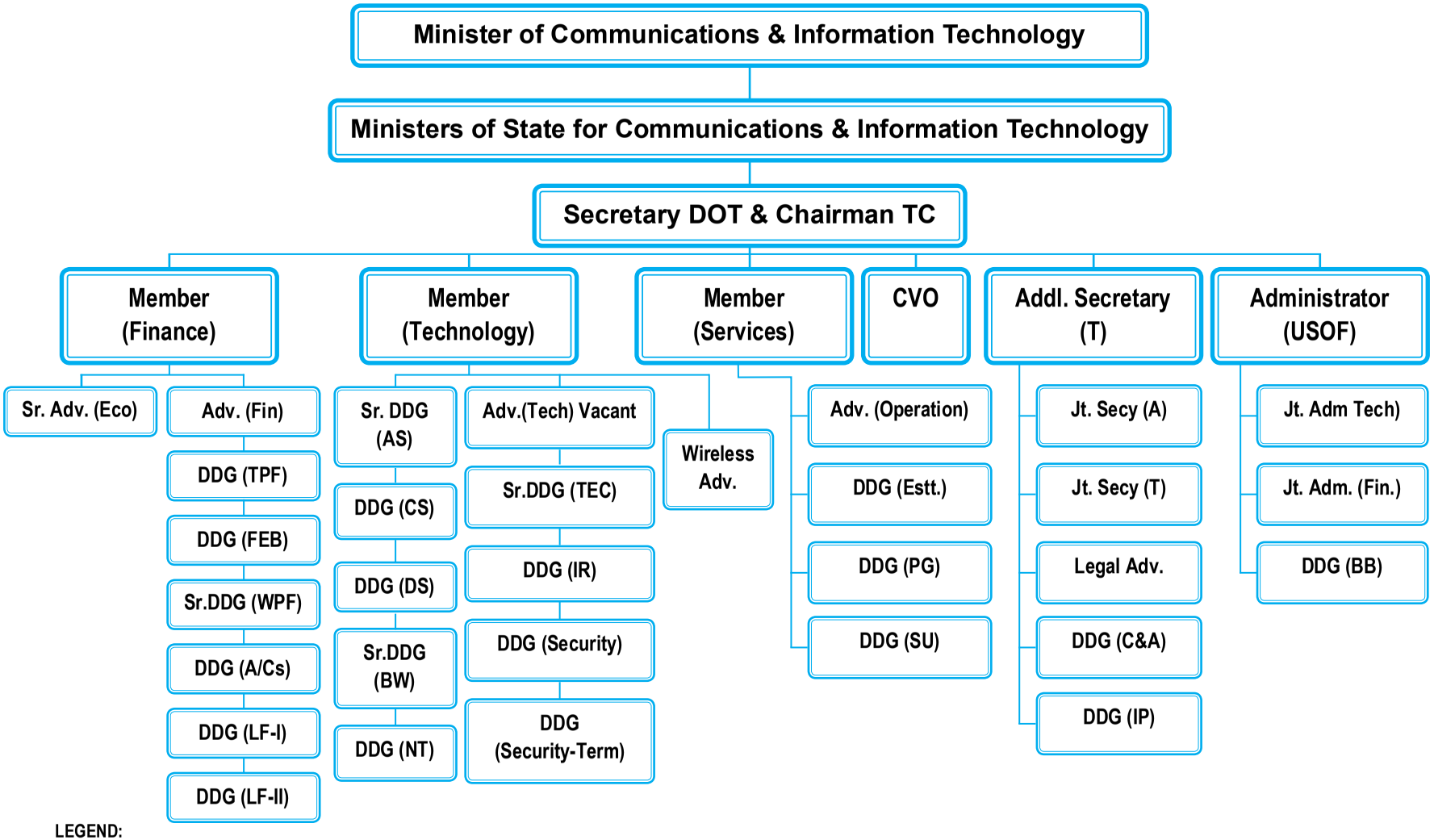
| | |
|---|---|
| FRS | Fault Repair Service |
| GMPCS | Global Mobile Personal Communication by Satellite |
| GPSS | Gateway Packet Switching System |
| GRs | Generic Requirements |
| HECS | High Erlang Capacity Switch |
| HSDL | High bit rate Digital Subscriberline |
| IFRB | International Frequency Regulation Board |
| ILD | International Long Distance |
| IMRB | Indian Marketing Research Bureau |
| IN | Intelligent Network |
| INSAT | Indian National Satellite |
| IRs | Interface Requirements |
| ISDN | Intigrated Services Digital Network |
| ISP | Internet Service Provider |
| ITU | International Telecommunications Union |
| IUC | Interconnection Usage Charge |
| IVRS | Interactive Voice Response System |
| LMDS | Local Multi-Point Distribution System |
| LOI | Letter of Intent |
| MCIBS | Microprocessor Controlled Intelligent Building Systems |
| MCPC | Multi Channel Per Carrier |
| MLLN | Managed Leased Line Network |
| MMS | Multimedia Messaging Service |
| MPLS | Multi Protocol Label Switching |
| MSS | Mobile Satellite System |
| MTL | Millennium Telecom Limited |

| | |
|---|---|
| MUX | Multiplexer |
| NIB | National Internet Backbone |
| NLDS | National Long Distance Service |
| NTP | New Telecom Policy |
| NYSF | New York Stock Exchange |
| OFC | Optical Fiber Cable |
| OLTE | Optical Line Terminating Equipment |
| QTS | Quality of Telephone Service |
| QOS | Quality of Service |
| PCB | Printed Circuit Board6Pm |
| PMRTS | Public Mobile Radio Trunk Service |
| POI | Point of Interconnection |
| POT | Plain Old Telephone |
| PRS | Premium Rate Service |
| PSTN | Public Switching Telecom Network |
| RABMN | Remote Area Business Message Network |
| RAN | Radio Access Network |
| RTTC | Regional Telecom Training Centre |
| SACFA | Standing Advisory Committee on Radio Frequency Allocation |
| SAS | System of Accounting Separation |
| SBM | Signal Base Module |
| SDCA | Short Distance Charging Area |
| SDH | Synchronous Digital Hierarchy |
| SIM | Subscribers Identification Module |
| SSA | Secondary Switching Area |
| STM | Synchronous Transport Module |
| TCP | Transmission Connection Protocol |

| | |
|---|---|
| TDMA | Time Division Multiple Access |
| TDSAT | Telecom Dispute Settlement Appellate Tribunal |
| TRAI | Telecom Regulatory Authority of India |
| TSP | Tribal Sub Plan |
| TTL | Telecom Testing Laboratory |
| TTO | Telecommunications Tariff Order |
| UHF | Ultra High Frequency |
| UMS | Unified Messaging Service |
| USF | Universal Service Fund |
| USO | Universal Service Obligation |
| USL | Unified Service Levy |
| UTL | United Telecom Limited |
| VCC | Virtual Calling Cord |
| VMS | Voice Mail Service |
| VPN | Virtual Private Network |
| VPT | Village Public Telephone |
| VRLA | Value Regulated Lead Acid |
| VSAT | Very Small Aperture Terminal |
| WLL | Wireless in Local Loop |
| WPC | Wireless Planning & Coordination |
| WPHS | Web Page Hosting Service |
| WSHS | Web Server Hosting Service |

*****

# XI. ORGANISATION CHART OF DEPARTMENT OF TELECOMMUNICATIONS




**LEGEND:**

TPF: Tariff Public Enterprises Finance
AS: Access Service
WPF: Wireless Planning Finance
Eco: Economic
Prod.: Production
CVO: Chief Vigilance Officer

LF: Licensing Finance
TEC: Telecom Engineering Centre
CS: Carrier Services
DS: Data Service
JS : Joint Secretary
USOF: Universal Service Obligation Fund

FEB: Finance, Establishment & Budget
IP: Invest Policy
IR: International Relations
SU: Service Unit
Fin : Finance

C&A: Coord.& Admn
PG: Public Grievances
LA: Legal Adviser
T: Telecom
NT: Networking

VIG: Vigilance
BW: Building Works
DDG: Dy. Director General
A: Administration

ANNEXURE-I

# RESULTS FRAMEWORK DOCUMENT – 2011-12

| Objective | Weight | Action | Success Indicator | Unit | Weight | Target / Criteria Value | | | | | Achievement | Performance | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Excellent | Very Good | Good | Fair | Poor | | Raw Score | Weighted Raw Score |
| | | | | | | 100% | 90% | 80% | 70% | 60% | | | |
| 1 Formulation of National telecom Policy and Policy on Licensing Frame Work and Spectrum Managemen | 25.00 | Formulation and Approval of policy on Licensing related issues | On-time approval | Date | 4.00 | 30/11/2011 | 31/12/2011 | 31/01/2012 | 29/02/2012 | 31/03/2012 | 15/02/2012 | 74.83 | 2.99 |
| | | Formulation and Approval of Policy on Spectrum assignment and pricing | On-time approval | Date | 4.00 | 30/11/2011 | 31/12/2011 | 31/01/2012 | 29/02/2012 | 31/03/2012 | | N/A | N/A |
| | | Formulation and Approval of Policy on consolidation of Spectrum | On-time approval | Date | 4.00 | 30/11/2011 | 31/12/2011 | 31/01/2012 | 29/02/2012 | 31/03/2012 | | N/A | N/A |
| | | Formulation and approval of policy on Spectrum Management | On-time approval | Date | 4.00 | 30/11/2011 | 31/12/2011 | 31/01/2012 | 29/02/2012 | 31/03/2012 | | N/A | N/A |
| | | Formulation of National Telecom Policy | On-time formulation | Date | 9.00 | 30/11/2011 | 31/12/2011 | 31/01/2012 | 29/02/2012 | 31/03/2012 | 10/10/2011 | 100.0 | 9.0 |
| 2. Rapid Expansion of Telecom Infrastructure for Voice, data & Broadband with Special emphasis on rural & remote areas. | 18.00 | Improving broadband (BB) connectivity in rural & remote areas {broadband connections with speed @256 Kbps & above are to be treated as BB connections | Increase in Wireline Broadband connections in rural & remote areas | Numbers | 4.00 | 250000 | 225000 | 220000 | 215000 | 210000 | 93037 | 0.0 | 0.0 |
| | | | Increase in Wireless Broadband connections in rural & remote areas-signing of the Agreements for the Service Areas (total 19) with the successful bidders for implementation of the scheme | Numbers | 2.00 | 19 | 17 | 14 | 13 | 11 | 0 | 0.0 | 0.0 |
| | | Facilitating increase in rural tele density | Increase rural tele density from 32% to 40% | % | 6.00 | 40 | 38 | 36 | 34 | 32 | 38.53 | 92.65 | 5..56 |

*Contd./-*

| Objective | Weight | Action | Success Indicator | Unit | Weight | Target / Criteria Value | | | | | Achievement | Performance | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Excellent | Very Good | Good | Fair | Poor | | Raw Score | Weighted Raw Score |
| | | | | | | 100% | 90% | 80% | 70% | 60% | | | |
| | | Cabinet approval of National optical Fibre Network | Approval of Cabinet | Date | 6.00 | 30/11/2011 | 31/12/2011 | 31/01/2012 | 29/02/2012 | 31/03/2012 | 25/10/2011 | 100.0 | 6.0 |
| 3. Transparency in Spectrum Allocation | 10.00 | Release of National Frequency Allocation Plan (NFAP) | Release of NFAP 2011 | Date | 3.00 | 31/12/2011 | 31/01/2012 | 15/02/2012 | 29/02/2012 | 31/03/2012 | 30/09/2011 | 100.0 | 3.0 |
| | | Enhancing transparency in providing information regarding Availability/ Allocation of spectrum | Placing information in Public domain | Date | 3.00 | 29/09/2011 | 31/12/2011 | 31/01/2012 | 29/02/2012 | 31/03/2012 | 04/07/2011 | 100.0 | 3.0 |
| | | Disposal of all applications within the 6 month of receipt regarding spectrum allocation | Timely Disposal | % | 4.00 | 100 | 90 | 80 | 70 | 60 | 100 | 100.0 | 4.0 |
| 4. Adequate Telecom Network Security | 6.00 | Put up draft Comprehensive Network Security Policy | Finalize draft policy for consultation | Date | 2.00 | 31/12/2011 | 31/01/2012 | 28/02/2012 | 15/03/2012 | 31/03/2012 | 26/08/2011 | 100.0 | 2.0 |
| | | Enforcement and Implementation of the Security Instruction | 0.10% subscriber verification | % | 2.00 | 0.11 | 0.10 | 0.09 | 0.08 | 0.075 | 0.11 | 100.0 | 2.0 |
| | | Pilot Implementation of the CMS System in Delhi, if CCS note is approved | Functioning of CMS after approval of Cabinet | Month | 2.00 | 3.5 | 4 | 4.5 | 5 | 5.5 | 3.5 | 100.0 | 2.0 |
| 5. Policy on Infrastructure | 6.00 | Formulation and Approval of Policy on Infrastructure | On-time approval | Date | 2.00 | 31/01/2012 | 31/03/2012 | | | | | N/A | N/A |
| | | Formulation and Approval of Policy on Mobile Virtual Network Operator (MVNO) | On-time approval | Date | 2.00 | 31/01/2012 | 31/03/2012 | | | | | N/A | N/A |
| | | Formulation and Approval of Policy on IXP etc. | On-time approval | Date | 2.00 | 31/01/2012 | 31/03/2012 | | | | | N/A | N/A |
| 6. Promotion of indigenous R&D and Manufacturing | 8.00 | Finalization & approval of policy for facilitating indigenous manufacturing of telecom equipments | On-time approval | Date | 2.00 | 29/02/2012 | 15/03/2012 | 29/03/2012 | 30/03/2012 | 31/03/2012 | 10/02/2012 | 100.0 | 2.0 |

*Contd./-*



| Objective | Weight | Action | Success Indicator | Unit | Weight | Target / Criteria Value | | | | | Achievement | Performance | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Excellent | Very Good | Good | Fair | Poor | | Raw Score | Weighted Raw Score |
| | | | | | | 100% | 90% | 80% | 70% | 60% | | | |
| | | Organization of India telecom 2011 | Timely completion of activities related to India Telecom 2011 | Date | 2.00 | 31/12/2011 | | | | | 15/12/2011 | 100.0 | 2.0 |
| | | Facilitating export of telecom equipment | Rs. 14,000 Crore | Crore Rs | 2.00 | 14000 | 13000 | 11200 | 9800 | 8400 | 14000 | 100.0 | 2.0 |
| | | Introduction of India standard for telecom equipment | Approval of Standards | Numbers | 2.00 | 10 | 8 | 6 | 4 | 2 | 10 | 100.0 | 2.0 |
| 7. Strengthening of PSUs / Autonomous Organization | 8.00 | Board level vacancy to be filled subject to court order if any pending | Vacancy pending | Number | 2.00 | 0 | 1 | 2 | 3 | 4 | 0 | 100.0 | 2.0 |
| | | Decision of Misra Committee report | Timely implementation | Date | 2.00 | 30/11/2011 | 31/12/2011 | 31/01/2012 | 29/02/2012 | 31/03/2012 | 27/02/2012 | 70.69 | 1.41 |
| | | To decide support for uneconomic activities | Finalise decision in respect of Government support of all identified items | Date | 2.00 | 29/02/2012 | 15/03/2012 | 29/03/2012 | 30/03/2012 | 31/03/2012 | | N/A | N/A |
| | | To get the relevant Govt decision on the Absorption issues | Finalisation of absorption issues | Date | 2.00 | 30/11/2011 | 31/12/2011 | 31/01/2012 | 29/02/2012 | 31/03/2012 | 22/09/2011 | 100.0 | 2.0 |
| 8. Policy on Numbering Plan | 4.00 | Formulation of revised numbering plan policy for allocation of Fixed line / mobile numbering | On-time formulation | Date | 2.00 | 30/11/2011 | 31/12/2011 | 31/01/2012 | 29/02/2012 | 31/03/2012 | | N/A | N/A |
| | | Formulation of revised numbering plan policy for all/ location of SP Codes, SMS codes & Level 1 Services | On-time formulation | Date | 2.00 | 15/12/2011 | 15/01/2012 | 15/02/2012 | 29/02/2012 | 31/03/2012 | | N/A | N/A |
| *Efficient Functioning of the RFD System | 3.00 | Timely Submission of Draft for Approval | On-time submission | Date | 2.0 | 07/03/2011 | 08/03/2011 | 09/03/2011 | 10/03/2011 | 11/03/2011 | 20/05/2011 | 0.0 | 0.0 |
| | | Timely submission of Results | On-time submission | Date | 1.0 | 01/05/2012 | 03/05/2012 | 04/05/2012 | 05/05/2012 | 06/05/2012 | 14/05/2012 | 0.0 | 0.0 |
| *Improving Internal Efficiency / | 10.00 | Implementation of Sevottam | Resubmission of revised draft of Citizens / Clients Charter | Date | 2.0 | 16/01/2012 | 18/01/2012 | 20/01/2012 | 23/01/2012 | 25/01/2011 | 14/01/2012 | 100.0 | 2.0 |

*Contd./-*

| Objective | Weight | Action | Success Indicator | Unit | Weight | Target / Criteria Value | | | | | Achievement | Performance | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Excellent | Very Good | Good | Fair | Poor | | Raw Score | Weighted Raw Score |
| | | | | | | 100% | 90% | 80% | 70% | 60% | | | |
| Responsiveness / Service delivery of Ministry / Department | | | Independent Audit of Implementation of Grievance Redress Mechanism | % | 2.0 | 100 | 95 | 90 | 85 | 80 | 100 | 100.0 | 2.0 |
| | | Ensure compliance with Section 4(1) (b) of the RTI Act, 2005 | No. of items on which information is uploaded by February 10,2012 | No | 2.0 | 16 | 15 | 14 | 13 | 12 | 13 | 70.0 | 1.4 |
| | | Identify potential areas of corruption related to departmental activities and develop an action plan to mitigate them | Finalize an action plan to mitigate potential areas of corruption. | Date | 2.0 | 26/03/2012 | 27/03/2012 | 28/03/2012 | 29/03/2012 | 30/03/2012 | 03/02/2012 | 100.0 | 2.0 |
| | | Develop an action plan to implement ISO 9001 certification | Finalize an action plan to implement ISO 9001 certification | Date | 2.0 | 16/04/2012 | 17/04/2012 | 18/04/2012 | 19/04/2012 | 20/04/2012 | 22/03/2012 | 100.0 | 2.0 |
| *Ensuring compliance to the Financial Accountability Framework | 2.00 | Timely submission of ATNS on Audit Paras of C&AG | Percentage of ATNS submitted within due date (4 Months) from date of presentation of Report to Parliament by CAG during the year. | % | 0.5 | 100 | 90 | 80 | 70 | 60 | 100 | 100.0 | 0.5 |
| | | Timely submission of ATRs to the PAC Sectt. On PAC Reports. | Percentage of ATRs submitted within due date (6months) from date of presentation of Report to Parliament by PAC during the year. | % | 0.5 | 100 | 90 | 80 | 70 | 60 | 100 | 100.0 | 0.5 |
| | | Early disposal of pending ATNs on Audit Paras of C&AG Reports presented to Parliament before 31.3.2011 | Percentage of outstanding ATNs disposed off during the year. | % | 0.5 | 100 | 90 | 80 | 70 | 60 | 69.44 | 69.44 | 0.35 |
| | | Early disposal of pending ATRs on PAC Reports presented to Parliament before 31.3.2011 | Percentage of outstanding ATRs disposed off during the year. | % | 0.5 | 100 | 90 | 80 | 70 | 60 | 100 | 100.0 | 0.5 |

*Mandatory objective(s)

Total Composite 64.21

# 1.48 approved by HPC on government Performance

Composite Score Approved by HPC 63.69




**Department of Telecommunications**
**Ministry of Communications & Information Technology**
**Government of India**
**New Delhi**

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