

CHAPTER-V

PUBLIC SECTOR UNDERTAKINGS UNDER THE MINISTRY

5.1 Non/short billing of Rental Charges for Leased Circuits/STM Systems

Despite assurance by BSNL to set right deficiencies pointed out in billing of leased circuits, delay in raising of bills due to non-incorporation/ non - updation of billing details continued to persist resulting in non-raising of demand for ₹ 7.61 crore of which ₹ 3.18 crore was still pending recovery as of October 2013.

M/s Bharat Sanchar Nigam Limited (BSNL) provides leased line/circuit services to subscribers for a specific period as dedicated communication links for in-house communication. Digital leased Circuit (High Speed Digital) is a digital leased line service providing an optimal communication environment for enterprise backbone lines using highly reliable Synchronous Transfer Mode¹ (STM). As per billing instructions issued (November 2002) for billing of circuits, rental was to be recovered in advance for 12 months for the first year from the date of installation, for the period from the completion of first anniversary of date installation up to the conventional billing month (March) in the second year and rental for one year as per conventional billing cycle (April–March) from the third year onwards. The advance rental could be collected quarterly/monthly at the option of the subscriber.

Delay in issuance of bills pertaining to lease circuits resulting in blocking of funds was commented in Performance Audit Report no 9 of 2008 along with the para on ineffective functioning of “TVARIT” software system meant for billing of leased lines. DoT in the Action Taken Note (ATN) for this report had stated

- In March 2009 that bills were being issued in time, the commissioning and other billing details were being monitored through system;
- In February 2010 that Western Telecom Region (WTR) had requested BSNL Corporate Office (CO) for early replacement of TVARIT system, competent authority had approved replacement of the system with a new system called Crestel Order Management System and this new system was under final stage of implementation; and

¹ STM(Synchronized Transfer Module) is the mode for carrying digital leased circuits

- In December 2013 that lack of integrated package for commercial and billing section resulted in non billing/delay in billing of leased lines and it was further stated that ‘ TVARIT PLUS system²’ was under implementation.

In the Report No. 3 of 2011-12, similar observations were made by Audit as the lacuna had persisted.

Despite assurance of DoT in the ATNs, Audit observed that out of 352 cases (349 leased circuits and 3 STMs) reviewed (March 2012 to April 2013) in two districts³ and one circle⁴, billing details were not incorporated in 294 cases (292 leased circuits and 2 STMs) and not updated in 58 cases (57 leased circuits and one STM) resulting in non-raising of demand of ₹ 7.61 crore in respect of these 352 cases during the period from 2007-08 to 2012-13.

BSNL Corporate office stated (August 2014) that TVARIT PLUS system (advanced version of earlier TVARIT billing package) was initiated in the year 2009-10 for ensuring correct provisioning, billing and collection process of leased circuit revenues from the enterprise customer. Out of three modules, only first module for generation of demand notes etc., was commenced on 13 September 2010 and other two modules meant for integrated commercial correct billing and fault repair could not be commenced as on date (October 2014). As regards monitoring of billing status, it was replied that the activities for billing and recovery of outstanding were done at SSA/Circle level and BSNL Corporate Office monitors and gives directions for revenue generation and clearance of outstanding dues.

On being pointed out (March 2012 to April 2013) by Audit, the concerned Districts/Circle raised (March 2012 to April 2013) supplementary bills for ₹ 7.61 crore of which ₹ 4.27 crore was realized, ₹ 0.16 crore was cancelled⁵ and ₹ 3.18 crore was pending for recovery as of October 2013.

Thus, despite assurance given, DoT did not evolve an effective control mechanism to provide quality service to its potential enterprise customers for correct provisioning, billing and collection of revenue in circles which resulted in persistent delay in billing in circles and non realization of ₹ 3.18 crore.

² IT software for work order management, Billing module and Fault Repair system for leased lines

³ Chennai Telephone District and Hyderabad Telephone District

⁴ Maharashtra Circle

⁵ Bills were cancelled due to enhancement of discount and regularization and up-gradation of circuits.

5.2 Inordinate delay in commissioning of OAN projects

Projects for laying Optical Fiber Cables (OFC) executed by four Telecom Project Circles and North East Task Force for ₹ 53.27 crore during the period 2005-06 to 2010-11 under Overlay Access Network were yet to be completed/handed over to the user Circles/SSAs. Further, as these projects were put on hold due to cash deficit in the Company, the expenditure incurred on these projects was rendered unfruitful.

Board of Directors of M/s Bharat Sanchar Nigam Limited (BSNL) decided (January 2001) to provide direct Optic Fiber Cable⁶ (OFC) connectivity to commercially important customers. In this regard, BSNL issued (December 2003) planning guidelines for OFC Overlay Access Network⁷ (OAN) and also directed (February 2004) their Territorial/Project circles to plan the same. Further, it was decided (March 2005) to provide OAN in all District Headquarters and any other town considered fit by the concerned Chief General Managers (CGMs) of the Circles. Beginning with the coverage of eight cities, the BSNL decided (January 2007) to extend the project to 898 cities across the country to provide broadband facilities to meet the challenges of providing connectivity on demand posed by the other telecom service providers.

The OAN projects were to be executed by the Telecom Project circles⁸ and handed over to the end users i.e. the Circle/Secondary Switching Areas⁹ (SSAs) after commissioning. One of the steps for timely execution of the project was to obtain permission from Central/State or Local authorities for laying cables/pipes etc. BSNL decided (December 2010) to put on hold the expenditure on Overlay networks in view of cash deficit.

Audit scrutiny (January 2011 to October 2012) of 547 OAN projects executed by four Telecom Project Circles¹⁰ and North Eastern Task Force (NETF) during 2005-11 revealed that out of 53 projects, 31 projects were yet to be commissioned even after a lapse of 22 to 96 months of scheduled date of completion of the projects (**Annexure-XVII**) and remaining 22 projects were commissioned during September 2009 to March 2013 but not handed over to the end users till March 2013 (**Annexure-XVIII**) for various reasons like want of permission from various authorities, damage to OFC cable, end to end was not ready and concerned end user did not accept etc. As on March 2013, the amount incurred on the 53 projects was ₹ 53.27 crore.

⁶ OFC is underground cable used in almost all telecom Networks having greater capacity and immunity to cross talks and static interfaces than metallic cable.

⁷ An overlay access network is a virtual network of nodes and logical links that is built on the top of the existing network with the purpose to implement a network service that is not available in the existing network.

⁸ The Telecom Project Circles functions as non-territorial unit which is responsible for specialized activities i.e. long distance media mostly involving OFC

⁹ The territorial circles are divided into secondary switching areas which are the basic management units of the BSNL.

¹⁰ There are four Project circles viz, Western Telecom Project, Southern Telecom Project, Eastern Telecom Project and Northern Telecom Project covers all the states except North East. North East Task Force (NETF) unit with its head office at Guwahati, covers all the seven states in NE region which are not covered in above 4 Project circles.

The Project Circles in their replies (June 2011 to October 2013) cited the following as reasons for delay in commissioning:

1. Non receipt or delay in receipt of right of way leave permission for cable laying from State/Local authorities; (all four project circles and NETF circle)
2. Cable damage caused by development work/road repair work; (all four project circles and NETF circle)
3. Non availability of cables; (STP)
4. Area specific problems like law and order, long spell of rainy seasons etc., (NETF circle)
5. Stoppage of work due to BSNL instruction of April 2012; (ETP)

DoT endorsed (October 2013) the reply of BSNL Corporate Office which reiterated the replies of concerned circles that delay in Right of Way (ROW) permission and cable damage during development works were the main reasons for delayed commissioning of projects.

While BSNL commissioned 494 projects, due to non-commissioning of these 53 projects, the aim of BSNL to deliver the gigabit band width to the customers and also using the access network as a platform for offering future services like Metro Local Area Network, Wide Area Network, Ethernet over Synchronous Digital Hierarchy (SDH), Ethernet over Multiprotocol Label Switching and Storage Area Network remained unfulfilled besides blocking of funds of ₹ 53.27 crore.

Thus, the failure of the Telecom Project circles to complete the OAN projects in time and hand over the same to SSAs resulted in unproductive investment of ₹ 53.27 crore as of March 2013. Further the non-commissioning/handing over of project defeated the very purpose of meeting the challenges posed by Private Service Providers by providing quality and prompt connectivity to the premises of commercially important customers on demand.

5.3 Infertuous expenditure of ₹ 4.61 crore on Installation of VPT sign boards in West Bengal Telecom Circle

Delay of the Corporate Office in finalizing the specifications for the sign board and also action of the three SSAs in procuring the sign boards without adhering to tender procedures of BSNL and Standards of financial propriety resulted in avoidable extra expenditure of ₹ 4.61 crore.

M/s Bharat Sanchar Nigam Limited (BSNL) entered (March 2003) into an agreement with Administrator, Universal Service Obligation Fund (USOF) for provisioning of Village Public Telephones (VPT) in West Bengal. As per clause 14.2 of the Agreement, the

Universal Service Provider (USP) had to display information like rates, contact persons for complaint/grievances, toll free Public Utility Telephone numbers, etc., in both local language and Hindi/English. The agreement was silent regarding the size of the sign board. BSNL Corporate Office fixed the size of the Board only in November 2007, after more than four years after signing the Agreement with USOF.

Audit scrutiny (February 2010) disclosed that nine¹¹ SSAs out of 14 (Secondary Switching Areas (SSA) in West Bengal had installed sign boards and the rates per sign board paid to contractors for supply and installation of the signboards varied from ₹ 64 to ₹ 23,900 as detailed below:

Name of SSA	Number of Sign Boards	Period of Installation of Sign Boards	Rate per Sign Board (in ₹)
Bankura	750	June 2002 – December 2002	64.00
Kolkatta	5,000	2002-2003	80.00
Asansol	5	Not available	100.00
Purulia	166	2006-07	150.00
Kharagpur	6,274	2004-2005	195.00
Berhampore	1,000	March 2007 – August 2007	822.00
Raiganj	2,450	May 2005 – July 2007	7,400.00
Krishnanagar	816	August 2007 – November 2007	22,500.00
Malda	400	December 2005 – February 2007	23,900.00

Audit, on review of records pertaining to installation of sign boards at Raiganj, Krishnanagar and Malda SSAs, observed that these SSAs installed 3,666 sign boards using heavy steel structures with cement concrete incurring exorbitant expenditure. Further, the three SSAs executed the work of installation of signboards through M/s ITI, M/s TCIL and M/s HCL without inviting any tender.

Non invitation of tender was in contravention of BSNL procurement guidelines since guidelines for procurement of decentralised items issued (June 2001) stipulates that procurement would be done following transparent tendering procedure in consistence with the overall procurement policy of BSNL. Awarding of work of a simple sign board was also not in accordance with Standards of financial propriety as per which every officer incurring or authorizing expenditure from public money should be guided by high

¹¹ Balance five SSAs (Jalpaiguri, Coochbehar, Siliguri, Gangtok and Suri) did not install any sign boards

standards of financial propriety, ensure all relevant financial rules and regulations are observed and also exercise same vigilance as a person of ordinary prudence would exercise in respect of expenditure of his own money. BSNL Corporate Office did not also finalize the specifications for the sign board immediately after signing of agreement with USOF.

It could be seen from the Table above that Berhampore, Raiganj, Krishnanagar and Malda SSAs issued work orders for installation of sign boards during 2005 to 2007 but there were huge variation in rates.

Based on the rates of Berhampore SSA (which was the least of the four SSAs), BSNL incurred avoidable extra expenditure of ₹ 4.61 crore due to installation of sign boards at the other three SSAs at high rates as detailed below:

(₹ in lakh)

SSA	No. of Sign Boards	Cost of the Board	Service Tax & VAT	Total Cost	Cost based on rate of Berhampore SSA (₹ 822.00 per sign board)	Extra Expenditure
Raiganj	2,450	181.30	14.65	195.95	20.14	175.81
Krishnanagar	816	183.60	10.41	194.01	6.71	187.30
Malda	400	95.60	5.99	101.59	3.29	98.30
Total	3,666	460.50	31.05	491.55	30.14	461.41

In view of the fact that five SSAs in West Bengal circle itself had installed the sign boards at far lesser rates, there was no justification for incurring such huge expenditure on a simple sign board.

DoT while admitting the facts, replied (December 2013) stating that structural specifications were given by the Corporate Office in November 2007 and by that time most of the work was complete and uniformity could not be maintained. It was also stated that delegation of financial power had been given by the Corporate Office to the SSAs and they had to exercise these powers in accordance with rules and instructions on the subject. DoT further stated that the matter regarding non-observance of rules and guidelines relating to procurement would be investigated. In pursuance to audit observation, Kolkata circle intimated (February 2014) that the investigation by Vigilance wing of the circle had commenced and further, Central Bureau of Investigation, Kolkata had also registered case suo moto in this regard in December 2013.

The fact remains that the delay of the Corporate Office in finalizing the specifications for the sign board and also action of the three SSAs in procuring the sign boards without adhering to tender procedures of BSNL and Standards of financial propriety resulted in avoidable extra expenditure of ₹ 4.61 crore.

5.4 Non installation of DG sets procured resulting in blocking of funds of ₹ 4.72 crore

Non installation of Diesel Generator Sets procured by BSNL under GSM mobile expansion projects resulted in blocking of ₹ 4.72 crore on their procurement

Phase-wise expansion projects were undertaken by M/s Bharat Sanchar Nigam Limited (BSNL) for its GSM mobile services in its territorial Telecom circles during the period 2005-06 to 2012-13 involving upgradation of existing technology, capacity enhancement of Main Switching Centre (MSC) and installation of additional Base Transceiver Stations (BTS) for providing optimal coverage. For ensuring un-interrupted working of BTS sites during power failures, engine alternators (diesel generator sets) of various capacities were also procured as a part of these expansion projects.

It was noticed during audit (November 2013 - March 2014) in three¹² Telecom Circles that out of 441 DG sets of various capacities valued at ₹ 6.13 crore procured for installation on turn-key basis through vendors under respective expansion projects of these Telecom circles, 304 DG sets valued ₹ 4.72 crore remained un-utilized as on 31 March 2014 for periods ranging from two years to five years from their receipt. (**Annexure-XIX**)

DoT replied (September 2014) that:

- 16 DG sets stated to be lying idle in Andhra Pradesh Telecom circle were utilized/being utilized during Phase VII roll out project.
- The entire work of installation and commissioning of DG sets was awarded to M/s ITI Limited under 30 *per cent* reserved quota on turnkey basis for Gujarat Telecom Circle but due to inability of M/s ITI Ltd to complete the work as per schedule, the balance quantum of work was handed over to Electrical Wing of BSNL at the risk and cost of M/s ITI Ltd and as on date, 162 DG sets were lying in store and 33 DG sets were under commissioning at sites.
- In Rajasthan Telecom Circle, all the DG sets procured under GSM expansion phase-IV and Phase V.1 have been utilized as on 31 March 2014 and only 7 DG sets were lying with them as they had been recovered from existing school BTS sites in adherence to Hon'ble High Court of Rajasthan's orders.

¹² Gujarat, Andhra Pradesh & Rajasthan Telecom circles.

Thus, it could be seen from the reply of DoT that 195 DG sets have not yet been commissioned in Gujarat Telecom circle and 16 DG sets were utilized/being utilized during Phase VII roll out project in Andhra Pradesh Telecom circle as on 31 March 2014. Further, though DoT has stated that all the DG sets procured under GSM expansion phase-IV and Phase V.1 have been utilized as on 31 March 2014, the fact remains that they were installed after more than four years since the procurement. Thus, 304 DG sets remained unutilized till March 2014 for two to five years. Due to absence of site-wise utilisation details of DG sets in all the three circles, the reply of DoT that balance DG sets were installed could not be verified.

Thus, failure of BSNL in ensuring timely installation and utilization of the DG sets procured under phase wise expansion plans led to blocking of ₹ 4.72 crore on their procurement.

5.5 Non Recovery of Penalty from Defaulters

Non-recovery of penalty paid by BSNL to DoT due to non-compliant Customer Application Forms from Franchisees/Direct Selling Agents/Customer Service Centre employees resulted in blocking up of ₹ 32.62 crore

Department of Telecom's (DoT) licence conditions (November 2006) for cellular mobile services/value added services inter-alia provides that "the Licencee shall ensure adequate verification of each and every customer before enrolling him as a subscriber and instructions issued by the Licensor in this regard from time to time shall be scrupulously followed". DoT had issued instructions/guidelines for verification of subscribers and calculation of penalty on defaults in December 2008.

BSNL Corporate office delegated (April 2009) the financial powers to Heads of Circles to pay penalty on violation of terms and conditions of Licence Agreement for all cases verified and rejected (non-compliant) by Telecom Enforcement, Resource and Monitoring (TERM) Cells of DoT after 1 April 2009. It was also instructed that Heads of Telecom Circles must fix responsibility for any non compliance and recover the amount of penalty from the defaulter, be it franchisee or direct selling agent and in case the defaulter was employee of BSNL, appropriate disciplinary action including recovery of the amount from the employees, should also be considered.

A reference is invited to Para no. 2.1.6.2 of the Report of the Comptroller and Auditor General of India for the year ended 31 March 2012 (Union Government – Communications and IT Sector) wherein details of telecom service provider-wise non-compliant Customer Application Forms (CAF) was pointed out.

On a review by audit (September 2013 – March 2014) of Customer Application Form (CAF) defaults by BSNL in eight¹³ Telecom circles during the period from 2009-10 to 2012-13, it was found that 59,289 CAFs were verified and rejected as non-compliant (NC) by respective TERM cells of DoT in these Telecom circles either due to non-submission or non-availability of proper proof of identification and address (Non-PIA), photograph not visible etc. in violation of licence agreement terms for verification of subscribers at respective points of sale. An amount of ₹ 33.07 crore was imposed as penalty by the respective TERM cells out of which an amount of ₹ 32.85 crore has been paid by these eight Telecom circles (**Annexure-XX**).

However, recovery of the penalty paid by BSNL from defaulter's viz. franchisees/direct selling agents (DSA)/Customer Service Centre (CSC) employees was partially made by four¹⁴ Telecom circles amounting to ₹ 0.23 crore. An amount of ₹ 32.62 crore remained to be recovered from the defaulters of these eight Telecom Circles. (**Annexure-XXI**).

DoT stated in its reply that BSNL has already instructed all SSA's for recovery of penalty and fixing of responsibility. They further stated that telecom circles have expressed the following for non-recovery:

- Recovery process from BSNL franchisees has affected the sale of BSNL products badly with some of the existing franchisees un-willing to renew their contracts for fear of recovery of penalty on CAF defaults. Further, difficulties in finding new franchisee had led to decline in overall revenue:
- TERM Cells interpretation and rejection of proofs of identity submitted along with CAFs on issues of clarity of photograph, in-adequate address proof issued by various Government authorities, mismatch in signatures etc. vary with interpretation and acceptance of the same by BSNL sales outlets viz. Franchisees/retailers/CSCs officials which leads to increase in levy of penalties since TERM Cells interpretation are taken as final.

The reply is not acceptable as:

- Instructions issued by Corporate Office from time to time for recovery of penalty from erring franchisees/retailers/Customer Service Centre (CSC) officials have not succeeded due to failure by Telecom circles to effectively implement the same as could be seen from the increase in the number of cases being rejected by TERM Cells for being non-compliant while the recovery of penalty paid by BSNL for non-compliant CAF was very meagre;

¹³ Gujarat, Rajasthan, MP-Chhattisgarh, Karnataka, Kerala, West Bengal, Assam and Haryana Telecom Circles.

¹⁴ Gujarat, Madhya Pradesh, Haryana & Kerala Telecom circles.

- CSC officials are designated to verify all the supporting documents submitted along with new CAFs by BSNL channel sales partner's viz. franchisees/retailers before activation of the connection. It was submitted in reply that negligence on the part of erring franchisees/retailers/CSC officials cannot be fixed, which was in fact, aimed at covering up BSNLs own failures since the ultimate responsibility of accepting incomplete CAF, if any, lies with CSC employees and the onus of recovery should be from the erring CSC employee too:
- As expressed in reply, the fear of losing existing franchisees and inability to find new franchisees if recovery was affected for rejected CAFs from them cannot be accepted as it is BSNL's responsibility to ensure the enforcement of its own instructions regarding recovery of penalty paid for non-compliant CAFs to protect its financial interest.

Thus, failure to observe DoT's mandatory terms & conditions prescribed for acceptance of CAFs at points of sale led to payment of penalty of ₹ 32.85 Crore during the period from 2009-10 to 2012-13 by BSNL out of which ₹ 32.62 Crore remained to be recovered as on 31 March 2013.

5.6 Erosion of Subscriber Base due to Porting Out by Subscribers under Mobile Number Portability

Failure by BSNL to provide a good quality GSM mobile network at competitive tariffs led to erosion of its existing subscriber base under Mobile Number Portability to other operators resulting in loss of assured revenue of ₹ 100 crore

Ministry of Communication & Information Technology, Government of India introduced mobile number portability (MNP) for all existing GSM mobile subscribers of the country in January 2011. The purpose of MNP was to provide an option to the customers to shift to a new service provider retaining the existing mobile telephone number in case of unsatisfactory service of the existing service provider.

Audit noticed that the introduction of MNP (January 2011) by Government resulted in net loss of 8,04,015 subscribers during the period from January 2011 to March 2013 in seven¹⁵ BSNL Telecom Circles as given in Table-1 below:

¹⁵ Gujarat, Rajasthan, MP, Karnataka, West Bengal, Bihar & Haryana Telecom Circles

Table-1

Name of the Telecom Circle	Port In	Port Out	Net Gain(+)/Loss(-)
Gujarat	70,627	2,24,489	(-) 1,53,862
West Bengal	21312	79797	(-) 58,485
Rajasthan	96,866	3,59,350	(-) 2,62,484
Karnataka	1,86,276	2,38,870	(-) 52,594
Haryana	81,252	2,53,389	(-) 1,72,137
Madhya Pradesh	42,851	1,02,885	(-) 60,034
Bihar#	15,722	60,141	(-) 44,419
Total:-	514906	1318921	(-) 8,04,015
# Data not available for the months February 2012 to November 2012			

A detailed analysis by audit revealed the following:-

In four of the above seven Telecom Circles, 40 *per cent* to 76 *per cent* of existing subscribers ported-out of BSNL stating “network problem”, 5 *per cent* to 29 *per cent* stating “Tariff related issues” and 10 *per cent* to 40 *per cent* stating other reasons, as detailed in Table-2 below:-

Table-2

(In percentage)

Name of Circle	Network/ Quality of service related problems	Tariff related problems	Other reasons
Gujarat	40	29	31
Rajasthan	68	22	10
West-Bengal	48	20	40
Haryana	76	05	19

- i. As per Network Service Quality Parameters prescribed by Telecom Enforcement, Resource and Monitoring (TERM) Cell, DoT, for GSM service providers, accumulated downtime (network not available for service) should be less than 2 *per cent* of total Base Transceiver Station (BTS) Hours available for the month. Further, as per BSNL’s norms¹⁶, the benchmark prescribed for BTS interruption rate (faults) was up to 20 *per cent* of working BTS for the month. However, it was noticed in four out of the seven Telecom Circles that though total BTS failure hours remained within 2 *per cent* of total available hours for the month during the period from 2010-11 to 2012-13, the

¹⁶ E1-E2 Management Chapter 15 on Inspection & Quality of Service

number of faults registered ranged from 25.4 per cent to 198.59 per cent as detailed in Table-3 below:-

Table-3

Name of Circle	Percentage of Average monthly BTS fault rate registered (2010-11 to 2012-13)
Gujarat	45.31
Rajasthan	49.58
Karnataka	25.40
West-Bengal	198.59

ii. BSNL, as a GSM mobile service provider held more spectrum in six out of seven Telecom Circles as detailed in Table-4 below:

Table-4

Service Area	Spectrum Held (in MHz)/ Subscriber base (in lakh) as on 31 March 2013								Net gain of customers during the period from 1 April 2010 to 31 March 2013 (in lakh)			
	BSNL		Bharti		Vodafone		Idea		BSNL	Bharti	Vodafone	Idea
	Spectrum	No. of subscribers	Spectrum	No. of subscribers	Spectrum	No. of subscribers	Spectrum	No. of subscribers				
Gujarat	7.4	41.80	6.2	71.11	9.8	160.62	6.2	85.10	12.32	16.54	52.37	31.09
West Bengal	8.0	35.34	6.2	92.72	6.2	116.01	4.4	26.60	12.99	37.06	43.09	20.26
Rajasthan	8.0	57.88	6.2	147.39	6.2	89.62	6.2	51.44	16.90	44.37	14.85	28.02
Karnataka	10.0	69.51	9.8	162.30	8.0	68.38	4.4	62.46	34.70	35.87	16.71	36.13
Haryana	10.0	30.90	7.8	23.34	6.2	46.33	6.2	37.83	06.23	08.00	17.19	16.23
Madhya Pradesh	10.0	50.31	6.2	101.20	4.4	43.08	8.0	155.59	17.36	34.79	24.63	83.07
Bihar	10.0	66.91	8.0	193.72	4.4	67.69	4.4	60.40	13.47	83.69	35.98	29.93
Total:-		352.65		791.78		591.73		479.42	113.97	260.32	204.82	244.73

As could be seen from the above, the number of subscribers on 31 March 2013 of M/s Bharti Airtel Ltd, M/s Vodafone Ltd and M/s Idea Cellular Ltd were 7.92 crore, 5.92 crore and 4.79 crore respectively whereas that of BSNL was only 3.53 crore. Further, the number of subscribers gained by M/s Bharti Airtel Ltd, M/s Vodafone Ltd and M/s Idea Cellular Ltd during the period 2010-11 to 2012-13 was 2.60 crore, 2.05 crore and 2.45 crore respectively against 1.14 crore by BSNL. Thus, despite holding lesser spectrum than BSNL, the private operators were able to attract and gain more subscribers in these telecom circles due to their ability to provide and maintain a better quality network

whereas BSNL despite having established a vast pan India network under phase-wise expansions, carried out for capacity augmentation and technology up-gradation from time to time could not provide and maintain a quality network. Further, BSNL also failed in effective marketing of its products with competitive market driven tariffs as evident from the reasons furnished by subscribers for porting out from BSNL as brought out in Table-2.

Erosion of existing subscriber base due to MNP in these seven BSNL Circles led to a revenue loss of ₹ 100 crore¹⁷ during the above period (**Annexure-XXII**).

Telecom Circles stated (January–March 2014) that the factors responsible for erosion of subscriber base were inability of BSNL to match aggressive marketing campaign by private operators to attract port-in subscribers, match special incentives offered to retailers by other operators for bringing in MNP customers, dissatisfaction with BSNL mobile service coverage, lack of competitive tariffs and poor quality of service and in-ability of BSNL to match freebies offered by other operators.

DoT in its reply (September 2014) had stated that existing subscribers did not port out of BSNLs network due to the poor quality of service being rendered as BSNL has been meeting overall quality of service performance as per TRAI¹⁸ benchmark during the period under comment and hence it will not be appropriate to say that the subscriber base of BSNL is porting out due to quality of service.

The reply of DoT contradicts the fact that four of the seven telecom circles regularly failed to maintain the prescribed TRAI benchmark on BTS downtime (un-availability of network) and call drop rate (live call disconnection) as brought in Tables 2 and 3 above. Further, DoT reply is silent as to why BSNL was facing regular erosion of its existing subscriber base under mobile number portability.

Thus BSNL, despite holding maximum quantity of spectrum in the six service areas, failed to substantially increase its existing subscriber base in fast expanding telecom sector due to its inability to provide and ensure a good quality pan-India GSM mobile network with minimal interruptions (faults) and also could not introduce dynamic market driven tariffs which resulted in erosion of its existing subscriber base in these seven Telecom Circles leading to a revenue loss of ₹ 100 crore during the period 2010-11 to 2012-13. DoT needs to, on priority, identify the reasons for gradual erosion of subscriber base of its PSU viz. BSNL and ensure effective steps are taken so as to enable BSNL to arrest the trend of erosion of subscriber base and also to compete with private operators in all the circles.

¹⁷ Revenue loss calculation based on monthly blended (prepaid + post paid) average revenue per user (ARPU) of the seven telecom circles of BSNL.

¹⁸ Telecom Regulatory Authority of India.

5.7 Non-deduction of Tax at Source resulted in liability of ₹ 29.74 crore towards Income Tax

Non-deduction of Tax at source on commission paid to Franchisees in the form of trade discounts resulted in liability of ₹ 29.74 crore on BSNL towards Income Tax

M/s Bharat Sanchar Nigam Limited (BSNL) was deducting Tax at Source on commission paid to its franchisees on sale of Re-Charge Coupons/India Telephone Cards up to Assessment Year 2008-09. BSNL Corporate Office issued amendments in December 2007 to its Sales and Distribution Policy, 2006 as per which the franchisees were not acting as agents of BSNL for sale of Recharge coupons (RCC), India Telephone Cards (ITC), Fixed Line Prepaid (FLPP) Sanchar-net Cards, Web Phone Cards and CD Rom. It was further stated that these transactions were on principal to principal basis and accordingly applicable discount was fixed for franchisees. BSNL instructed (April 2008) that in cases where franchisees, Business Associates, PCO holders, Direct Selling Agents etc., were acting on principal to principal basis, deduction of tax at source (TDS) was not applicable since the risk and responsibility of the business was transferred to the person once he bought the coupons/cards by paying the net price after discount. Accordingly, units were advised not to deduct tax at source and separate agreement bringing out the principal to principal nature of transaction was to be executed with the franchisees for this purpose. The amendment was affected without considering the judgment of Income Tax Appellate Tribunal (ITAT), Kolkata which, in the case of a private mobile service provider, had held (April 2006) that trade discount allowed to franchisees was equivalent to commission and liable for TDS deduction.

Considering trade discount allowed to franchisee's equivalent to commission, the Income-Tax authorities first raised a demand on Chennai Telephones in November 2009 for non deduction of TDS on trade discounts allowed to its franchisees. Subsequently, demands were raised by Income Tax authorities in other four Telecom Circles¹⁹ on the same pretext. In March 2011, BSNL reverted back to its earlier procedure of deduction of TDS on commission paid to franchisees with effect from April 2011 (applicable to Assessment Year 2012 - 13). An appeal by BSNL Chennai Circle against the demand notices before Income Tax Appellate Tribunal (ITAT) was dismissed (October 2012) citing the decision of Hon'ble High Court, Delhi.

It was noticed during audit in thirteen²⁰ Telecom circles that TDS applicable as per IT Act was not deducted on trade discount allowed to franchisees during the period from 2008-09 to 2011-12 (up to June 2011) resulting in huge liability of ₹ 29.74 crore towards income-tax apart from Interest and penalty thereon. Income Tax Authorities had raised a

¹⁹ Hyderabad, Jaipur, Uttar Pradesh & Jammu Telecom Circles.

²⁰ Chennai Telephones, Andhra Pradesh, Rajasthan, Punjab, Jammu and Kashmir, Haryana, Bihar, Gujarat, Madhya Pradesh, Uttar Pradesh, Orissa, Karnataka & Kerala.

claim for ₹ 14.77 crore against five²¹ Telecom Circles for non recovery of TDS and ₹ 2.04 crore towards penalty and interest against two²². An amount of ₹ 14.35 crore was paid by four²³ Telecom Circles (**Annexure--XXIII**).

DoT stated (September 2014) in their reply that amendments to existing Sales and Distribution Policy, 2006 were necessitated due to representations received from its franchisee associations for formulating BSNL's policy in accordance with policy of other private service providers who were allowing trade discount instead of commission to obviate payment of service tax on commission paid for sale of SIM cards & recharge coupons. A committee, formed at BSNL Corporate Office, recommended treating sale of some of BSNLs products sold to franchisees on cash basis as principal to principal basis and upfront trade discount on such purchase was to be allowed instead of commission on their sale later and this proposal was approved by the competent authority and BSNL Sales and Distribution Policy was amended accordingly in 2007. However, the Income Tax authorities started issuing notices to BSNL's field units on account of failure to deduct TDS on trade discount offered to franchisees since it was considered by them that the same was equivalent to commission. In view of Hon'ble Delhi High Court decision in favour of deduction of TDS, BSNL reverted back in April 2011 to its earlier policy of deducting TDS on commission paid to franchisees.

The fact remains that due diligence was not done since the judgment of the Income Tax Appellate Tribunal (ITAT), Kolkata of 2006 in respect of private service provider on the same subject, which was available in the public domain, was not considered while amending the existing Sales and Distribution Policy in 2007. As a result, the terms and conditions in franchisee agreements were in contravention to existing Income Tax Act/Orders on the subject and this resulted in liability towards payment of Income-Tax, Interest and penalty of ₹ 29.74 crore due to non-deduction of TDS on trade discount allowed to franchisees. An amount of ₹ 14.35 crore out of ₹ 29.74 crore had been paid so far.

5.8 Unfruitful expenditure due to non-functioning of IPLC-LIM System

International Private Leased Circuit-Lawful Interception and Monitoring (IPLC-LIM) Systems procured by BSNL for Mumbai and Kolkata Gateway nodes for security monitoring of tele-traffic remained non-functional for more than three years since their installation resulting in unfruitful expenditure of ₹ 8.48 crore besides compromising the security requirement of interception and monitoring.

Installation of International Private Leased Circuit–Lawful Interception and Monitoring System (IPLC-LIM) at the Gateways by International Long Distance Telecommunication

²¹ Chennai Telephones, Andhra Pradesh, Rajasthan, Jammuand Kashmir and Uttar Pradesh.

²² Andhra Pradesh and Jammu and Kashmir Telecom Circles.

²³ Chennai Telephones, Andhra Pradesh Jammu and Kashmirand Uttar Pradesh Telecom Circles.

Operators (ILDOS) is the mandatory requirement for providing IPLC services commercially. IPLC-LIM system is used for interception and monitoring of the traffic passing through the IPLC-LIM. The ILDOs shall liaise with the licensor and security agencies with regard to security monitoring of the traffic upon authorization by the Union Home Secretary or Home Secretaries of the States/Union Territories as prescribed in Rule 419 (A) of Indian Telegraph Rules 1951.

BSNL Corporate Office (CO) placed (August 2007) a purchase order (PO) on M/s ICOMM Tele Ltd. for supply, installation and commissioning of the IPLC-LIM system at five²⁴ Gateway Nodes of BSNL at a cost of ₹ 17.04 crore with a scheduled delivery by 02 January 2008. The equipments at these places were delivered by January 2008. However, the equipments were put to use only at three²⁵ places by January 2011. As of March 2014, the equipments at Mumbai and Kolkata were yet to be put to use.

A paragraph on "Delay in installation of Lawful Interception and Monitoring and International Private Leased Circuits" appeared in Comptroller and Auditor General of India (C&AG of India) Report No. 10 of 2010-11 wherein non-commissioning or delay in commissioning of equipments at three²⁶ places (including Kolkata) was pointed out and delay was attributed to failure in clearing the Acceptance Test. It was also pointed out that despite bidder's failure to demonstrate all functionalities of the equipments, no action was taken against the vendor. In the Action Taken Note (ATN) to the paragraph, DoT stated (March 2010) that Acceptance and Testing schedule prescribed by T&D Circle had additional tests other than those performed during validation and no technical specifications/generic requirement were available with BSNL during the procurement of IPLC-LIM equipments. It was further stated that action would be taken against the vendor as per terms and conditions of the PO. But despite assurance by DoT, no action was taken against the vendor in the instant case of non-performance of the equipments except levy of LD charges (October 2014).

Audit observed the following:

- As per clause 11.1 of PO, 60 *per cent* of the cost of equipments was payable on supply of the equipment at the site and on production of Inspection Certificate of Quality Assurance (QA). BSNL CO instructed (October 2007) WTR, Mumbai and ETR Kolkata (March 2008) to release the amount without inspection report of QA on the plea that validation test would be done by validation committee and accordingly, an amount of ₹ 5.10 crore was paid (February/March 2008) to the vendor. As the

²⁴ Mumbai, Kolkata, Chennai, Ernakulam & Tuticorin.

²⁵ Chennai- 16 October 2010, Tuticorin- 31 January 2011, Ernakulam- 31 January 2011

²⁶ Ernakulam, Kolkata and Chennai

validation testing was conducted and completed successfully only in January 2009, the release of payment of ₹ 5.10 crore being 60 *per cent* of the cost of equipments in February/March 2008 was contrary to the PO conditions.

- As per clause 11.1 (b), 30 *per cent* of total cost to be paid on the successful acceptance and testing (AT). As per terms of reference to the Committee constituted (August 2007), AT was to be carried out at Chennai, Kolkata and Ernakulam covering only major parameters. The AT done at ETR Kolkata in January 2009 had some shortcomings like loading and password problem. Similarly, at Mumbai, packet data capture was not demonstrated (October 2014). Despite the shortcomings, an amount of ₹ 1.75 crore was paid by Mumbai unit in March 2009 and payment of ₹ 0.72 crore by Kolkata unit in February 2010 being 30 *per cent* of total cost. As the acceptance testing was not successful, payment of ₹ 2.47 crore being the 30 *per cent* of the cost was not in accordance with the PO conditions.
- As per clause 11.1 (c), balance 10 *per cent* was to be paid only after one year of successful commissioning of equipment. However, WTR, Mumbai released (March 2009) the balance amount of ₹ 0.58 crore for equipment on the plea of clause 11.3 (Sec-III) of the Tender Document²⁷ on the production of Additional Bank Guarantee (BG) even though the equipment was not commissioned. The bank guarantee was not extended after its expiry in January 2010.
- Further, an additional amount of ₹ 0.33 crore was also paid to the supplier towards installation and commissioning by Mumbai unit though the equipment was yet to be commissioned (October 2014).

The authorities of WTR (March 2014) and ETR (April 2014) replied that payments to vendor were made only on basis of conditions of PO as well as instruction issued by BSNL Corporate Office.

The Management while accepting the non-functioning of equipments stated (September 2014) that:

- The Original Equipment Manufacturer (OEM), M/s Verient was liable for providing technical support for commissioning/smooth functioning of IPCL-LIM in BSNL network for a period of five years as per tender conditions. But OEM stated that there was no privity of contract between them and BSNL, they were no way privy to the tender documents of IPCL and there was no consensus on their part to those tender documents towards BSNL.

²⁷ 10*per cent* Balance can be paid, if performance is satisfactory and an additional Bank Guarantee (ABG) equivalent to 10 *per cent* of the value of supplies is furnished by the supplier.

- It was proposed to forfeit the Performance Bank Guarantee of ₹ 1.06 crore and black list the company.
- For delay in installation and commission of equipments, BSNL has already recovered LD of ₹ 0.78 crore against M/s ICOMM and there was no violation of clause as payments were released on successful validation and Acceptance testing terms and conditions of PO.

DoT, in its reply, stated (October 2014) that

- IPLC-LIM equipment was installed in Mumbai in May 2008 and taken over by WTR, Mumbai in November 2010;
- clearance of IPLC-LIM was accorded by DoT in 2008;
- payment was released subsequent to successful validation of the equipment at Mumbai; and
- IPLC-LIM equipments were not functioning at Kolkata and Mumbai as on date, the supplier had failed to take corrective action despite several requests and hence PBG forfeiture has been initiated.

The replies are not acceptable as payments were released in contravention of PO clauses as brought out above. Since BSNL had no technical specification/Generic Requirement (GR) regarding IPLC system, it was not reasonable on part of BSNL to relax the terms and conditions of payments which was based on test schedules like Validation, Quality Assurance and Acceptance Testing while making payment to vendor. The relaxation in payment terms did not protect the interest of the Company. BSNL did not enter into any contract with the OEM which was not a good practice particularly considering the reply of OEM that they were not privy to the tender documents of IPCL and there was no consensus on their part to those tender documents towards BSNL. Due to failure to sign any contract with OEM, BSNL could not hold the OEM liable for the shortcomings noticed during the AT resulting in non-installation of the equipments at Mumbai and Kolkata.

Thus failure of BSNL to enter into any contract with OEM and strictly adhere to payment conditions stipulated in the PO resulted in unfruitful expenditure of ₹ 8.48 crore on procurement of IPLC-LIM system as the systems remained idle for more than six years since their supply at Mumbai and Kolkata. Besides, compliance of regulatory requirement to address the security concerns remained unfulfilled.

5.9 Non auto-disconnection of services by the billing system due to non-payment resulted in accumulation of dues from subscribers

Inability of BSNL's billing system to auto-disconnect services on crossing threshold limits and delayed action by billing authorities resulted in accumulation of dues of ₹ 5.61 crore. Further, non-observance of Corporate Office guidelines while approving ISD connection facility resulted in non-recovery of revenue of ₹ 2.82 crore

M/s Bharat Sanchar Nigam Limited (BSNL) started post-paid mobile telephone under the brand name Cell One with effect from October 2002. Zonal Billing Centers (ZBC) were formed at Chandigarh, Kolkatta, Pune, Hyderabad and Trichy under General Manager, Cellular Mobile Telephone Services (CMTS) of respective Telecom Circles of North, East, West and South zones. The Zonal billing centers were responsible for processing of bills, monitoring payments, generation of various reports for monitoring of revenue collection and processing for withdrawal of outgoing/incoming calls in cases of non-payment of dues for all Circles under their billing jurisdiction. Telecom Circles were following different threshold limits of demands not paid (DNP) for disconnection of postpaid cellular mobile connections. BSNL fixed (September 2008) a uniform threshold limit in the billing system for disconnection of a postpaid cellular mobile connection due to non-payment of dues despite crossing threshold limits for various account categories to be followed with immediate effect.

It was noticed during audit of two²⁸ Telecom circles test checked (January 2013 & August 2013) that due to non disconnection of 14,939 "Individual" category post paid subscribers despite crossing threshold limits assigned in the system and due to lack of proper monitoring by respective billing authorities, these subscribers were permitted to continue mobile facilities up to five billing cycles resulting in accumulation of outstanding dues of ₹ 5.61 crore during the period 01 April 2009 to 30 June 2014.

DoT, in its reply, stated (September 2014) that:

- Post paid subscribers were permitted to continue mobile facilities up to five billing cycles without payment as normally a maximum of two bills are raised after the customer defaults on payment of first bill (total three bills outstanding). In cases of four or five bills outstanding, details of usage was due to the fact that international roaming bills were received at a later date and hence they are normally billed in the fourth or fifth bill generated.
- Corporate Office instructions on the subject have been followed by Zonal Billing Centre at Trichy (Andhra Pradesh Telecom Circle) and Billing and Customer Care

²⁸ Maharashtra and Andhra Pradesh Telecom circles.

System (BCCS) at Pune (Maharashtra Telecom Circle) and the disconnection procedure process was completely automatic. There has been no fraud in delay in disconnection (DNP) cases.

- The due dates and threshold limit for barring was configured in system based on guidelines issued by Corporate Office from time to time. The auto barring feature has resulted in minimizing the outstanding dues/frauds.

The reply is not acceptable since the very fact that 4th or 5th bills are issued in respect of international roaming clearly indicates there is no real time monitoring mechanism in BSNL for subscribers availing international roaming facility and thus, the system was deficient to that extent. Further, the reply that due dates and threshold limit for barring was configured in system based on guidelines issued by Corporate Office from time to time is very general as no specific reply as to the reasons for delay in disconnection in the cases pointed out by Audit have been furnished. Further, the position needs to be examined in the remaining telecom circles and effective action taken to ensure that bills are raised based on real time monitoring and also timely disconnection is effected by the system in case of dues crossing the threshold limits fixed.

BSNL Corporate Office issued (April 2011) amendments to existing guidelines to check fraudulent activities in CMTS network emphasizing that “International Subscriber Dialing (ISD) with conference facility should be provided only after required customer verification and approval of the Head of Secondary Switching Area (SSA) of the level of SAG or above” and stated that “conference facility out of required combined facility will be provided only after ensuring up to date payment of three previous consecutive bills”. It was noticed in two²⁹ Telecom circles (December 2013 & January 2014) that 202 Post Paid Mobile connections with ISD and conference facility were provided to eight subscribers without mandatory credential verification and obtaining approval of the competent authority (Official of the rank of SAG or above). Further, billing system failed to generate usage pattern of the subscriber on daily basis. Non-adherence to the Corporate Office guidelines and failure of the billing system to generate usage pattern regularly resulted in accumulation of dues to the extent of ₹ 2.82 crore.

DoT replied (September 2014) that

- For the fraud cases in Karnataka Telecom Circle which have occurred due to non adherence of Corporate Office guidelines, the responsibility has been fixed on the concerned staff and in some of the fraud cases, vigilance case was still under process.

²⁹ Karnataka & Tamil Nadu Telecom circles.

- In respect of fraud cases in Tamilnadu Telecom Circle, the local billing address given by the defaulter in application did not exist and on a thorough CBI investigation, an amount of ₹ 1.92 lakh was seized and deposited in Bank as per directions of the Court. BSNL panel advocate has opined that pursuance of the case any further was futile and expensive one and therefore the dues of M/s Himalaya Herbals has been proposed for write-off.

Thus, it is clear from the reply that an amount of ₹ 2.82 crore was rendered irrecoverable. Effective steps may be taken to enhance the internal controls in the system in order to ensure that facilities are activated to the subscribers only after approval by competent authority.

5.10 Imprudent Investment in GPON/GEPON Project

Procurement of GPON/GEPON equipments without detailed market study and obtaining of requirements from the Circles besides delayed installation of the same resulted in idling of equipments valued ₹ 377.15 crore and non-provision of envisaged services like Internet Protocol Television, Voice over Internet Protocol and Video on demand to the FTTH (Fibre to the Home) customers defeating the purpose of procurement of such equipments.

M/s Bharat Sanchar Nigam Limited (BSNL) decided (May 2007) to deploy “Passive Optical based Network” (PON)³⁰ technology through Optical Fibre Cable (OFC) to provide voice, data and video services to their customers and identified Gigabit Passive Optical Network (GPON) and Gigabit Ethernet Passive Optical Network (GEPON) as two major technologies for meeting the requirements of urban and rural customers respectively under “Fibre to the Home” (FTTH)³¹ network. The main objective of the project was to provide high bandwidth broadband services³² such as Internet Protocol Television (IPTV), Voice over Internet Protocol (VOIP) and Video on demand by using GPON/GEPON technology etc.

A PON consists of a central office node called an Optical Line Terminal (OLT), one or more user nodes called optical network units (ONUs) or Optical Network Terminals (ONTs) and the fibers and splitters between them. An OLT is the service provider

³⁰ PON technology involves provisioning of services, at consumer end, through optical fibre (OF) cable, known as Fibre To The Home (FTTH) services. The provisioning of services through OF increases quality, speed and variety of services to consumers. Under this technology, single OF caters to 32 customers with high bandwidth and OF cable is laid up to the customer premises.

³¹ FTTH is delivery of a communication signal over optical fibre from the operator’s switching equipment all the way to a home or business.

³² Audio on demand service, Bandwidth on demand, Remote Education, Point to Point and Point to Multipoint Video conferencing, Voice and Video telephony over IP, Interactive Gaming, Layer 3 Virtual Private Network (VPN), VPN on Broadband, Dial-upVPN service and Virtual Private LAN service (VPLS).

endpoint of a PON and is placed in the Central Office or head end. The OLT or ONU terminates the PON and presents the native service interfaces to the user.

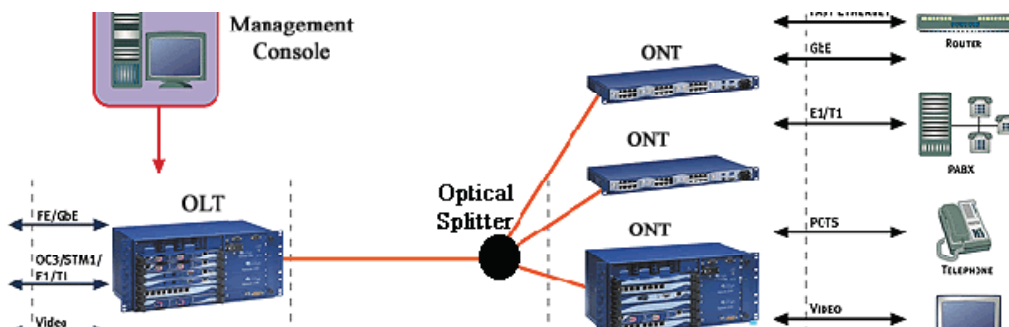


Figure 1: General Architecture

The approved plan of the Management Committee (June 2007) on roll out of FTTH had been communicated to field units by the BSNL Corporate Office in September 2007 and it was targeted that 18.32 lakh customers would be covered under GPON/GEPON during the period from May 2007 to December 2010 in four phases. Four Project Circles - Northern Telecom Projects (NTP) - Delhi, Eastern Telecom Projects (ETP) - Kolkata, Western Telecom Projects (WTP) - Mumbai and Southern Telecom Projects (STP) - Chennai were made (September 2008) responsible for installation and commissioning in coordination with the respective Territorial Circles. The estimated cost of the project was ₹ 1,150 crore and was to be funded from internal resources of retained earnings and current assets. BSNL placed (May 2009) purchase orders for procurement of 1,720 Optical Line Terminals (OLTs)/chassis, 234 Local Area Network (LAN) switches and 5.50 lakh Optical Network Terminals (ONTs) for GPON equipment and 166 OLTs and 1.06 lakh ONTs for GEPON equipment on five³³ vendors at a cost of ₹ 1,119.73 crore.

Audit scrutiny of the records in BSNL Corporate Office, four Project Circles and ten³⁴ Telecom Circles covering a period from April 2009 to March 2013 revealed the following deficiencies:

- In accordance with the phase-wise implementation plan approved by the Management Committee in June 2007, a proposal for procurement of 32,000 lines was submitted by BSNL Corporate office to the Management Committee (MC) under the Board of BSNL which was revised (December 2007) by the MC to five lakh lines (GPON: 3.5

³³ M/s ITI Limited, M/s Sterlite Technologies Limited, M/s Nokia Siemens Network India Private Limited, M/s Teracom Limited and M/s ICOMM Limited.

³⁴ Chennai, Tamil Nadu, Karnataka, Maharashtra, Rajasthan, Punjab, Uttar Pradesh (East), Uttar Pradesh (West), Kolkata and West Bengal

lakh and GEPON: 1.5 lakh) at an estimated cost of ₹ 850 crore. The Board of BSNL decided (December 2007) to further enhance the quantity of GPON equipment by additional two lakh lines at an additional cost of ₹ 300 crore on the grounds that endeavour should be made to cover all satellite townships and industrial clusters which had potential demand and accorded approval (December 2007) accordingly.

Audit observed that the decision was taken without a proper business plan/pilot study and estimate of the equipment was not obtained from the user branches (Circle offices) which was contrary to the requirements laid down in the procurement manual which stipulated that the forecast for the requirement of equipment was to be prepared by the user branches concerned which plan for induction of such equipment into the network and also the requirement of the equipment against each project or by each Circle should be worked out after discussions with the concerned heads of the Circles before the same was finalized by the Corporate Office. Further, though the GPON/GEPON equipment was a new item, no member from the Telecom Engineering Centre (TEC) was inducted in the Committee for Evaluation of Tenders (CET) formed for the evaluation of GPON/GEPON tenders as stipulated in BSNL procurement policy.

DoT stated (October 2013) that planning for purchase of 5 lakh lines was made by Core Network Planning (CNP) cell of Corporate Office and BSNL Board approved the proposal for procurement of 3.50 lakh lines of GPON and 1.50 lakh lines of GEPON in December 2007. DoT further stated (October 2013) that CET for GPON/GEPON had been formed by the MMT section of BSNL Corporate Office and in both the tenders, there were two technical members viz. DDG(TX) and Jt. DDG (OF).

The reply is not acceptable as the Board in their meeting held on 27 December 2007 approved procurement of 7 lakh lines and not 5 lakh lines as stated in the reply. The reply does not state anything regarding procurement of the equipment without assessing the demand for the equipment by way of market study as GPON/GEPON was a new technology. Regarding constitution of CET, the fact remains that BSNL Corporate office did not follow their own requirements stipulated in the procurement manual and thus was deprived of their expertise while implementing the latest technologies in the telecom sector.

- Element Management System (EMS) manages all the OLTs in the same city as well as the OLTs of the same PON technology in the remote cities using Data Communication Network (DCN). As per the terms and conditions of the tender, the installation, specifically GPON chassis, LAN switches and splitters alongwith Element Management Systems (EMS) and Fibre Distribution and Management Systems (FDMS) was to be done by the respective Project Circles within six months of receipt of equipment from the suppliers. Further, suppliers were to integrate each chassis and

LAN switches and its EMS/Local Craft Terminal (LCT)/Point of Presence (POP) to the National Internet Backbone-II (NIB-II) within six months after the installation of OLT equipments by Project Circles.

Audit observed that out of 1,886 OLTs, 6,16,568 ONTs and 5,07,140 batteries supplied as of March 2013, 143 OLTs worth ₹ 38.60 crore and 6,04,680 ONTs including 4,95,252 batteries worth ₹ 338.55 crore were lying unutilised in all the Circles. Audit further noticed (September 2012) that the installation and integration of the GPON and GEAPON OLTs with EMS had not been done in Tamil Nadu, Punjab, Uttar Pradesh (West) Circles as well as in Asansol and Durgapur in West Bengal Telecom Circle.

DoT stated (October 2013) that there were some initial delays in installation of OLT equipments due to non-availability of media/Optical Fibre cable, unavailability of space and now majority of GPON/GEAPON equipments had been installed and commissioned and telecom Circles and Project Circles had been asked to complete the installation and commissioning latest by March 2014, wherever installation and commission was pending. DoT also stated (October 2013) that difficulties were being experienced by field units in providing last mile OF connection at customer premises and Circles were authorised to procure 2F/4F Cables. DoT further stated (October 2013) that all the OLTs supplied under GPON/GEAPON were to be connected with EMS, all the installed OLTs have been connected with EMS and integration of EMS supplied by M/s. ITI and M/s. Sterlite had been validated.

The reply is not acceptable as audit observed inordinate delay in finalisation of locations, space and lay out plans for the OLTs at the Circles and also the integration of installed OLTs with EMS took place after a delay of more than 3 years and 6 months from the scheduled date of supply in respect of GPON equipments (April 2010 to October 2013) and more than two years in respect of GEAPON equipments (September 2011 to October 2013) which resulted in delayed delivery of quality services to new customers.

- The Resilient Packet Ring (RPR) switch is a protocol standard designed for the optimised transport of data traffic over optical fibre networks through one common platform. RPR switch was mentioned as optional item in the Notice Inviting Tender (March 2008) of GPON/GEAPON equipment.

Audit observed that though a large number of RPR switches of equal capacity had already been deployed (February 2008) under Broadband Multiplay³⁵ spanning 98 cities, BSNL placed orders for 234 RPR switches (60 switches for Eastern Region, 57 switches for Western Region and 117 switches for Northern Region) except for Southern Region (STP) at a cost of ₹ 107.35 crore without working out the region-wise requirement. While no

³⁵ Broadband Multiplay offers voice, video and data through copper cable to the customer from the telephone exchange.

switches were procured for Southern Region, the requirement in other regions was not assessed before placing the order. Audit ascertained (October 2014) that as on March 2013, out of 234 RPR switches supplied, 182 switches were installed against which only 95 were commissioned. Thus, 139 RPR switches worth ₹ 63.77 crore³⁶ including 52 switches were not commissioned (March 2013) resulting in unfruitful capital expenditure of ₹ 63.77 crore besides non-achievement of optimised transport of data traffic over OF networks through one common platform, which was one of the objectives of adopting PON technology.

DoT stated (October 2013) that Circles have been instructed to utilise RPR Switches supplied for augmentation of Broadband multiplay project and complete the commissioning in financial year 2013-14.

The fact remains that improper planning and procurement of RPR switches by BSNL Corporate Office without assessing the actual requirement resulted in unfruitful capital expenditure of ₹ 63.77 crore. Further, due to non-installation of 139 RPR switches, BSNL failed to achieve its objective of optimised transport of data traffic over OF networks through one common platform.

- As per instructions issued (May 2011) to the Circles by BSNL Corporate Office, the Circles were to finalise the franchisees for rolling out the Fibre to the Home (FTTH) services since BSNL itself could not provide all specified services. Thus, BSNL had to enter into agreements with private Content Providers for each service on revenue sharing basis or on usage basis. Audit noticed that no agreements were entered with the private content providers in any of the Circles test checked as of June 2013.

DoT stated (October 2013) that games on demand, game/video/music on demand and IPTV were already being provided over broadband including FTTH, Circles were asked to finalize the franchisees on revenue share basis through EOI but could not succeed and efforts were on to re-float the tender from Corporate Office for finalization of Franchisee for roll out, operation and maintenance of FTTH.

The reply confirms that all the services envisaged using GPON/GEPON technology was yet to be provided (February 2015) due to delay in entering into agreement with private content providers.

- The charging of customers for voice calls was being done on the basis of charge band received from Trunk Automatic Exchange (TAX) as per standard pulse and the Metered Call Units (MCU³⁷) were being downloaded by each of the exchanges

³⁶ Cost of one RPR switch = (₹ 107.35 crore / 234) = ₹ 0.45876 crore. Thus, cost of total not commissioned 139 RPR switches (234 - 95) works out to = ₹ 0.45876 crore X 139 = ₹ 63.77 crore

³⁷ MCU is Metered Call Unit for the charging of voice telephone calls made by a customer.

manually from the Noida soft switch³⁸. The same was then used for generation of billing by the concerned office. BSNL was having Call Data Record (CDR³⁹) based software for customer facilitation and billing developed by Tata Consultancy Services (TCS) for all the services except FTTH.

BSNL stated (July 2012) that FTTH billing was presently being done through DOTSOFT package upgraded by Information Technology Project Circle (ITPC), Pune. DoT stated (October 2013) that FTTH billing was not in the scope of CDR tender and the present system of All India DOTSOFT was proven system and no bills were delayed due to system reasons.

The fact remains that BSNL did not have an integrated FTTH billing system. Due to non inclusion of FTTH billing in CDR software, automatic disconnection of customers on crossing of threshold limits would not occur resulting in accumulation of dues recoverable from the customers as evident from amount of ₹ 1.17 crore pending recovery as of February 2015 out of ₹ 26.66 crore billed for services provided from March 2010 till March 2013 to 22,778 customers.

- BSNL failed to achieve the Revenue⁴⁰ as well as Customer⁴¹ Targets in all the years during the period from 2010-11 to 2012-13. While the achievement of revenue was 0.20⁴² per cent in 2010-11 and 4⁴³ per cent in 2011-12, no target was set for 2012-13⁴⁴, the number of customers acquired during the three years ending 2012-13 was only 0.26⁴⁵ per cent, 1.54⁴⁶ per cent and 8.58⁴⁷ per cent respectively.

DoT stated (October 2013) that since FTTH was a new service and BSNL was the first operator in India to launch such services at all India level, it would take some time for making user aware about the new technology and marketing the product and picking up of services, daily monitoring was helping to increase the uptake and the speed of customer acquisition had increased since February 2013 and BSNL was expecting 80 per cent of capacity utilisation by December 2014. DoT further stated that as on 30 September 2013, 17,552 High speed internet connections, 10,306 VOIP connections on FTTH, 916 IPTV connections, 230 Internet Leased Lines on FTTH and 1,827 VPN connections on FTTH are working.

³⁸ Softswitch is short for software switch, which is a central device in a telecommunication network connects telephone calls from one phone line to another, across a telecommunication network, entirely by means of software running on a general purpose computer system

³⁹ CDR is Call Data Record which is a centralized integrated billing software for landline connections.

⁴⁰ Revenue Target during 2010-11 and 2011-12 was ₹ 290.00 crore and ₹ 136.62 crore respectively.

⁴¹ Customer Target during the period from 2010-11 to 2012-13 was 5,00,565, 2,69,724 and 2,65,564 respectively.

⁴² Revenue billed was ₹ 0.59 crore.

⁴³ Revenue billed was ₹ 5.40 crore

⁴⁴ Revenue billed was ₹ 20.67 crore

⁴⁵ 1,294 customers

⁴⁶ 4,160 customers

⁴⁷ 22,778 customers

The fact remains (December 2013) that even after a lapse of four years, 100 *per cent* installation/commissioning of GPON/GEPON equipments were not completed as 143 OLTs (8 *per cent*), 6,04,680 ONTs (98 *per cent*) including 4,95,252 batteries (98 *per cent*) and 139 RPR (59 *per cent*) switches were yet to be installed; the integration of Elementary Management System took place after more than 3 years and 6 months from the scheduled date of supply in respect of GPON equipments (April 2010 to October 2013) and more than two years in respect of GEPON equipments (September 2011 to October 2013) as stated by DoT. Further, BSNL could achieve only 22,778 customers (1.24 *per cent*) customers against the target of 18.32 lakh customers by December 2010 though total equipped capacity was 6,56,240 lines (93.75 *per cent*) against the planned seven lakh lines.

As a result, the objective of BSNL viz. to provide various services such as voice as well as High Speed internet, Voice over Internet Protocol (VOIP) and video services on the FTTH using GPON/GEPON technology to generate more revenue as anticipated at the time of planning to deploy the new technology remained unfulfilled. Thus, the very purpose for which this scheme was launched viz. provision of various services for increasing the revenue was defeated due to procurement of equipments for seven lakh lines in one-go without assessment of user requirements, delay in installation of the equipments procured and lack of effective monitoring for installation and integration of the equipments procured by BSNL as brought out above.

5.11 Follow up on Audit Reports - (Commercial)

Audit Reports of the Comptroller and Auditor General (CAG) represent the culmination of the process of scrutiny of accounts and records maintained in various offices and departments of PSUs. It is, therefore, necessary that appropriate and timely response is elicited from the Executive on the audit findings included in the Audit Reports.

The Lok Sabha Secretariat requested (July 1985) all the Ministries to furnish notes (duly vetted by Audit) indicating remedial/corrective action taken by them on various paragraphs/appraisals contained in the Audit Reports (Commercial) of the CAG as laid on the table of both the Houses of Parliament. Such notes were required to be submitted even in respect of paragraphs/appraisals which were not selected by the Committee on Public Sector Undertakings (COPU) for detailed examination. The COPU in its Second Report (1998-99 Twelfth Lok Sabha), while reiterating the above instructions, recommended:

- Setting up of a monitoring cell in each Ministry for monitoring the submission of Action Taken Notes (ATNs) in respect of Audit Reports (Commercial) on individual Public Sector Undertakings (PSUs);

- Setting up of a monitoring cell in Department of Public Enterprises (DPE) for monitoring the submission of ATNs in respect of Reports containing paras relating to a number of PSUs under different Ministries; and
- Submission to the Committee, within six months from the date of presentation of the relevant Audit Reports, the follow up of ATNs duly vetted by Audit in respect of all Reports of the CAG presented to Parliament.

While reviewing the follow up action taken by the Government on the above recommendations, the COPU in its First Report (1999-2000-Thirteenth Lok Sabha) reiterated its earlier recommendations that the DPE should set up a separate monitoring cell in the DPE itself to monitor the follow-up action taken by various Ministries/Departments on the observations contained in the Audit Reports (Commercial) on individual undertakings. Accordingly, a monitoring cell is functioning in the DPE since August 2000 to monitor the follow up on submission of ATNs by the concerned administrative Ministries/Departments. Monitoring cells have also been set up within the concerned Ministries for submission of ATNs on various Reports (Commercial) of the CAG.

Further, in the meeting of the Committee of Secretaries (June 2010) it was decided to make special efforts to clear the pending ATNs/ATRs on CAG Audit Paras and PAC recommendations within the next three months. While conveying this decision (July, 2010), the Ministry of Finance recommended institutional mechanism to expedite action in the future.

A review of the position of receipt of ATNs relating to M/s Bharat Sanchar Nigam Limited and M/s Mahanagar Telephone Nigam Limited under the administrative control of Department of Telecommunications, Ministry of Communications and Information Technology (MoC&IT) included in the Audit Reports up to the year 2014 revealed that ATNs in respect of 97 paragraphs were pending as of September, 2014 of which ATNs on 10 paragraphs were not received at all, as detailed in the *Appendix- I*.