सत्यमेव जयते

Department of Telecommunications

Progress during the last three years (2014-17)

I. Five major achievements which have benefited the people or appreciated by the people.

Telephone Touching Top Heights

- India added 261.97 million telephones during April, 2014 to March, 2017 as compared to 86.69 million net addition during the April, 2011 to March, 2014. Mobile phone addition touched 266.07 million during the period from April 2014 to March 2017 as compared to 92.92 million during April 2011 to March 2014 (Fig-1 and Fig-2). Internet connections added during March 2014 to December 2016 is 139.91 million as compared to 31.92 million added during April 2011 to March 2014 (Fig-3). Total internet connections as on December 2016 was 391.5 million.

Fig-1

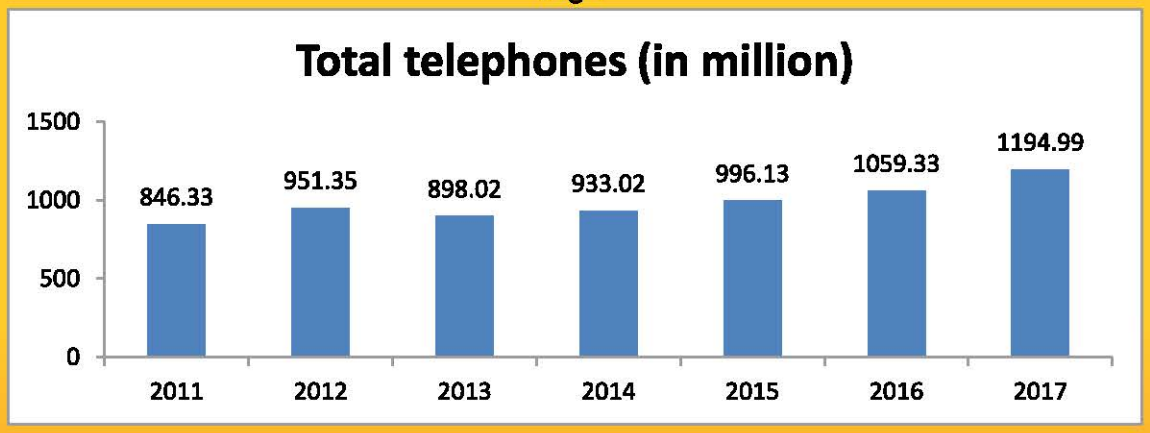


Fig.2

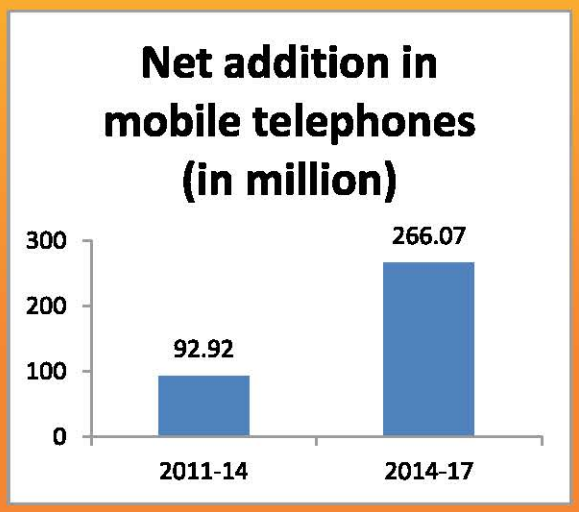
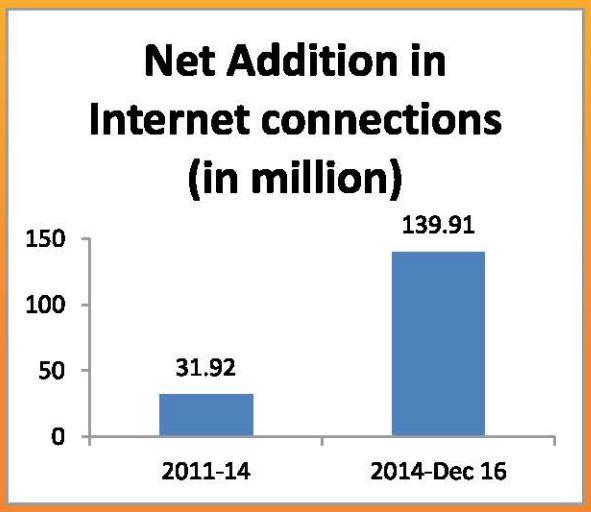


Fig.3



Mega Auction

- The mega auction of spectrum in 700, 800, 900, 1800, 2100, 2300 & 2500 MHz bands was concluded successfully in October, 2016. The auction sold 965 MHz of spectrum in different bands, which is more than 929 MHz sold cumulatively in last four auctions from 2012 to 2015. The auction also fetched a total amount of Rs. 66,000 crore, and highest ever upfront payment of Rs. 33,000 crore since 2012 (Fig-3). As a result of the auction there has been an increase in availability of spectrum for the operators. It has also reduced network congestion and call drop incidents (Fig-4 and Fig-5)

Fig-4

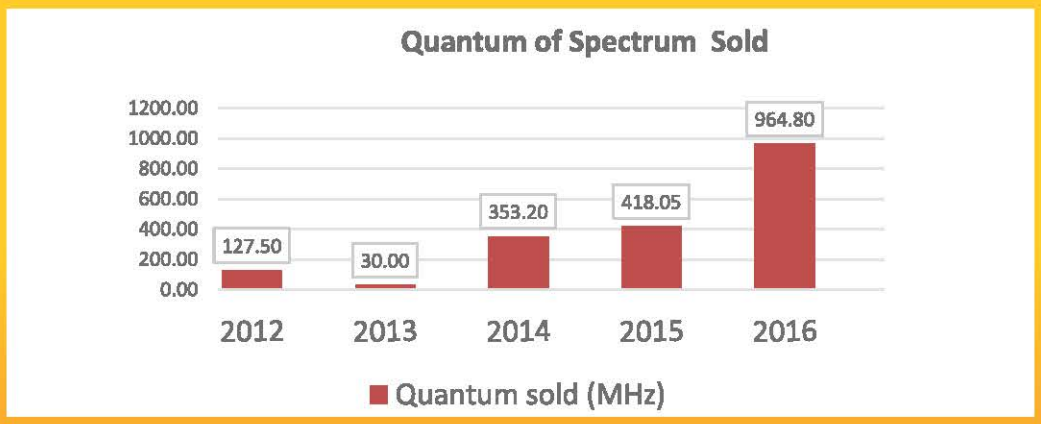
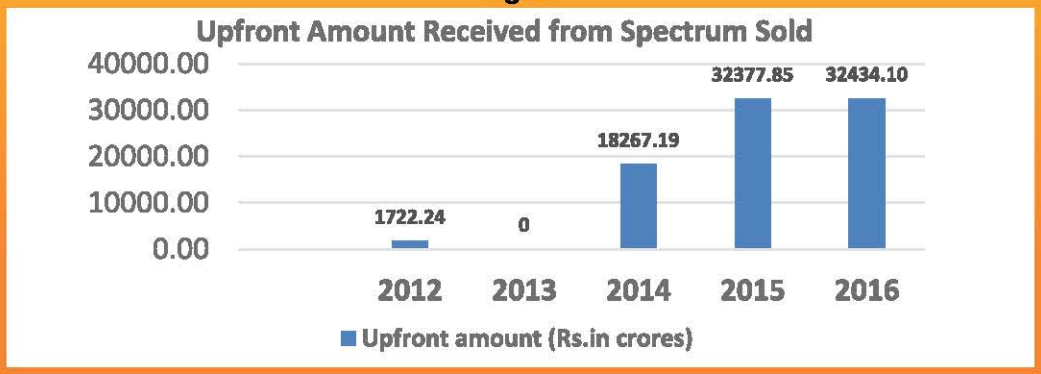


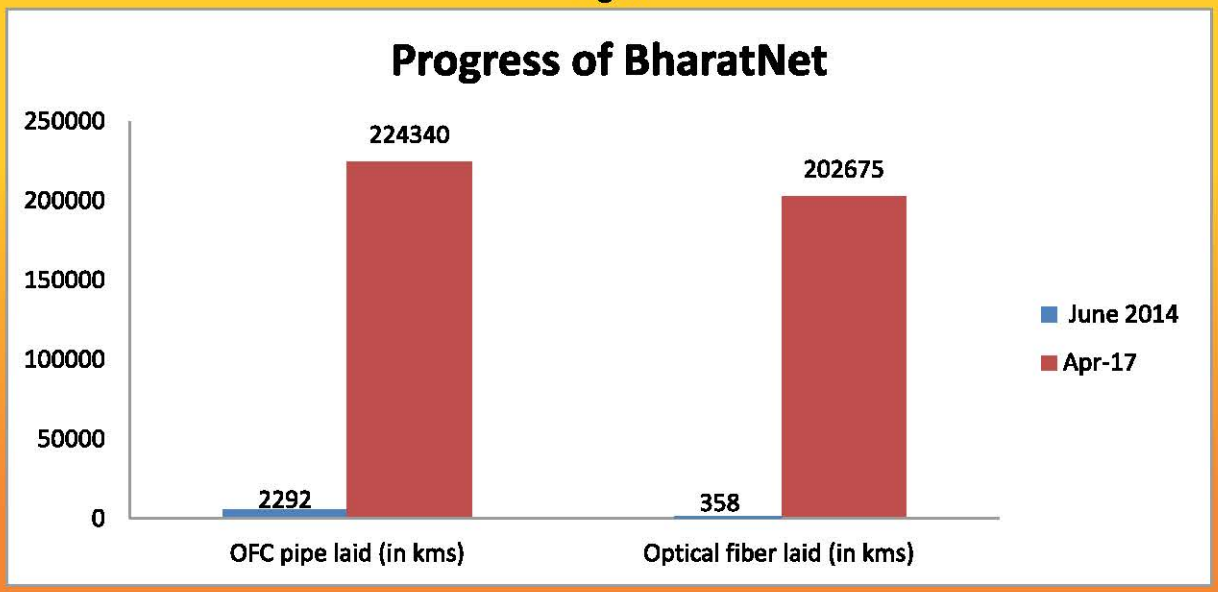
Fig-5



Broadband Connectivity

- For the deeper digital penetration in rural areas, the Government has implemented the flagship BharatNet program to link each of the 2.5 lakh Gram Panchayats of India through Broadband optical fibre network. On its completion BharatNet would facilitate Broadband connectivity (with a 100 Mbps of bandwidth) for over 600 million rural citizens of the country. As on date OFC has been laid in 202675 km covering 90027 Gram Panchayats (GPs), as compared 358km of OFC laid till June 2014. Currently the OFC pipes are laid in 2,24,340 km covering 100934 GPs as compared to 2292 km laid till June 2014 (Fig-6).

Fig-6



Aadhar Based E-KYC Services

- Towards realising the goal of 'green telecom", the Government has prescribed an 'Aadhaar based E-KYC services' for issuing mobile connections from September, 2016. Under this, a subscriber can authenticate himself using his biometrics at the point of sale and obtain a new activated sim-card in 30 minutes. When manually done, this process takes almost a day and involves a lot of paper work. In addition to simplifying the process this also ensures security assurance and is an environment friendly measure saving more than 50,000 trees annually.

Mobile Number Portability

- Government has allowed One Nation - Full Mobile Number Portability (MNP) 3rd July 2015, that enables the subscribers to change their licence service area and still retain their mobile number. This also helps in developing mobile numbers as an identity of individuals for providing various government services and more towards JAM (Jan Dhan-Aadhar-Mobile) Trinity.

II. Other important achievements

- Mobile Services were provided in 2199 locations in Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Maharashtra, Madhya Pradesh, Odisha, Telangana, Uttar Pradesh and West Bengal, which are affected by Left Wing Extremism (LWE).

- The Government has mandated that mobile phones sold in India will come with a dedicated "panic button" and Global Positioning System(GPS). Accordingly the Mobile Phone Handsets Rules, 2016 were notified in April 2016.

- The Government has issued guidelines on 31st March 2016 for VNO (Virtual Network Operator) allowing Telecom Service Providers to utilise their networks and spectrum efficiently by sharing active and passive infrastructure. Till date 55 licenses have been granted for VNOs.

- Spectrum sharing was allowed for the first time in India on 21st April 2016, when operators were allowed to pool their respective spectrum holdings for using the whole spectrum block

- The government has permitted trading of Spectrum by allowing an Access Service Provider (Seller) to transfer spectrum usage rights and obligations to another Access Service Provider (Buyer). This has facilitated the optimisation of resources.

- Harmonisation of spectrum in 800 MHz and 1800 MHz bands that was carried out from April to September, 2016 resulted in rationalisation of spectrum holdings of telecom service providers, and transferring defence holdings to the defence bands.

- The Govt approved plans for laying Submarine OFC connectivity between Mainland India to Lakshdeep and Andaman& Nicobar Islands.

- Department has approved a proposal to setup 25,000 Public Wi-Fi Hotspots using the block-level infrastructure of BSNL's Telephone Exchanges in rural areas

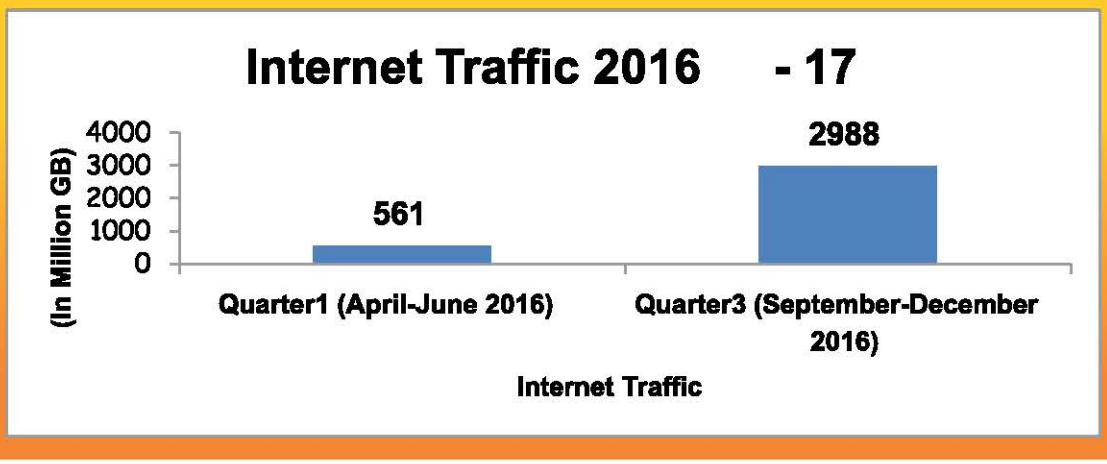
- A proposal for setting up of 5000 Wi-Fi Chaupals at Gram Panchayat levels in the 18 states of the country by CSC-SPV, at an estimated cost of 100 crore, to be funded from USOF, has been approved.

- An agreement is proposed to be signed with RailTel for setting up Wi-Fi hotspot at 200 at rural railway stations.

- A Memorandum of Understanding (MoU) has been signed between Department of Post(DoP), BBNL and BSNL for providing Broadband services at the Post Offices of the DoP by utilising the infrastructure created under BharatNet project at the Gram Panchayatsas part of Diigital India initiative

- India has achieved significant improvement in Internet usage. This is amply clear from the fact that Data traffic has shown a six fold increase from 561 million GB in the first quarter to 2988 million GB in the third quarter of 2016-17 (Fig-7).

Fig -7



- Earnings of BSNL (before interest, depreciation and taxes, i.e. EBDITA) which was (-) 691 Crore in 2013-14 became (+) 672 Crore in 2014-15 & further (+) 3855 CR in 2015-16 (Fig-8). With the operating profits turning positive and losses narrowing down, the BSNL is now on a path of revival. The total income of BSNL increased by 7.05% upto third quarter of 2016-17 compared to the same period of previous year.

- The market share of BSNL which was declining till 2015 has since shown an upward trend(Fig-9).

Fig-8

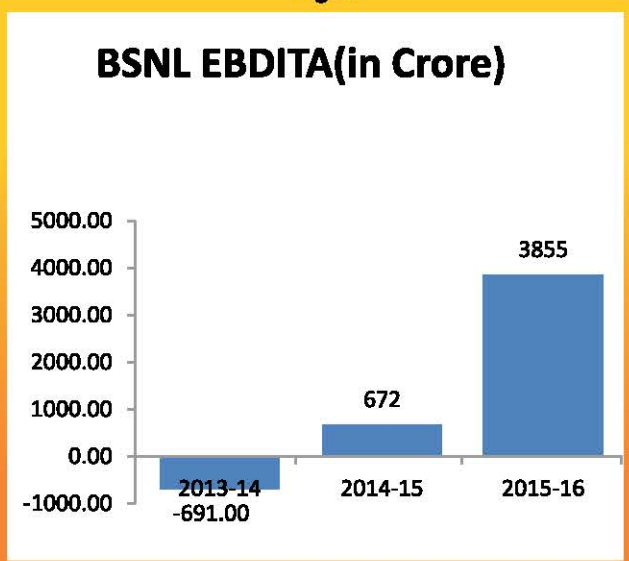
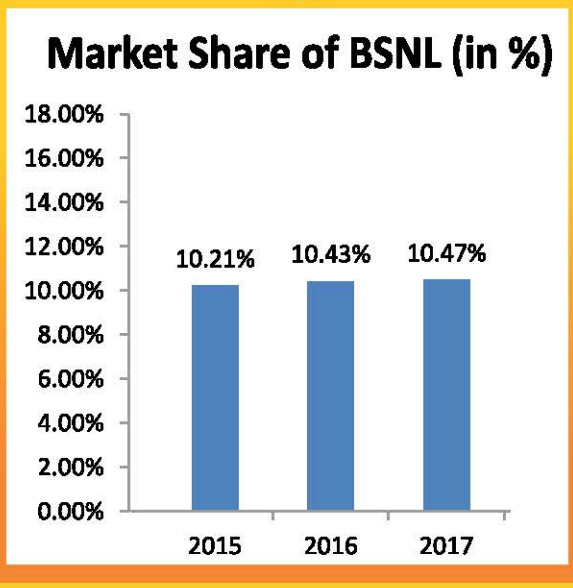


Fig-9

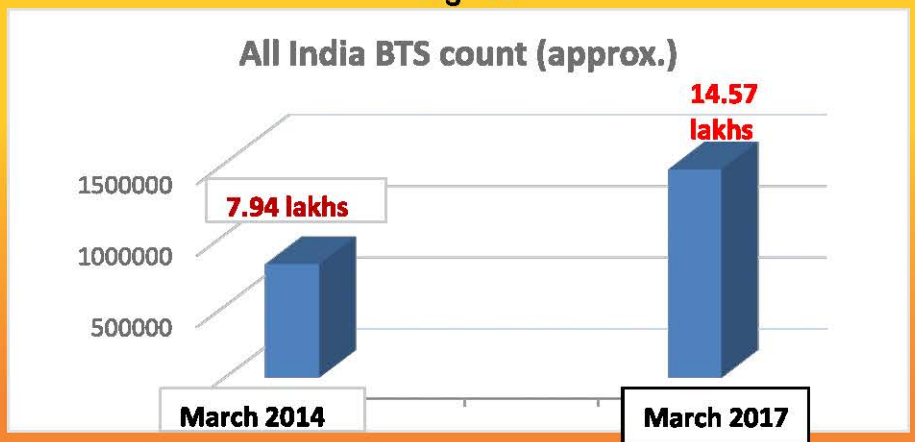


- Department of Telecom has launched Tarang Sanchar, a web portal for Information sharing on Mobile Towers and EMF Emission Compliances, with a view to generate confidence and conviction with regard to safety and harmlessness from mobile towers, clearing any myths and misconceptions. The portal can be accessed at www.tarangsanchar.gov.in The portal has the complete collated technical details of over 14.5 lakh base stations (BTSs) spread across the country of all technologies (2G, 3G, 4G etc.) and of all Telecom Service Providers (TSPs).

- EMF radiations from a mobile tower are far below the safe limits, prescribed by International Commission on Non-Ionizing Radiation Protection (ICNIRP) and recommended by WHO, and have no convincing scientific evidence of causing adverse health effects. Department of Telecommunications has prescribed stricter precautionary norms for exposure limit for the Base Station Emissions which is 1/10th of the existing limits prescribed by ICNIRP and recommended by WHO.

- The Government has taken initiative to explore various technology solutions focused around developing an affordable and reliable ICT solution suitable for the rural landscape. The initiative centers on developing rural Wi-Fi infrastructure and host of suitable applications enabling transformation of a village into a "Hi-Fi village". The Government proposes to leverage the existing infrastructure under BharatNet optic fibre network at Gram Panchayats (GP) and extend it over a Wi-Fi Hot Spot covering the vicinity of Gram Sachivalayas of the village so as to create Wi-Fi Choupal, a rural Internet service delivery platform managed and operated by local villagers.

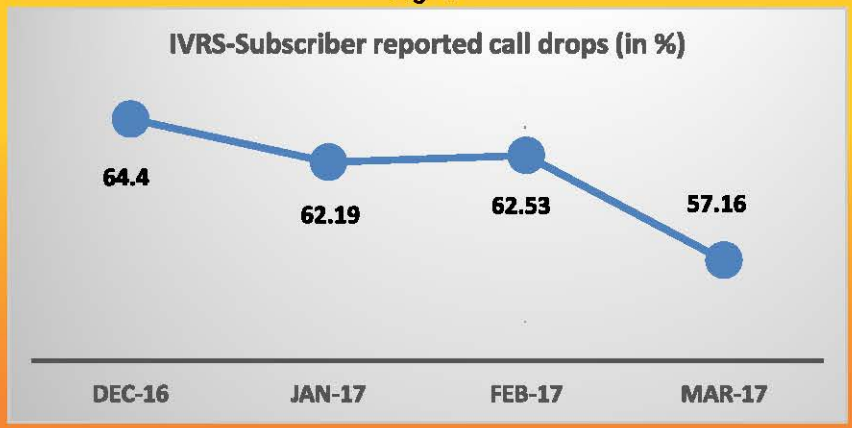
Fig -10



- Both Government and TRAI are taking all possible steps and pursuing with the TSPs to address the problem of call drop and bring it down within the permissible limit. About 6.6 Lakh additional BTSs (Base Transceiver Stations) across the country have been installed during the period April-2014 to March-2017, out of which, 2.5 lakh were installed during June-2016 to March 2017 (Fig-10).

DoT had launched 1955 Interactive Voice Response System (IVRS) in 5 states on 23/12/2016 and in remaining states on 12/1/2017 and 16/03/2017. The results obtained through the IVRS platform show that the call drops reported by subscribers have dropped from 64% in Dec-2016 to 57% at the end of Mar-2017, a drop of nearly 7% in 3 months (Fig-11).

Fig-11



There has been a marked improvement in the number of TSP (Telecom Service Provider) complying to the bench marks prescribed for call drop. The number of 2G and 3G TSPs who were not meeting the benchmarks are consistently coming down.

- The Department drew up an Action Plan for "Swachhta Pakhwara" for a focused attention. The activities chosen include, inter-alia, special cleanliness drive in the office building premises and its surroundings, cleanliness and hygiene in the Departmental Canteens, disposal of unserviceable office equipment/furniture/other material including E-waste in the Department proper and related PSUs and organisations. A special cleanliness drive was undertaken during the course of the Swachhta Pakhwara besides a major focus on 27,600 Telephone Exchanges, guest houses and canteens of BSNL and MTNL.

- The Department has launched "Twitterseva" on 2nd August 2016 for obtaining feedback/grievances related to Telecom issues and services from the public. All the Division/Units of DoT as well as Telecom Service Providers (TSP's) and few important Internet Service Providers (ISP's) have been participating on Twitterseva.The Tweets coming on Twitter handle are forwarded to concerned Telecom Service Providers and other Units/Divisions of DoT for quick action and regular monitoring. As on date out of total 14513 tweets received, 14365 have been resolved in time bound manner.

III. Three reforms brought by the Department – Process, Policy, Functioning, Programs etc.

- Towards enhancing the Ease of Doing Business The Indian Telegraph Right of Way Rules, 2016 was notified to regulate underground infrastructure (optical fibre) and overground infrastructure (mobile towers).

- Towards realising the goal of 'green telecom", the Government has prescribed an 'Aadhaar based E-KYC services' for issuing mobile connections from September, 2016.

- The Government has permitted the sharing of active infrastructure amongst service providers based on mutual agreements.

IV. Two top success stories

1. Spectrum Auction

India has suffered from a chronic shortage of spectrum. This was dealt with decisively through the mega auction of spectrum in 700, 800, 900, 1800, 2100, 2300 & 2500 MHz bands that was concluded successfully in October, 2016. The auction sold 965 MHz of spectrum in different bands, which is more than 929 MHz sold cumulatively in last four auctions from 2012 to 2015. The auction also fetched a total amount of Rs. 66,000 crore, and highest ever upfront payment of Rs. 33,000 crore since 2012. Before that, on 26th March, 2015 four bands 800, 900, 1800 & 2100 MHz were put up for auction which fetched Rs.109875 crore revenue to the Government.

2. BSNL

BSNL declared on 25th April 2015 that all ISD voice calls from India to Nepal from BSNL mobile & BSNL fixed lines to any other network in Nepal were to be treated as local call from 25th to 28th April 2015 as a relief measure due to earthquake in Nepal. It means that the calls which were costing Rs.10/- per minutes were charged at Rs. 0.10/- to Rs.1.00/- (Depending upon the tariff plan used by customer). The total minutes of the calls registered during this period from India from BSNL network to Nepal were 11.7 lakh minutes. This BSNL gesture helped many people to connect with their relatives in Nepal at local call rates. During cyclone HudHud in Odisha and Andhra Pradesh the same resilience was shown by BSNL in maintaining the network and also in the Chennai floods, BSNL led from the front in restoring network providing services and even offering the services free of cost to all flood stricken people in this hour of calamity.