ANNUAL REPORT 2014-2015





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

ANNUAL REPORT 2014-15



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

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1. INDIAN TELECOM SECTOR: AN OVERVIEW

Communication has grown as essential infrastructure for socio-economic development in an increasingly knowledge intensive world. The reach of telecom services to all parts of the country has become integral part to innovative and technologically driven society. Studies have shown a positive correlation between Internet and Mobile Services on growth of GDP of a country. As a result of sustainable measures taken by the Government over the years, the Indian Telecom Sector has grown exponentially and has become the second largest network in the world, next only to China.

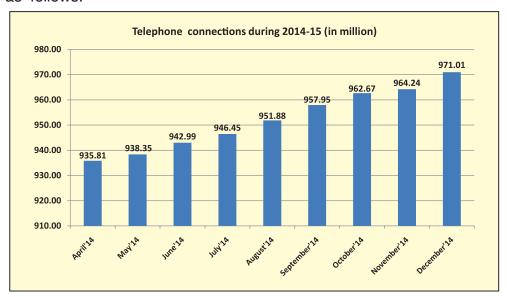
1. PRESENT STATUS

The number of telephones increased from 933.02 million in the beginning of the financial year to 971.01 million at the end of December 2014.

Present Status of the Telecommunication Sector (as on December 31, 2014)

- Indian telecom network is the second largest in the world after China.
- The country has 971.01 million telephone connections, including 944.01 million wireless telephone connections.
- Overall tele-density in the country is 77.59%.
- Urban tele-density is 147.75%, whereas rural tele-density is 46.14%.
- The share of wireless telephones in total telephones is 97.22%.
- The share of private sector in total telephones is 89.15%.
- Number of Broadband connections is 85.74 million.

The Chart indicating the number of connections at the end of each month during the year 2014-15 is as follows:



2. WIRE LINE VS WIRELESS

While wireless voice and data services continued to grow, the landline provided remarkable support to high speed data services. The landline telephones are now 27.00 million and wireless telephone has grown to 944.01 million at the end of December 2014. As a result, the share of wireless telephones increased to 97.22 per cent of total services. The everlasting demand for wireless services has propelled the telecom sector to create sustainable resources to meet such requirements jointly with land line high speed services.

3. PUBLIC VS PRIVATE

Another noteworthy feature of the Indian Telecom Sector is the continuous rise in the number of telephones of the private sector operators. During the period ending December 2014, the total number of telephones of the private sector increased to 865.68 million and number of telephone of public sector stood at 105.32 million as a backbone structure for telecom sector. The share of private sector increased to 89.15 per cent at the end of December, 2014, over public sector share of 10.85 percent during the same period. In present scenario, the private sector is dominating in Telecom Sector (Table).

Table: Telecom Development Indicators

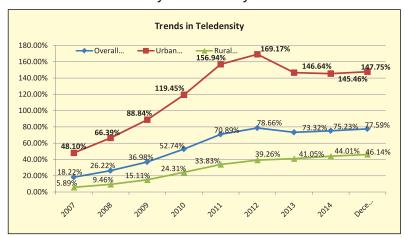
SI.	Item			At the	end of	
No.				March'13	March'14	December'14
1		Overall	951.35	898.02	933.02	971.01
2		Wire line	32.17	30.21	28.50	27.00
3	Number of Telephones (in million)	Wireless	919.17	867.81	904.52	944.01
4	(Rural	330.83	349.21	377.78	398.73
5		Urban	620.52	548.80	555.23	572.28
6		Overall	78.66	73.32	75.23	77.59
7	Tele-density (Telephones per 100 persons)	Rural	39.26	41.05	44.01	46.14
8	poi los polociio)	Urban	169.17	146.64	145.46	147.75
9		Wireless	96.62	96.64	96.95	97.22
10	%age share	Public	13.69	14.49	12.87	10.85
11		Private	86.31	85.51	87.13	89.15
12	%age growth of Total Telephones- over previous year		12.41	(-)5.61	3.90	4.07*

^{* %}age growth of Total Telephones - over 09 months of the current year.



4. TELE-DENSITY

Tele-density, which denotes the number of telephones per 100 population, is an indicator of telecom penetration in the country. Tele-density in the country, which was 75.23% as on 1st April, 2014, increased to 77.59 per cent at the end of December 2014. The rural tele-density increased from 44.01 per cent to 46.14 per cent during this period. Urban tele-density, however, registered an up and down trend and later maintained the pace from 145.46 per cent to 147.75 per cent during this period. Among the Service areas, Tamil Nadu (116.96 per cent) had the highest tele-density followed by Himachal Pradesh (111.78 per cent), Punjab (105.13 per cent), Karnataka (96.35 per cent) and Kerala (95.21 per cent). On the other hand, the service areas such as Bihar (48.28 per cent), Assam (51.90 per cent), Uttar Pradesh (58.65 per cent), Madhya Pradesh (58.77 per cent), West Bengal (58.84 per cent), Odisha (65.24 per cent) and Jammu and Kashmir (73.67 per cent) have comparatively low teledensity. Among the three metros, Delhi Service Area tops in tele-density with 235.62 per cent tele-density, followed by Kolkata (146.86 per cent) and Mumbai (145.86 per cent). The chart below indicates the trend in tele-density over the years.





Rural India connected through Telecommunication

5. UNIFIED LICENSE

With a view to achieve the objective of NTP-2012 to create one nation - one license across services and service areas, the Department of Telecom (DoT) has issued guidelines on Unified License. As per these guidelines, the allocation of spectrum is de-linked from the license and has to be obtained separately as per prescribed procedure i.e. bidding process. Only one Unified License is required for all telecom services in entire country. In addition, authorization for various services [like access services, National Long Distance Services, International Long Distance Services, Internet Service Provider (ISP) services will be required separately. Single authorization for Unified License (All services) category would cover all telecom services except ISP (B) and ISP (C) services. The tenure of such authorization will run concurrently with the Unified License. Also, the entry fee for various telecom services has been reduced substantially.

6. FOREIGN DIRECT INVESTMENT (FDI) POLICY

To attract FDI inflow and to make the sector more attractive and investor friendly, Government raised FDI limit for the telecom services from 74 per cent to 100 per cent. This measure will facilitate telecom licensees to consolidate equity and raise domestic as well as foreign debt from the market. Telecommunication and telecom services have been included under Harmonized Master list of infrastructure sub-sector and qualify for infrastructure lending. Reserve Bank of India has also expanded the existing definition for infrastructure sector for the purpose of availing External Commercial Borrowing (ECB).

7. UNIVERSAL SERVICE OBLIGATION FUND (USOF)

To give impetus to the rural telephony, the Government in June, 2002 established a Universal Service Obligation Fund (USOF) by an Act of Parliament. Subsequently the scope of USOF was widened to provide subsidy support for enabling access to all types of telegraph services including mobile services, broadband connectivity and creation of infrastructure like optical fiber in rural and remote areas. Therefore, various schemes have been launched by USOF for provision of telecom services in rural and remote areas of the country. The Universal Access Levy (UAL) collection in 2014-2015 (upto September 2014) was ₹ 1,869.68 crore and subsidy disbursed during the said period (Upto December 2014) was ₹ 1781.93 crore. The UAL amount of ₹ 26678.43 crore has been utilised till 31st December, 2014.

8. NATIONAL OPTICAL FIBER NETWORK (NOFN)

The optical fiber has predominantly reached state capitals, districts and blocks. To connect all 2.5 lakh Gram panchayats in the country, Government approved a project called 'National Optical Fiber Network'. Non-discriminatory access to the network will be provided to all the telecom service providers like mobile, Internet and cable TV in rural areas. The project is being executed by a Special Purpose Vehicle (SPV), namely, Bharat Broadband Networks



Limited (BBNL). Three pilot projects have been completed to cover all 59 gram panchayats of Araian Block in Ajmer District (Rajasthan), Panisagar Block in North Tripura, Paravada Block in Vishakapatnam (Andhra Pradesh) and as on date 86 gram panchayats have been connected. The amount disbursed under the project till the end of December 2014 is ₹ 2010.00 crore. The NOFN project is targetted to be completed by December, 2016.



Trenching work for laying Optical Fibre Cable under progress

9. MOBILE COMMUNICATION SERVICES IN LEFT WING EXTREMISM AFFECTED AREAS

Government approved on 20th August, 2014 a proposal at the estimated cost of ₹ 3567.58 crore to install mobile services at 2199 identified locations in Left Wing Extremism affected 10 States to be funded by USO Fund and till 31st December 2014, ₹ 596.51 crore has been disbursed under this project. An agreement between USOF and Bharat Sanchar Nigam Limited (BSNL) has been signed on 30th September 2014 and 500 towers are likely to be installed by March 2015.

10. RURAL WIRE-LINE BROADBAND SCHEME

For providing wire-line broadband connectivity upto village level in rural and remote areas, USOF signed an agreement with BSNL under the Rural Wire-line 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. Under this scheme, BSNL is to provide 8,88,832 wire-line Broadband connections to individual users and Government Institutions and set up 28,672 kiosks by the year 2015. The estimated subsidy outflow is ₹ 1,500 crore in 9 years time. As on 30th November 2014, a total of 639572 broadband connections have been provided and 14469 kiosks have been set up in rural and remote areas. The subsidy

disbursed till 31.12.2014 under wire-line broadband scheme is ₹ 381.50 crore.

11. 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 National Telecom Policy (NTP)-2012. A number of recommendations on various telecom issues were made by TRAI during 2014-15. 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 Point of Interconnection (POI) congestion on monthly basis. The regulatory measures taken by TRAI facilitate orderly growth of telecom sector by promoting healthy competition and enhancing investment efficiency besides protecting interests of consumers.

12. RESEARCH & DEVELOPMENT (R&D)

C-DoT, an autonomous body, is DoT's R&D arm. The organisation is committed to providing a wide range of cost-effective, indigenously developed and state-of-the-art total telecom solutions. C-DoT has grown to the level of a national centre for R&D in communication technology in many areas -Satellite communications, IN, ATM, DWDM, NMS, Wireless Broadband, GPON, NGN and Mobile Cellular systems. C-DoT is also entrusted with the projects of national importance, like Central Monitoring System for telecom security and Secure Network for strategic applications.

13. PUBLIC SECTOR UNDERTAKINGS (PSUs)

DoT has the following PSUs under its administrative control:

- a) Bharat Sanchar Nigam Limtied (BSNL)
- b) Mahanagar Telephone Nigam Limited (MTNL)
- c) ITI Limited
- d) Telecommunications Consultants India Limited (TCIL)
- e) Bharat Broadband Network Limited (BBNL)
- f) Hemisphere Properties India Limited (HPIL)
- 13.1 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 its focus areas. BSNL also pays special emphasis on development of telecommunication facilities in North-Eastern region and in tribal areas. BSNL had a turnover of ₹ 14125 crore and incurred a loss of ₹ 3786 crore during the year 2014-15 (upto September).

13.2 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, and for GSM Mobile services four peripheral towns of 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 ₹1811.64 crore during the year 2014-15 (upto September), as compared to the previous year's (upto September) turnover of ₹ 1882.23 crore. MTNL posted a Profit of ₹ 1567.46 crore during the year 2014-15 (upto September).

13.3 ITI Limited was established in 1948, to supply telecom equipments to the then telecom service provider, DoT. 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 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 ₹ 255 crore and incurred a loss of ₹ 214 crore during the year 2014-15 (upto September).

13.4 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 (before tax) of ₹ 9.12 crore on a turnover of ₹ 489.40 crore provisionally during the year 2014-15 (upto December).

13.5 BBNL, a Special Purpose Vehicle (SPV), namely, Bharat Broadband Nigam Limited (BBNL) has been incorporated on 25.02.2012 under the Indian Companies Act, 1956 for execution of the NOFN project approved by the Government for connecting 2.50 lakh approx Gram Panchayats (GPs).

13.6 HPIL, has become 6th public sector undertaking of the Department of Telecom to construct, acquire, hold, manage, develop, administer, protect, preserve and to deal in any other manner with surplus land, including sales and purchase of that.

14. VISION

DoT is committed 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 voice and data services across the country.

To serve the nation in its vastness and diversity, modern telecommunication facilities will be facilitated to all remote corners of this country with special focus on underserved areas in North-Eastern region and backward areas. The provision of high speed Digital Highway to connect the nation and to deliver Government services to every citizen will be made for socio-economic development. The telecom sector needs to be strengthened further to ensure rapid growth of the economy and to overcome developmental challenges in other areas like Education, Health and Employment generation. Our present policy with supporting legislative framework and licensing principles has the strong capability to adjust to rapid technological changes and to accelerate the innovation.





2. 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 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 of the Government of India of the Concerned Departments.

The Chairman and the Full time members of the Commission, at present, are as under:

Post	Name of the person holding the post	Holding the post with effect from (Date)
Chairman	Shri Rakesh Garg	17.07.2014
Member (Finance)	Ms. Annie Moraes	05.09.2013
Member (Production)	Vacant	-
Member (Services)	Shri Rajiv Agrawal, Advisor (Operation) is looking after the charge of Member (S)	_
Member (Technology)	Shri A.K. Bhargawa, Advisor (Technology) is looking after the charge of Member (T)	-

The Part time Members are:

- a) Secretary, Department of Electronics and Information Technology.
- b) Secretary, Planning Commission.
- c) Secretary (Finance), Department of Economic Affairs
- d) Secretary, Department of Industrial Policy and Promotion.

The functions of the Telecom Commission are:-

- a) Formulating the policy of Department of Telecommunications for approval of the Government;
- 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.



3. DEPARTMENT OF TELECOMMUNICATIONS

The Department of Telecommunications (DoT) is responsible for Policy formulation, Performance review, Monitoring, International cooperation and 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.

- a) Policy, Licensing and coordination matters relating to Telegraphs, Telephones, Wireless, Data, Fascimile, Telematic services and other like forms of communications.
- b) 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), Asia Pacific Telecommunication (APT).
- c) Promotion of standardization, research and development in telecommunications.
- d) Promotion of private investment in telecommunications.
- e) Financial assistance for the furtherance of research and study in telecommunications technology and for building up adequately trained manpower for telecom program, including-
 - assistance to institutions, assistance to scientific institutions and to universities for advanced scientific study and research; and
 - 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.
- f) Telecom Commission
- g) Telecom Regulatory Authority of India.
- h) Telecom Disputes Settlement and Appellate Tribunal.
- i) Administration of laws with respect to any of the matters specified in this list, namely:-
 - The Indian Telegraph Act, 1885 (13 of 1885);

- - The Indian Wireless Telegraphy Act, 1933 (17 of 1933); and
 - The Telecom Regulatory Authority of India Act, 1997 (24 of 1997).
 - j) Indian Telephone Industries Limited.
 - k) Post disinvestment matters relating to M/s Hindustan Teleprinters Limited.
 - I) Bharat Sanchar Nigam Limited.
 - m) Mahanagar Telephone Nigam Limited
 - n) Bharat Broadband Network Limited (BBNL)
 - o) Tata Communications Limited (TCL) and Telecommunications Consultants (India) Limited
 - p) Hemisphere Properties India Limited (HPIL)
 - q) All matters relating to Centre for Development of Telematics (C-DOT).
 - r) Residual work relating to the erstwhile Department of Telecom Services and Department of Telecom Operations, including matters relating to-
 - cadre control functions of Group 'A' and other categories of personnel till their absorption in Bharat Sanchar Nigam Limited;
 - administration and payment of terminal benefits.
 - s) Execution of works, purchase and acquisition of land debitable to the capital Budget pertaining to telecommunications.

1. GRANT OF LICENSES

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

1.1 Grant of Unified Licenses

The Department has granted Unified licenses to three other companies i.e. M/S Sify Technologies Limited, M/s Hughes Communication India Limited and M/s Sprint Telecom India Private Limited during the period April- September, 2014. One Unified License has been given to M/s Bharti Airtel Limited on 16.10.2014. Therefore, eight unified licensees have been issued by the department as on 16.10.2014.

1.2 Licensing for National Long Distance (NLD) Service and International Long Distance (ILD) Service

After announcing opening up of ILD and NLD Service for free competition, Government has so far issued 27 ILD Licenses and 34 NLD licenses (including BSNL). After the introduction



of Unified Licensing Regime, the new licenses to operate NLD & ILD services are being provided as authorization under Unified License. Under Unified Licensing (UL) regime, in addition to above mentioned licenses, five licensees have been authorized to offer ILD services and six licensees have been authorized to offer NLD services.

The Annual license fee for NLD/ILD has been enhanced to 8% (including USO contribution) of Adjusted Gross Revenue w.e.f. April 31, 2013. There is no mandatory roll out obligation for NLD operators. For ILD operators the roll out obligation is the establishment of at least one ILD gateway within a period of three years.



Telephone cable laying Work-in-Progress

1.3 Internet and Broadband Services

As on 31.12.2014, there are 325 authorized Licences for Internet Services which include 84 Category "A" Licences, 135 Category "B" Licences and 106 Category "C" Licences.

The internet services have been included in the Unified License. As on 31.12.2014, 118 Unified Licences have been issued with ISP authorization for various Categories. This includes 9 Category A ISP authorization, 99 Category B ISP authorization, 38 Category C ISP authorization.

1.4 Very Small Aperture Terminal (VSAT) Services

VSAT service licenses are granted on nonexclusive 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 CUG between various sites scattered throughout India using VSATs and central hub. There are two categories of VSAT licenses:

- (a) Captive CUG VSAT license wherein the licensee company can set up VSAT network for its internal use only. 27 captive CUG VSAT Licenses are effective on 31-12-2014.
- (b) Commercial CUG VSAT license wherein the licensee company can provide CUG VSAT service to a number of CUGs on commercial basis. As on 31-12-2014 there are 9 licenses for commercial CUG VSAT services. In addition to above 9 licenses, 4 all India authorizations for VSAT CUG services under Unified Licenses have also been issued after introduction of Unified Licensing regime.

DOT also issues permissions for Captive Networks to organizations wherein the permission holder can setup a captive network for its internal use. Four such permissions are working as on 31-12-2014.

1.5 Registration Certificate of Infrastructure Provider Category-I (IP-I)

Under IP-I registration, company can provide Dark Fibre, Right of way, duct space, tower etc. to licensed telecom service providers. As on 31.12.2014, 490 companies have been registered as Infrastructure Provider Category-I.

1.6 Voice Mail/Audiotex/Unified Messaging Service

30 licenses are in existence as on 31.12.2014, for providing Voice Mail/Audiotex/Unified Messaging Service. There is no entry fee or license fee for Voice Mail/Audiotex/UMS.

1.7 Public Mobile Radio Trunking Service

40 licences are in existence as on 31.12.2014, in 4 metros and 15 circles for providing Public Mobile Radio Trunking Service.

1.8 Global Mobile Personal Communication by Satellite

The process of grant of GMPCS License includes, inter-alia, clearance of the proposal from Security angle by Inter-Ministerial Committee comprising of Secretary, Cabinet Secretariat, Defence Secretary, Home Secretary, Secretary (Department of Space), Secretary (Intelligence Bureau). The process also involves setting of the GMPCS Land Earth Station (Gateway). No GMPCS license has been granted till date.

2. FULL MOBILE NUMBER PORTABILITY

National Telecom Policy 2012 envisages achieving of one nation -Full Mobile number portability in the country. In this regard, the Department has carried out necessary amendment



to Mobile Number Portability license conditions and other instructions in accordance with the recommendations of TRAI.

3. NETWORKS & TECHNOLOGIES CELL (NT CELL)

3.1 IPv6 Implementation status

The 'Digital India' programme aims to connect all gram panchayats by broadband Internet, promote e-governance and transform India into a connected knowledge economy. The Internet has been de-facto key technology enabler of socio-economic development as it serves as an effective medium for delivery of various citizen centric services even in remote and rural areas. Internet Protocol version-4 (IPv4) has been default protocol of the internet since its inception and now huge number of IP addresses are required for billions of devices for interconnections. In view of the fact that IPv4 addresses are almost exhausted, the National Telecom Policy (NTP)-2012 recognizes the futuristic role of Next Generation Internet Protocol version-6 (IPv6) and aims to achieve substantial transition to IPv6 in the country in a phased and time bound manner.

DoT has been designated as the nodal Department for IPv6 transition in the country. Accordingly, National IPv6 Deployment Roadmap (v-I) was released by DoT in July, 2010. After the achievement of prime objectives envisaged in the first Roadmap, there was a need to consolidate the gains and build further on the milestones achieved. Therefore National IPv6 Deployment Roadmap v-II was released by DoT in March, 2013. The basic purpose of Roadmap v-II is to take the next step forward and lay down the important milestones to facilitate substantial transition of our country to IPv6 in a phased and time bound manner. To facilitate Government organisations in their phased approach for IPv6 transition as per Roadmap v-II, a 13 point proforma named 'IPv6 Adoption Milestone' was circulated to all Government organisations. The same has been received from all Central Government Ministries/Departments and 25 States/UTs.

DoT is also facilitating the implementation of the same across all stakeholders through various workshops across the length and breadth of the country benefiting approximately 10,000 stakeholders including key decision makers in the Government Organisations, service providers, content & application providers, device manufacturers, academicians etc.

3.2 Machine to Machine (M2M) Communications

To address M2M Policy and Regulatory Issue towards communication aspects of M2M networks, two level committees was formed by DoT. High level "Policy & Regulatory Committee" is formed with DoT representatives to outline Government side policy and regulatory aspects. Industry level Consultative Committee is formed to outline draft policy taking into consideration industry view. To have better understanding of issues and Industry requirements, an approach of Industry consultation was adopted. Based on the consultation, 'Term of Reference' was prepared for formation of M2M policies and regulation.



Interaction with MBA students of 'HAAS School of Management' University of California, on Business case of Smart Cities under the Chairmanship of Sh A K Bhargava, Member (T)

4. FOREIGN DIRECT INVESTMENT POLICY IN TELECOM SECTOR

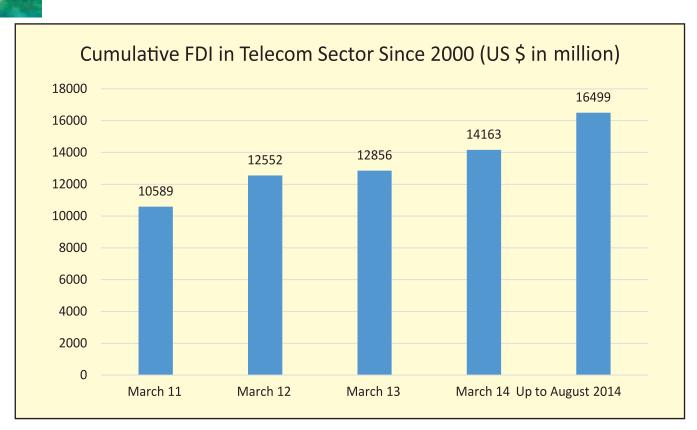
Telecom Sector is considered to be one of the most attractive sectors for Foreign Direct Investment (FDI) in the country. To make telecom sector more investor friendly, the Government has raised Foreign Direct Investment (FDI) limit for all telecom services from 74% to 100%. The current FDI policy for the Telecom services, subject to observance of licensing and security conditions by licensee as well as investors as notified by the Department of Telecommunications (DoT) from time to time is as follows:



Sr. No.	Sector/Activity	FDI Cap/Equity	Entry route
1.	Telecom Services (including Telecom Infrastructure Providers Category-I) All telecom services including Telecom Infrastructure Providers Category-I, viz. Basic, Cellular, Unified Access Services, Unified license (Access services), Unified License, National/International Long Distance, Commercial V-Sat, Public Mobile Radio Trunked Services (PMRTS), Global Mobile Personal Communications Services (GMPCS), All types of ISP licences, Voice	100%	Automatic upto 49%. Beyond 49%. Through FIPB route
	Mail/Audiotex/UMS, Resale of IPLC, Mobile Number Portability services, Infrastructure Provider Category - I (providing dark fibre, right of way, duct space, tower) except Other Service Providers.		
2.	Manufacture of Telecom Equipments	100%	Automatic

Actual inflow of FDI in Telecom Sector from April 2000 to August 2014 is 16,499 US \$ in millions. The Cumulative FDI data for last four years and current year is as under:

Cumulative FDI in Telecom Sector Since 2000			
Up to Year Ending	Cumulative FDI (US \$ in million)		
March 11	10589		
March 12	12552		
March 13	12856		
March 14	14163		
Up to August 2014	16499		



Source: DIPP web-site

5. MANUFACTURING OF TELECOM EQUIPMENTS

The National Telecom Policy 2012 proposed to 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. The department is working in coordination with Department of Electronics and Information Technology (DeitY) for this cause and thus the Government has inter alia imposed basic custom duty at 10% on the following 4 telecommunication products which are outside the purview of the information technology agreement:

- (a) Soft switches and Voice over Internet Protocol (VoIP) equipment, namely, VoIP phones, media gateways, gateway controllers and session border controllers;
- (b) Optical transport equipments, combination of one or more of Packet Optical Transport Product or Switch (POTP or POTS), Optical Transport Network (OTN) products, and IP Radios:
- (c) Carrier Ethernet Switch, Packet Transport Node (PTN) products, Multiprotocol Label Switching-Transport Profile (MPLS-TP) products;
- (d) Multiple Input/Multiple Output (MIMO) and Long Term Evolution (LTE) Products.



The Government has also imposed education cess on imported electronic products to provide parity between domestically produced goods and imported goods.

The National Telecom Policy 2012 also proposed to create a corpus to promote indigenous research & development, intellectual property right (IPR) creation, entrepreneurship, manufacturing, commercialization and deployment of state-of-the-art telecom products and services during the 12th Five Year Plan period. The Government has now approved setting up of Electronic Development Fund (EDF) in December, 2014. The objective of the EDF policy is to support Daughter Funds including Early Stage Angel Funds and Venture Funds in the area of Electronics System Design and Manufacturing, Nano-electronics, Information Technology (IT) and Telecommunications. The supported Daughter Funds will promote innovation, R&D, product development within the country in the specified fields of ESDM, nano-electronics and IT including Telecom.

The Government has also included Set Top Boxes in the definition of goods for use in the "Telecommunications Network" under Central Sales Tax Act, 1956 thus extending the facility of form 'C' to Set Top Boxes. Consequently, the locally manufactured set top boxes are now at par in price with the imported set top boxes. This has created a huge opportunity for the indigenous set top boxes manufacturers. In order to give fillip to the local set top box industry, Government also raised import duty on imported set top boxes to 10%.

5.1 Import and Export of Telecom equipments including mobile phones, parts, SIM cards and telecom cables

The import of telecom equipments including mobile phones, parts and telecom cables during 2013-14 is ₹ 6,95,164 million and from Apr'14 to Oct'14 is ₹ 5,23,105 million. The Export of Telecom equipments including mobile phones, parts and telecom cables during 2013-14 is ₹ 2,04,752 million and from Apr'14 to Oct'14 is ₹ 52,630 million.

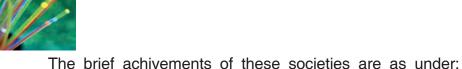
6. INTERNATIONAL COOPERATION

With a view to promote R&D, IPRs, Standardization, Product development and manufacturing of telecom equipment and services including their exports, Government have facilitated setting up of following societies:

- Telecom Centres of Excellence, (TCoE) India in Public Private Partnership mode for R&D, IPRs generation including product development
- b) Telecommunications Standards Development Society, India (TSDSI) for standardization
- c) Telecom Equipment and Services Export Promotion Council (TEPC) for facilitating export of telecom equipments and services



TCoE-INDIA



6.1 Telecom Centres of Excellence India (TCoE)

Telecom Centres of Excellence India (TCoE India), a Public Private Partnership (PPP) initiative of Department of Telecommunications (DoT), Government of India, are established at 08 premier academic institutes of the country with the objective of creating an ecosystem for a sustained, high rate of growth of Telecom in the country. TCoEs created a platform for Govt., Industry & Academia to come togther and work in synergistic manner to position India as a global Telecom Leader in terms of Innovation, New Technologies, IPR Generation leading to global standards, Policy Advocacy and Entrepreneurship.

Objectives

- a) Application oriented Telecom R &D and Innovation jointly with the Industry
- b) Capacity building through "Training the Trainers" & "Entrepreneurship Development"
- c) Think Tank activities for Policy Advocacy towards Governance & Regulation of Telecom Sector
- d) Influencing Global Standards to cater to Indian needs

Achievements

1	Proof- Of- Concept of different Technologies approved by Sponsors	40 (H/W= 7, Appln= 33)	- Out of 89 Ongoing projects
2	IPRs & Patents	14 + 20	- Including 6 US Patents
3	Research Papers in aid of Policy/Management Decisions	41	- Published in TCOE & IIMA website
4	Technology launched in Operator Network	05	
	 a) Digital Kisan Mandi b) Auto Customer Acquisition Form c) Mobile Social Networking Platform d) Network Opex Optimization e) Unlicensed Band Radio (UBR) 	RCom.+ IIT M TTL + IIT B TTL + IIT B	 launched in Haryana & Odisha Being Commercialised launched in TTL's network 10-15% Opex Saving demonstrated Low cost Wi-Fi + multiple usage



5	Products being manufactured	02	
	a) Variable Phase Power Plant for Rural BTS	VMC + IITK	- 25% reduction in Genset running
	b) Unlicensed Band Radio (UBR)	Primatel + IIT B	- Low Cost, High Perf., 1000 Links ops
6	Simulators	02	
	a) Powering Cellular Base Station	IIT M	- For Power Management
	b) Broadband Wireless Simulator	CEWiT+IITM+ IITKgp+IITB+ IITK	- For testing 4G, LTE Technologies
7	IPv6 Consultancy & Training	IIT Kanpur	- Undertaken at BSNL & MHA
8	Entrepreneurship	04 (IITM: 2, IITB: 2)	- Panchsheel Research Pvt. Ltd. & DSP Works Ltd. incubated from IIT B in '13

6.2 Telecommunications Standards Development Society, India (TSDSI)

Telecommunications Standards Development Society, India (TSDSI) is India's Telecommunication Standards Development Organization with an objective to develop promote and maintain standardised solutions for India-specific requirements. TSDSI intends to contribute its work to the global telecommunications standardisation process and also acts as a catalyst for the local development of design and manufacturing expertise in the subcontinent.

Department of Telecommunications (DoT) approved Bye-laws and Rules and Regulations of TSDSI in **October**, **2013**.

TSDSI has been registered with the legal status of a society under Societies Registration Act 1860 on **7th January 2014** at New Delhi, India. It represents all stakeholders of Indian telecom sector, namely, Government, service providers, manufacturing companies, technical services companies R & D organizations and academic institutions on a common platform. TSDSI strives to follow the best practices of knowledge sharing, consultations and consensus building to make standards which address special needs of the Indian consumers and help equipment manufacturers and operators fulfil those needs in ways that are beneficial to both.

Cooperation Agreements signed with other Standard Development Organisations

a) Association of Radio Industries and Businesses (ARIB) - Japan,

- b) Alliance for Telecommunications Industry Solutions (ATIS) U.S,
- c) China Communications Standards Association (CCSA),
- d) European Telecommunications Standards Institute (ETSI),
- e) Telecommunications Technology Association (TTA) Korea,
- f) Telecommunication Technology Committee (TTC) Japan

International Participation - GSC, 3GPP and oneM2M

TSDSI has been accepted as the 11th member of Global Standards Collaboration (GSC) during the 18th meeting of GSC held from July 22-23, 2014 at Sophia Antipolis, France. TSDSI's membership was approved in record time indicating the importance the global community is according to India's SDO efforts.

TSDSI is accepted as the seventh partner member of 3GPP and is now aspirant of Type 1 membership of oneM2M.

6.3 Telecom Equipment & Services Export Promotion Council (TEPC)

Telecom Equipment & Services Export Promotion Council (TEPC) as a Council plays a critical role in furtherance of Telecom Exports from the Country and assists its member companies in easy facilitation of their respective exports. The Council caters to the complete Telecom Ecosystem including Telecom Hardware Manufacturers, Telecom Service Providers, Telecom Software Vendors and Consultants.

Achievements of TEPC during 2014-15

- a) Inclusion of telecom products under 5% duty credit scrip of Focus Product Scheme (FPS) Public Notice No. 53 (RE 2013)/2009-14 dated 27th February 2014
- b) TEPC facilitated exporters subsidised participation in the following international events:
 - i. CeBIT 2014, Australia: Sydney Australia (5-7 May 14)
 - ii. Israel Innovation Conference 2014,Israel (20-22 May 14)
 - iii. CommunicAsia 2014: Singapore (17-20 June 14)
 - iv. East Africacom Exhibition, Nairobi, Kenya (8-9 Sept. 14)
 - v. K.L. Converges : Malaysia (17-19 September 14)
 - vi. GITEX 2014: Dubai (12-16 Oct 14)
 - vii. FutureCom 2014: Brazil (13-16 Oct 14)
 - viii. AfricaCom 2014: Cape Town, South Africa (11-13 Nov. 14)



7. INTERNATIONAL RELATION

The year 2014-2015 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, and ITSOetc. 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. The activities on International Relations front have been categorized as below.

- a) Activities on Bilateral Cooperation
- b) Activities on Multilateral Cooperation and Conferences of Intergovernmental and International Organizations
- c) Study Group meetings
- d) Capacity building programs with ITU / APT and ITU-T study group meetings
- e) Events International Exhibitions and Promotion events

7.1 Bilateral Cooperation

a) Indian Delegations visiting abroad

DoT delegates participated the First Israel Innovation MIXII Conference 2014, Tel Aviv Israel from 20-22 May 2014.

b) Foreign delegations visited India

Japanese Ministerial delegations visited India. Shri Yasuo Sakamoto, Vice Minister for Internal Affairs and Communications, Japan met Hon'ble MoC&IT on December 3, 2014 at 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. Four Joint Working Groups have been planned in the areas of GreenICT, Cyber Security Cooperation, ICT for Disaster Management (ICT4DM), ICT Application for Social and Economic Challenges.

7.2 Multilateral Cooperation

a) A high level delegation led by Shri Ravi Shankar Prasad, Hon'ble MoC&IT participated in Asia-Pacific Telecommunity (APT) Ministerial Conference and Preparatory Meetings during 8-11th September, 2014. The Hon'ble MoC& IT made an important address in the session on Safe and Secure Society through ICT. He also Chaired the session on Enabling a Sustainable ICT Ecosystem for an Innovative Economy during the ministerial conference.

b) Preparatory meetings for ITU Plenipotentiary (PP-14) conference & Plenipotentiary Conference

DoT delegation participated in the APT's 3rd and 4th PP preparatory meetings held at Malaysia and Bangkok. The preparatory process got culminated in the final conference at Busan (South Korea) during October 2014.

The Plenipotentiary Conference is the key event at which ITU Member States decide on the future role of the organization, thereby determining the organization's ability to influence and affect the development of information and communication technologies (ICTs) worldwide. The Plenipotentiary Conference is the top policy-making body of the ITU, held once every four years. The delegation was led by Hon'ble MoC& IT, Secretary Telecom and DDG (IR). The DDG (IR) made a contribution on role of ITU in realizing secure Information Society during the PP conference. The conference acknowledged the relevance of the issues raised.

c) India as ITU Governing Council Member

India won as a member of the ITU Governing Council for the period 2015-18. India also hosted Indian night for the International delegations in the contest of India contesting for ITU elections.

d) ITU World Telecom Development Conference (WTDC-2014)

A high level delegation led by Secretary (T), Member (T), Member (F), Sr. DDG TERM participated in the ITU WTDC conference at Dubai during 29th March-07th April 2014. The WTDC is a summit level conference of ITU-D sector. There were several contributions from India on ITU Strategic plan and other relevant areas.

e) Visit of Director (TSB) ITU and Elect DSG, ITU

Director Telecommunication Standardization Bureau (TSB), ITU, Mr Malcolm Johnson, was on his official mission to India during 9-10 December 14. He had meetings with Hon'bleMoC& IT and secretary (Telecom) with the senior officers of DoT. He also met industry leaders.

f) ETSI

DOT delegates participated in the 18th Global standards collaboration meeting at France from 21-23 July 2014.

g) 9th IGF (Internet Governance Forum)

DOT delegate participated in the 9th Internet Governance Forum at Istanbul from 2-5 September 2014.



h) 36th Assembly of Parties meeting of International Telecommunication Satellite Organization (ITSO)

A delegation led by Member (T) participated in this high level event at Washington, USA in May 2014. India has been elected as a member of ITSO Advisory Council.

i) TDAG (Telecom Development Advisory Group) Meeting

DOT delegation participated in the TDAG meeting from 29 September to 01 October, 2014 at ITU HQ, Geneva. India is a member of TDAG bureau.



Asia-Pacific ICT Ministerial Meeting on "Building Smart Digital Economy through ICT", 10-11 September 2014, Brunei, Darussalam

7.3 Study Group (SG) meetings

The ITU study group meetings are aimed to build capacity and contribute for harmonizing standards, share best practices and learnings for ICT growth. The issues discussed in these meetings are important for India as an emerging country to develop the ICT eco system and take challenges and issues to the international discussion forums.

India hosted the ITU-T SG 5 meeting at Kochi

The DoT hosted the important ITU-T SG 5 meeting dealing with Environment and Climate Change at Kochi during 8-19th December 2014. The Secretary (T) inaugurated the event and the ITU symposium on 14th December at Kochi. The event was attended by several industry members and DoT officers and it provided an opportunity for introduction to ITU study group meetings in future.

Further, the DoT delegations participated in the following ITU study meetings in different sectors.

- a) ITU-T study group 5 meeting at Geneva July 2014
- b) NIST (National institute of Standards and Technology) workshop: DDG (Security), DDG (TTSC) and DDG (NGN) participated in this workshop from 15-19 September 2014 at USA
- c) ITU-T study group 15 meeting at Geneva November 2014

7.4 Trainings

The DoT officers participated in the capacity building programme abroad organized by the International organisation such as ITU, APT in the following areas:

- a) Big Data in Telecom and Cloud Services
- b) Latest Technological Trend, Planning Methods and Standardization to Promote Broadband Networks in the Asia-Pacific Region
- c) Networks, Technologies and Infrastructures for Transport, Access and Home
- d) Broadband Wireless Network Integration and Transition to 5G
- e) Next Generation Mobile Telecommunications Technology and Its Applications
- f) Enabling Frameworks for ICT Development
- g) Smart City
- h) Practical Technologies and their Implementation of Small Scale Telecommunications for the Rural Area (with Technical Practice)
- i) Mobile Telecommunications Technologies and Services
- j) LTE and Application

7.5 Events

Senior officers from DoT participated in the following important events abroad in the context of Investment Promotion, Opportunities in India in ICT space in terms of technology and Products.



- a) CeBIT 2014 Exhibition at Sydney, Australia in May 2014
- b) 5th International Communication and Information Technology Exhibition and Conference, CommunicAsia 2014 at Singapore in June 2014
- c) KL Converge Event at Malaysia in September, 2014
- d) Internet Governance Forum at Turkey in September 2014
- e) East Africacom 2014 at Kenya in September 2014
- f) Africacom- 2014 at South Africa in November 2014

8. OFFICIAL LANGUAGE (HINDI) DIVISION

8.1 Composition

The Official Language Division is under the overall administrative charge of Deputy Director General (C&A). It is presently headed by a Deputy Director assisted by one Assistant Director, translators and other supporting staff.

8.2 Activities

During the period 2014-15 (April, 2014 to December, 2014), 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 2014-15. Quarterly Progress Reports regarding progressive use of Hindi in the Department, its attached and subordinate units and the Public Sector Undertakings under its administrative control were reviewed and necessary instructions issued for taking corrective measures. Section 3(3) of the Official Languages Act, 1963 was fully complied with during the period under review.

The Department of Telecom has been awarded 3rd prize for best implementation of official language policy of the Union under category of Ministries/Departments pertaining to 'Indira Gandhi Rajbhasha Awards'. This prize was given to Secretary (Telecom) by the Hon'ble President in a function organized by Ministry of Home Affairs, Department of Official Language on 15th November, 2014 in Vigyan Bhavan, New Delhi.

8.3 Monitoring and Inspection

The Official Language Division worked as a co-ordinator during the course of inspections

conducted by the 2nd sub-committee of the Committee of Parliament on Official Language (CPOL) of the various Offices/Corporate Offices under the Department. In the Parliamentary Committee Meetings, the Department was represented by Deputy Director General (C&A) and a representative of Official Language Division. During the period under review two such inspections of Telecom Consultant India Limited (TCIL), New Delhi on 30.12.2014 and Office of the General Manager, Bharat Sanchar Nigam Limited, Itanagar (Arunachal Pradesh) on 31.12.2014 were carried out. Another inspection of the office of the General Manager, Bharat Sanchar Nigam Limited, Goa by the said committee was carried out on 17.01.2015. The inspections of GM (administration), MTNL, Delhi and GMTD, BSNL, Thanjavur (Tamilnadu) are scheduled to be held in the remaining period of 2014-15 i.e. from January-March, 2015.

It is mandatory for the headquarter to conduct official language inspections in 25% of offices under its administrative control as per targets prescribed by Department of Official Language, Ministry of Home Affairs in its Annual Programme in order to assess the position of implementation of official language policy. The 2nd sub-committee of Committee of Parliament on Official Language inspects this Department and offices under its control from time to time to assess the implementation of official language Hindi and its various aspects. During the inspection, committee stress upon this point as the committee is of the view that it is necessary for the Ministry/Headquarter to inspect the position of implementation of O.L. policy in subordinate offices.

In this context 24 Official Language inspections were carried out by the officials of this Department of its various offices situated across the country and 09 Official Language inspections were carried out of offices situated in Delhi up to December, 2014. Important instructions were given to improve the situation of Official Language Hindi in the concerned offices in compliance with the effective implementation of Official Language Policy of the Union. Another 10 Official Language inspections are in the pipeline in the remaining period of 2014-15 i.e. from January-March, 2015.

8.4 Training in Hindi Language, Hindi Typewriting/Hindi Stenography

Five stenographers were nominated for training in Hindi Stenography Classes during this period. Another five stenographers and ten MTS employees are being nominated for the above training in the remaining period of 2014-15 i.e. from January-March, 2015.

8.5 Meetings of Official Language Implementation Committee

Quarterly meetings of the Official Language Implementation Committee (OLIC) 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, three such meetings were held on 02.05.2014, 21.08.2014 and on 05.12.2014 respectively. Another meeting is proposed to be held in the month of February, 2015.



8.6 Conducting Hindi Workshop

During the period under review, one Hindi workshop regarding imparting the knowledge of some important aspects of Official Language Policy of the Union, to officers and employees of Department of Telecom, was conducted on 14.07.2014. Another workshop is proposed to be held in the month of March, 2015.

8.7 Celebration of 'Hindi Pakhwara'

'Hindi Pakhwara' was organized from 15.09.2014 to 29.09.2014 in the Department. Thirteen competitions for the purpose of the promotion of Official Language in the Department were organized. 217 officers/officials participated in these competitions, out of which 103 were declared successful for Cash Awards with Certificates of Appreciation. Prizes were distributed to the successful participants by the Secretary (Telecom) in the Prize Distribution Function held on 30.10.2014.

8.8 Meeting of Hindi Salahakar Samiti

After the expiry of the previous term of the Hindi Salahakar Samiti of Department of Telecom on 20.10.2013, its reconstitution process is under the active consideration of the Government.

8.9 Translation Work

During the period under report a number of documents relating to Standing Committee/Demand for Grants/Parliamentary Assurances and other parliamentary work and routine matters 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 Languages 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.

8.10 Notifying the offices under rule 10(4) of O.L. Rules, 1976

During the period under report, 3 offices namely (a) Office of the Telecom District Manager, Bundi (Rajasthan), (b) Office of the General Manager, Bharat Sanchar Nigam Limited, Malappuram (Kerala) and (c) Office of the General Manager, Bharat Sanchar Nigam Limited, Bhatinda (Punjab) have been notified under rule 10(4) of the Official Languages (use for official purposes of the Union) Rules, 1976, where more than 80% staff have acquired working knowledge of Hindi.

9. STAFF WELFARE AND SPORTS ACTIVITIES

Under the Welfare Programmes, Scholarship, 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 recreational tours etc. During April 2014 to September 2014, the following activities were undertaken under the Welfare Programme:

- a) Book Award of ₹ 74,500/- was distributed to the wards of DoT employees from which ₹ 33,400/- was distributed to Girl Children & ₹ 25,900/- was distributed to SC, ST & OBC wards. ₹ 1,12,400/- was distributed to the wards of DoT Employees as Scholarship Award from which ₹ 29,600/- was distributed to Girl Children & ₹ 34,800/- was distributed to SC, ST & OBC wards. Incentive of ₹ 12,300/- (Twelve Thousand Three Hundred Only) was distributed to wards of DoT employees from which ₹ 8,100/- was distributed to Girl Children. ₹ 14,600/- (Fourteen Thousand Six Hundred Only) is awarded to mentally/ physically challenged wards of DoT employees as Scholarship & conveyance allowance/ hostel subsidy.
- b) Department of Telecommunications organized Cultural Event for Prize Distribution to the winners of sports meet held in March 2014. An amount of ₹ 1,52,105/- (One Lakh Fifty Two Thousand One Hundred Five Only) was utilized for organizing this cultural event.

9.1 Anticipated achievements till end March, 2015

- a) In last financial year April 2013 to March 2014, Book Award of ₹ 13,59,800/- (Thirteen Lakh Fifty Nine Thousand Eight Hundred Only), Scholarship of ₹ 11,06,000/- (Eleven Lakh Six Thousand Only) & Incentive of ₹ 1,92,200/- (One Lakh Ninety Two Thousand Two Hundred Only) were distributed to the meritorious school going children of DoT employees. The same is anticipated in the current financial year based on the applications so far received.
- b) Every year women's day is celebrated in Department of Telecommunications and a amount of ₹ 20,000/- is expensed on the celebration and the same is anticipated for the current financial year.
- c) It is proposed to organize an Athletic Meet, a limited over Cricket Match, tournaments in Badminton, Table Tennis, Lawn Tennis etc. followed by a cultural event and prize distribution ceremony.

10. TRAINING

10.1 National Training Policy - 2012

As per the guidelines of DOP&T, the main action points involved for Implementation of National Training Policy-2012 are as follows:-

- a) Appointment of Training Manager and creation of a Training Cell with HR and Capacity Building Professionals to assist the Training Manager.
- b) Classification of all posts with clean job description and competency required.



- c) Development of Cadre Training Plans (CTP), based on the competencies required and Training needs for ensuring that all cadres under the Ministries/Departments or its attached/subordinate Offices may articulate Schemes for the Development of their competencies.
- d) Development of Annual Training Plan (ATP) for all the employees working in Ministries/ Departments including attached/subordinate Offices. The training to be imparted to its employees should include the Entry Level Training, Mid Career Training, Short term/Long term Training, Orientation Training and Workshops/Seminars, Conferences.
- e) Developing Training Institutes under the Ministries/Departments in centres of excellence.
- f) Earmarking of separate budget for the purpose of training.

10.2 Action taken

Based on the above guidelines, following actions have so far been taken:

- a) JS (Admn.) of this Department has been appointed as Training Manager.
- b) The Annual Training Calender (2014-15) for all Cadres of the Department has been prepared.
- c) The Mid Career Training Programme for IP & TAFS Officers is under process.
- d) Road map for implementation of Mid Career Training Programmes for ITS has been prepared.
- e) A draft proposal for strengthening NTIPRIT, Training Institute for ITS has been prepared.
- f) IRRS, being a specialised technical Cadre, their Training programmes are available only in Institutes abroad. Accordingly, some Institutes have been shortlisted and are being contacted in order to workout the modalities for conducting Short Term Training programme for IRRS Officers. Further, a proposal for conducting Training Programmes/ Workshops in India by inviting experts from abroad as well as in India is in the process.
- g) All Cadres have been requested to prepare an Action Plan to implement the Competency framework within their cadres.
- h) CPIOs of Department of Telecommunications were given training in the RTI workshop organised by National Institute of Communications Finance (NICF).
- i) A proposal for opening a separate Budget Head for Training purpose is under process, in the Accounts/Finance Wings.

11. NATIONAL TELECOMMUNICATIONS INSTITUTE FOR POLICY RESEARCH, INNOVATIONS & TRAINING (NTIPRIT)

The Department of Telecommunications established the National Telecommunications Academy (NTA) in the year 2010 as the technical training Institute of the Department. The

scope of its activities was soon enhanced by bringing under its ambit the Policy Research & Innovation in ICT; As a result, the Institute was rechristened as National Telecommunications Institute for Policy Research, Innovations & Training (NTIPRIT) in the year 2011. Since then, NTIPRIT has grown from strength to strength and the Institute is now a Central Training Institute (CTI) enlisted with Department of Personnel & Training. NTIPRIT presently operates from the campus of Advanced level Telecom Training Center (ALTTC) of BSNL at Ghaziabad.

11.1 Present activities of the Institute

Training: At present, the Institute is broadly running the following training activities:

- a) Induction Training of Indian Telecom Service (ITS) Group 'A' and Building Works Service (BWS) - Civil, Electrical & Architecture Group 'A' Officer Trainees.
- b) Induction training of Group-B of Junior Telecom Officer level.
- c) In-service training courses for officers of DoT: These include courses on various topics related to telecom& ICT - technologies, policy & licensing as well as courses on vigilance awareness, RTI Act etc.
- d) Customised trainings for other Govt. agencies/Public Sector Enterprises, intelligence agencies & Law enforcement agencies on telecom & ICT.

11.2 Training Courses conducted

Following Training courses have been conducted by NTIPRIT during the period April-December 2014:

SI. No.	Type of Courses	No. of Courses Conducted	No. of Trainees attended	No. of Trainee-days
1	Induction Training of ITS & BWS Group-A officers	37	89	1539
2	In-service courses for officers of DoT	9	111	326
3	Workshops/Seminar	5	84	119
4	Courses for other Govt. departments/agencies	3	33	129
	Total	54	317	2113

11.3 Trainings undergone by NTIPRIT Faculty

The faculty have also been imparted training in India and abroad to further train the trainees.



11.4 Policy Research

A study on "Creation of Sectoral Cyber Emergency Response Team (CERT) in DoT" was conducted jointly by NTIPRIT and TEC, and its report was submitted to DoT Headquarter.

11.5 Innovation

A Seminar on "Innovation in Telecom Sector - Opportunities and Challenges" was organized in association with Telecom Equipment Manufacturers Association of India (TEMA). The seminar deliberated upon the need to have more indigenous equipment in our telecom network. There were speakers from the industry as well as from the Government and wide ranging discussions were held on the opportunities and challenges for Innovation in the Indian Telecom sector.



Shri Rakesh Garg, Secretary (T) addressing the audience during seminar on "Innovation in Telecom Sector-Opportunities and Challenges" organised by NTIPRIT, Ghaziabad on December 02, 2014 at Bharat Sanchar Bhawan, New Delhi

12. GENDER BUDGETING

The Gender Budget Cell has been working in DoT since November 2006. The General 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 formulating stage of various schemes in the sector.

Allotment of funds under plan & non plan head for the benefit of women for 2014-15 (BE), 2014-15 (RE) and 2015-16 are given below:

100% Women specific programmes

(₹ in crore)

Details of the scheme	BE 2014-15		RE 2014-15		BE 2015-16	
	Plan	Non plan	Plan	Non plan	Plan	Non plan
Amenities to staff	-	0.25	-	0.30	-	0.33
Universal Service Obligation Scheme	1.50	-	1.75	-	1.50	-

13. COLLECTION OF SPECTRUM CHARGES (License Fee and Royalty)

The collection of spectrum charges are as under:-

(₹ in crore)

Category of Service	Actual collection of Spectrum Usage Charges April-14 to Dec-14	Anticipated collection of Spectrum Usage Charges Jan-15 to Mar-15
GSM	4683	1639
CDMA	196	62
Other Communication Services	310	327
One Time Spectrum Charges (OTSC)*	0	*10043
Estimated proceeds of auction during 2014-15 in 900 & 1800 MHz band**	0	**14355
Total Receipts	5189	26426

^{*} The provisional demands of OTSC are subjudice. Collection of OTSC during Oct-14 to Mar-15 is subject to final decision of Hon'ble Courts.

^{**} Auction proceeds include ₹ 5000 Crores from 3G spectrum auction subject to vacation of the same by Ministry of Defence.



13.1 Assessment of Licenced Fees

The assessment of licence fees at the end of financial year is based on the revenue figures as appeared in the audited accounts of the company. The company is allowed to deduct PSTN charges, Roaming charges passed on to eligible/entitled service providers and Sales Tax/Service Tax passed on to the State/Central Government from its total revenue. The sum so arrived at after these allowable deductions is called Adjusted Gross Revenue. Then the licence fee is levied at 8% of this Adjusted Gross Revenue.

Licence Fee is payable in four quarterly installments during each financial year. Quarterly installment of licence fee for the first three quarters of a financial year is paid within 15 days of the completion of the relevant quarter. However, in respect of last quarter of the financial year, the licence fee has to be paid by 25th March on the basis of expected revenue for the quarter.

For telecom networks licensed for Captive use and CMRTS licences, the license fee is levied at fixed rates depending upon the number of terminals, channels and/or network's capital cost.

13.2 Trend of Licence Fee Collections

The trend of licence fee collections for the last five years is given below.

(₹ in Crore)

Licence Fee Collections for the year					
2009-10	2010-11	2011-12	2012-13	2013-14	
10122	10297	11386	11442	12909	

14. RIGHT TO INFORMATION ACT

A separate RTI Unit has been established in this Department and is functional since January 1, 2007. RTI Unit of the Department is headed by Section Officer and functioning under the supervision of Deputy Secretary and Nodal Officer (RTI). To facilitate the quick disposal of RTI applications/appeals, 70 CPIOs and 30 First Appellate Authorities are functioning.

RTI Unit of this Department is continuously in the process of strengthening the system of disposal of RTI applications to the satisfaction of the public by strict compliance of the guidelines issued by the Department of Personnel & Training from time to time to implement the RTI Act effectively.

The facility of receiving and processing RTI applications/appeals online, RTI Web-portal of Department of Personnel & Training, has been started in the Department on 23.08.2013. This is strengthening the system of quick disposal and monitoring of RTI applications and appeals.

15. 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 2014-15 (upto 31.12 2014) are given as under:-

Opening balance as on 01.04.2014	No. of grievances booked during 01.04.2014 to 31.12.2014	Total	No. of grievances closed during 01.04.2014 to 31.12.2014	Pending balance as on 01.01.2015
3571	72774	76345	72852	3493

16. RESULT FRAMEWORK DOCUMENT

16.1 Vision

To provide secure, reliable, affordable and high quality converged telecommunication services anytime, anywhere for an accelerated inclusive socio-economic development.

16.2 Mission

To develop a robust and secure state-of-the-art telecommunication network providing seamless coverage with special focus on rural and remote areas for bridging the digital divide and thereby facilitate socio-economic development; create an inclusive knowledge society through proliferation of affordable and high quality broadband services across the nation; reposition the mobile device as an instrument of socio-economic empowerment of citizens; make India a Global Hub for telecom equipment manufacturing; promote development of new standards to meet national requirements; attract investment, both domestic and foreign and promote creation of jobs.

16.3 Objectives

- 1. Facilitating rapid expansion of Telecom services with special emphasis on rural and remote areas
- 2. Simplification of Licensing regime and efficient management of Spectrum
- 3. Empowerment of consumers of Telecom Services, Public Health and Safety
- 4. Strengthening of PSUs/Autonomous Organisations
- Development of Skills and Human Resources in Telecom Sector 5.
- Infrastructure Development and Promotion of Green Telecom 6.
- 7. Promotion of indigenous R&D, Standardisation and Manufacturing
- Promotion of New Generation Technologies 8.



- 9. Ensuring adequate security for Telecom Network and services
- 10. Legislative proposals for Policy and Governance of Telecom Sector

To provide secure, reliable, affordable and Result Framework Document showing inter-se priority among key success indicators and targets has been given in **Annexure-I**.



Telecommunication services reaching in remote and hilly areas



Launching of Indid's First High Speed rural broadband network by BBNL in Idukki district of Kerala under DIGITAL INDIA PROGRAMME

3.1 WIRELESS PLANNING AND COORDINATION

The Wireless Planning and Coordination (WPC) 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 radio communication systems and Indian Wireless Telegraphy Act 1933, (IWTA, 1933)

1. NATIONAL FREQUENCY ALLOCATION PLAN (NFAP)

National Frequency allocation plan is a policy document which provides basis of development, manufacturing and spectrum utilization activities in country, both for Government and private sector. NFAP is revised generally every two years. At Present NFAP-2011 is under review within overall frame work of Radio Regulations of International Telecommunication Union (ITU).

2. AUCTION OF SPECTRUM

Auction of spectrum in 900 MHz and 1800 MHz bands was conducted during February, 2014 and Letters of Intent (LoI) and Frequency Allotment Letters have been issued. The auction of spectrum in 800 MHz, 900 MHz 1800 MHz and 2100 MHz frequency bands is scheduled to start from 4th March 2015.

3. SACFA SITING CLEARANCE

Standing Advisory Committee on radio Frequency Allocation (SACFA) clearances are granted for fixed wireless stations considering aviation hazard, interference free operations and line of sight obstruction. Siting clearances by SACFA are issued without prejudice to applicable bylaws, rules and regulations of local bodies such as Municipal Corporations/Gram Panchayats, etc.

4. SATELLITE SYSTEM 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.

4.1 Satellite coordination with other Administrations

Coordination with Administration of Cyprus, China, Egypt, Israel, Korea, Lao, Luxembourg,



Malaysia, Nigeria, PNG, Russia Singapore, Turley, Tonga, UAE, Netherlands, Thailand and France have been undertaken for INSAT-NAVR series of satellite networks of India.

Coordination with Administration of Germany and USA has been undertaken for Mars Mission of India (MMI) satellite network.

Coordination with Administration of Indonesia has been undertaken for their satellite networks Indostar with concerned satellite networks of India.

Coordination with Administration of China, Cyprus, Netherlands, Luxembourg, Malaysia, Russia, Singapore, Tonga, Turkey and UAE have been undertaken for INSAT-TTC series of satellite networks of India at orbital location 55E, 74E, 83E and 93.5E.

Coordination with Administration of Netherlands, Russia, Malaysia, China, Thailand and Turkey has been undertaken for INSAT-NAV (55) satellite network of India.

Coordination proposals were sent to Administration of Japan, Thailand and USA in order to coordinate INSAT-TTC (82) satellite network at orbital location 82E with their satellite networks.



Satellite Earth Station

4.2 Coordination meetings with other Administrations

An Administration level coordination meeting was held between India and Japan during 15-19 September 2014 at Bangalore for coordination of INSAT satellite networks with the satellite networks of Japan.

4.3 Coordination with ITU

Notices for frequency assignments Part I-S for INSAT-NAV (55), INSAT-MET82 TWSAT (NGSO) satellite networks have been published in concerned special section of BR IFIC (International Frequency Information Circular) of ITU.

5. CONFERENCES

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

5.1 World Radiocommunication Conference (WRC-15)

National Preparatory Committee (NPC) has been constituted for WRC-15 to coordinate and harmonize the views of stakeholders to finalize national viewpoints on various agenda items of WRC-15. NPC has met several times to evolve common Indian proposals/view points on various agenda items covering the spectrum issues related to various Radio communication Services such as Fixed Satellite Service, Mobile Satellite Service, Fixed Service, issues related to additional spectrum allocation for International Mobile Telecommunication (IMT) Service, etc.

6. PROJECT IMPLEMENTATION

The project Design, Supply, Installation & Commissioning of "National Radio Spectrum Management & Monitoring System (NRSMMS)" has been implemented by the WPC Wing. Under the project, spectrum management and monitoring functions have been automated with a view to making these activities effective and efficient.

Annual Maintenance Contract for the Automated Spectrum Management System (ASMS) software and hardware has already been awarded to National Informatics Centre (NIC). Two new servers have been procured by NIC for the WPC Wing.

Arbitration Tribunal for settlement of disputes relating to NRSMMS Project between M/s HFCL, India and WPC Wing, Department of Telecommunications, Ministry of Communications & IT has been set up. Proceedings of the Arbitration Tribunal are continuing.



Actual Achievements during 01-04-2014 to 30-09-2014 and Anticipated Achievements during 01-10-2014 to 31-03-2015

Achievements	Actual Achievement during April-2014 to September-2014	Anticipated Achievement during October-2014 to March-2015
1.1 Radio Frequency Spectrum Management		
 New Radio Frequency authorized to various users 	1912	2000
 Frequency assignments intimated to Radiocommunication Bureau of ITU for International recognition and protection. 	363	400
 Radio Frequency Assigned for visits of VVIPs 	28	30
 SACFA (Standing Advisory Committee on Frequency Allocations) meeting held 	01	01
 Inter-departmental meetings held 	12	12
Sites cleared for new wireless stations	72,943	80,000
1.2 Wireless Licences Issued		
No. of Import Licences Issued	1618	2000
 No. of Licences issued to new Wireless Stations 	57,480	60,000
 No. of Licences Renewed (for Wireless Stations) 	26,023	30,000
1.3 Certificate of Proficiency (COP) Examination/Licences		
No. of COP Examination conducted	33	33
No. of candidates admitted	4,563	4,600
No. of Licences issued	1315	1350
 No. of Licences renewed 	2412	2450
 No. of Licences issued to New Radio Amateur Stations 	244	250
 No. of Licences renewed for Old Radio Amateur Stations 	240	250

7. WIRELESS MONITORING ORGANISATION (WMO)

Wireless Monitoring Organization continues to ensure 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. Actual achievements during. 01-04-2014 to 30-09-2014 and Anticipated Achievements during 01-10-2014 to 31-03-2015 are as given below:-

S. No.	Particulars	Actual achievements during 01-04-2014 to 30-09-2014	Anticipated achievements during 01-10-2014 to 31-03-2015
1.	Monitoring Assignments Handled.	5357	6400
2.	No. of Wireless Transmission monitored.	59,112	70,930
3.	Technical assistance to users to maintain their operation within specified standards.	477	580
4.	Infringements communicated to various wireless users for remedial action.	1652	2000
5.	Channel days utilized for Radio Monitoring.	2754	3300
6.	No. of Wireless Stations Inspected.	2535	3050
7.	No. of Radio Noise measurements.	65125	62000
8.	No. of high priority interference complaint resolved.	40	50
9.	No. of standard interference complaint resolved.	15	25
10.	Man days devoted for high level technical work.	120	150
11.	No. of training courses conducted.	00	04
12.	No. of man days for training.	00	40

7.1 Radio Monitoring - a regulatory and treaty requirement

Radio monitoring service, 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.



7.2 Major functions of Wireless Monitoring Organization (WMO)

The major functions of the WMO are as under:

- a) Resolution of the harmful interference:
- b) Monitoring for identification of frequency sub-bands for introduction of new services and/ or for additional allocation to existing services;
- c) Monitoring for spectrum recovery unused/ under-used frequency authorizations;
- d) Monitoring for ensuring adherence to licensing conditions;
- e) Monitoring / measurements for sharing studies;
- f) Assistance to domestic wireless users;
- g) Assistance to foreign administrations;
- h) Participation in special monitoring campaigns of the International Telecommunication Union;
- 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;
- j) Inspection of licensed installations; and
- k) Monitoring of space emissions to protect authorized satellite transmissions.

7.3 Challenges before WMO

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 in terms of manpower and machine-power to ensure that these services continue to operate in interference-free environment. The primary reason for the protection from interference to radiocommunication services lies in their critical importance to the society as a whole. With respect to public mobile cellular service, WMO has twin objectives:

- a) To identify and eliminate the sources of interference occurring due to a multitude of reasons, and
- b) To find unused spectrum for expansion of existing 2G services and for the 3G services.

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 and a Real-Time Spectrum Analyzer has recently been procured for training purpose. Intensive training on monitoring system as well as information



technology is aimed at capacity-building. These two aspects are being jointly handled by the Monitoring Headquarter and Wireless Monitoring Training & Development Centre, New Delhi.



3.2 TELECOMMUNICATIONS ENGINEERING CENTRE

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

- a) Preparing Standards and Specifications for harmonious growth of the Indian Telecom Network and Services for the public as well as private sector operators.
- b) Carrying out evaluation of equipment and services.
- c) According approvals for equipment, technology and services.
- d) Studying new technology and services and give technical advice to DoT for their introduction in the Indian Telecom Network.
- e) Technical support for DoT.
- f) Technical advice to TRAI, TDSAT, USOF, BSNL and MTNL, on request of DoT.
- g) Drawing up Fundamental Technical Plans of DoT.
- h) Interaction with multilateral agencies like APT, ETSI and ITU through DoT.
- i) Creating facilities to further the objectives of MRA.
- j) Develop necessary expertise to imbibe the latest technologies and results of R & D.
- k) Coordinate with C-DoT to provide details on the technological developments in the Telecom Sector for policy planning at DoT level.

1. ACHIEVEMENTS

1.1 Following new GRs/IRs have been issued:

- a) GR on WAN optimization for Satellite Network
- b) IR on Ethernet Switches
- c) IR on UTP to Optical Converter
- d) IR on Firewall

1.2 Following GRs/IRs have been revised:

- a) GR on 6 GHz ultra-High Performance Antenna
- b) GR on Optical Talk Set in place of Optical Fiber Jumper & Adapter

- - c) GR on IP Based Integrated Media Gateway for NLD/ILD applications
 - d) GR on UTP to Optical Converter
 - e) GR on Variable Attenuator
 - f) GR on Fixed Attenuator
 - g) IR on Set Top Box
 - h) IR on Data Interface to G.703 converter
 - i) IR on Digital Exchange with 2048 Kbit/s interface
 - j) IR on Switching Node with Network- Network interface at STM-1

2. TESTING/VALIDATION/FIELD TRIAL

- a) Testing of HP Routers (6 different models) carried out at Bengaluru for interface approval & certification.
- b) CMS Validation carried out at C- DoT Campus.
- c) Revised Technology approval certification of C-DOT developed GPON Equipment at C-DoT Campus.
- d) Environment Testing of Mini OLT carried out at C-DoT Campus
- e) ETTL Lab Delhi has been designated as CAB (Conformity Assessment Body).
- f) Testing carried out of Interface approval & certification for PABX Model AEONIX of M/s Vilink Systems Chennai at Bengaluru.
- g) Testing of Interface approval & certification for High Speed Line Driver Product of M/s MRO_TEK, Bengaluru.
- h) Field Trial conducted of WDM coupler of C-DOT developed GPON.
- i) IPv6 Ready Logo certificate issue to HP after examination of HP LaserJet Series.
- j) Testing of HP and Cisco Routers carried out at NGN Lab, TEC.
- k) IPv6 ready Logo program setup at NGN Lab, TECfor C-DoT GPON.
- I) Field Trial of Mini OLT based on GPON equipment at Ajmer.

3. STUDY PAPERS PREPARED

- a) Penetration testing Procedures
- b) HSPA+
- c) Supplementary Downlink
- d) Security Accreditation Scheme for SIM



- e) Offloading 3G/4G networks with Wi-Fi hotspots and hot zones
- f) Telecommunication/ICTs for rural and remote areas of India

4. TECHNICAL PRESENTATIONS IN TEC

Technical presentation on various topics like e-waste for checking and finalisation by FA Division TEC, Mobile Data offload and Wi-Fi Offload by R Division TEC, Supplementary Downlink, High Speed Packet Access (HSPA), Security Accreditation scheme in SIM & Digital Warning System and Priority routing of calls of persons engaged in "Response and Recovery" by TWA Division TEC, Power Storage Platform by FA Division TEC, S-UMTS: Satellite component of UMTS by R Division TEC, Demonstration of security testing tool by M/s Niksun, Engineering System by M/s Oracle, Software Network by M/s Cisco, MIPv6 by M/s Sterlite Technologies, WAN Optimization by M/s Mamotec, E-Health by M/s ST Micro and PMA of DVA Audit Methodology by Industry, Digital India& role of TEC by TEMA/TSDM, Wi-Fi Technology and its deployment challenges by M/s Bharat Connect, Government Networks for secure communications & Disaster management by Vendor were arranged in TEC for updation of TEC Officers and Telecom Industry.

5. ORGANIZING MEETINGS OF NWG

Regular meetings of ITU-T groups were organised in TEC and contribution on 7 topics in various study groups was submitted.

6. TESTING & CERTIFICATION

Interface Approval 56

Type Approval 04

Certificate of Approval 14

Revenue ₹ 61,30,850/-



3.3 UNIVERSAL SERVICE OBLIGATION FUND

The USO Fund was established with the fundamental objective of providing 'basic' telecom services to people in the rural and remote areas at affordable and reasonable prices. Subsequently the scope was widened to include all telecom services including mobile services, broadband connectivity and creation of infrastructure like OFC in rural and remote areas.

Selection of Universal Service Provider is on the basis of open bidding amongst "eligible operators" i.e. entities having valid license or registration or authorization from Central Government/Department of Telecommunication for providing telecom services or infrastructure or any other entities as specified by the Central Government from time to time.

1. PROGRESS OF ON-GOING SCHEMES OF USOF

1.1 National Optical Fibre Network (NOFN)

NOFN project is planned to connect all Gram Panchayats (approx. 2.5 Lakh) 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 (GPs) and Blocks. Minimum 100 Mbps bandwidth will be available at each Gram Panchayat. Non-discriminatory access to the network will be provided to all categories of service providers.

NOFN Project was envisaged as a Centre-State joint effort. State Governments are expected to contribute by way of not levying any RoW charges thus require suitable tri-partite MoU to be signed by GOI, State Governments &BBNL.Tri-partite MoU has been signed with all states and Union Territories except Tamil Nadu and Lakshadweep.

Three Pilot Projects have been completed to cover 59 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 date, total 86 Gram Panchayats have been connected.

The project is likely to be completed by 31.12.2016 in a phased manner as follows:

Phase I 50,000 Gram Panchayats		by 31.03.2015
Phase II	Another 1,00,000 Gram Panchayats	by 31.03.2016
Phase III	Remaining 100,000 Gram Panchayats	by 31.12.2016

India's First High Speed Rural Broadband Network has been commissioned on 12.01.2015 in Idukki district of Kerala

With the commissioning of the National Optical Fibre Network (NOFN), the Idukki district of



Kerala has become the first in India to be connected with the high speed broadband for all the areas of the district. Currently the District has a total of eight (8) Block Offices & 53 Gram Panchayats of which 8 Block Offices & 52 Gram Panchayats have been connected on Optical Fibre and one Gram Panchayat, namely Edamalakudy, is connected through VSAT. Edamalakudy, is a Tribal Gram Panchayat consisting of 26 Tribal villages with around 2200 people. It is remotely located around 18 Kms from Pettimudi which is last point one can go in a vehicle. BSNL has made exceptional efforts in connecting this Gram Panchayat and now Broadband Internet as well as Mobile services are also available here. For the first time all villages under this Panchayat would be connected through Mobile phones and internet.

The establishment of NOFN would open up new avenues for Access service providers such as Telecom Service Providers, Internet Service Providers, and Cable TV operators, Content Providers etc. to launch next generation services and spur creation of local employment opportunities in a big way.

1.2 General Infrastructure Augmentation

For provision of broadband in rural areas, sufficient back-haul capacity is required to integrate

the voice and data traffic from the access network in the rural areas to their core network by strengthening the OFC network. Accordingly, this scheme considers OFC Network augmentation between the blocks' HQ and Districts' HQ to begin with. The States of Assam, Meghalaya, Manipur, Tripura, Mizoram, Arunachal Pradesh, & Nagaland have been taken up for implementation.

This OFC Schemes are based on BOO model, i.e. build, operate & own basis, and accordingly, the Telecom Service Providers, implementing the schemes would build, operate, own and manage all the equipment/infrastructure for the execution of the scheme.

All locations shall be connected on physical OFC Ring Route(s) with the DHQ node ensuring the cable route diversity and ring capacity of at least 2.5 Gbps, with the capability to efficiently transport various protocols, including TDM, IP, Frame Relay, etc., for integrated voice, data and video signals in all the specified districts.



Universal Service Obligation Fund (USO Fund) schemes reaching rural areas



The following Optical Fibre Network schemes have been taken up:

1.3 Optical Fibre Network Augmentation, Creation and Management of Intra-District SDHQ-DHQ OFC Network in Assam

Brief and background note: The State of Assam has been taken up first for implementation. As per the outcome of the tender for implementation of this scheme in Assam, BSNL has been declared the successful bidder at a subsidy quote of ₹ 98.89 Crore, and subsequently, an Agreement has been signed with them on 12.02.2010 in this regard.

This OFC Scheme would connect 354 total locations in Assam in total 27 Districts in about 58 months from the date of signing of the Agreement i.e. by December 2014. The Agreement shall be valid for a period of ten years from the effective date.

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.

Present Status: As of November 2014, about 303 nodes have been installed out of total 354 nodes. Proposal has been received from BSNL for dropping 37 OFC nodes in view of various reasons viz. duplication of nodes, OFC not feasible etc. BSNL has further sought roll out extension for one year upto 31.12.2015 for commissioning of balance 14 nodes in two districts of Assam (North Cachar and KarbiAnglong).

1.4 Optical Fibre Network Augmentation, Creation and Management of Intra-District SDHQ-DHQ OFC Network in NE-I Circle (comprising states of Meghalaya, Mizoram & Tripura)

Brief and background note: The States of Meghalaya, Mizoram & Tripura have been taken up for OFC augmentation in this scheme. As per the outcome of the tender for implementation of this scheme, M/s RailTel Corporation of India Limited has been declared the successful bidder at their subsidy quote of ₹ 89.50 Crore.

This OFC Scheme would connect 188 locations in 19 Districts within 36 months from the date of signing of the Agreement i.e. by 15.01.2015. The Agreement shall be valid for a period of eight years from the date of signing of agreement i.e. 16.01.2012.

At least 70% of the subsidized bandwidth capacity, created under the scheme, shall be shared with the licensed service providers in the area at a rate not more than 12% of the current TRAI ceiling tariffs.

Present Status: Work for trenching and laying has been awarded in respect of 20 districts out of 23 districts in Meghalaya, Mizoram and Tripura while tenders are under finalization for remaining 3 districts in Mizoram. 978 km duct has been laid while OFC has been laid for 483 km. 24 nodes have been connected in Tripuraas on 31.12.2014.



1.5 Optical Fibre Network Augmentation, Creation and Management of Intra-District SDHQ-DHQ OFC Network in NE-II Circle (comprising states of Arunachal Pradesh, Manipur & Nagaland)

Brief and background note: The States of Arunachal Pradesh, Manipur & Nagaland have been taken up for OFC augmentation in this scheme. As per the outcome of the tender for implementation of this scheme, M/s RailTel Corporation of India Limited has been declared the successful bidder at their subsidy quote of ₹ 298.50 Crore.

This OFC Scheme would connect 407 locations in total 30 Districts within 42 months from the date of signing of the Agreement i.e. by 15.07.2015. The Agreement shall be valid for a period of eight years from the date of signing of agreement i.e. 16.01.2012.

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

Present Status: Work for trenching and laying has been awarded in respect of 18 districts out of 36 districts in Arunachal Pradesh, Manipur and Nagaland while tenders are under process/finalization for remaining 18 districts in these states. 675 km duct has been laid while OFC has been laid for 13 km. Network rollout is yet to start in North East-II Telecom Circle.

1.6 Rural Wireline Broadband Scheme for provision of Broadband Connections

Under this scheme, BSNL will provide wire-line broadband connectivity to rural & remote areas by leveraging the existing rural exchanges infrastructure and copper wire-line network.

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 SIX-years, i.e. by 2015 (extended by one year from the original target of January, 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 9 years' time.

As on 30th November 2014 a total of 6,39,572 broadband connections have been provided and 14,469 kiosks have been set up in rural and remote areas.

1.7 Scheme for Mobile Communication Services in Left Wing Extremism (LWE) affected Areas

On 20.08.2014, the Cabinet approved a project to provide Mobile Services in 2199 locations [1836 new sites & 363 sites already installed by BSNL] in Left Wing Extremism (LWE) affected areas in 10 states to be funded by Universal Service Obligation Fund (USOF). Installation and roll out in these areas is targeted to be completed in 12 months. Agreement between

USOF and BSNL has been signed on 30.09.2014. The work in under way, 500 towers are likely to be installed by March 2015.

1.8 Village Public Telephones

As on 31.12.2014, **5,81,288 out of the 5,93,601 inhabited villages** [i.e. 97.93%] of the country as per Census 2001 have been covered with Village Public Telephones (VPTs). VPTs are being provided in remaining inhabited uncovered villages through on-going USOF scheme of VPTs in newly identified uncovered villages as per Census 2001.



Village Public Telephones (VPT)

1.9 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 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. BSNL has submitted that VPTs will be provided in remaining inhabited villages by March 2015. Approximately 3700 VPTs are likely to installed by March 2015.



2. DETAILS OF FORTHCOMING USOF SCHEMES

2.1 Scheme for Mobile Communication Services in Uncovered Villages

An exercise was undertaken to identify uncovered villages as per Census 2011 which do not have mobile connectivity in the country. Tower location data and village coverage data was obtained from all service providers and gaps in connectivity have been identified with the assistance of M/s TCIL. Mobile coverage to uncovered villages will be provided in a phased manner. Himalayan States (Jammu & Kashmir, Himachal Pradesh and Uttarakhand) and border States (Rajasthan, Gujarat, Punjab and Haryana) will be taken up in the first phase.

2.2 Comprehensive Telecom Development Plan for North-Eastern Region

On 10.09.2014, the Union Cabinet approved a proposal to implement a Comprehensive Telecom Development Plan for the North-Eastern Region. The Project envisages to provide mobile coverage to 8621 identified uncovered villages, installation of 321 mobile tower sites along National Highways and strengthening of transmission network in the States of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.

3. FUND STATUS & DISBURSEMENT FIGURES FOR VARIOUS USOF ACTIVITIES

- The Universal Access Levy (UAL) collection in the year 2014-15 (up to 30th September, 2014) is ₹ 1,869.68 crore and subsidy disbursed upto 31st December 2014 the said period is ₹ 1,781.93 crore.
- A subsidy of ₹ 19,729.79 crore has been disbursed through USOF till 31.12.2014 and a payment of ₹ 6,948.64 crore over the period 2002-03 to 2005-06 for fulfilling rural obligation is required to be taken into account for arriving at available balance.
- Thus a total of ₹ 26.678.43 crore of USOF has been utilised till 31.12.2014.
- Under Rural Wireline Broadband scheme, ₹ 381.5 crore has been disbursed till 31.12.2014.
- Under VPT scheme (as per census 2001), ₹ 114.91 crore has been disbursed till 31.12.2014.
- National Optical Fibre Network (NOFN) project for providing broadband connectivity to 2.5 lakh gram panchayats is being funded by USOF with an estimated cost of ₹ 20,100 crore. The amount disbursed under NOFN project till 31st December, 2014 is ₹ 2,010 crore.
- Mobile services will be provided in LWE affected areas identified by MHA with financial support from USOF, for which estimated cost is ₹ 3567.58 crore. As on 31.12.2014, ₹ 596.51 Crore has been disbursed under this project.
- Remaining amount will be utilised for implementation of other ongoing and upcoming schemes of USOF.





Universal Service Obligation Fund (USO Fund) projects in operation



3.4 CONTROLLER OF COMMUNICATION ACCOUNTS OFFICE

1. CONTROLLER OF COMMUNICATION ACCOUNTS OFFICES

There are 26 CCA Offices located across the length and breadth of the country. Even though initially they were established with a view to settle pension and terminal benefits, the Pr.CCA/CCA circles now play an increased role as a critical professional interface between DoT and its various stakeholders at the ground level on various issues such as license fee and spectrum charges management, USO Fund management, USO activities progress review etc. Within a short span of time, the CCA offices have carved out a niche for themselves by serving the different stakeholders of DoT (telecom service providers and in particular BSNL employees) and bringing them closer to DoT with their professional working.

2. DISBURSEMENT OF TERMINAL BENEFITS

• **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)	Pensioners Pension disbursed (₹ in crore)
2013-14	2.60	5657.23
2014-15 (April to December 2014)	2.72	5049.79

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

3. ACCOUNTS

Controller of Communication 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 system effectively in the CCA offices. Department of Telecom has achieved complete integration in submission of accounts by computerization through COMPACT software, 'with e-lekha'. E-lekha is an e-governance initiative of CGA office, wherein the accounts are uploaded by the Ministry online. This integration has facilitated day to day information of DoT accounts. For transparent and quick payments, this Department has adopted E-payment module. During the year 13 offices of DoT have adopted the epayment module. Special efforts have been made to ensure computerization of the remaining accounting functionaries. Comprehensive Drawing and Disbursing package have been implemented in 13 offices during the year. The Department of Telecom has taken over the pension payment of about 20,000 combined service pension optee employees of MTNL. The office of Pr. CCA Delhi and Pr. CCA Mumbai have been designated as Pension Disbursing Agencies in respect of MTNL pensioners. This would facilitate the pensioners being a single point contact and reduce their grievances. To facilitate pensioners, the compact pension module has been installed in 9 offices. E-receipt system for accounting of receipts of DoT has been implemented at DoT HQ. The implementation to all offices is under progress. An accounting procedure has been framed and issued vide No.7-1/2009/TA-I/22 dated 04.12.2014 regarding maintenance of GPF in respect of DoT officials on foreign service/deputation. Toll Free telephone number Helpline at Pr. CCA/CCA offices for benefit of DOT Pensioners has been installed in all CCA offices. Pension Adalats are being regularly held in all CCA offices to sort out the problems faced by the DoT Pensioners and their grievances are being settled timely. Internal Audit Inspection has been carried out in 13 offices during this year. Effective control is exercised through exhaustive and purposeful Internal Audit Inspections. Action has been initiated for computerized State of Work reports.

4. ASSESSMENT & REVENUE FUNCTIONS

- Collection of License Fee: The Pr. CCAs / CCAs are responsible for the collection of License Fees and Universal Service Levy from various Telecom Service Providers in respect of all the Type of Telecom Licenses viz. Basic, CMTS, UASL/UL, ILD, NLD, Captive V-SAT, Commercial V-SAT, CMRTS, PMRTS, ISP IT -'A', 'B' & 'C', ISP without Telephony 'A', 'B', & 'C', IP-I & IP-II etc. along with supporting documents viz. Statement of Revenue and License Fee (Adjusted Gross Revenue statements) and Affidavits etc.
- Assessment of License Fee: The Pr. CCAs / CCAs are also responsible for the



assessment of license fees in respect of standalone / decentralized licenses viz. ILD, NLD, Captive V-SAT, Commercial V-SAT, CMRTS, PMRTS, ISP IT -'A', 'B' & 'C', ISP without Telephony 'A', 'B', & 'C', IP-I & IP-II etc.

- Verification of Deductions Claimed by Licensees: 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) admissible on actual paid basis are verified quarterly by the CCAs. The deductions claimed by the licensees vary from 25% to over 90% of the gross revenue under different categories of licenses.
- Maintenance of Financial and Performance Bank Guarantees: The Pr. CCAs / CCAs are also responsible for the safe custody of Financial Bank Guarantees in respect of all the licensees and Performance Bank Guarantees in respect of decentralized licenses. CCA offices are also to ensure for proper maintenance of ledgers / control registers, renewal, revision, invocation etc. of these Bank Guarantees submitted by the licensees.
- **Penalties:** Penalties relating to CAF, EMR and all other penalties imposed by CCA, TERM Cell, Security and TEC and their collections / recovery.
- Miscellaneous Revenue: Monitoring of various sources of Revenue and its collections viz. OSP Registration Fee, Testing fee of BASE Transceiver Station (BTS), Survey / Establishment charges from REPC Division, WMO, RLO etc.
- Representation from the Licensees: The Pr. CCAs / CCAs are required to give replies
 to the representation submitted by the licensees with reference to deduction verification
 reports / queries, collection of License Fees, submission of other documents required for
 maintenance of PBG / FBGs.
- Court Cases: CCA offices also represent the Department of Telecom in legal cases and defending court cases relating to the concerned offices of Pr. CCAs / CCAs before their respective Hon'ble High Courts / Tribunal / Ombudsman. These offices also furnish replies in respect of TDSAT cases containing paras relating to their offices.
- Posting of Data in LF Software: The CCA offices are required to post in LF software
 the data pertaining to LF collections and GR / AGR within 2 working days of its receipt
 and reconciliation of LF collections with CAC figures. They are also required to post in
 the LF software the Financial Bank Guarantees in respect of all the licensees and
 Performance Bank Guarantees in respect of decentralized licenses.
- 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.

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 five years on this account is given in the following Table:

(₹ in crore)

	2010-11	2011-12	2012-13	2013-14	2014-15 (Upto Dec. 2014)
License Fee	10286.43	11790.93	11456.48	14628.47	6111.45
Spectrum Charges	3432.47	5192.30	5679.19	6883.67	5234.03
Auction Revenue	106264.73	-	1722.24	18267.18	-

5. SINGLE WINDOW SYSTEM

In accordance with the directions of CGA, Ministry of Finance and Reserve Bank of India, it was decided to disburse pension to Telecom Pensioners through modified single window system through Public Sector Banks. This system enables all public sector banks to disburse pension to all the states and do away with link branches by introducing Central Pension Processing Centres (CPPCs). This facilitates pensioners to settle their grievances, if any, quickly by approaching CPPCs directly. Accordingly, an MOU was signed on 19 September 2012 with 24 Public Sector Banks and with Bank of India on 06 March 2013 for disbursement of pension to Telecom Pensioners and system has been implemented successfully in the department.

6. E PAYMENT SYSTEM

As per instruction of Ministry of Finance regarding implementation of e-payment system in the department, necessary steps were taken for the implementation of the system in all Pr. CCA/CCA Offices. As on date e-payment system successfully implemented in PAO, in DoT HQrs, CCA Chhattisgarh, CCA West Bengal Circle and Pr. CCA Kolkata phones. The other Pr. CCA/CCA Offices are in process of implementing the e-payment system.

7. 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 CCAs also disburse USOF subsidy to Service Providers before disbursing the fund. They also carry out physical inspection of USOF sites for establishing the veracity of the claims. They also interact with State Governments to facilitate smooth implementation of the schemes. Amount of USO Fund disbursed during the last two years is given below:-

	2013-14	2014-15 (upto Dec2014)
USO Fund Disbursed (₹ in crore)	2163.45	1781.69



They also perform the following functions:

- Processing claims submitted by the USPs
- Disbursement of subsidies and claims
- Field visits Inspection of VPTs/RCPs/RHDELS/Mobile
- Data base management
- Filing of periodical returns to USO Funds Administrator
- Rural Telecom studies.

8. ADMINISTRATIVE FUNCTIONS

- The CCAs are performing DDO functions for WMO, RLO and TERM Cells, the field offices for DOT. Apart from carrying out other administrative functions as the Heads of the Department (HOD).
- **Legal Functions:** The CCAs also handle court cases at field level where the Govt. of India is a party in service related matters and matters of license fee, spectrum charges, pension, absorption issues etc.
- 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. This has been done to increase the accessibility for the consumers and to expedite the process of grievance redressal.
- DoT 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 & buildings. CCA offices have carried out verification of the DoT/BSNL/MTNL land with the BSNL/MTNL officers. 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.

9. NATIONAL INSTITUTE OF COMMUNICATION FINANCE

National Institute of Communication Finance (NICF) is an apex level Central Training Institute of Ministry of Communications & IT recognized by the DoPT. It is National level training institute for imparting training to the IP&TAFS officers/officials of Ministry of Communications & IT. The Institute is responsible for Training needs Analysis, giving inputs to DoT for policy and Plan formulations, coordination and organization of Training at various levels of Group

'A' and 'B' officers and Group 'C' officials of IP&TAFS and other organized services. The Institute organizes In-service courses, conferences, seminars, workshops, Mid-Career Training, Induction training etc. to various level officers and officials with benchmarking in a scientific way.



Hon'ble President of India with IP&TAFS officers at Rashtrapati Bhawan on 16-4-2014

9.1 Workshops/Seminars

NICF serves as a nodal training and research Centre for Telecom Policies, Planning, USO regulation, Postal Accounts and Finance. During the year 2013-14, the Institute had organized workshops/seminars on various subjects like APAR, COMPACT, Pension and terminal benefits, Right to Information, USOF, Verification of deductions for GR/AGR, Office Management etc. During the current year 2014-15 so far, the Institute has organized workshops on RTI, Vigilance & Disciplinary proceedings, Pension vouching and Audit (PVA) software, CDDO package, Budget & Planning in Govt. of India, Personal Financial Management, USOF and Analysis of Financial Statements.

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3.5 VIGILANCE ACTIVITIES

Complaints are received by the vigilance wing of DoT 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 identify the delinquent officers/officials and fix responsibility. During the period [from April 2014 to December 2014], 71 complaints were added, 55 complaints were investigated. 28 Officers/Officials were charge-sheeted, 29 officers/officials were punished for major/minor penalty after conclusion of disciplinary proceeding, and 2 appeal cases were settled during the period.

1. STAFF TRAINING

To increase awareness on vigilance functions among the staff, a 5 days 'Vigilance & Disciplinary Proceedings' training course has been designed. Employees at different levels are deputed for this training from various units of Department of Telecom (including field units). The course is being conducted as per schedule at National Telecommunications Institute for Policy Research, Innovation and Training (NTIPRIT), and at National Institute of Communication Finance (NICF). Officers 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. A total of 5 sessions of the training were organized by aforesaid institutes and a total of 103 participants were trained during the period.

2. VIGILANCE CLEARANCES

This is an important activity of the vigilance wing because vigilance clearance is required at the time of promotion, training/deputation abroad, deputation to other Organizations/ Departments and obtaining passports etc. During the period [from April 2014 to December 2014], vigilance clearances were granted to 2503 employees for various purposes.

3. CONSULTATION WITH THE CENTRAL VIGILANCE COMMISSION

CVC is the apex vigilance institution having jurisdiction over all Ministries/Departments/PSUs etc for vigilance related matters. Action against Government officers/officials is initiated in consultation with the CVC. The vigilance wing of DoT coordinates with the CVC for vigilance related matters. After examination, 30 non-CVC cases were referred to CVC for advice during the period from 01.04.2014 to 31.12.2014.

4. VIGILANCE AWARENESS WEEK

Vigilance Awareness Week was observed from 27th October to 1st November 2014. Essays,



quiz and debate competitions etc. were conducted for spreading the awareness among the staff. Prizes were given and certificates awarded to the winners.

5. PREVENTIVE VIGILANCE

Two Vigilance inspections in respect of the TERM Cell Orissa and Regional Licensing Office, WPC, Mumbai were carried out during the period April 2014 to December 2014.

6. STATISTICAL SUMMARY

The statistical summary of the various activities is as below:-

Activities	From 01.04.14 to 31.12.14
Total No. of Complaint received during April 1, 2014 to December 31, 2014	71
Total No. of Complaints investigated	55
Total No. of Disciplinary/Other action taken	34
Total No. of Officers/officials charge sheeted	34
Total No. of Major Penalty recommended	51
Total No. of Minor Penalty recommended	22
Total No. of Vigilance Clearance issued	605

7. CVC COMPLAINT RECEIVED, AND DISPOSED OF DURING THE PERIOD FROM APRIL 2014 - DECEMBER 2014

Opening Balance as on April, 2014	Received up to December 31, 2014	Disposed of up to December 31, 2014	Closing balance December 31, 2014
17	2	8	11



Departmental Vigilance Activities during April 2014 - December 2014

SI. No.	Activities	Category	From 01.04.14 to 31.12.14
1	No. of complaints handled during the period		65 [excluding 118 complaints sent for n/a to PSUs & other units]
2	No. of officers charge sheeted for		
	(a) Major Penalty	GOs	18
		NGOs	_
	(b) Minor Penalty	GOs	10
		NGOs	_
3	No. of officers punished with MA/MI penalty		29
4	No. of prosecution sanctioned issued	GOs	03
		NGOs	_
5	No. of investigation reports examined and sent to CVC for advice (other than CVC Cases)		30
6	No. of CBI reports referred to CVC for advice		05
7	No. of officers in respect of whom Vigilance clearance issued		2503
8	No. of cases (received from ACU of PMO) disposed off after investigations		_
9	No. of appeal cases settled	Group 'A'	1
		Group 'B'	1



3.6 TELECOM ENFORCEMENT RESOURCE AND MONITORING (TERM)

1. CREATION OF TERM CELLS

With the liberalization of telecom sector i.e. increase in the number of telecom operators, increase in FDI, growth of internet services, advancement of technologies and increase in subscriber base in the country, the Government felt the need for presence of Telegraph Authority in all the license service areas and large telecom districts of the country. This is to ensure that service providers adhere to the license conditions and also to ensure compliance of telecom network security issues. To address these issues, the Government during the period 2004 to 2007 has created 34 VTM Cells.

Since formation of Vigilance & Telecom Monitoring (VTM) Cells in the DOT, the role and functions of VTM Cells have increased manifold. With a view to reflect the entire gamut of functions assigned to the Cells and to distinguish their role vis-a-vis staff-vigilance activities, the name of VTM Cells has been changed to Telecom Enforcement, Resource and Monitoring (TERM) Cells w.e.f 5th August 2008. As on date there are 22 LSA TERM Cells and 12 Non-LSA TERM Cells.

Each TERM Cell is headed by a Senior Administrative Grade (SAG) level officer, designated as Dy. Director General (DDG), TERM. All 34 TERM Cells are reporting to Sr. DDG (TERM), a Higher Administrative Grade (HAG) level officer, at DoT HQ.

2. FUNCTIONS ASSIGNED TO TERM CELLS

2.1 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 from 0.02% to 0.1% based on the recommendation of National Sample Survey Organization (NSSO). Penalties are also being imposed on Telecom Service Providers (TSPs) for non-compliance to the norms. Apart from above, TERM Cells are also carrying out following activities and penalties are being imposed for non-compliance:

- a) Analyses of subscriber databases submitted by TSPs
- b) Inspections of warehouses and Point of Sale (PoS) of the TSPs for having samples directly from the storage



- c) Investigation of complaint related to subscriber verification reported by various sources including Law Enforcement Agencies (LEAs)
- d) Analysis and verification of bulk customer verification (10 or more than 10 connections to an entity)
- e) Police verification of franchisee of TSPs in sensitive states (Assam, North East and J&K).

TERM Cells have audited approx. 5.87 crores CAFs till 31.12.2014 across all TSPs and on non-compliant CAFs a penalty of approx. ₹ 2223 crores has been imposed.

2.2 Checking of compliance to Electro Magnetic Field (EMF) radiation norms

With the increasing concerns over harmful effects of Electromagnetic Radiation on human health, in the year 2010 TERM Cells were entrusted with the work of cross checking the compliance of EMF radiation norms as prescribed by DoT from time to time. TERM Cells verify the prescribed EMF self-certificates submitted by TSPs and also check the EMF radiation exposure levels of upto 10% of Base Transreceiver Station (BTS) annually on random basis. In case of non-compliance of EMF radiation norms by TSPs penalty on the concerned TSP(s) is levied by TERM Cells.

TERM Cells have tested approx. 1.87 lakhs BTS till 31.12.2014 across all TSPs and on non-compliance of EMF radiation norms a penalty of approx. ₹ 7082 crores has been imposed.

2.3 Service Testing for checking Roll-out obligations

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 TERM Cells were entrusted with the responsibility to carry out the service testing of the cases offered by TSPs and issue Service Test Result Certificates (STRCs) against the cases tested by them. Liquidated Damage (LD) Charges is imposed on the TSPs who are not complying to Roll-out obligation conditions.

TERM Cells have carried out service testing for checking Roll-out obligations of approx. 2626 towns covering approx. 22852 BTSs till 31.12.2014 across all TSPs.

2.4 Curbing of illegal set ups causing financial loss to the exchequer

TERM Cells also carry out investigation to curb the illegal operations (not permitted under Indian Telegraph Act) in coordination with LEAs. TERM Cells broadly have following sources/methods to find out the clandestine activity/grey market operations:

- a) Through complaint/information received by any means
- b) Through Observation of unusual traffic in operators networks

- c) Through social contacts
- d) Through already investigated/under investigation cases
- e) Through Security/Law enforcement Agencies

TERM Cells have unearthed around 560 cases of illegal setups till 31.12.2014.

2.5 Inspections of TSPs/Subscribers

TERM Cells are carrying out inspections of UASL/CMTS/Basic/UL/NLD/ILD/ISPs/OSPs/IP-1s/VSAT etc. licensees, for checking compliance to terms and conditions of their license/registrations. TERM Cells also carry out the inspections of Bulk customers, Heavy users, ILL/IPLC/NPLC customers, V-SAT customers.

Till 31th December 2014 more than 17000 such inspections have been carried out by TERM Cells and the discrepancies have been rectified in coordination with TSPs.

2.6 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 31th December 2014 more than 49000 PG cases have been dealt by TERM Cells.

2.7 Registration of Other Service Providers (OSPs)

TERM Cells have been entrusted to register Other Service Providers in LSAs like BPO, KPO, Network Operation Centre, Vehicle Tracking System, e-Commerce, Tele-medicine, Tele-education etc.

Till 31th December 2014 more than 7700 number of OSPs have been registered by TERM Cells.

2.8 Other major works carried out by TERM Cells

- a) Coordination among various network operators, telecom service providers in the field and monitoring of network parameters.
- b) Checking of the compliance by the licensee of any directions issued by the licensor in public interest.
- c) Verification of Visitor Location Register (VLR) count for allotment of new MSC codes to the TSPs.
- d) Checking of the compliance by the companies in respect of No Objection Certificate (NOC) issued by the DOT for selling of the global calling cards, international SIM Cards etc.



- e) To monitor inter operator connectivity to ensure optimum Call Completion Ratio (CCR) for inter operator calls. Analysis of call details records/exchange records / subscription/ traffic data of various licensees.
- f) 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.
- g) Technical arrangement for the lawful interception / monitoring of all communications passing through the licensee' network as and when offered by the licensee.
- h) **Disaster Management:** Co-ordination with Telecom Service Providers and State Agencies and monitoring of quick restoration of affected telecom services in disaster situations. Taking over of network in the events of natural calamities or the other emergency situations.
- i) Ascertaining that the licensee is providing the services within permitted area.
- j) Electromagnetic compatibility compliance enforcement of Telecom and Railway Operators across the country by RE Unit of TERM Cell Delhi.
- k) Issues related to Mobile Number Portability.





3.7 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:

1. UNIVERSAL SERVICE OBLIGATION FUND (USOF): SANCHAR SHAKTI SCHEME

The Sanchar Shakti, is a rural development initiative of the USOF (Universal Service Obligation Fund) wing of the Department of Telecommunications (DoT).

Thus in line with the Department of Telecommunication's GRB commitments, it was decided to launch pilot projects under the aegis of Sanchar Shakti scheme, on 7.3.2011, on eve of Women's Day. It was aimed at facilitating Rural Women's access to ICT enabled services for their education, training, employment opportunities, health and safety needs.

1.1 Major goals and objectives

The Sanchar Shakti pilot scheme for Mobile Value Added Services (VAS) provisioning envisages development of content/information customized to the requirements of women SHG members engaged in diverse activities in rural areas across India. The scheme entails innovative application of technology in designing & delivering the VAS content so as to ensure its easier accessibility & effective assimilation among the targeted women beneficiaries.

1.2 Main activities

- Provision of VAS to the mobiles of the targeted beneficiaries with a pre-set frequency of messages (either SMS or IVRS) and as per the pre-decided schedule of content, specific to each pilot project under Sanchar Shakti, over a period of 12 months (4 quarters).
- Development of relevant VAS content by the Service Provider and for which it shall undertake a Customer Profiling Exercise with the help of their NGO-partner. This exercise is structured by Service Provider in such a manner that aspects such as needs,



preferences, etc. related to information, mobile phones, mode of content reception, etc., are well addressed.

- 3. The Service Provider ensures the training and handholding of the SHG members to effectively utilize the mobile VAS.
- 4. The Service Provider operates a Toll-Free Helpline for the targeted SHG members for complaint registration and other assistance/clarifications.

The subsidy is disbursed to the Service Provider through the field offices of USOF i.e. Controller of Communication Accounts, over a max period of 12 months for VAS dissemination as per the terms & conditions of the agreement entered between USOF and the Service Provider for each pilot project.

1.3 Intended key results

- Create a demand for information/VAS/ICT services in rural areas through the flow of the tailor-made information to the SHG women in rural areas on their mobile handsets, under the Sanchar Shakti.
- 2. Digital inclusion would enhance women's feelings of self-worth and self-respect.
- Direct flow of information would reduce the exploitation and harassment due to information asymmetry in rural areas in respect of their due entitlements from the government and equip them to demand greater accountability from the local government machinery.
- 4. Access to the information for a correct and informed decision making in their personal, economic, social and political spheres.

1.4 Partners in the Sanchar Shakti

The framework of this scheme is a Public-Private-People partnership model.

- USOF (PUBLIC) subsidizes the VAS content development, training/handholding and VAS/ information dissemination by the Service Provider (PRIVATE). The NGO-partner (PEOPLE) of the Service Provider is involved in selection, educating and spreading the awareness among the beneficiaries.
- 2. Presently, M/s Bharti Hexacom Ltd. in Rajasthan and M/s Reuters Market Light Information Services Pvt. Ltd. are the Service Providers in the remaining pilot projects under Sanchar Shakti.
- 3. The targeted beneficiaries (PEOPLE) are actively involved by the Service Provider to customise & localise their VAS content.

1.5 Key successes of the Sanchar Shakti

Beneficiaries - Rural women SHG members

Operational area of pilot project under Sanchar Shakti	Uttarakhand	Pune (Mah)	Ajmer (Raj)	Srikakulam, East Godavari & Vishakhapatnam (A.P.)	UP (East)-	Saharanpur UP (West)- Proposed
Beneficiaries	2200	2200	2860	3066	3200	3200

- The USOF subsidy disbursed for the Sanchar Shakti activity as on 31/08/2014 is ₹ 0.63 crores.
- Since the launch of Sanchar Shakti, the two pilot projects in Uttarakhand & Pune district (Maharashtra) under Sanchar Shakti scheme have been concluded successfully.
- The initiative in Ajmer is nearing the stage of commencement of VAS provision.
- Since 1st Oct 2014, the customized information is being disseminated to the women beneficiaries on their mobile phones, in the 3 districts (Srikakulam, East Godavari, and Vishakhapatnam) of Andhra Pradesh.
- In addition, the Sanchar Shakti scheme was extended to the districts of the Uttar Pradesh, namely Azamgarh and Saharanpur and is nearing the stage of agreement signing.

Thus the Sanchar Shakti scheme is still evolving and its success, in various parts of India, is being gauged & evaluated by USOF Hq. with the aid of the offices of Controller of Communication Accounts, before it's scaling into a full-fledged scheme of USOF can be deliberated upon.

2. MAHANAGAR TELEPHONE NIGAM LIMITED (MTNL)

Mahanagar Telephone Nigam Limited (MTNL) has always endeavored towards women participation in the Organization and the nation building. This can be visualized from manpower figures, viz. as on 31.12.2014, 22.82% of total manpower are women employees.

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

1. Special care has been taken in case of female employee working in night shift and are provided with rest rooms/dormitory. Night shift allowance is also paid to them. Night shifts are organized in such a fashion that they report for duty and go back in day time. This type of duty is performed only once in a weekend after performing night duty, the staff is required to perform day duty on third day only, the 2nd day being a off day. Effectively this works out to be two continuous days break.



- 2. For women working in the same positions, same remuneration is paid and there in no discrimination whatsoever in payment of compensation on the basis of caste, gender, religion, etc.
- 3. In order to redress and grievance relating to sexual harassment at work place, Sexual Harassment Complaint Committee has been constituted at Unit level as well as in Corporate Office.
- 4. The service conditions are uniform and there is no gender bias.
- 5. Maternity/Paternity leave is also available to employees.
- 6. Child Care Leave is provided for a maximum periods of two years (i.e. 730 days) with pay upto 3 months and without pay upto 2 years inclusive of 3 months with pay.
- 7. Crèche facility has also been provided for women employees with infants.
- 8. Special Grant is being sanctioned on an annual basis for MTNL Women Welfare Organization, which in turn provides vocational training to kith and kin of working as well as retired/deceased employee'

3. BHARAT SANCHAR NIGAM LIMITED (BSNL)

In BSNL, schemes for the benefit of women, inter-alia, include:

- 1. Maternity leave of 180 days are given to all women employees.
- 2. Child Care Leave as per the provisions of DOP&T OM No. 13018/2/2008-Estt.(L) dated 11.09.2008 is available to women employees.
- 3. 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.

4. TELECOMMUNICATIONS CONSULTANTS INDIA LIMITED (TCIL)

TCIL is providing a friendly workplace for its employees without any discrimination. The safety & security measures are strictly enforced ensuring equal opportunities to all employees. TCIL has taken various measures for the welfare of its women employees which inter-alia include provision of separate rest rooms for women on each floor at TCIL headquarter. Women employees are also occupying some of the higher/ middle management posts and many women are being involved in the decision making process. TCIL also has a Sexual Harassment Committee consisting of women employees for addressing the grievances of women employees regarding harassment and for welfare & security of women employees.

5. ITI LIMITED

ITI Limited, being a socially conscious Public Sector Undertaking, has from its inception being

committed to the concept of employees welfare. Due importance is given to the welfare of its women employees. Some of the steps taken by ITI Limited for empowerment of women employees are as under:

- It is a matter of pride to the Company that many of its women employees have been selected for the Shram Devi Award in the past.
- Separate lunch room in canteen, rest rooms and crèches have also been provided in the Units.
- The Company has comprehensive health care scheme providing medical treatment / reimbursement to the employees and their families. Hospitals have set up in Bangalore, Naini, Mankapur, and Raebareli Plants which emphasize women and child welfare.
- In the light of 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 during the year 2004-2005, CDA rules were amended accordingly.
- Complaints Committee formed in each Unit to inquire into complaints of sexual harassment made by any women employees in the Company and also uploaded in Company Website.
- Care is taken to ensure that women employees are nominated for training programmes, which are need based.

6. CENTRE FOR DEVELOPMENT OF TELEMATICS (C-DOT)

C-DOT's Management has always been sensitive to gender issues and has consistently worked towards creating organizational culture reflecting gender equality. Presently, about 31.5% of staff in C-DOT are women.

- All female staff members are allowed to avail up to 180 days maternity leaves and up to 90 days leaves subsequent to that (270 days inclusive of 180 days maternity leave).
 For miscarriage/abortion, leave of a total of 45 days in the entire service span is permissible.
- This year C-DOT has introduced the policy on child care leave. This leave has been granted to eligible female staff on their applying for the same.
- C-DOT offers accommodation and transport benefits to all its women employees with different options that may be availed as per individual needs. This ensures the safety and security of all women employees in the company.
- Reimbursement for residential telephone expenses is admissible to about 100% of the women staff.
- Multifunctional allowance is admissible to 36% of the women employees.



- Career growth opportunities are available to women employees in C-DOT. In the last financial year, of the total employees promoted to higher grades 26% of them were women.
- In management cadres (Team Leaders, Group Leaders, Technical Experts and Sr. Technical Experts) about 17% are women.
- 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.



3.8 WELFARE OF DIFFERENTLY ABLED PERSONS

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

1. CENTRE FOR DEVELOPMENT OF TELEMATICS (C-DOT)

1.1 Recruitment of persons with disabilities

For recruitment of persons with disabilities, C-DOT follows government rules providing for reservation in jobs in C-DOT.

C-DOT has a system in place to look after the welfare of persons belonging to this category and address any problems/complaints that may come up.

1.2 Benefits for persons with disabilities

- C-DOT follows guidelines issued by Government of India with respect to reservations in jobs for persons with disabilities.
- 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)

In respect of schemes for the benefit of persons with disabilities the following schemes are existing in BSNL:

- Double the rates of Transport Allowance are eligible for Physically Handicapped employees.
- As far as possible, subject to administrative constraints, persons with disabilities are posted near their native place 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. MTNL has taken several steps to fulfill its social responsibility and few other innovative schemes are being devised for providing a respected status in the society to these people.

The provisions of reservation for such 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.

As on 31.12.14, 0.465% of the total manpower are Physically Challenged employees.

4. ITI LIMITED

The facilities being provided to persons with disabilities are detailed below:

- PWD employees who are residing in the township are given special allowance at the rate of 5% of Basic pay subject to maximum of ₹ 75/- per month.
- Those employees who are not residing in Company's township but are utilizing Company's Transport for commuting between residence to factory are given special allowance at the rate of 5% of Basic Pay subject to maximum of ₹ 100/- per month.
- PWD employees are permitted 10 minutes grace time to Punch In and Out for marking their attendance at the commencement and closure of shift respectively.
- PWD employees are allotted quarters out of turn basis.
- As per the government directive ITI has been maintaining 3% reservation for PWD in recruitment and the reservation in promotion has also been maintained wherever applicable.
- For PWD candidates, the Company has been relaxing 10 years in age in recruitment for Group C and D posts and 5 years in case of Group A & B posts.

5. TELECOMMUNICATIONS CONSULTANTS INDIA LIMITED (TCIL)

TCIL considers selection of physically disabled as per Govt. of India reservation guidelines at entry level positions. No discrimination is done with physically disabled employees and they are treated equally with other employees. No physically disabled employee is posted in remote sites where harsh conditions/ hardships are involved.





3.9 CITIZEN CHARTER & GRIEVANCE REDRESSAL MECHANISM

The Citizen's/Clients Charter is a written declaration by a Government department that highlights the standards of service delivery that it subscribes to, 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.

Though not enforceable in a court of law, the Citizen's/Client's 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/Clients Charter is to render citizen centric public services by making them demand driven rather that supply driven.

Central Ministry/Departments are expected to design a Client's Charter instead of a Citizen's Charter in case they are not dealing with the public directly.

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

The Citizen's/Client's Charter of Department of Telecom, has been placed in public domain of DoT's website www.dot.gov.in under "Citizen's Charter-RFD format" link. A summarized version thereof is as below:-

S. No.	Services / Transaction	DoT unit	Success Indicator	Service Standard	Unit
1	Issue of Internet License	DDG (DS)	Time taken after the submission of complete application for the issue of letter of Intent (LOI)	60	Days
			Time taken after compliance of LOI conditions and necessary clearances.	30	Days



S. No.	Services / Transaction	DoT unit	Success Indicator	Service Standard	Unit
2	Security clearance for foreign nationals under Internet License	DDG (DS)	Time taken to issue Security clearance for foreign nationals after receiving the clearance from security agencies	30	Days
3	Merger/demergers and amalgamation/ change of name/change of registered office address of the company of licensee.	DDG (DS)	Time taken after receiving of complete application from the licensee.	60	Days
4	Request for surrender of the Internet license	DDG (DS)	Time taken after receiving of necessary clearance to issue of cancellation of license.	60	Days
5	Issuing of direction to Internet service providers for blocking of website/ URL/IP address	DDG (DS)	Time taken after receiving the direction for blocking of website/URL/IP address to issue of letter for blocking to Internet service providers	7	Days
6	Issue of CUG VSAT/ Mobile Satellite Service- Reporting (MSS-R) License	DDG (DS)	Time taken after the submission of complete application to the issue of letter of internet (LOI).	60	Days
			Time taken after compliance of LOI condition and necessary clearance.	30	Days
7	Issuance of Permission for Private Captive CUG networks on OFC or Wireless	DDG (DS)	Time taken after the submission of complete application to the issue of letter of internet (LOI).	60	Days
			Time taken after compliance of LOI conditions for issue of permission to the applicant.	30	Days

S. No.	Services / Transaction	DoT unit	Success Indicator	Service Standard	Unit
8	Issue of In-principle Clearance to Licensees for addition of new satellite services/network	DDG (DS)	Time taken to issue In-principle Clearance to Licensees for addition of new satellite services / network.	30	Days
9	Processing of Foreign Direct Invest (FDI) application	JS(A)	Time taken for scrutiny of application and pointing out discrepancy/shortcomings, if any or seeking additional information required, if any	I I	Days
			Time taken to consult other Divisions of DoT to seek comments/views on FIPB application, if any.	21	Days
			After receipt of complete application in IP Unit in DoT, time taken to process the application referred by FIPB(DEA) and sending comments to FIPB.	30	Days
10	Processing of application from exporters for input- output norms submitted to DGFT	JS(A)	Time taken for scrutiny of application and pointing out discrepancy/shortcomings, if any, or seeking additional information required, if any		Days
			After receipt of complete application in IP Cell in DoT, time taken to process the application referred by DGFT and sending comments to DGFT.	30	Days
			After receipt of complete application in IP Unit in DoT, time taken to process the application referred by DGFT and sending comments.	30	Days



S. No.	Services / Transaction	DoT unit	Success Indicator	Service Standard	Unit
11	Grievance Redressal / Facilitation of Grievance Redressal Process.	DDG (PG)	Time taken to acknowledge and forward a grievance to the concerned units / subordinate organizations.	3	Days
			Interim/Final response to complainant within 60 days of registration/receipt of grievance in PG cell.	90	%
12	Retirement benefits/ revision of pension cases in respect of Government/ BSNL retiring employees/ Pensioners.	DDG (Estt)	Time taken for Checking of received documents and pointing out deficiencies, if any	15	Days
			Time taken for Checking of Employees Service records and pointing out deficiencies, if any in respect of cases received	20	Days
			Time taken for issue of request to concerned administrative units for furnishing the requisite information/documents and to follow-up for the same.	10	Days
			Time taken for preparing the pension calculation sheet after receipt of all the required documents completed in all respect and forwarding to PFP for further action.	25	Days
			Time taken to forward the case of BSNL Corporate office to PFP for further action.	7	Days

S. No.	Services / Transaction	DoT unit	Success Indicator	Service Standard	Unit
13	Issuance of Pensioner's Identity card, service certificate, Qualifying service certificate, Circulation of IDA orders for BSNL pensioner's. Dissemination of information relating to pension matters through website etc.	(Estt)	Time taken for preparation of pensioner's Identity cards from the date of receipt of the application form completed in all respects	20	Days
			Time taken for preparation of service certificate for availing of Telephone concessional facility provided to DOT pensioners.	15	Days
			Time taken to circulate the orders relating to Industrial Dearness Relief from DPE	03	Days
			Time taken for uploading the pension related order to the website from the date of issue of the orders	03	Days
14	Redressal of grievances in respect of DoT/BSNL pensioners / Family pensioners	DDG (Estt.)	Time taken for forwarding of the grievance application to the concerned Subordinate Offices from the date of receipt of the grievance.	05	Days
			Time taken for sorting out of such grievances to this section from the date of receipt of the grievances.	30	Days
15	Appointment of Arbitrator under section 7 B of Indian Telegraph Act 1885 in respect of billing disputes	DDG (TPF)	Time taken from the date of receipt of the fully completed proposal in all respects	14	Days



S. No.	Services / Transaction	DoT unit	Success Indicator	Service Standard	Unit
16	Issue of authorization for National Long Distance (NLD) / International Long Distance (ILD) Service under United Licensing regime.	DDG (CS)	Time taken for Scrutiny of the application form and documents by Licensing Cell. Intimation to applicant of deficiencies/discrepancies, if any.	20	Days
			Time taken for Scrutiny of application by Finance Wing of DoT. Intimation to applicant of deficiencies/discrepancies, if any.	20	Days
			Time taken for Processing and approval of competent authority for issue of letter of Intent(LOI) after fulfillment of all eligibility conditions/submission of requisite documents / clarifications.	20	Days
			Time taken for Issue of LOI to the applicant company by CS Cell after approval of the case. Request for No dues certificate from LF/WPC/WPF Cells of DoT.	5	Days
			Time taken for Receipt for No dues certificate from LF/WPC/WPF Cells of DoT.	45	Days
			Time taken for Signing of the license agreement for NLD/ILD services with applicant company after compliance of LOI conditions and necessary clearances.	10	Days

S.	Services / Transaction	DoT	Success Indicator	Service	Unit
No.		unit		Standard	
17	Security clearance for foreign nationals under NLD/ILD License	DDG (CS)	Time taken for Scrutiny of the application form and documents by Licensing Cell. Intimation of deficiencies/discrepancies to applicant, if any.	15	Days
			Time taken for Sending the proposal for the consideration of security agencies after clarification/clearance of discrepancies.	10	Days
			Time taken for Processing and issuance of approval for Security clearance of foreign nationals after approval from security agencies is received.	10	Days
18	Request for Name change, registered office address change for company holding NLD/ ILD License	DDG (CS)	Time taken for Scrutiny of the application form and documents. intimation to applicant of deficiencies/discrepancies, if any.	20	Days
			Time taken for processing and approval for request for name change for company holding NLD/ILD License.	20	Days
19	Issue of PMRTS/CMRTS License	DDG (CS)	Time taken for Scrutiny and ensuring eligibility of applicant to get the license. After clearance of all deficiencies/discrepancies, if any and forwarding same to TEC/WPC for examination & comments. and to LF/WPC/WPF cells of DoT for "No dues certificate".	20	Days



S. No.	Services / Transaction	DoT unit	Success Indicator	Service Standard	Unit
			Time taken for sending the case for financial vetting/approval on fulfillment of all eligibility conditions/submission of requisite documents/clarifications.	20	Days
			Time taken for Processing and approval of competent authority for issue of letter of intent (LOI) after fulfillment of all eligibility conditions/submission of requisite documents/clarifications.		Days
			Time taken for Issue of LOI to the applicant company by CS Cell after approval of case.	5	Days
			Time taken for Signing of the license agreement for PMRTS/CMRTS services with applicant company after compliance of LOI conditions, clearances including no dues and confirmation from the company to sign the agreement.	10	Days
20	Issue of Registration Certificate to Infrastructure Provider Category-I	DDG (CS)	Time taken for scrutiny of application and intimation to applicant of deficiencies/discrepancies, if any.	15	Days
			Time taken for approval of competent authority for issue of Registration Certificate after clarification of all discrepancies.	20	Days

S. No.	Services / Transaction	DoT unit	Success Indicator	Service Standard	Unit
21	Issue of Voice Mail/ Audiotex/Unified Messaging Service(UMS) License	DDG (CS)	Time taken for Scrutiny and ensuring eligibility of applicant to get the license after clearance of all deficiencies/discrepancies, if any and forwarding the same to LF/WPC/WPF cells of DoT for "No dues certificate" and putting up for financial vetting/approval.	30	Days
			Time taken for Processing and approval of competent authority for issue of letter of Intent(LOI) after fulfillment of all eligibility conditions/submission of requisite documents/ clarifications.	30	Days
			Time taken for Issue of LOI to the applicant company by CS Cell after approval of the case.	5	Days
			Time taken for Signing of the license agreement for Voice Mail/Audiotex/Unified Messaging Service (UMS) license with applicant company after compliance of LOI conditions, clearances including no dues and confirmation from the company to sign the agreement.	10	Days
22	Request for Issue of NOC/ Renewal of the NOC for Sale/Rent of International Roaming SIM Cards and Global Calling Cards.	DDG (CS)	Time taken for Scrutiny and intimation to applicant of deficiencies/discrepancies, if any.	15	Days



S. No.	Services / Transaction	DoT unit	Success Indicator	Service Standard	Unit
			Time taken for Processing and approval of competent authority for issue of NOC/renewal of NOC subject to fulfillment of all eligibility conditions/submission of requisite documents/clarifications.	20	Days
23	Granting of Wireless Licenses (above 806 MHz)	l	Time taken to issue Letter of Intent (LOI) (After receipt of interministerial clearances, if applicable)	30	Days
			Time taken to issue Agreement in Principle(AIP) / Decision letter (DL) letter.	30	Days
			Time taken to issue Wireless Operating License (WOL) against AIP/DL letter	30	Days
			Time taken to renew certificate of (Wireless Operating Licenses) WOL	15	Days
24	_		Time taken to issue letter of intent (LOI). (After receipt of inter ministerial clearances, if applicable)	30	Days
			Time taken to issue AIP/DL letter	30	Days
			Time taken to issue Wireless Operating License against AIP	30	Days
			Time taken to renew the WOL	15	Days
25	Granting of Wireless	ı	Time taken to Issue LOI	30	Days
	Operating Licenses (GSM/3G/PMRTS)	Advisor	Time taken for assignment of frequencies/AIP	30	Days

S. No.	Services / Transaction	DoT unit	Success Indicator	Service Standard	Unit
			Time taken to issue wireless Operating Licenses against assignment of frequencies/AIP	30	Days
			Time taken to issue renewal certificate of WOL	15	Days
26	Operating Licenses		Time taken to issue LOI conveying spectrum	30	Days
	(CDMA/BWA/ISP)		Time taken for assignment of frequencies/Agreement-in-Principle (AIP)	30	Days
			Time taken to issue of Deployment plan and issue of "Wireless Operating Licenses" (WOL) against assignment of frequencies/AIP	30	Days
			Time taken to issue "renewal certificates" of WOL	15	Days
27			Time Taken to issue LOI	30	Days
	Operating Licenses for Satellite Services	Advisor	Time taken to issue AIP letter.	30	Days
			Time taken to issue Wireless Operating License (WOL) against the AIP	30	Days
			Time taken to renew the WOL	15	Days
			Time taken for Endorsement of TV Channel	40	Days
28	Issue of Amateur Station Operator's Certificate (ASOC) licenses/ Certificate of Proficiency (COP) licenses.	Advisor	Time taken for issue of ASOC licenses (Ham Radio Operator licenses) after receipt of the documents completed in all respects	45	Days



S. No.	Services / Transaction	DoT unit	Success Indicator	Service Standard	Unit
			Time taken for renewal of ASOC licenses (Ham Radio Operator licenses) after receipt of the documents completed in all respects	45	Days
			Time taken for issue of Radio Telephony Restricted (Permit) after receipt of the documents completed in all respects	30	Days
			Time taken for issue of Radio Telephony Restricted (Conversion) after receipt of the documents completed in all respects	30	Days
			Time taken for issue of Radio Telephony Restricted (Permit) renewal Certificate after receipt of the documents completed in all respects	30	Days
			Time taken for issue of Radio Telephony Restricted Conversion) renewal Certificate after receipt of the documents completed in all respects	30	Days
			Time taken Issue of renewal Certificate of Global Maritime Distress and Safety System (General Operator Certificate) GMDSS(GOC) renewal after receipt of the documents completed in all respects	30	Days
			Time taken for Issue of renewal certificate of Radio Telephony Restricted (Aeronautical) -	30	Days

S. No.	Services / Transaction	DoT unit	Success Indicator	Service Standard	Unit
			RTR(A) renewal after receipt of the documents completed in all respects		
			Time taken for Issue of renewal certificate of Old Maritime Licenses renewal certificate after receipt of the documents completed in all respect.	30	Days
29	Issue of Standing Advisory Committee on Frequency Allocation (SACFA) Clearance Certificate		Time taken to Issue SACFA Clearance (Full site/Mast Height-7/40 category sites i.e. sites/antennae located at least 7 k.m. from nearest Airport Reference Point (ARP) and an effective tower/mast height not more than 40 meters w.r.t. ARP site elevation)	30	Days
			Time taken to Issue SACFA Clearance (Full site/Mast Height-Sites other than 7/40 category)	60	Days
			Time taken to Issue sitting clearance for sites under "Exemption category"	30	Days
			Time taken to issue Additional Antenna Clearances	30	Days
30	Promotion of research and development in Telecommunications through C-DoT		Timeframe to get the plan approved from the date when complete Business Plan is received.	90	Days
			Timeframe to get the MoU Signed from the date when draft MoU is received.	60	Days



S. No.	Services / Transaction	DoT unit	Success Indicator	Service Standard	Unit
			Timeframe to get the review of performance approved from the date when physical and financial achievement statement is received from C-DOT.	1 1	Days
			Timeframe to put up the CDOT request for release of Grants for financial scrutiny on receipt from CDOT	15	Days
			Timeframe to obtain the administrative approval from competent authority and issue of sanction Memo after receipt of financial concurrence	15	Days
			Time to get the Annual Report in Parliament from the date when the audited Annual Report alongwith performance review report is received from C-DOT	60	Days
31	Administration of National Numbering Plan	DDG (AS)	Time taken after receipt of application and allocation of code	1	Days
32	Security clearance for Lawful interception monitoring capabilities	DDG (AS)	Time taken after receipt of application and issuance of letter for fixing demonstration date.	15	Days
			Time taken after receipt of report from security agencies and issuance of directions to licensee	1 1	Days

Grievance Redressal Mechanism

The responsibility of redressal of grievances lies with the concerned organizations/subordinate units/PSUs/administrative sections of the Ministry/Service providers (in case of a service grievance). However, PG Cell of DoT, without prejudice to the right of a complainant to approach an appropriate court of law, acts as a facilitator for resolutions of grievances so received. A complainant may approach to public grievance cell of Department of Telecommunications (DoT), Sanchar Bhawan, 20, Ashoka Road, New Delhi-110001 along with documentary evidence for non-redressal of grievance at concerned Organization/Service Provider level through following means:

- (a) By Post: Public Grievances Cell, Deptt. of Telecom, Room No. 804, 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
 - i) With an object 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 time (24x7) 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 using any Browser interface.
 - 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.

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4. TELECOM REGULATORY AUTHORITY OF INDIA

The Telecom Regulatory Authority of India (TRAI) was established under the TRAI Act 1997. Subsequently, Broadcasting and Cable Services were also brought within the definition of 'telecommunication service'. 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.

TRAI has played catalytic role in the development of the telecom, broadcasting and cable services. It has been its endeavor to provide an environment, which is fair and transparent, encourages competition, promotes a level-playing field for all service providers, protects the interest of consumers and enables technological benefits to one and all.

Under the TRAI Act, 1997, TRAI is mandated, inter-alia, to ensure compliance of the terms and conditions of license, lay down the standards of quality of service to be provided by the service providers and ensure the quality of service, specify tariff policy and recommend conditions for entry of new service providers as well as terms and conditions of license to a service provider. TRAI's scope of work also includes consideration and decisions on issues relating to monitoring of tariff policy, commercial and technical aspects of interconnection, principles of call routing and call handover, free choice and equal ease of access for the public to different service providers, resolution of conflicts that may arise due to market developments and diverse network structures for various telecom services, need for up-gradation of the existing network and systems, and development of forums for interaction amongst service providers and interaction of the Authority with consumer organizations.

An important aspect of TRAI's functions as mandated under the TRAI Act is to make recommendations to the Government on diverse subjects including market structures and entry of new operators in the sector, the licensing framework, management of scarce resources such as spectrum, consumer safety and security. Under this mandate, several significant policy regulatory recommendations were made during the year.

1. RECOMMENDATIONS

The authority has made following recommendations during 2014-15:

- a) Recommendations dated 1st May 2014 on 'Definition of Adjusted Gross Revenue (AGR) in Licence Agreements for provision of Internet services and minimum presumptive AGR'.
- b) Recommendations dated 12th May 2014 on 'INMARSAT/Satellite Phone services'.

- c) Recommendations dated 21st July 2014 on 'Full Mobile Number Portability'.
- d) Recommendations dated 21st July 2014 on 'Guidelines on Spectrum sharing'.
- e) Recommendations dated 22nd July 2014 on 'Improving telecom services in Andaman and Nicobar Islands (ANI) and Lakshadweep.
- f) Recommendations dated 29th August 2014 on 'Allocation and pricing of Microwave Access (MWA) and Microwave Backbone (MWB) RF carriers'.
- g) Recommendations on "Valuation and Reserve Price of Spectrum: Licences expiring in 2015-16" dated 15th October 2014.
- h) Recommendations on Valuation and Reserve Price of Spectrum: 2100 MHz Band dated 31st December 2014.

2. **REGULATIONS**

The authority has issued following regulations during 2014-15:

- a) "The Telecom Commercial Communications Customer Preference (Fifteenth Amendment) Regulations, 2014" dated 7th April 2014.
- b) "The Quality of Service of Broadband Service (second amendment) Regulations 2014 dated 25th June, 2014.
- c) The Telecommunication Consumers Education and Protection Fund (Third Amendment) Regulations 2014 dated 26th June 2014.
- d) The Telecommunications Consumer Redressal (Third Amendment) Regulations 2014 dated 1st July, 2014.
- e) The "Standards of Quality of Service for Wireless Data Services (Amendment) Regulations, 2014", dated 24th July, 2014.
- f) The International calling card services (access charges) Regulations 2014, dated 19th August 2014.
- g) The Standard of Quality of Service of Basic Telephone service (wireline) and Cellular mobile telephone service (Third Amendment) Regulations 2014 dated 21st August 2014.
- h) The Telecom Commercial Communications Customer Preference (Sixteenth Amendment) Regulations, 2014 dated 10th December 2014.

3. TELECOMMUNICATION TARIFF ORDERS

The Authority issued following tariff orders during 2014-15:

a) The Telecommunications Tariff (Fifty Seventh Amendment) Order dated 14th July 2014



- b) The Telecommunications Tariff (Fifty Eighth Amendment) Order dated 1st August 2014
- c) The Telecommunication Tariff Order (Fifty ninth Amendment), 2014 dated 21st November 2014.

4. OTHER ACTIVITIES

Seminar / Workshop / Study tour relating to development of 'smart cities'.





5. TELECOM DISPUTES SETTLEMENTS & 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 off appeals and to protect the interests of service provides 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, licensee, and a group of consumers. In January, 2004 the jurisdiction of TDSAT was extended to include broadcasting and cable services besides telecommunication services.

The jurisdiction of TDSAT is exclusive and its orders can be challenged before Hon'ble 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 present Chairperson is a former Judge of the Supreme Court of India while the present Member comes with a background of 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 ₹ 5,000/-, ₹ 10,000/- and ₹ 1,000/- respectively.

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

The number of cases in the Tribunal has been increasing since its establishment in May, 2000. The total number of cases filed before TDSAT in the 2001 were 105 (including Petition/Appeal/E.A./R.A./M.A.), which increased to 851 in 2010. From 01.01.2011 to 31.12.2011, a total number of 911 cases were filed in TDSAT. From 1.1.2012 to 31.12.2012, 1786 cases were filed. During 01.01.2013 to 31.12.2013 a total of 940 cases were filed. During 1.1.2014 to 31.12.2014 a total number of 926 cases were filed. In the current year a total number of 26 cases have so far 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 31.12.2014, 7245 cases have been disposed off out of 8490 cases instituted during that period. Statements of cases filed, disposed off and pending since 2001 till 31st December, 2014 and 1st to 13th January, 2015, are enclosed.

TDSAT, since its inception, has delivered land mark judgments in cases of Telecom as well as Broadcasting & Cable Services 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 previous years i.e. 2012-13 & 2013-2014, the Tribunal had organized the Seminars at Srinagar, Patna, Jaipur and Shimla. The Tribunal has also organized a seminar at Gangtok during this financial year and also proposes to organize another seminar. 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 has recently set up a Mediation Centre for speedy settlement of disputes between the parties. The Mediation Centre has started functioning w.e.f. 29.7.2013 and it has been successful in settlement of 86 cases till 13.01.2015.



STATEMENT OF INSTITUTION, DISPOSAL AND PENDENCY OF CASES AS ON 13th JANUARY, 2015

S.No.	o. Discription								Institution	u								
		2001	2002	2003	2004	2002	2006	2007	2008	5009	2010	2011	2012	2013	2014	2015	Total	
-	Petition	24	20	50	99	155	328	333	271	284	437	523	981	478	545	8	4463	
2	Review Petition	0	1	2	2	3	7	17	5	6	11	14	19	6	11	0	110	
3	Appeal	12	15	35	9	12	18	15	11	6	11	2	22	19	7	0	190	
4	Received on Transfer from Trai	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	
2	Received on Transfer from High Court	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	13	
9	On Remand from SC	2	-	-	0	2	က	10	9	10	-	0	0	0	0	0	93	
7	Executition Applicaton	0	0	0	7	2	18	27	4	10	38	24	46	15	27	0	216	
	Total	22	37	22	0/	174	374	402	297	322	496	563	1068	534	230	8	5047	
	M.A.	48	22	48	176	253	148	165	214	179	355	348	718	406	336	19	3470	
	Grand Total	105	94	103	246	427	522	292	511	501	851	911	1786	940	976	27	8517	
									Disposal	-E								Pendency
		2001	2002	2003	2004	2002	2006	2007	2008	5009	2010	2011	2012	2013	2014	2015	Total	
-	Petition	24	20	20	56	155	328	333	271	281	436	488	692	299	219	0	3633	830
7	Review Petition	0	-	2	2	က	7	17	2	တ	=	41	91	6	∞	0	104	9
က	Appeal	12	15	32	5	12	18	15	11	6	11	2	22	18	0	0	182	8
4	Received on Transfer from Trai	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0
2	Received on Transfer from High Court	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	13	0
9	On Remand from SC	5	1	1	0	2	3	3	2	0	0	0	0	0	0	0	17	22
7	Executition Applicaton	0	0	0	7	2	18	27	4	2	34	24	37	လ	12	0	173	43
	Total	27	37	22	0/	174	374	395	293	304	492	539	292	342	239	0	4138	606
	M.A.	48	57	48	176	253	148	165	214	179	353	345	829	327	123	3	3117	353
	Grand Total	105	8	163	246	427	225	290	202	483	845	884	1445	699	362	က	7255	1262





6. AUDIT OBSERVATION OF C AND AG

Status of C&AG Audit Paras pending as on 31st December 2014 is as under:

S. No.	Year	Report No.	No. of paras/ PA on		e CAG Paras/PA are pending as	•
			Reports which ATNs have been submitted to PAC after vetting by Audit (from April 2014- December, 2014)	the Ministry even for	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	Nil	Nil
2	2002-03	2 of 2004	Nil	Nil	02	Nil
3	2003-04	2 of 2005	Nil	Nil	01	Nil
4	2004-05	9 of 2006 (NTR)	Nil	Nil	01	Nil
5	2006-07	CA 1 of 2008	Nil	Nil	01	Nil
6	2009-10	19 of 2010-11#	Nil	Nil	Nil	Nil
		Total	Nil	Nil	05	Nil

- 1. Total C&AG Audit Paras of DoT pending as on 31/12/2014 = 09
 - a) 01 ATN on Para No. 5 of C&AG Report No.6 of 1998 have been sent to O/o DG Audit (P&T) for vetting remarks.
 - b) 03 ATN s on Para no. 3.1 to 3.3, 4.1 to 4.11 and 5.1 to 5.5 of C&AG Report No.19 of 2010-11 have been sent to O/o DG Audit (P&T) for vetting remarks.
- 2. Total Paras of PAC Report pending as on 31/12/2014=3
 - **3 Paras pending for the 49th Report of PAC on 'Administration of Universal Service Obligation (USO) Fund'. Out of these 03 Paras, 02 Paras have been replied and sent to O/o DG Audit (P&T) for vetting remarks. Advance copies of ATNs furnished.





7. CENTRE FOR DEVELOPMENT OF TELEMATICS (C-DoT)

C-DoT, DoT's R&D centre 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 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.

1. ACCOMPLISHMENTS DURING FY 2014-2015

During 1st three quarters of the FY 2014-2015, significant progress has been made in the development of state-of-the-art cutting edge technologies, technology trials, efforts in technologies' commercialization, which include signing of MoUs with manufacturers, technologies' promotions, showcasing to prospective vendors, building requisite IPR assets, etc.

Some of the major technology projects, wherein progress has been made are summarized below:

1.1 Broadband technology

Broadband technology development includes multi-terabit router (commercial-grade multi-system development. Software adaptations for IMS 70% completed and for LTE 80% completed & function testing ongoing in the lab. Multi terabit router hardware implementation, system integration & testing and system validation commenced.

1.2 Next generation mobile technology

Activities on next generation mobile technology comprise of development for Long Term Evolution-Advance (LTE-A), 4th generation mobile technology and fixed-and-mobile converged platform for delivery of services to fixed and mobile subscribers.

LTE-A technology development activities accomplished during the year include ToT process initiation for femto LTE system in FDD band and development completed for LTE femto in TDD band. Beside, significant progress also made to complete various other nodes, namely, RRH (Remote Radio Head) in TDD band, RRM (Radio Resource Management), SON (Self Operating Network), and OAM (Operation and administrative Module), and their lab testing presently ongoing.

Besides, development also completed for copper access node, integrated release of Fixed Line Prepaid (FLPP) and online recharge server with IMS core.

1.3 Carrier networks transport technologies

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

- a) Optical Aggregation and Access System (OAAS) next generation PON technology, namely, 32G PON system based on WDM. Development for WDAN ONT and OLT completed. Integration and testing in the lab in-progress.
- b) Optical Core Network (OCN) a 100G DWDM transport network system. Development completed for the terminal equipment with 100G muxponder; system integration and testing for partially equipped TEs (Terminal Equipment) with 100G muxponder is inprogress. Besides, development for TE with 40G muxponder is also in-progress.



Research & Development work at C-DoT

1.4 Telecom services and applications

Telecom services and applications aims to build software platform, applications to address changing technology trends towards convergence of applications, networks, contents and



value-added services creating differentiation. Presently, development for following software platforms are ongoing.

- a) Unified NMS (UNMS) a converged NMS platform, which facilitate in monitoring and managing service providers' network and services. Generic UNMS platform development in-progress supporting host of network management functionalities addressing requirements of different networks, namely, NFS, TSPs, ISPs, etc. Separate Software releases for PoC in the NFS network and pilot trial in other clients' network - TSPs /ISPs, etc. have been made ready.
- b) Customized Platform for Rural Services (CPRS) software platform for building rural applications with advance features gesture / speech recognition, Near Field Communication (NFC), etc. The features implemented, include Adhar online authentication, gesture recognition, video conferencing, etc. Pilot trial for the platform also commenced.

1.5 Secure wireless and wire-line networks

Activities under this technology scheme aims at creating intra and inter department secure communication network within various ministries of the government. Under the scheme, project WiPS (Wireless Phone Secure) is ongoing, which involve development of core network elements, end user device(s) for setting-up a secure mobile wireless network using standard wireless technologies, like, 3G, WiFi.

The design for the end-user device - secure tablet (ver.2), has been completed and packaging design ongoing.

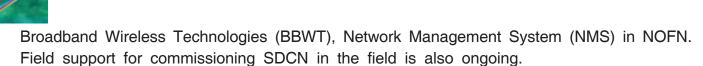
1.6 Satellite based technology

Development completed for individual modules, namely, modulators/de-modulators of satellite hub baseband subsystem; terrestrial gateway sub-system. Satellite hub baseband subsystem's modules' integration and testing ongoing.

1.7 Enhancements, new features, upgradations, adaptations and technical support for developed technologies including the North-East program

This scheme focuses on development efforts related to enhancements, evolution, feature addition, scalability, value addition and customization for changing requirements. These are envisaged for developed, deployed and to be deployed technologies of C-DOT.

For roll-out of MAX-NG technology in the BSNL network, technology manufacturer has been geared-up for manufacturing, core network equipment supplied on site and installation ongoing. Similarly, in the MTNL network, NGN trial network has also been set-up for roll-out of NGN technology and 1000 land connections of legacy PSTN technologies have been migrated to C-DOT NGN technology. Besides, regular support is also ongoing for field issues, manufacturing support for Optical Technology - GPON in NOFN, and deployment of



1.8 Process improvement

The organization was successfully apprised for CMMI maturity level-5. High maturity (CMMI level - 4 & 5) process definition were stabilized through implementation and refinements. Further, all process practices (upto maturity level 5) were internally audited regularly.

IPRs, papers presentations and publications

Intellectual Property Asset	No.	Related project / product	Subject invention
Patents Filed	3	DRAX	Gesture Based Human Machine Interface Using Marker
		MLLN	(i) A Communication System For Managing Leased Line Network And A Method Thereof (In USA, UK, CHINA, CANADA)
			(ii) Communication System For Managing Leased Line Network With Wireless Fallback (In USA, UK, CHINA, CANADA)
Patents Granted	2	All products -Tool for rework in assembly	Heatsink Adapter Removal Tool For Ball Grid Arrays
		ATM	ATM Switch
Design Filed	2	MAX-NG	Line Access Gateway Chassis
		GPON (Titli Damak)	Electronic Equipment For USB Charging And Holding Portable Communication Devices
Design Granted	1	GPON	Enclosure For Cable Management
Papers presented in the national and international conferences and seminars	1	DRAX	Paper on "A comprehensive review of embedded system design aspects for rural application platform" has been submitted in International Journal of Computer science (Under Review)



2. BUSINESS PROMOTION

On the occasion of 'Good Governance Day', celebrated on December 25, 2014, by the Government, C-DOT dedicated its two citizen-friendly technologies, namely, 'GyanSetu' and 'MAX-NG' to the Nation. These technologies were transferred to Electronics Corporation of India Limited (ECIL) for mass manufacturing and deployment of the equipment and shall prove to be the stepping stones towards taking the benefits of Internet Services to the masses of the country. On this occasion, C-DOT also exhibited its current set of products at Manekshaw centre, Delhi and more than 125 visitors from Government, defence and private sectors, visited C-DOT stall. Online real-time demonstrations of the products were shown.



Workshop on "TSDSI - On the Path to Global Standards" was held on 14th October, 2014 at C-DOT Campus, New Delhi which has been inaugurated by Shri Ravi Shankar Prasad, Hon'ble Minster Communications & IT.





Launch of C-DOT GyanSetu (R) and Unveiling of Transfer of Technology (ToT) package of C-DOT MAX-NG & GyanSetu (L) by Hon'ble Minister of Communications & IT, Shri Ravi Shankar Prasad during Good Governance Day function on December 25, 2014 in Delhi.

C-DOT also participated in the number of conferences / exhibitions, namely, Israel Innovation Conference, MXIiii 2014 (May20-22, 2014) held in Tel Aviv, Israel; 5th Strategic Electronics Summit 2014 (SES 2014) - Defence & Aerospace (July 30 - 31, 2014) by ELCINA at Bangalore; DEFTRONICS-2014 (September 23 - 25, 2014) at Bangalore Defcom 2014 (November 17-18, 2014) held at Manekshaw Centre, Delhi. State-of-the-art C-DOT technologies had been showcased in these exhibitions.

C-DOT launched India's first indigenous Terabit router, which addresses the needs of service providers for next generation core network for data centre, at TSDSI function held at C-DOT Campus on October 14, 2014. Hon'ble Minister of Communications & IT, Shri Ravi Shankar Prasad inaugurated C-DOT Terabit Router along with GPON based Fiber-to-the-Desk (FTTD) solution.



Inauguration of C-DOT's Terabit Router & FTTD solution by Hon'ble Minister of Communications & IT, Shri Ravi Shankar Prasad, on 14th October 2014 at C-DOT Campus, Delhi

C-DOT Hosted IEEE International Conference on Advance Network and Telecommunication System (ANTS) from December 14-17, 2014 at C-DOT Delhi, inaugurated by Hon'ble Minister of Communication &IT, Shri Ravi Shankar Prasad at CDOT Campus.

3. MoUs, NDAs, ToT AGREEMENTS

During the period 10 nos. of various agreements, namely, MoU, project agreements, ToT,



signed with prospective PSUs, manufacturers for technology implementations, manufacturing, customized development, etc. The details are as given below.

S. No.	Strategic Partner	Purpose
Α	MOUs / Project Agreements	
1		C-DOT'S customized NMS for pan- India rollout of the NOFN
2	Bharat Broadband Network Ltd. (BBNL)	Implementation of Telecommunication Geo-Intelligence Solution for Survey Report Analysis and GPON Planning for NOFN
3	Bharat Electronics Ltd. (BEL)	Requirements of NFS TENDERS of BSNL for Army and Navy
4	Electronics Corporation of India Ltd. (ECIL)	Requirements of NFS Tenders of BSNL for Army and Navy, and AFNET Tender of Air Headquarters
5	Bharat Sanchar Nigam Ltd. (BSNL)	Technical Field Support in BSNL network
В	TOT Agreements	
1	Rajasthan Hybrids Pvt. Ltd. (RHPL)	C-DOT GPON System
2	Bharat Electronics Ltd. (BEL)	C-DOT Layer 2 Switch
3		C-DOT MAX-NG Technology
4	Electronics Corporation of India Ltd. (ECIL)	C-DOT Stackable Terabit Router
5		C-DOT Broadband Wireless Terminal

Besides, 36 nos. of Non-Disclosure Agreements (NDAs) also signed, cover exchange of confidential information related to joint development projects, outsourced components, transfer-of- technology and participation in tenders.





8. PUBLIC SECTOR UNDERTAKINGS (PSUs)

		Pages
8.1	BHARAT SANCHAR NIGAM LIMITED (BSNL)	111-119
8.2	MAHANAGAR TELEPHONE NIGAM LIMITED (MTNL)	121-126
8.3	ITI LIMITED	127-132
8.4	TELECOMMUNICATIONS CONSULTANTS INDIA LIMITED (TCIL)	133-137
8.5	BHARAT BROADBAND NETWORK LIMITED (BBNL)	139-140
8.6	HEMISPHERE PROPERTIES INDIA LIMITED (HPIL)	141



8.1 BHARAT SANCHAR NIGAM LIMITED (BSNL)

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 no. of work force of around 2.29 lakh as on 31/12/2014. 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 wireline, 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.

1. HIGHLIGHTS

The details of physical targets and achievement for the year 2014-15 are given as under:-

1.1 Achievement during Financial Year 2014-15 (up to 31.12.2014)

			MOU for the year 2014-15				
S. No.	Item	Unit	Target (2014-15)	Status as on 01.04.2014	Status as on 31.12.2014	Achievement	
1	Total Telephone Connection	Lakh	100	1131.38	983.18	(-) 148.2	
1 (a)	Wire-line	Lakh	-	184.88	169.33	(-)15.55	
1 (b)	WLL	Lakh	-	22.49	20.45	(-)2.04	
1 (c)	Mobile	Lakh	100	924.00	793.40	(-)130.6	
2	Broadband (DSL+FTTH+ EVDO+WiMAX)	Lakh	30	99.28	99.34	0.06	
3	Rural Telephone	Lakh	-	384.21	331.09	(-) 53.12	
4	VPT	No.	-	578,267	577,202	(-) 1,065	

1.2 Financial Performance

The details of profit / loss figure for the year 2011-12, 2012-13, 2013-14 & 2014-15 (up to 30.09.2014) are given as under:

(Figures in ₹ Crore)

Financial Year	2011-12	2012-13	2013-14	2014-15 (Up to 30.09.2014)*
Total income	27,934	27,128	27,996	14,125
Total expenditure	36,586	34,900	34,930	17,821
Net profit	(-) 8,851	(-) 7,884	(-) 7,020	(-) 3,786

Note: * Data is Provisional & Un-audited

1.3 Computerization & Information Technology in BSNL

a) Achievements during the year 2014-15

- (i) Procured 8,73,700 CLIP (Caller Line Identification Phone) instruments till date in the FY 2014-15.
- (ii) A/T and V/T (Validation Testing) for NGN Equipments supplied by L-1 bidder for Core and Access is being done.
- (iii) Purchase Order for Phase-I NGN Access Equipment to L-2 bidder and RQ Quota to M/s ITI has been issued. Equipments delivery and installation work is under progress.
- (iv) Purchase Order for Phase-I NGN Core Equipment to L-2 bidder has been issued. Equipment delivery and installation work is under progress.
- (v) Purchase Order has been issued for C-DOT MAX -NG Project of 100 sites in First Phase.
- (vi) Purchase Order have been issued by all Circles against the Authorizations issued by MM Cell for procurement of 50% Add-on quality of PIJF U/G cable of 10, 20, 50, 100 and 200 Pair sizes against current tender. Supplies by vendors to some Circles has also started w.e.f Nov. 2014.
- (vii) A new tender for procurement of 15.59 LCKM PIJF U/G Cable has been issued on 12.12.2014.
- (viii) Regarding implementation of IPV6, PO has been placed vide WO No. ITPC/CDR-Project/IPV6/2012-13/58&59 dated 27.07.2014.
- (ix) FTTH solution deployed in all four Data Centre under the control of CGM ITPC and work in progress for migration of FTTH service on CDR System.
- (x) Implementation of IPV6 and provisioning / billing of FTTH and leased circuits in CDR System.

b) Enterprises Resources Planning (ERP) System Implementation

The implementation of ERP in BSNL was planned in two phases i.e Phase-I Proof of Concept (POC), Phase-II Rollout. The ERP had been implemented in 7 POC Circles / units viz; Telecom Factory, Mumbai, ALTTC Ghaziabad, WTP Mumbai, STR Karnataka, BSNL Corporate Office, Maharashtra. Rollout Phase has already been started in remaining Circles/Units. The ERP had been implemented in NATFM in February, 2014.

The ERP had been implemented in 17 Circles / Units viz; Gujarat, BBNW, TS Circle Kolkata, AP Circle, NCNGN, CPAO (ITI bills) - Bangalore, BRBRAITT, Punjab, QA, STP, WTR and Inspection Circle (T&D), NTP, Chennai Telecom Distt., Rajasthan Telecom Circle, Tamil Nadu Telecom. Circle, Kerala Telecom Circle during April-December, 2014.



1.4 Rural Telephony

a) Village Public Telephones [VPTs]

- (i) BSNL has covered 5,77,202 villages as per census 2001 with VPT facility in the country up to 31.12.2014 out of the 5,93,601 inhabited villages.
- (ii) An agreement was signed with USOF in February 2009 to provide subsidy support for provision of VPTs in 62,443 (Now proposed to be revised in 61,254 VPTs sent to USOF, DoT for approval) inhabited and uncovered villages as per census 2001 in the country. As on 31.12.2014, 51,340 VPTs have been provided by BSNL (including 419 MHA VPTs). The dropping of 7,571 non-feasible villages has already been sent to USOF, DoT. The balance villages will be covered up to 31.03.2015.



Hon'ble MoC&IT Shri Ravi Shankar Prasad during the inauguration of the Wi-Fi Zone at Sheetla and Dashashmedh Ghat in Varanasi under Digital India Programmes on 08.02.2015



Hon'ble MoC&IT Shri Ravi Shankar Prasad is inaugurating the Wi-Fi Zone at Sheetla and Dashashmedh Ghat in Varanasi under Digital India Programmes on 08.02.2015

2. TELECOM FACTORIES

BSNL Telecom factories are In-house manufacturing units of the BSNL and located at Kolkata, Gopalpur, Kharagpur, Jabalpur, Bhillai, Richhai and Mumbai. TF Mumbai is ISO 14000:2004:18001:2007 OHSAS certified and all other factories are ISO 9001:2008 certified. Presently, these factories are engaged in production of SIM Card, PLB HDPE Telecom Duct, OFC Accessories, FDMS, SS Drop wire, Jointing Kits, Transit Safety Device, LJU cum splitter, DDF, Towers & others & other conventional items such as Mini Pillar, CD Cabinet, CT Box, DP Box LJU etc. In the ever changing Telecom scenario, it is the endeavor of the Telecom Factories to venture into new technology areas and support BSNL as manufacturing cum service support organizations.

Amidst all constraints posed by declining demand of almost all conventional products, decreasing work force and inter operator competitive environment, factories have tried their best to meet the requirement of various telecom goods in the BSNL field units upto Dec, 2014 of the current financial year.

3. INTERNATIONAL RELATION

A total of 30 BSNL officers were deputed abroad during the period April - December 2014 (2014-15) for various events with details as under:

- a) Six (6) officers were deputed as trainers for delivery of international training on different courses under CTO PDT Training Programme
- b) Twenty Four (24) officers were deputed for attending exhibitions / meetings / conferences/ business visits to have first hand information on latest developments taking place in telecommunications.

4. TRAINING

- **4.1** BSNL has 30 Telecom Training Centres countrywide comprising of three APEX level Training Centres namely:
- a) Advanced Level Telecom Training Centres (ALTTC), Ghaziabad.
- b) Bharat Ratna Bhim Rao Ambedkar Institute of Telecom Training (BRBRAITT), Jabalpur
- c) National Academy of Telecom Finance and Management (NATFM) Hyderabad.
- **4.2** In terms of training in the current year 2014-15 (upto 31.12.2014) are given as under:
- a) Induction training to Fresh Recruits: 1,168
- b) In-house training to Executives/Employees: 25,686
- c) Mandatory Training for Executive under EPP in e-mode: 4,163



4.3 BSNL-AICTE Employability Enhancement Training Program

Under this initiative training is being imparted to 5th, 6th & 7th semester engineering students allotted by AICTE. During the academic year 2014-15, a total of 7,674 students have been allotted by AICTE and Silver Certificate course is in progress.

4.4 Training Revenue

During the period April 2014 to Dec 2014, training centers / field units have reported revenue of ₹ 16.69 Crore by providing vocational training to 67,283 students / external trainees.

4.5 Skill Development initiatives under New Telecom Policy (NTP 2012)

Under this scheme, 17 Premier Telecom Training Centres (ALTTC, BRBRAITT and 15 RTTCs) of BSNL have been registered under the skill building initiatives spearheaded by NTIPRIT of DOT.

4.6 NSQF (National Skill Qualification Framework)

In place of National Vocational Educational Qualification Framework (NVEQF) Government has introduced National Skill Qualifications Frameworks (NSQF). BSNL has developed (by ALTTC) 10 levels for NSQF in Telecom sector for 7 streams and submitted to DOT / NTIPRIT.

4.7 Telecommunications Standards Development Society, India (TSDSI) Membership

BSNL has become a member of Telecommunications Standards Development Society, India (TSDSI), under Govt. category. TSDSI is a DOT support telecom industry wide initiatives and involved in developing / promoting India specified requirements.

BSNL officers have been nominated for active participation in the following study groups of Telecommunications Standards Development Society, India (TSDSI):

- a) Machine to Machine (M2M) communication group
- b) Core Networks (CN) study group
- c) Radio Networks and Spectrum (RNES)

5. DEVELOPMENT OF TELECOMMUNICATION FACILITIES IN SELECTED AREAS

5.1 Special Component Plans

Annual Plan of BSNL pays special emphasis on accelerated growth of telecommunication facilities under Special Component Plans in (1) North Eastern Region and (2) Tribal Subplan in Tribal Areas.

5.2 Network Status of NE Region States

The status of telecom facilities as on 31.12.2014 in each of the state of North East Region



is shown in the following table:-

S. No.	Name of State	Telephone Exchange (Wire-line)	Capacity	Total DELs (Wire-line+ Wireless)	Broadband Connection	VPTs (As per census 2001)
1	Assam	577	21,64,153	14,53,669	94,829	24,692
2	NE-1	199	11,31,614	7,32,684	41,022	6,852
2(a)	Meghalaya	50	3,80,766	2,03,170	41,022	5290
2(b)	Mizoram	65	2,43,032	1,86,345		704
2(c)	Tripura	84	5,07,817	3,43,169		858
3	NE-II	220	9,38,169	9,31,994	23,190	6,247
3(a)	Arunachal Pradesh	108	3,48,559	3,67,549	23,190	2,810
3(b)	Manipur	48	2,61,299	2,36,086		2,174
3(c)	Nagaland	64	3,28,311	33,28,359		1,263
4	Sikkim	48	1,64,448	62,491	3,538	429
	NE Region	1,044	43,98,384	31,80,838	1,62,579	38,220

5.3 Development Status

Target and achievement during the year 2014-15 for the North East Region are as follows:-

S. No.	Items	Target (2014-15)	Status as on 01.04.2014	Status as on 31.12.2014	Achievement
1	Total Switching Capacity	2,83,700	42,47,660	43,98,384	1,50,724
1(a)	Wire-line	-	10,36,858	10,25,506	(-) 11,352
1(b)	WLL	-	4,63,310	4,63,410	100
1(c)	GSM	2,83,700	27,47,492	29,09,468	1,61,976
2	Total Telephone Connection	5,11,900	32,71,071	31,80,838	(-) 90,233
2(a)	Wire-line	3,000	3,33,543	3,16,255	(-) 17,288
2(b)	WLL	-	2,53,640	2,41,837	(-) 11,803
2(c)	Mobile	5,08,900	26,83,888	26,22,746	(-) 61,142
3	Broadband	59,306	1,61,502	1,62,579	1,077
4	Rural Telephone	-	10,59,011	10,52,380	(-) 6,631
5	VPT	1,549	38,140	38,220	80



6. TRIBAL SUB PLAN

- **6.1** 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:
- a) to provide the telephone facility on demand in tribal areas
- b) to provide NSD facility to all exchanges in tribal areas and
- c) to provide public telephone in all tribal villages.
- **6.2** 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.

6.3 Targets and achievements for the year 2014-15 under Tribal-sub-plan (TSP) are as follows:-

		2014-15		
SI. No.	Items	Target	Achievement during 2014-15 (up to 30.09.2014)	
1.	Wireline Telephone exchanges	-	(-) 27	
2.	Switching Capacity (Wireline + Wireless)	11,85,597	36,505	
3.	DELs (Wireline + Wireless)	14,46,381	(-) 2,70,984	
4.	OFC (RKms)	15,47	306	
5.	Broad band Connections (in nos.)	1,17,312	4,382	

7. WELFARE MEASURES / FACILITIES / SPORTS UNDERTAKEN BY BSNL

BSNL is running various welfare programmes for its employees and their family members as part of BSNL's welfare measures for the year 2014-15.

7.1 Welfare Schemes

Some of the salient welfare schemes are reproduced below:

- a) Grants of Scholarship / Book Awards to the wards of BSNL Employees.
- b) Financial assistance of up to ₹ 25,000/- in case of serious illness or major surgical treatments...

- c) Immediate financial assistance of ₹ 15,000/- to the family of the BSNL employees who die in harness irrespective of basic pay limit.
- d) Financial assistance to the tune of ₹ 7,000/- per employee who are the victims of Natural Calamities / Communal riots / terrorist attacks etc.
- e) Organizing of Drawing Competitions.
- f) Transport subsidy to the tune of 75% for organization of Excursion trip.
- g) Grant in Aid to Recreation Clubs in each Circle / SSA.
- h) Grant in Aid to RWA's
- i) 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:
 - Setting up of Crèches for child care in P&T residential colony and in offices.
 - TWCO/TWWO have been allowed usage of computer facilities of Telecom Training Centre for imparting training to the children and spouses of BSNL employees.

7.2 Holiday Homes

There are 37 Holiday Homes all over the country for use by its employees and their family members.

7.3 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 Scholarships, Book Awards. In the case of girl students 15% relaxation is being given for grant of Book awards and 10% in scholarship.

7.4 Sports

BSNL is encouraging its employees to participate in various sports activities by annually organizing 15 Games and one Cultural competition. This year an allocation of ₹ 2 crores has been sanctioned for sports.

- a) Sanchar Krida Award / Cash Awards are given to sportsmen who excel at National and International level.
- b) BSNL Sports Board is affiliated with 12 Sports Federation of India.
- c) Financial as well as organization support is being given for organizing 15 All India BSNL sports tournaments and one cultural meet. Besides that BSNL has also been organizing one Public Sector Tournament.



8. STAFF STRENGTH

Total number of working employees as on 31.12.2014 is as follows:

		Employees	-Scheduled			
Group	Number of employees	Scheduled Caste	Scheduled Tribe	Ex- Servicemen	Women Employees	
Executive	47,582	7,793	2,402	141	7,853	
Non-Executive	1,81,865	33,199	9,422	417	26,307	
Total	2,29,447	40,992	11,824	558	34,160	
Number of Disabled employees as on 31st December 2014 is 556						



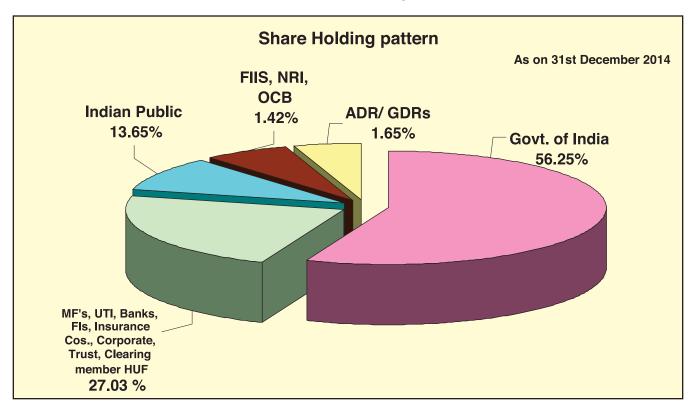


8.2 MAHANAGAR TELEPHONE NIGAM LIMITED (MTNL)

Mahanagar Telephone Nigam Limited (MTNL) was incorporated on February 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 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.

Further, MTNL is providing dial up internet services in Delhi and Mumbai under separate nonexclusive license agreement. MTNL launched Broadband service based on the state of the art ADSL2+ technology in the year 2005. MTNL launched 3G services in 11.12.2008 against the spectrum allotted in August 2008.

The authorized capital of the Company is ₹ 800 crores. The paid up share capital is ₹ 630 crores 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.



1. PHYSICAL PERFORMANCE

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.

During the year 2014-15 (upto Dec'14), there is net addition of 1.05 Lakh connections (including fixed line, WLL, GSM & Broadband). During this period as sufficient spare capacity was available for all type of services & severe Financial constraints of the company, no addition in the Networks installed Capacity was made. MTNL is providing telephone on demand in its service areas.

Details of achievements of MTNL Delhi & Mumbai during 2014-15(upto Dec'14) are as follows:

S. No.	Items	Achievements 2014-15 (upto Dec'14)		
		Delhi	Mumbai	
А	Switching (i) Net Capacity Landline (ii) Net Capacity GSM (iii) Net Capacity WLL	(-) 25000 0 0	0 0 0	
В	DELs (includes LL, WLL, GSM & Broadband) (i) Gross (ii) Net	222275 46557	316164 58524	
С	Transmission (a) SDH System (i) STM-16 (ii) STM-4 (iii) ADM-1/STM-1	0 0 1	2 4 42	
D	Optical fiber Cable (in Route Kms)	96.45	55.01	
Е	Optical fiber Cable (in Fiber Kms)	2707.218	1006.77	
F	ISDN	(-)99	(-)413	
G	Waiting List	0	0	
Н	Broadband subscribers	13523	-1786	

2. DIFFERENT SERVICES AND PROJECTS

GSM services / 3G services: MTNL was awarded 3G spectrum in the year 2008 and for allotment of 3G spectrum for Delhi and Mumbai LSAs together it had paid ₹ 6,564 crore.



For deployment of 3G services, MTNL has been earmarked 1 carrier of 5 MHz each in Delhi and Mumbai in the 2100 MHz frequency band.

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 and enable to provide a host of video related & enriched value added services 3G services with the brand name "Jadoo" are available in entire service area of MTNL Delhi & Mumbai.

3G is a new technology in India. MTNL has allowed all its GSM mobile subscribers access to 3G services, in order to make the 3G services popular among its subscribers. After this step, the data usage by GSM subscribers has increased exponentially.

3. BROADBAND NETWORK

Broadband services based on ADSL2+ are being provided by MTNL. High speed Internet is being offered on this broadband network. Since launch of its ADSL2+based Broadband services, MTNL has maintained a healthy positive growth in Broadband subscriber base. MTNL had a installed broadband capacity of around 16.34 lakh ports and customer base of around 11,83,238, as on 31.12.2014.

4. 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 work of deployment of active network portion of GPON based FTTH network 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. As a matter of fact, by the end of December 2014, MTNL had 4943 FTTH connections.

5. IPv4 TO IPv6 MIGRATION

DoT has directed all major service providers to make their core network infrastructure ready, 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 it's core network (IPv4 only) with dual stack MPLS network and has also done testing for it's Broad-band network along with other equipments. Peering at ISP for IPv6 has already been completed. CPE procurement is being done as IPV6 / IPV4 compliant. The broadband

network of MTNL is IPv6 ready on dual stack, without NATing. NATing equipment for IPv6-IPv4 interoperability is under procurement stage.

6. 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. During the year 2014-15 (upto Sept'14), MTNL has earned ₹ 57.19 crore from gainful utilization of assets (including rental income, sale of Scrap etc.).

7. JOINT VENTURES

7.1 MTNL-STPI IT Services (MSITS)

MSITS was incorporated on 31.03.2006 under the Companies Act, 1956, as a JV of MTNL & STPI, with authorized Capital of ₹ 50 crore. The main objective of the company is to provide data center services, messaging services, business application services etc. In order to implement its objectives, MSITS has established the physical infrastructure of the Data Center at Chennai on space taken on lease basis from STPI. The Data Center has server farm area of around 3400 sq. ft. and the total investment made in this regard is of ₹ 477 lakh. The Data center is maintaining 99.98% uptime on 24X7. The commercial operation of the Data Center commenced in 2009. The Ministry of External Affairs (MEA) has hosted its Passport Seva Project at MSITS Data Center through M/s TCS.

7.2 United Telecom Limited (UTL)

The Joint Venture is working for providing telecom service in Nepal based on CDMA technology. UTL has total voice customer base of more than 506,459 in number and total data customer base is more than 56,059. UTL has more than 118 personnel consisting of telecom engineers and finance professionals and other support staffs. Apart from this, more than 110 people are working through outsourcing agencies for Fault Repair Services, Customer Care and Marketing of phones, security and campaigns. The Management closely monitors the overall performance of the network, quality of services, subscriber complaints, fault rates, BTS wise traffic and ILD traffic. The Company is sustaining its operational expenses from internal revenue generation. As on date, MTNL holds 22.06% of Equity Share in UTL.

7.3 Millennium Telecom Limited

It is a wholly owned subsidiary of MTNL, incorporated in February 2000 under the Companies Act 1956. It has its registered office located in Mumbai. Services being offered by MTL are:-

- a. Telecom consultancy & engineering: e.g. Outdoor plant, OF laying etc.
- b. IT Consultancy and Project Management execution.



8. SUBSIDIARY COMPANIES

Mahanagar Telephone Mauritius Limited (MTML)

MTML is a 100% subsidiary of MTNL. The company is having license for mobile services, international long distance services and internet services. The customer base of MTML has grown to 231,644 (upto Dec'14) from 191,262 of last year resulting in a market share of around 17%. The revenue of the company also is growing consistently.

MTML has already earned a Gross revenue of approx INR 720 million till Dec'14 as against INR 580 Million in the corresponding period of last fiscal year, thereby registering a growth of around 27% so far. Despite the intense competition and saturated market, the company could increase its revenue due to customer centric efforts in designing specific packages and services. In the year 2015, the company is planning to upgrade its network for higher speed data services and will introduce LTE (4G) in some select areas.

All the expenses of the company are paid by its own internal resources and CAPEX for procurement of equipments is also being met. There is no debt liability on the company.

The company is managed by CEO, CTO, CFO and 10 more officers all on deputation from the parent company. Other operations are managed through outsourcing.

9. CAPITAL EXPENDITURE ON TECHNOLOGY

During the year 2014-15 (upto Dec'14) MTNL has spent an amount of ₹ 139.16 (provisional) crore on the Capital Expenditure. This was achieved largely through other resource (Long term Loan) generation.

10. MANPOWER

The total employees of MTNL as on 31.12.14 were 34,391 belonging to different categories. Employees belonging to Scheduled Caste are 6281, which constitute 18.26% of the total employees. The total number of employees belonging to Scheduled Tribes is 1227, which is 3.57% of total employees.

Man Power Details

Group	Total Working Strength	SC	ST	Women	Persons with disabilities
А	916	145	58	63	1
В	3835	512	86	600	15
С	20390	3397	347	6114	123
D	9232	2227	736	1071	21
TSM	18				
Total	34391	6281	1227	7848	160

MTNL has endeavoured to fulfill the statutory requirement with regards to implementation of reservation policy for Candidates belong to SC/ST/OBC communities as per Gol Rules have been made in recruitment of Officers in various streams. 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 our society.

11. FINANCIAL PERFORMANCE

The Financial performance of MTNL is detailed below:

(Figures in ₹ crore)

Items	2012-13	2013-14	2014-15 (upto Sept'14)
Income from Services	3496.43	3475.66	1706.74
Other Income	286.69	396.49	104.90
Total Income	3783.12	3872.15	1811.64
Expenditure	9086.45	6959.60	3423.60
PBT	(5303.33)	8533.25	-1611.96
Net profit	(5322.03)	7820.72	-1567.46

Despite stiff competition, from other operators, MTNL has achieved a financial turnover of ₹ 1811.64 crore during the year 2014-15 (upto Sept'14), as compared to the previous year's turnover of ₹ 1882.23 crore (Sept'13).





8.3 ITI LIMITED

INTRODUCTION

ITI Limited was established in 1948 with the vision of attaining self-reliance in the field of telecommunication needs of the Country. The company was set up at Bangalore [Karnataka] with Government of India holding majority equity stake in the Company. ITI has its Registered & Corporate Office located at Doorvaninagar, Bangalore-560016. The Company is a Schedule 'A' CPSE in Medium and light Engineering Sector under the administrative control of Ministry of Communications and Information Technology.

With the Government of India's plans to meet the growing demand of expanding telecommunication network and to develop backward areas by providing employment to local populace, ITI over a period of time, widened its manufacturing bases in the states of Jammu & Kashmir [one unit at Srinagar], Uttar Pradesh [Three units at Naini, Rae Bareli and Mankapur] and Kerala [at Palakkad]. ITI has provided livelihood to thousands of employees, directly and indirectly, all over the country. All the manufacturing Plants are accredited with ISO 9001-2000 standards.

In addition to these manufacturing plants, ITI has a dedicated Network System Unit (NSU) for execution of turn key projects covering installation and maintenance support activities. It has service units across the country and headquarters at Bangalore. It has executed several turn key projects for BSNL, MTNL, Defence and State and Central Governments. ITI has received the top turnkey solution provider of the country award many times in the last decade.

The Company started making losses from 2002-03 onwards, was referred to BIFR and declared sick in 2004.

The Revival Plan of ITI Limited has been approved by the Cabinet Committee on Economic Affairs (CCEA) in February 2014 with a financial package of ₹ 4156.79 Crore. The financial package includes ₹ 2264 Crore as equity for capital investments for implementation of several projects as part of Revival plan and balance amount as grant-in-aid towards clearing part of liabilities. In the Union budget 2014-15, Government has approved ₹ 460 crores as first phase disbursement to the Company. This investment is expected to make the company to have manufacturing infrastructure of global standards and hence become competitive in the Indian and international market.

The current initiatives of the Government like "Make in India", "Digital India", "Preferential Market Access policy" etc. are expected to give fillip to ITI's proposal for absorption of new technologies for manufacturing and help in turning around the company.

MISSION

To regain top turnkey solution provider status in the field of Telecom & Service Projects.

VISION

To reclaim leadership position in engineering, design, manufacture and supply of electronics equipment for various sectors, total telecom solutions and services based on state-of-the-art technology.

1. KEY PERFORMANCE FACTORS

1.1 Year 2014-15 (Half Yearly)

The Company's MoU target is ₹ 1500 crores (sales) for the year 2014-15. Against this MoU target, the Company has achieved Sales (including ED & Service Tax) of ₹ 240 crores during the year upto September, 2014 (half yearly) with the loss of ₹ 214 crores.

1.2 Capital Structure

The Authorized Share Capital of the Company as on 31.03.2014 was ₹ 700 crores. The paidup Share Capital as on that date was ₹ 588 crore. (₹ 288 crores equity shares of ₹ 10/each and ₹ 300 crores as preference shares of ₹ 100/- each). The percentage share of Central Government in equity as on 31.03.2014 is 89.89%.

1.3 Financial Highlights

Particulars	Performance During the Year (₹ crores)			
	2014-15 (Upto Sep-14)	2013-14	2012-13	
1. Turnover & Other income	255	810	955	
2. Expenditure	469	1154	1137*	
3. Net Profit/Loss	-214	-344	-182	

Note: *Net of Extraordinary income of ₹ 130 crores and prior period income of ₹ 47 crores Turnover included Excise Duty and Service Tax.

PROJECT / PRODUCT UNDER EXECUTION

2.1 Next Generation Networks (NGN)

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.



2.2 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) 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 which is under execution. The above consortium is also executing SECC project for the Ministry of Rural Development.

2.3 MLLN (Managed Leased Line Networks)

ITI has successfully rolled out countrywide MLLN network for BSNL in technical collaboration with a technology partner. Recently, ITI has received an expansion order from BSNL which is under execution.

2.4 **GSM**

ITI has been implementing GSM Project in BSNL West Zone and MTNL-Mumbai in technology alliance with M/s Alcatel-Lucent & in South Zone in technology alliance with M/s Huawei.

2.5 Defence projects

ITI is the leader in supplying encryption equipments for the secured communication in the Defence networks. ITI has also supplied telecom equipment like Telephones, Ruggedized Telephone Exchanges, Transmission equipments, VSAT etc. to the Defence sector. ITI has also executed ASCON project (Phase I, II, & III) successfully.

2.6 Solar Project

ITI is having requisite expertise and experience for implementing Solar solutions in its Naini plant. ITI has executed solar projects for BSNL as well as UP police. BSNL and other Service Providers are planning to upgrade their outdoor GSM Telecom BTS sites with Solar Power specially in rural areas where power supply position is not good.

2.7 Data center & IT Projects

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. ITI is also playing a major role in implementing IT projects. All the State Governments are pursuing E-Governance projects for taking the benefit of IT to the Village Panchayats. ITI is aggressively pursuing this Market segment. ITI has 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.

3. FUTURE OUTLOOK

3.1 Defence projects

ITI is looking at Defence market as a great opportunity for its business. With greater thrust

towards domestic manufacturing of Defence equipments, ITI proposes taking up manufacturing of new products for Defence like, Software Defined Radio (SDR), High Frequency Radio Handsets, TR modules for RADAR, Electronic Fuzes, equipments for Army Wide Area Network (AWAN Phase II) etc.

The Ministry of Defence had approved in principle for the establishment of Strategic Business Units (SBUs) at ITI at Bangalore and Raebareli plants to take up manufacture of DRDO designed products at ITI. The formation of SBUs is aimed at establishing facilities at ITI for the production of strategically important network and communication components, modules, systems designed and developed by DRDO. Necessary action is under progress to achieve the above objective.

Other major projects which have been launched by Indian Army are ASCON Phase IV and Battlefield Management System (BMS). Earlier three phases of ASCON project have been executed by ITI successfully and ITI is hopeful of getting orders for the above projects also.

3.2 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 and meeting the growing energy needs. ITI, having requisite expertise and experience for implementing Solar solutions, is planning to augment the solar panel manufacturing infrastructure in its Naini plant and is also planning to install one more manufacturing facility at its Srinagar plant.

3.3 Core Telecom Products

ITI is pursuing on addressing the core telecom market like GSM, Next Generation Networks (NGN), Long Term Evolution (LTE), and Managed Leased Line Network (MLLN) etc. The LTE technology is expected to be the future technology in mobile communications. ITI is planning to take up manufacturing of these products by entering into collaboration agreements with technology providers.

3.4 Telecom projects like NFS

The Government funded projects like Network for Spectrum (NFS) require many types of telecom equipments like DWDM, Carrier Ethernet, Radio satellite equipments etc. in huge volumes. ITI is planning to take up manufacture of these products with suitable technology collaborations. In the tender floated by BSNL for laying optical cables under NFS project, ITI was L1 in two (out of seven) zones and has received Purchase Order from BSNL worth ₹ 2111 Crore (excluding AMC) for establishment of fiber network in those two zones.

3.5 LED Lighting

LED lighting is an environmental friendly option due to non-use of Mercury. Market potential for this product is very good. ITI is planning to address this market. Potential areas of business



opportunities are expected from National Highway Authority, State Governments and Municipal Corporations, CPWDs/PWDs, Railways, Hotels and Hospital Industry.

3.6 Data Center

Considering the huge scope existing in the market of Data center particularly in the Government sector, to store data for projects of national importance like NPR, UIDAI and other Projects/Schemes envisaged by Government agencies & PSUs, ITI is planning to establish its own Data center.

3.7 Manufacture of Citizen ID Cards

As an extension of NPR project which is under execution by ITI as a consortium partner with BEL and ECIL, ITI is also looking at the huge opportunity of manufacturing SMART card based citizen identity cards for all the citizens in the Country. ITI is already having SMART card manufacturing facility at its Palakkad plant. This will be further augmented to take manufacture of citizen ID cards.

3.8 Manufacturing of Li-Ion Batteries

High density back up power solutions using Li-Ion technology have been proved in all fields of consumer electronics like PCs, Mobile phones, Tablet PCs etc,. They are also making inroads into other applications like powering GSM towers. ITI is planning to take up manufacturing of Li-Ion batteries in one of its plants.

4. HUMAN RESOURCES DEVELOPMENT (HRD)

Manpower strength as on 30th September, 2014 detailed in the table below:

Group	Total Working Strength	SC	ST	Women	Persons with Disabilities (PWD)
Officers	3406	523	42	349	37
Non-Officers	3298	560	23	229	56
Total	6704	1083	65	578	93

The Company employed about 6704 employees (Executives -3406 & Non-Executives -3298) as on 30.09.2014. About 12.22% of the employees were having professional qualification in the field of Engineering, Finance, Human Resource and medical, around 11.4% were graduates and post graduates, 16.71% were Diploma Holders and 37.86% were Trade Certificate holders and 21.81% others around 77% come under the age bracket of 51 and above.

The voluntary retirement scheme was not in operation during the year.

4.1 Schemes for SC/ST Employees

- a) exempted from payment of application / examination fee
- b) Relaxation in age by 5 years in recruitment
- c) Concessions in qualifying marks
- d) Reservation in recruitment and promotion as per Presidential Directives.
- e) Out of Turn allotment of quarters

5. INDUSTRIAL RELATIONS

The Industrial Relations scenario in the Company was cordial during the year. Employees' Union and Officers' Association extended their co-operation and support in ensuring smooth workflow to meet the Company's objective.

6. OFFICIAL LANGUAGE

All Units/Offices have established Check-Points in their concerned Offices to make more efforts for effective implementation of the Official Language Policy, monitored by the Official Language Implementation Committees constituted in every Unit/Office.

7. RIGHT TO INFORMATION

The Right to Information Act, 2005 has enabled all the citizens to seek information from a Public Authority. Since introduction of the Act, a mechanism has been drawn to process all requests received by Corporate Office/Units under the Act. The Units and Regional Offices have designated PIOs / APIOs with CPIO, Appellate Authority and Transparency Officer at the Corporate Office.

8. ENVIRONMENT INITIATIVES

The success of technology up-gradation and induction is visible across all units of ITI, which fully conform to ISO-9001: 2000 Quality Management System. ISO 14001:2004 Environmental Management System standard is also successfully implemented.





8.4 TELECOMMUNICATIONS CONSULTANTS INDIA LIMITED (TCIL)

1. COMPANY PROFILE

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 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 Department of Telecommunications under Ministry of Communications & IT with 100% shareholding by the Government of India. Its registered and corporate office is 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 optimal 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.'

2. 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 6 Branches. It also has 4 Joint Ventures namely Intelligent Communication System India Ltd., Bharti Hexacom Ltd., United Telecom Ltd. and TCIL Bellsouth Ltd. In addition the company has 4 subsidiary companies namely, TCIL Oman LLC, Tamilnadu Telecommunications Ltd., TCIL Bina Toll Road Ltd. (TBTRL) and TCIL Lakhnadone Toll Road Ltd.

The physical performance i.e turnover excluding other income of the company during the period from 2011-12 to 2013-14 are mentioned below:-

Main Services / Segments	Unit	2013-14	2012-13	2011-12
Telecom	₹ in crore	528.95	489.27	470.67
Civil	₹ in crore	271.13	192.78	182.87
Total	₹ in crore	800.08	682.05	653.54

3. 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.

4. 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 ₹ 816.52 crores (Including other income). The standalone profit before tax increased to ₹ 20.03 crores as against ₹ 19.87 crores of previous year.

5. HUMAN RESOURCES MANAGEMENT

The enterprise employed 899 regular employees as on 31.03.2014. The retirement age in the company is 60 years. Category wise employment status for last 3 years is given below:

Particulars	2013-14	2012-13	2011-12
Executives	416	428	412
Non Executive	483	488	503
Total Employees	899	916	915

6. ACHIEVEMENTS, ACTIVITIES AND PERFORMANCE DURING APRIL - DECEMBER 2014

Upto December 2014, Company has secured orders of over ₹ 3957.21 crores. The major



orders booked during the period are as under:

- a) Procurement, Supply, Trenching, Laying, Installation, Testing and Maintenance of Optical Fiber Cable, PLB Duct and Accessories for construction of Exclusive Optical NLD Backbone and Optical Access routes on Turnkey basis for Defence Network against package 'C' from BSNL valuing ₹ 2060.57 crores.
- b) Department of Post for Supply, Installation & Maintenance services of Hardware, Peripheral devices, Operating system and connectivity for Rural Information and Communication Technology (ICT) Solutions for four clusters (North, East, West and South) valuing ₹ 1361.00 crores.
- c) Supply, Installation and Maintenance of Telecom Network in Mubarak Al-Kabeer and Ahmadi Govermarates and FOC works in Kuwait valuing ₹ 108.29 crores.
- d) Supply, Installation, Integration, Testing & Commissioning of Outside Plant Network in the Sultanate of Oman valuing ₹ 101.47 crores.
- e) Supply, Installation and Maintenance of Telecom Network in Farwaniya and Johra Govermorates for MOC and FOC & UTP work in Kuwait valuing ₹ 93.19 crores.
- f) Renovation & Expansion of ESIC Hospital at Okhla, New Delhi, for the value of ₹ 66.15 crores.
- g) O&M, upgradation and patching of ODB and Design & Implementation from Mobily Etisad Etisalat Co, Saudi Arabia, valuing ₹ 44.28 crores.
- h) Manpower supply and other work in KSA, from Ericsson, NSN, Nokia Siemens Saudi and other clients valuing ₹ 20.16 crores.
- i) Construction of regional office building of Navodaya Vidyalaya Samiti at Lucknow, U.P valuing ₹ 15.00 crores.
- j) Supply Local Material, OFC services, AMC of OFC UG Network in Nepal valuing ₹ 10.41 crores.
- k) Establishment of Police Control Room with GIS and GPS equipment and Vehical Tracking System for the city of Ghaziabad, from Inspector General of Police/Director, Telecom, UP Police Radio Headquarter, Lucknow. valuing ₹ 6.60 crores.
- I) OFC work, Supply, Installation & Termination of ODF in (FAIHA) NUZHA, Supply, Installation & Termination of ODF in NBK in (DAIYA) NUZHA, UTP Work, Supply, Installation & Termination of ODF at NBK in SABAHIYAH, Supply, Installation & Termination of ODF at NBK in SHAMIYA in Kuwait valuing ₹ 5.92 crores.

Provisional Financial Performance of TCIL/Group up to December 2014 is as under:

(₹ in crores)

	Upto December 2014
TURNOVER - TCIL	489.40
SHARE IN JVs TURNOVER	957.56
TOTAL	1446.96
PROFIT BEFORE TAX - TCIL	9.12
PROFIT BEFORE TAX - GROUP	179.31

7. WORKING STRENGTH

Working strength of TCIL as on 1st January 2015 is given as under:

Total number of Employee : 904

Executives : 414

Non-Executives : 490

8. WELFARE OF SC/ST EMPLOYEES

TCIL continues to pay great importance to implementing the directives and policies of Govt. of India regarding reservation of SC/STs. There is no disparity between general and reserved category employees in TCIL. Due representation is given to SC/STs whenever recruitment is done by the company as per reservation guidelines of Govt. of India. Also, relaxation in age upto 5 years is given to candidates belonging to SC/ST category while doing the recruitment. A liberal view is taken while doing transfer and posting of SC/ST candidates. A liaison officer has been appointed for looking into their welfare and grievances.





CMD TCIL, inaugurates Swachh Bharat Mission



CMD TCIL, inaugurates Hindi Pakhwara

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8.5 BHARAT BROADBAND NETWORK LIMITED (BBNL)

Bharat Broadband Network Limited (BBNL) has been incorporated on 25.02.2012 under Indian Companies Act, 1956. BBNL has been given responsibility to connect 2,45,748 Gram Panchayat (GPs). As per approval of the Government, in September 2013, the work execution of connecting the GPs has been phased out to be completed in 3 phases as follows:

- a) Phase I 1,00,000 GPs
- b) Phase II 1,00,000 GPs
- c) Phase III 45,748 GPs

The Survey Work has been completed for more than 2,00,000 GPs out of 2,45,748 GPs. Out of these Technical Sanction Provisional (TSP) has been issued for 2,06,000 GPs covering 5572 Blocks, distributed in 580 Districts. For phase I, final Technical Sanction (TSF) has been issued for 2861 Blocks.

The CPSUs have finalised and awarded works of Trenching & Cable Laying for 1389 Blocks of phase I out of which work has started in 1015 Blocks.

Tender for Optical Fibre Cable (OFC) & Accessories has been finalised by BBNL, POs issued for 1,80,000 kms of OF Cable and corresponding accessories covering phase I requirement.

Tender for GPON Equipment has been finalised and APO issued for 10,000 OLTs and 1,96,599 ONTs, PO issued for 3000 OLTs and 58980 ONTs. CPSUs have placed PO for 1,21,000 kms of PLB Duct. Agreements have been signed between BBNL and 3 CPSUs for execution of work.

Agreement has been signed between BBNL and USOF for execution of work and funding by USOF.

Right of Ways (RoWs) have been signed with 26 States and 5 Union Territories (i.e. all states and UTs except Tamilnadu).



CMD, BBNL & Administrator (USOF) visiting plot site at Arain (Rajasthan)



Launching of India's First High Speed rural broadband network by BBNL in Idukki district of Kerala under Digital India Programme



8.6 HEMISPHERE PROPERTIES INDIA LIMITED (HPIL)

At the time of 25% stake strategic sale in Videsh Sanchar Nigam Limited (now Tata Communications Limited), surplus land measuring 773.13 acres was demarcated out of total 1230.13 acres of land at four stations and decided that surplus land will not be a part of disinvestment bid and will be managed by a separate realty company. Rights of the Government in this land were protected through a scheme of arrangement incorporated in the Share Purchase Agreement (SPA) and Share Holders Agreement (SHA).

Accordingly, the Government has approved the scheme of demerger of Surplus land of VSNL into a Resulting Company and during March 2014, 51.12% shares of resulting Company namely Hemisphere Properties India Limited (HPIL) have been acquired by the Government. With this, HPIL has become 6th Public Sector Undertaking (PSU) of Department of Telecom.

Due diligence on the title deed, physical verification, demarcation and the process of transfer of Surplus land is underway between Tata Communications Limited and the Government. The Company shall start its business only after transfer of aforesaid land and completion of requisite statutory requirements. Among other things the object of the company is to construct, acquire, hold, manage, develop, administer, protect, preserve and in deal in any other manner with surplus land, including sale and purchase of that.





	9. STATISTICAL SUPPLEMENT	
		Pages
Table 1	Telephone per 100 Population- Urban/Rural (Teledensity)	145
Table 2	Number of Telephones	146

Table-1

Telephone per 100 Population-Urban/Rural (Tele-density) as on 31st March and December 2014

SI.No.	Service Area			Tele-	Tele-Density					Tele	Telephones			% of Rur	% of Rural Phones
		Ó	Overall	Ď	Urban	æ	Rural	Ó	Overall	n	Urban	E.	Rural	to Overa	to Overall Phones
		March'14	December'14	March'14	December'14	March'14	December'14	March'14	December'14	March'14	December'14	March'14	December'14	March'14	December'14
-	ANDHRA PRADESH	79.52	82.78	167.60	172.12	45.53	48.25	69194450	72472956	40610155	42006604	28584295	30466352	41.31%	45.04%
2	ASSAM	48.74	51.90	126.27	129.05	34.36	37.41	15462192	16611629	6265741	6531472	9196451	10080157	29.48%	%89.09
3	BIHAR1	46.10	48.28	150.96	160.14	29.41	30.43	61966991	65494147	27863955	29885850	34103036	35608297	55.03%	54.37%
4	GUJARAT	90.54	93.11	137.63	142.00	57.44	58.41	56227514	58364961	35279750	36951498	20947764	21413463	37.26%	36.69%
5	HARYANA	81.44	82.11	121.40	124.60	59.77	58.68	21751303	22179334	11400273	11961997	10351030	10217337	47.59%	46.07%
9	HIMACHAL PRADESH	105.59	111.78	326.01	338.64	77.07	82.14	7373458	7854886	2608116	2749752	4765342	5105134	64.63%	64.99%
7	JAMMU & KASHMIR	66.80	73.67	130.70	131.22	42.61	51.71	8125041	9037026	4365465	4445579	3759576	4591447	46.27%	50.81%
8	KARNATAKA	92.45	96.35	167.19	174.86	46.24	47.30	56637842	59446367	39131321	41484705	17506521	17961662	30.91%	30.21%
6	KERALA	96.19	95.21	189.66	178.54	64.34	98.99	34006214	33815838	17040735	16095574	16965479	17720264	49.89%	52.40%
10	MADHYA PRADESH ²	56.04	58.77	116.34	123.01	33.67	34.77	56584457	59977024	31792710	34146062	24791747	25830962	43.81%	43.07%
Ξ	MAHARASHTRA	77.32	78.88	116.26	114.43	52.85	59.01	74903431	77024917	40065662	40057662	34837769	36967255	46.51%	47.99%
12	NORTH-EAST3	69.97	75.47	153.01	154.92	45.68	49.13	9551079	10391562	5165564	5310711	4385515	5080851	45.92%	48.89%
13	ORISSA	60.90	65.24	161.16	171.17	39.87	42.78	25473028	27452805	11690415	12597875	13782613	14854930	54.11%	54.11%
14	PUNJAB	107.22	105.13	154.34	150.01	71.96	70.98	32433318	32073434	19982848	19774618	12450470	12298816	38.39%	38.35%
15	RAJASTHAN	75.39	75.18	160.01	152.70	48.58	50.56	53569781	53984633	27361586	26432529	26208195	27552104	48.92%	51.04%
16	TAMIL NADU⁴	111.14	116.96	138.16	143.00	74.02	80.08	78087652	82559159	56176488	59173175	21911164	23385984	28.06%	28.33%
17	UTTAR PRADESH - [East]	57.27	58.65	131.52	131.59	35.55	37.19	77783016	80663741	39461026	40177886	38321990	40485855	49.27%	50.19%
18	UTTAR PRADESH - [West]5							49297455	51048110	26601057	27001257	22696398	24046853	46.04%	47.11%
19	WEST BENGAL®	55.13	58.84	135.28	137.66	41.71	45.62	42797168	45970360	15056367	15449946	27740801	30520414	64.82%	%68.39%
20	KOLKATTA	142.67	146.86	#	#	#	#	22147379	22979456	20382016	21298296	1765363	1681160	7.97%	7.32%
21	DELHI	226.84	235.62	#	#	#	#	45688835	48489180	43323453	46155054	2365382	2334126	2.18%	4.81%
22	MUMBAI	151.90	145.86	#	#	#	#	33953534	33117257	33606889	32586412	346645	530845	1.02%	1.60%
	ALL-INDIA	75.23	77.59	145.46	147.75	44.01	46.14	933015138	971008782	555231592	572274514	377783546	398734268	40.49%	41.06%

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-2

Number of Telephones as on 31st March and December 2014

SI.No.	Service Area			Wireline	Wireline Phones					Wireles	Wireless Phones			1	TOTAL
		Ĺ	TOTAL	PSUs' (Operators	Private	Private Operators	T	TOTAL	Ğ	PSUs	Private (Operators	TELE	TELEPHONES
		March'14	December'14	March'14	December'14	March'14	December'14	March'14	December'14	March'14	December'14	March'14	December'14	March'14	December'14
-	ANDHRA PRADESH	2044305	1915427	1657496	1543551	386809	371876	67150145	70557529	9919531	9931560	57230614	60625969	69194450	72472956
2	ASSAM	183984	178191	182904	176841	1080	1350	15278208	16433438	1280869	1276828	13997339	15156610	15462192	16611629
3	BIHAR1	381591	373747	363665	354639	17926	19108	61585400	65120400	3246007	2939455	58339393	62180945	61966991	65494147
4	GUJARAT	1690065	1568693	1459828	1342812	230237	225881	54537449	56796268	4137901	3173174	50399548	53623094	56227514	58364961
5	HARYANA	499908	432283	452043	377796	47865	54487	21251395	21747051	3331626	3067868	17919769	18679183	21751303	22179334
9	HIMACHAL PRADESH	253744	229498	246352	221676	7392	7822	7119714	7625388	1433602	1437942	5686112	6187446	7373458	7854886
7	JAMMU & KASHMIR	186655	156472	186655	156472	0	0	7938386	8880554	1271143	1236863	6667243	7643691	8125041	9037026
8	KARNATAKA	2318079	2267201	1535931	1428963	782148	838238	54319763	57179166	7350172	6730017	46969591	50449149	56637842	59446367
6	KERALA	2885942	2681841	2773148	2580135	112794	101706	31120272	31133997	7951150	6745205	23169122	24388792	34006214	33815838
10	MADHYA PRADESH2	1103538	1100808	833717	829250	269821	271558	55480919	58876216	4948640	3833287	50532279	55042929	56584457	59977024
11	MAHARASHTRA	2309779	2158141	1882033	1730570	427746	427571	72593652	74866776	6583446	5291489	66010206	69575287	74903431	77024917
12	NORTH-EAST ³	139937	128830	139877	128710	09	120	9411142	10262732	1521837	1535990	7889305	8726742	9551079	10391562
13	ORISSA	347455	335734	335875	324412	11580	11322	25125573	27117071	3333678	3451231	21791895	23665840	25473028	27452805
14	PUNJAB	1222091	1150216	876585	794702	345506	355514	31211227	30923218	4629083	3188732	26582144	27734486	32433318	32073434
15	RAJASTHAN	924311	852582	798265	722587	126046	129995	52645470	53132051	6054920	3461435	46590550	49670616	53569781	53984633
16	TAMIL NADU⁴	2913185	2799642	2218136	2098991	692049	700651	75174467	79759517	9828051	9855057	65346416	69904460	78087652	82559159
17	UTTAR PRADESH - [East]	801992	525853	693951	415224	108041	110629	76981024	80137888	10436240	8039027	66544784	72098861	77783016	80663741
18	UTTAR PRADESH - [West] ⁵	541216	505577	504292	469000	36924	36577	48756239	50542533	4480281	3438380	44275958	47104153	49297455	51048110
19	WEST BENGAL®	506151	456936	500140	451317	6011	5619	42291017	45513424	2050565	1948531	40240452	43564893	42797168	45970360
20	KOLKATTA	1076955	1020077	847254	785053	229701	235024	21070424	21959379	860703	802446	20209721	21156933	22147379	22979456
21	DELHI	3103986	3123066	1601739	1605117	1502247	1517949	42584849	45366114	2307731	2337387	40277118	43028727	45688835	48489180
22	MUMBAI	3063976	3039290	1940336	1916447	1123640	1122843	30889558	30077967	1064605	1148804	29824953	28929163	33953534	33117257
	ALL-INDIA	28498845	27000105	22030222	20454265	6468623	6545840	904516293	944008677	98021781	84870708	806494512	859137969	933015138	971008782
]			;			1		-							

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). 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.





10. ACRONYMS

2G Second Generation
3G Third Generations
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

ATNs Action Taken Notes

BBNL Bharat Broadband Network Limited

BRBRAITT Bharat Ratna Bhim Rao Ambedkar Institute of Telecom Training

BSNL Bharat Sanchar Nigam Limited

BTSs Base Terminal Stations
BWA Broadband Wireless Access
C&AG Comptroller and Auditor General

CACT Component Approval Centre for Telecom

CAD Computer Aided Design

CCEA Cabinet Committee on Economic Affairs

CCS Cabinet Committee on Security
CDMA Code Division Multiple Access

C-DoT Centre for Development of Telematics

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

DeitY Department of Electronics and Information Technology

DIAS Direct Internet Access System

DLC Digital Loop Carrier

DoE Department of Expenditure

DoPT Department of Personnel and Training

DoS Department of Space

DoT Department of Telecommunciations

DPR Detailed Project Report

DSPT Digital Satellite Phone Terminal

DWDM Dense Wavelength Division Multiplexing

EFC Expenditure Finance Committee
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

G-PON Gigabit Pasture Optical Network
GPSS Gateway Packet Switching System

GRs Generic Requirements

HECS High Erlang Capacity Switch

HSDL High bit rate Digital Subscriberline

I&B Information and Broadcasting

IAPs Innovation Action Plans

IFRB International Frequency Regulation Board

ILD International Long Distance

IMEI International mobile equipment identity
IMRB Indian Marketing Research Bureau

IN Intelligent Network

INSAT Indian National Satellite

IP and P Industrial Policy and Promotion
Ipv6 Internet Protocol Version 6
IRs Interface Requirements

ISDN Intigrated Services Digital Network

ISP Internet Service Provider

ITI Ltd Indian Telephone Industries Limited ITU International Telecommunications Union

ITU-D International Telecommunication Union-Development Sector

ITU-R International Telecommunication Union- Radiocommunication Sector

ITU-T International Telecommunication Union-Telecom Sector

IUC Interconnection Usage Charge

IVRS Interactive Voice Response System

Lab Laboratory

LMDS Local Multi-Point Distribution System

LOI Letter of Intent

LWE Left Wing Extremism M2M Machine to Machine

MCIBS Microprocessor Controlled Intelligent Building Systems

MCPC Multi Channel Per Carrier MHA Ministry of Home Affiars



MLLN Managed Leased Line Network
MMS Multimedia Messaging Service
MNP Mobile Number Portability

MNRE Ministry of New and Renewable Energy

MoF Ministry of Finance

MoU Memorandum of understanding MPLS Multi Protocol Label Switching

MSS Mobile Satellite System
MTL Millennium Telecom Limited

MTNL Mahanagar Telephone Nigam Limited

MUX Multiplexer

NDA Non-Disclosure Agreement

NHAI National Highway Authority of India

NIB National Internet Backbone

NICF National Institute of Communication Finance

NLDS National Long Distance Service NOFN National Optical Fiber Network

NTIPRIT National Telecommunications Institute for Policy Research, Innovation and

Training

NTP National Telecom Policy
NTP New Telecom Policy

NYSF New York Stock Exchange

OFC Optical Fiber Cable
OFC Optical Fiber Cable

OLTE Optical Line Terminating Equipment

PAC Public Accounts Committee
PCB Printed Circuit Board6Pm

PCR Priority Call Routing
PIA Photo Identity Address
PMA Preferential Market Access

PMRTS Public Mobile Radio Trunk Service

POI Point of Interconnection
POT Plain Old Telephone
PRS Premium Rate Service

PSTN Public Switching Telecom Network

QOS Quality of Service

QTS Quality of Telephone Service R and D Research and Development

RABMN Remote Area Business Message Network

RAN Radio Access Network



RoW Right of Way

RTTC Regional Telecom Training Centre

SACFA Standing Advisory Committee on Frequency Allocations

SACFA Standing Advisory Committee on Radio Frequency Allocation

SAR Specific Absorption Ratio

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

ToT Transfer of Technology

TRAI Telecom Regulatory Authority of India

TSP Tribal Sub Plan

TSPs Telecom Service Providers
TTL Telecom Testing Laboratory
TTO Telecommunications Tariff Order

UHF Ultra High Frequency

UMS Unified Messaging Service
USF Universal Service Fund
USL Unified Service Levy

USO Universal Service Obligation

USOF Universal Service Obligation Fund

UTL United Telecom Limited

UTs Union Territories

VCC Virtual Calling Cord

VMS Voice Mail Service

VPN Virtual Private Network

VPT Village Public Telephone

VRLA Value Regulated Lead Acid

WLL Wireless in Local Loop

WPC Wireless Planning & Coordination

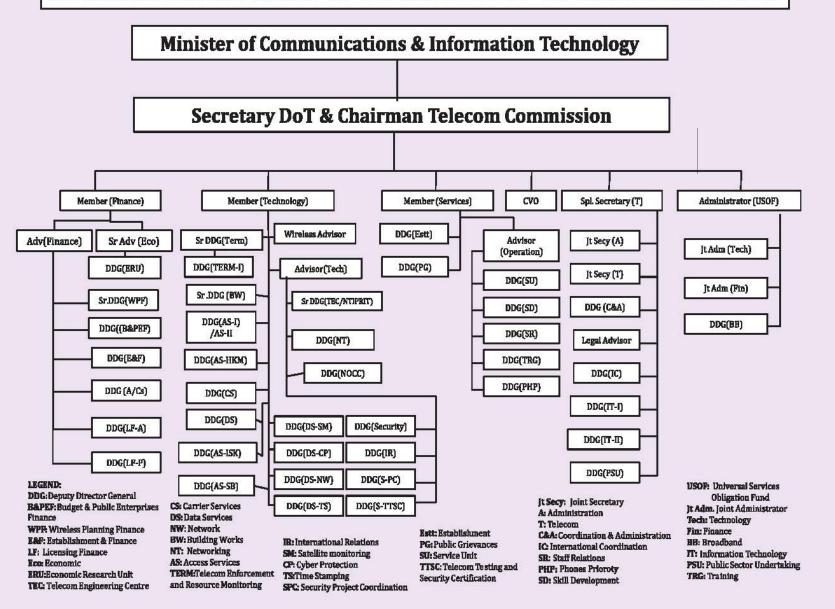
Very Small Aperture Terminal

WPHS Web Page Hosting Service WSHS Web Server Hosting Service

VSAT

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XI. ORGANISATION CHART OF DEPARTMENT OF TELECOMMUNICATIONS







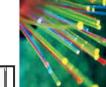
Department of Telecommunications' Result Framework Document (RFD) - 2014-15 Inter se Priorities among Key Objectives, Success Indicators and Targets

					j		Tarq	get/Criteria V	alue	1
Objective	Welght	Actions	Success Indicator	Unit	Welght	V.	Very Good	Good	Fair	Poor
			hiddethird kirik			100%	90%	80%	70%	60%
[1] Facilitating rapid expansion of	21	[1.1] Fadilitating expansion of tele-	[1.1.1] Increased rural teledensity	%	1.00	48	46	45	44.5	44
Telecom services with special emphasis on rural and remote		density and Broadband connectivity	[1.1.2] Increased overall teledensity	No. of connections in millions	1.00	1000	990	980	970	960
areas			[1.1.3] Number of broadband connections provided as per the provisions of 12th Five Year Plan	% over base figure on 31.3.2014	2.00	10	9	8	7	6
			[1.1.4] Circulation of draft Cabinet Note on 'New National Broadband Policy' for Inter Ministerial Consultation	Date	1.00	15/01/2015	15/02/2015	28/02/2015	15/03/2015	31/03/2015
			[1.1.5] Identifying gaps in connectivity along with solutions with special focus on remote areas, strategic regions and highways	Date	1.00	31/12/2014	31/01/2015	28/02/2015	15/03/2015	31/03/2015
			[1.1.6] Rural penetration- Strategy and approaches to increase rural teledensity	Date	1.00	31/12/2014	31/01/2015	28/02/2015	15/03/2015	31/03/2015

		[1.1.7] Study and submission of report on why broadband speeds are so slow at the moment	Date	1.00	31/12/2014	31/01/2015	28/02/2015	15/03/2015	31/03/2015
tel	elecom connectivity the North Eastern egion (NER)	[1.2.1] Approval of Cabinet for the scheme for providing 2G mobile coverage along National Highways in North East	Date	1.00	31/12/2014	31/01/2015	28/02/2015	15/03/2015	31/03/2015
		[1.2.2] Approval of Cabinet for the scheme for augmentation of transmission media in North East for redundancy and reliability	Date	1.00	31/12/2014	31/01/2015	28/02/2015	15/03/2015	31/03/2015
		[1.2.3] Approval of the Cabinet to the scheme for providing mobile coverage in uncovered villages in North East	Date	1.00	31/12/2014	31/01/2015	28/02/2015	15/03/2015	31/03/2015
		[1.2.4] Providing DSPT in uncovered villages (2590 Villages)	%	1.00	100	95	90	85	80
est Na Ne	stablishment of ational Optic Fibre etwork (NOFN) up	[1.3.1] Availability of broadband in Gram Panchayats through NOFN	Number	2.00	50000	45000	40000	35000	30000
		[1.3.2] Number of Km of Optical Fibre Cable (OFC) laid	Kms.	1.00	100000	90000	80000	70000	60000



7		7								
		[1.4] Improving connectivity in areas affected with Left Wing Extremism (LWE)	[1.4.1] Installation of mobile towers for providing mobile services in LWE affected areas	Number of towers	2.00	500	450	400	350	300
		[1.5] Finalization of Comprehensive Right of Way (RoW) Policy	[1.5.1] Preparation of draft policy for consultation	Date	2.00	31/01/2015	28/02/2015	15/03/2015	25/03/2015	31/03/2015
		[1.6] Comprehensive Telecom Development Plan for Border Areas, Islands, Himalayan States and other uncovered areas (other than NER)	[1.6.1] Cabinet approval for the Comprehensive Telecom Development Plan for Border Areas, Islands, Himalayan States	Date	1.00	10/03/2015	15/03/2015	20/03/2015	25/03/2015	31/03/2015
			[1.6.2] Providing DSPT in uncovered villages (9401 Villages)	%	1.00	100	95	90	85	80
[2]Simplification of Licensing regime	15	[2.1] Formulation and approval of 2nd	[2.1.1] On time reference to TRAI	Date	1.00	30/04/2014	31/05/2014	30/06/2014	31/07/2014	31/08/2014
and efficient management of Spectrum		phase of Unified Licensing Regime	[2.1.2] Consideration of TRAI recommendations	Date	1.00	30/11/2014	31/12/2014	31/01/2015	28/02/2015	31/03/2015
		[2.2] Approval of Policy on allotment/assignment of spectrum and pricing for various categories of wireless users	[2.2.1] Notification of Policy	Date	1.00	31/01/2015	15/02/2015	28/02/2015	15/03/2015	31/03/2015
		[2.3] Finalization of Guidelines for Spectrum sharing	[2.3.1] Notification of Guidelines	Date	2.00	31/01/2015	28/02/2015	10/03/2015	15/03/2015	31/03/2015
		[2.4] Finalization of Guldelines for spectrum trading	[2.4.1] Submission of draft guidelines to Telecom Commission	Date	2.00	31/12/2014	31/01/2015	28/02/2015	15/03/2015	31/03/2015



Defence Band Notification of Defence Band Def		[2.5] Auction of Spectrum	[2.5.1] Completion of auction	Date	2.00	10/03/2015	15/03/2015	20/03/2015	25/03/2015	31/03/2015
Call Preparation of review Call Preparation of readmap Call Preparation Call Prep			Notification of	Date	1.00	28/02/2015	15/03/2015	20/03/2015	25/03/2015	31/03/2015
			Completion of	Date	1.00	31/10/2014	30/11/2014	31/12/2014	31/01/2015	31/03/2015
Levies: Computation of AGR Levies: Computation of AGR Levies: Computation of AGR Levies: Computation of AGR Levies: Computation of Computer of Public Wi-Fl Services California		roadmap for availability of	Notification of	Date	2.00	31/01/2015	20/02/2015	10/03/2015	20/03/2015	31/03/2015
Safety Public Wi-Fi Services Finalization of strategy for promotion of public Wi-Fi services Salignment of consumers of Telecom Services, Public Health and Safety S		Levies: Computation	and examination of recommendations	Date	1.00	10/03/2015	15/03/2015	20/03/2015	25/03/2015	31/03/2015
consumers of Telecom Services, Public Health and Safety Total Consideration of Telecom Services, Public Health and Safety Total Consideration of Instructions for Implementation of Inter-circle MNP Total Consideration of Instruction of Instruction of Inter-circle MNP Total Consideration of Instruction Instruction of Instruction Instruction of Instruction of Instruction of Instruction Instruction of Instruction of Instruction of Instruction Instruction Instruction of Instruction Instruction of Instruction Instruction I			Finalization of strategy for promotion of public Wi-Fi	Date	1.00	10/03/2015	15/03/2015	20/03/2015	25/03/2015	31/03/2015
Safety	consumers of Telecom Services, Public	Inter-circle Mobile	consideration of reconsidered	Date	1.00	31/07/2014	31/08/2014	30/09/2014	31/10/2014	30/11/2014
Radiation Verification Verification of BTSs with respect to prescribed radiation norms			Issuance of instructions for Implementation of Inter-circle	Date	1.00	30/11/2014	31/12/2014	31/01/2015	28/02/2015	31/03/2015
			Verification of BTSs with respect to prescribed	Number	1.00	32000	30400	27200	24000	19200
			[3.3.1] Placement of purchase order	Date	1.00	02/03/2015	09/03/2015	16/03/2015	23/03/2015	31/03/2015



		[3.4] Introduction of Priority Call Routing services for Disaster Relief Agencies	[3.4.1] Acceptance of TRAI recommendations for Implementation of priority call routing	Date	1.00	31/12/2014	31/01/2015	28/02/2015	15/03/2015	31/03/2015
		[3.5] Formalization of roadmap for implementation of Alerting mechanism for mobile phone during disasters	[3.5.1] On time approval of the recommendations of the Committee constituted to formalize the roadmap and amendment in license agreement	Date	1.00	31/12/2014	31/01/2015	28/02/2015	15/03/2015	31/03/2015
		[3.6] Development of business models for effective utilization of broadband network including NOFN by involving States	[3.6.1] Formulation of Business Model	Date	0.50	31/12/2014	31/01/2015	28/02/2015	15/03/2015	31/03/2015
		[3.7] Introduction of Virtual Network Operators	[3.7.1] Receipt and examination of recommendations of TRAI	Date	1.00	10/03/2015	15/03/2015	20/03/2015	25/03/2015	31/03/2015
		[3.8] Comprehensive Communication Plan for Disaster Management	[3.8.1] Submission of draft Plan to Telecom Commission	Date	0.50	10/03/2015	15/03/2015	20/03/2015	25/03/2015	31/03/2015
[4] Strengthening of PSUs/Autonomo us Organizations	8	[4.1] Extension of Reservation Quota for ITI Limited	[4.1.1] Approval of CCEA	Date	1.00	31/01/2015	28/02/2015	15/03/2015	28/03/2015	31/03/2015
		[4.2] Finalization of strategy for revival of BSNL and MTNL	[4.2.1] on time finalization	Date	1.00	31/12/2014	31/01/2015	28/02/2015	15/03/2015	31/03/2015
		[4.3] Financial support to MTNL for surrender of BWA	[4.3.1] On time release	Date	2.00	30/09/2014	31/10/2014	30/11/2014	31/12/2014	31/01/2015

		[4.4] Financial support to BSNL for surrender of BWA	[4.4.1] Numbers of quarterly release of amount to BSNL	Number	2.00	4	3	2	1	0
		[4.5] Formation of subsidiary company for tower assets of BSNL	[4.5.1] Submission of proposals to Cabinet	Date	1.00	31/12/2014	31/01/2015	28/02/2015	15/03/2015	31/03/2015
		[4.6] Restructuring of USOF	[4.6.1] Submission of proposal to Telecom Commission	Date	1.00	10/03/2015	15/03/2015	20/03/2015	25/03/2015	31/03/2015
[5] Development of Skills and Human Resources in	7	[5.1] Completion of skill gap study for the telecom sector	[5.1.1] On time completion of study	Date	2.00	30/11/2014	31/12/2014	31/01/2015	28/02/2015	31/03/2015
Telecom Sector		[5.2] Setting up of telecom domain knowledge Repository at NTIPRIT	[5.2.1] On time setting up	Date	2.00	28/02/2015	15/03/2015	20/03/2015	25/03/2015	31/03/2015
	N1	[5.3] Equipping NTIPRIT as per NTP mandate	[5.3.1] On time submission of DPR to Telecom Commission	Date	1.00	31/12/2014	31/01/2015	28/02/2015	15/03/2015	31/03/2015
		[5.4] Preparing a comprehensive training plan for identifying the training needs of employees	[5.4.1] On time preparation of comprehensive training plan	Date	1.00	31/01/2015	15/02/2015	28/02/2015	15/03/2015	31/03/2015
		[5.5] Providing suitable Infrastructure to NICF as per mandate of DoPT	[5.5.1] Approval of EFC for the Project	Date	1.00	30/06/2014	31/07/2014	31/08/2014	30/09/2014	31/10/2014
[6]Infrastructure Development and Promotion of Green Telecom	7	[6.1] Promotion of renewable energy sources for powering telecom towers and equipments	[6.1.1] Provision of renewable energy sources for powering of mobile towers for providing mobile services in LWE affected areas	Number	2.00	500	400	300	200	100

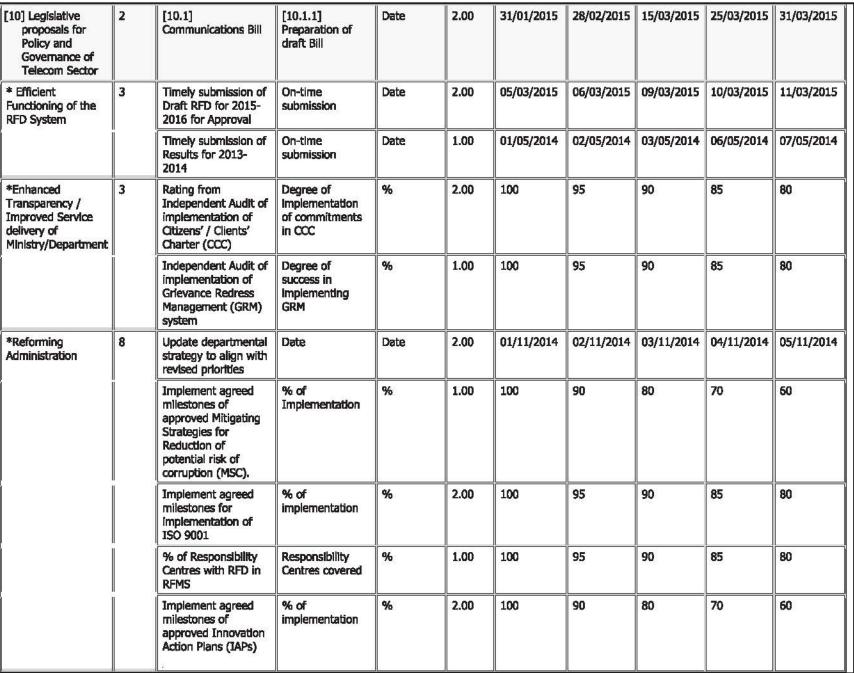


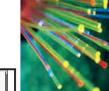
		÷		[6.1.2] On time approval of scheme for NOFN Phase-I sites	Date	1.00	15/02/2015	28/02/2015	10/03/2015	20/03/2015	31/03/2015
				[6.1.3] Number of Base Terminal Stations operating with renewable energy	Number	1.00	20000	19000	18000	17000	16000
			[6.2] Creation of Telecom Finance Corporation	[6.2.1] Submission of DPR to Telecom Commission	Date	2.00	30/11/2014	31/12/2014	31/01/2015	28/02/2015	31/03/2015
			[6.3] Spreading awareness about the advisory to states on mobile towers	[6.3.1] Putting the Advisory on departmental website and dissemination to states	Date	1.00	30/09/2014	31/10/2014	30/11/2014	31/12/2014	31/01/2015
	[7] Promotion of indigenous R&D, Standardization and Manufacturing	6	[7.1] Implementation of policy for Indigenous Manufacturing of Telecom Equipments	[7.1.1] On time review of existing notification of PMA for telecom products in Government Procurement	Date	1.00	31/01/2015	15/02/2015	28/02/2015	15/03/2015	31/03/2015
				[7.1.2] Increase In value addition in domestic manufactured products in Government procurement	%	2.00	35	30	25	20	15
		for promoting R&D,	[7.2] Creation of fund for promoting R&D, Entrepreneurship and manufacturing	[7.2.1] Submission of DPR to Planning Commission for seeking in- principle approval	Date	1.00	30/11/2014	31/12/2014	31/01/2015	28/02/2015	31/03/2015
			[7.3] Introduction of Indian Standard for Telecom Equipment	[7.3.1] Number of standards approved	Number	2.00	13	11	9	8	7

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[8] Promotion of New Generation	6	[8.1] Formulation of a roadmap for	[8.1.1] Issuance of roadmap	Date	2.00	28/02/2015	10/03/2015	15/03/2015	20/03/2015	31/03/2015	
Technologies			Machine to Machine (M2M) communication	[8.1.2] Dissemination of sector specific vision documents as technology enablers for socio-economic development	Number	2.00	4	3	2	1	0
		[8.2] Conducting seminars/workshops as follow-up for National IPv6 Deployment Roadmap Version-II	[8.2.1] On time completion of 12 seminars	Date	2.00	28/02/2015	10/03/2015	15/03/2015	20/03/2015	31/03/2015	
[9] Ensuring adequate security for Telecom Network and	5	[9.1] Approval of Telecom Security Policy by Telecom Commission for sending to CCS	[9.1.1] On time approval	Date	1.00	31/12/2014	31/01/2015	28/02/2015	15/03/2015	31/03/2015	
services			[9.2] Submission of the report to deal with the Issue of duplicate IMEI	[9.2.1] On time submission	Date	1.00	31/10/2014	31/12/2014	31/01/2015	28/02/2015	31/03/2015
		[9.3] Issue Instructions for implementing the solution for blocking of stolen/lost handsets	[9.3.1] On time Issue of instructions	Date	1.00	31/12/2014	31/01/2015	28/02/2015	15/03/2015	31/03/2015	
		[9.4] Subscriber Verification	[9.4.1] Number of subscribers vertifed on PIA basis	%	1.00	0.1	0.095	0.085	0.075	0.060	
		[9.5] Compliance of security guidelines	[9.5.1] Percentage of TSPs whose compliance to security has been ensured through audit and other activities	%	1.00	100	99	98	97	96	







	*Improve compliance with the Financial Accountability Framework	1	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.	%	0.25	100	90	80	70	60	
			Timely submission of ATRs to the PAC Secretariat on PAC Reports	Percentage of ATRS submitted within due date (6 months) from date of presentation of Report to Parliament by PAC during the year.	%	0.25	100	90	80	70	60	
					Early disposal of pending ATNs on Audit Paras of C&AG Reports presented to Parliament before 31.3.2014.	Percentage of outstanding ATNs disposed off during the year.	%	0.25	100	90	80	70
1			Early disposal of pending ATRs on PAC Reports presented to Parliament before 31.3.2014	Percentage of outstanding ATRS disposed off during the year.	%	0.25	100	90	80	70	60	



Department of Telecommunications' RFD 2014-15

Outcome / Impact of activities of department ministry

	utcome/impact of opertment/Ministry	Jointly responsible for influencing this outcome / impact with the following department (s) / ministry(ies)	Success Indicator	Unit	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
1	Facilitating increase in tele- density across the nation	All Governments of States & UTs	increase in rural tele- density	%	41	43	48	60	70
			increase in over-all tele-density	%	73.32	74.50	80	85	90
			Number of connections across the nation	Million	898	922	1000	1100	1200
2	Penetration of Broadband	DeitY, DoE, Planning Commission, State Governments	Number of broadband connections provided	Million	15.05	14.5	90	120	175
3	Augmenting alternate energy resources for powering telecom	MNRE, Ministry of Power, State Electricity Boards, Planning Commission, DoE	Number of Base Terminal Stations operating on Renewable Energy	Numbers	4000	0000	20000	40000	60000
4	Enhanced security of Telecom Network	MHA, DeitY	Percentage of TSPs whose compliance to security guidelines has been ensured through audit and other activities	%	100	100	100	100	100
5	Indigenous manufacturing of telecom equipments	Department of IP&P, MoF	increase in value addition in domestic manufactured products	%	25	30	35	40	45
6	Efficient use of spectrum	Ministry of Defence , Ministry of I&B, DoS	Auction of Spectrum	Date	20/11/2012	20/02/2014	10/03/2015	15/03/2016	15/03/2017



Department of Telecommunications

Ministry of Communications & Information Technology

Government of India

New Delhi