

CHAPTER-IV PUBLIC SECTOR UNDERTAKINGS

MINISTRY OF COMMUNICATIONS

Bharat Sanchar Nigam Limited

4.1 Performance Audit on Wireline Broadband Services

4.1.1 Introduction

Bharat Sanchar Nigam Limited (the Company), a wholly owned company of the Government of India, was incorporated on 15 September 2000 under the Companies Act, 1956 and commenced commercial operation on 1 October 2000. The business of providing telecommunication services across the country, other than Delhi and Mumbai, hitherto managed by the erstwhile Department of Telecom Services (DTS) and the Department of Telecom Operation (DTO) under Ministry of Communications was transferred to the newly formed company. There are 26 circles under the administrative control of the Company. Each circle is headed by a Chief General Manager under whom Secondary Switching Areas (SSAs) function for operating purpose which are headed by General Managers.

Broadband is a data connection that is able to support interactive services including internet access and has the capability of minimum download speed of 512 kbps¹ to an individual subscriber from the Point Of Presence (POP) of the service provider intending to provide broadband service. Broadband access technology is broadly classified into two categories namely Wireline and Wireless.

Government of India, recognizing the potential of ever-present Broadband service in the growth of common applications such as tele-education, tele-medicine, e-governance, entertainment and general employment opportunities by way of high speed access to information and web-based communication, introduced Broadband Policy, 2004 with the objective to accelerate the growth of broadband services in the country.

Data Services were originally started (1991) by Department of Telecommunication (DoT) through Packet Switch Exchanges at ten locations which expanded (1995) to 45 locations through National Internet Backbone (NIB)-I. Broadband Services to Indian customers was provided since 2005 by BSNL through NIB-II.

¹ DoT definition of Broadband as per notification dated 18 July 2013.

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The wireline broadband service was made available by the Company on Asynchronised Digital Subscriber Line (ADSL) and Very High Digital Subscriber Line (VDSL) technology on a country wide basis, utilising the same copper cable used for providing basic telephone connection, which provided convergence of voice, video and data with a speed upto 24 Mbps². Broadband capacities based on Passive Optic Fibre Network (PON) technology was procured (2009) to provide high speed data broadband services having speed upto 100 Mbps over fibre optical cable known as Fibre to the Home (FTTH).

Organizational Setup

The administrative and operational control of the Company is vested with the Board of Directors, headed by a Chairman and Managing Director (CMD) who is assisted by functional directors in charge of Consumer Fixed Access (CFA), Enterprise, Consumer Mobility (CM), Human Resources and Finance.

The wire line broadband services of the company are vested with Director (CFA) who is assisted by the General Manager (Network Planning Broadband) and the General Manager (Network Operations Broadband & Internet) at the Corporate office.

Scope of Audit

The Company provides Broadband services via both Wireline and Wireless media, however the performance audit was undertaken only to examine the scenario of Wireline Broadband Services (including FTTH services) of the Company. The audit was conducted for the period 2011-12 to 2015-16 during June to September 2016 at the Corporate Office and 56 SSAs in 12 circles³ out of the total 26 circles. In addition to the selected circles, issues relating to broadband services noticed during compliance audit of other circles were also included in the report. The audit covered the operational performance, capacity utilization, planning and procurement of wireline broadband (BB) equipment, customer satisfaction, marketing strategies, tariff policies, implementation of DoT policies relating to rural BB connections and Universal Service Obligation Fund (USOF) subsidies received in providing the BB services throughout the country.

Audit Methodology and approach

The Audit involved examination of records, files, reports of the Company relating to only wire line broadband services at the Corporate Office, selected Circle Offices and SSAs. Relevant files, records, reports relating to planning, maintenance and operation of BB services in BSNL, various recommendations of Telecom

² As per existing wireline broadband tariff plans provided in ADSL 2+ technology

³ Gujarat, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh (E) and West Bengal

Regulatory Authority of India (TRAI), instructions issued by DoT from time to time and also files relating to Materials Management wing were also examined.

As a part of the performance audit, an online survey of customer satisfaction was also undertaken in respect of nine circles and 48 SSAs.

Audit Objectives

The objectives of the performance audit were to examine

- Extent of growth of broadband services of the Company;
- Whether the planning and procurement functions were effective;
- Whether the marketing policies were effective and revenue tariffs were efficient;
- Whether the planning and implementation of rural broadband were effectively undertaken by the Company and USOF subsidy targets were achieved;
- Whether the Quality of Service (QoS) of the Company and the level of its customer satisfaction vis-a-vis TRAI benchmarks were adequate; and
- Whether the maintenance and operation functions were effective, efficient and economic.

Audit Criteria

The main criteria for conducting audit were:

- Instructions/Circulars issued by DoT time to time;
- TRAI notifications on various QoS parameters, Corporate office circulars and instructions issued from time to time;
- Agenda and minutes of committees in relation to various issues pertaining to operation of BB services;
- Procurement manual of BSNL; and
- Budget documents, financial statements, MIS reports.

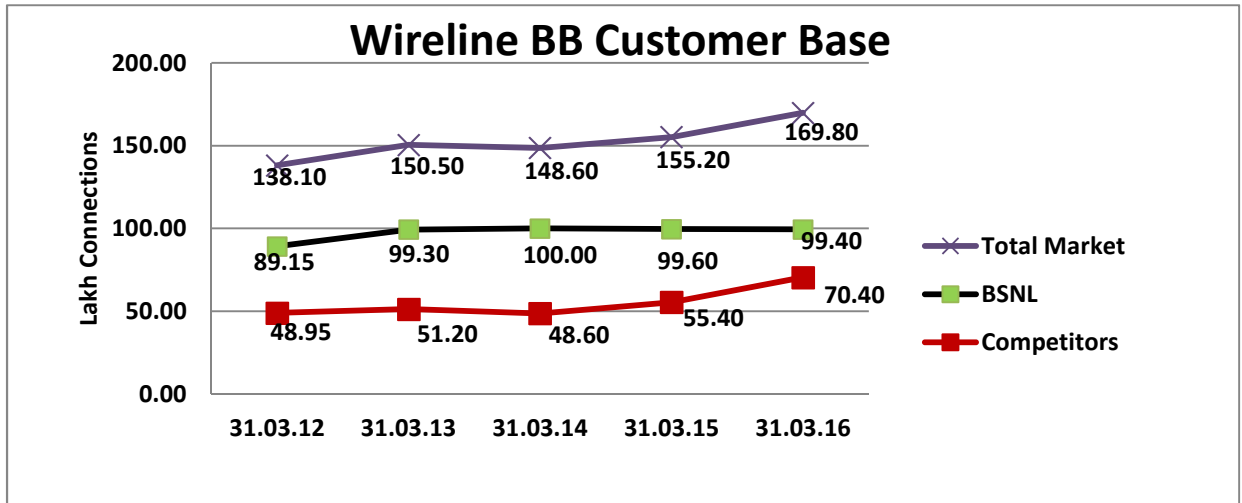
4.1.2 Audit Findings

4.1.2.1 Extent of Growth of Broadband services

A. Wireline Broadband Subscriber base

As per the Indian Telecom Services Performance Indicators reports of the TRAI for the period ended March 2012 to March 2016, the Overall Wireline Broadband

(WLBB) subscriber base in India, of the Company and of the competitors⁴ is shown in the diagram below:



From the above, it could be seen that while the total market/share of competitors kept increasing, the subscriber base of BSNL was at the best at the same level/declined. The total market was on the other hand showing an increasing trend since 2014-15 because of addition of consumers by competitors. In this regard, Audit noticed the following:

- i) Subscriber base data reported to TRAI is for inclusion in the Indian Telecom Services Performance Indicator Reports of TRAI, which serve as a reference document on telecom for various stakeholders, research agencies, analysts, etc.

The subscriber base figures provided for the TRAI report by the Company was misreported and inflated since the Company was reporting gross connection figures without excluding the disconnections (*Annexure II*) thereby not representing the actual subscriber base of the Company. During the period of Audit, the actual net subscriber base of the Company which had increased up to 56.34 lakh as on 31 March 2013 fell to 52.73 lakh⁵ as on 31 March 2016.

- ii) The trend of WLBB connections of the Company was moving directly in proportion to the trend of competitors until 2013-14. The competitors bounced back to growth trajectory of 14 per cent in 2014-15 and 27 per cent in 2015-16 after negative growth in 2013-14. The Company failed to follow the same and capture the growth in the market for 2014-15 and 2015-16 by realigning its marketing, tariff plans and quality of service.

⁴ The competitors provided connection over ADSL, FTTH and Cable TV which was covered as wireline broadband by TRAI.

⁵ DSL BB 51.90 lakh plus FTTH 0.83 lakh

B. Trend of revenue earned

The revenue targets for wireline broadband and actual achievement for the Company for the year 2012-13 to 2015-16 are as follows:

Table 1**Targets and Achievements**

Year	Targets for BB revenue	Revenue earned	Shortfall (Excess)	Percentage E=D/B *100
A	B	C	D	E
(₹in crore)				
2012-13	4084.3	3658.9	425.4	10.4
2013-14	4479.3	4192.8	286.5	6.4
2014-15	4415.3	4574.7	(159.4)	(3.6)
2015-16	5000.0	4886.3	113.7	2.3

From the above it could be seen that though there was an increase in the revenue earning on year on year basis, there was a shortfall in achievement of revenue target fixed. The achievement in excess of target in 2014-15 was due to fixation of lower target as compared to that of 2013-14. The growth in revenue earned despite decline in Broadband connections was largely due to increase in tariff.

4.1.2.2 Declining capacity utilisation**A. Declining utilization of Wireline Broadband capacity**

The Company had built up the WLBB capacities under ADSL/VDSL technology and Passive Optic Network (PON) technology. The utilization of WLBB capacity under ADSL/VDSL technology by the Company for the five years ending 2015-16 showed an year on year decrease and it came down from 55.5 *per cent* as on 31 March 2012 to 49.5 *per cent* as on 31 March 2016 as depicted in the table below:

Table 2**Capacity and Utilisation**

Particulars	As on 31 March				
	2012	2013	2014	2015	2016
(in lakh connections)					
Capacity	94.58	102.45	102.45	104.95	104.95
Net Connections	52.55	56.34	53.30	52.56	51.90
Utilisation in <i>per cent</i>	55.50	55.0	52.0	50.0	49.5

Audit observed that despite poor utilization of existing capacity, the Company went ahead to further enhance its WLBB capacity during the period of audit, without any concrete marketing and tariff plans to promote the penetration of connections and to increase the subscriber base as discussed in paragraphs 4.1.2.4 B and C.

B. Poor utilization of Fibre to the Home (FTTH) capacity

The Company had procured 6.55 lakh ports of Fibre to the Home (FTTH) capacities (May 2009) based on Passive Optical based Network (PON) technology which could be utilized to provide high bandwidth broadband services such as Internet Protocol Television (IPTV), Voice Over Internet Protocol (VOIP) and Video on Demand. The Company was expecting 18.32 lakh consumers in various services under FTTH by December 2010 and 80 *per cent* capacity utilisation by December 2014.

In the Audit Report No. 20 of 2015, the Comptroller and Auditor General of India had commented on Imprudent Investment in the Project due to procurement without detailed market study, delay in commissioning, non provision of targeted services/connections leading to non-achievement of the objectives of the project.

In the Action Taken Note, Ministry informed (September 2015) that speed of customer acquisition had increased since February 2013 and it was expected that 40 *per cent* capacity would be utilized by December 2015. However, the total FTTH consumers as on 31 March 2016 which was 83653 in number has increased to only 113068 as on 13 December 2016 (17.3 *percent* of the built up capacity of 6.55 lakh) showing that the envisaged customer base could not be achieved even after target dates.

The Management of three circles⁶ stated that demand for FTTH was less as the tariff plans were costlier. Also delay in laying of Optical Fibre Cable (OFC) upto consumer premises led to non-offtake of FTTH connections. Further, they stated that steps were taken for aggressive marketing and outsourcing of work to add new subscribers and numbers of customers were increasing.

The reply is not acceptable as laying of OFC to the consumer premises was a prerequisite to FTTH and the Company should have aggressively planned to speed up laying of OFC at consumer premises wherever possible to utilise the capacities built up and to further enhance the spread of faster internet Broadband services in the country.

C. Unwarranted purchase of Digital Subscriber Line Access Multiplexer (DSLAM) leading to idling of investment of ₹ 150.91 Crore

Government of India envisaged targets for Wireline Broadband (WLBB) connections of 200 lakh/400 lakh by December 2010/December 2012 respectively on a pan India basis. The Company had an installed capacity of 84 lakh WLBB connections (March 2010) and envisaged enhancement of its WLBB capacity to 90 lakh and to 200 lakh by similar dates as mentioned above. Keeping in view the

⁶ Maharashtra, UP (E), Jharkhand

MoU targets⁷, for providing additional 91 lakh WLBB connections up to June 2012, the Company decided (August 2010) to procure 32.20 lakh Digital Subscriber Line Access Multiplexers (DSLAM) with ADSL2+ line cards and VDSL line cards. DSLAM is a network device at telephone exchange that receives signals from multiple customer Digital Subscriber Line (DSL) connections and puts the signals on a high-speed backbone line using multiplexing techniques. The planning for procurement of the DSLAMs was made at the Corporate Office considering the spare installed capacity at Circles and the MoU targets for WLBB connections fixed by the Corporate Office, but without any study on market demand.

The procurement was envisaged to be made in two phases and accordingly the Company placed three purchase orders for DSLAM ports with ADSL/VDSL line cards under Phase I for providing 16.10 lakh connections as follows:

Table 3

Details of Purchase Orders placed for Procurement of DSLAM

Sl. No.	Name of the vendor	Date of Purchase Order	Total Price excluding Cenvatable Duties / Taxes (₹ in Crore)
1	M/s Sterlite Technologies Ltd, Noida	14 September 2011	52.59
2	M/s ZTE Telecom India Pvt Ltd, Gurgaon	24 December 2011	31.41
3	M/s Sterlite Technologies Ltd, Noida	28 August 2012	19.91
	Total		103.91

Further, addition to WLBB capacity was to be made through replacement of existing network switches⁸ with combo ports (under Next Generation Network technology). Requirement of BB capacity addition was initially envisaged for 30 lakh ports (March 2010) which were subsequently reduced to 10 lakh ADSL2+/VDSL ports worth ₹ 47.00 crore⁹. The procurement of combo ports (ports which provided both voice and broadband from the same frame) was decided considering that it reduced the requirement of power, space and other infrastructure and also results in saving of Capital and Operating expenditure of the Company in offering BB and wireline services.

⁷ Memorandum of Understandings (MoU) is executed between the Administrative Ministry (Ministry of Communications) and BSNL which included the achievement of broadband connections as a parameter.

⁸ E-10B, FETEX and NEAX

⁹ Approximate procurement cost as intimated by the Management.

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Audit observed that while estimating the additional capacity requirement at the time of planning, the Company erred in considering gross connections of 52.5 lakh instead of net connections of 42 lakh as on April 2010.

Before the commencement of the Phase II, the Company took inputs from circle on the requirements which did not support any need for further capacity addition. As a result, it was decided not to proceed with Phase II procurement of the ADSL/VDSL line cards.

Though the adoption of new technology in procurement of combo ports which was commissioned in 2014-16 was well intended, the addition of combo ports was an optional requirement and was done without considering the existing excessive capacities in WLBB at time of placing orders.

It was further noticed that after the capacity addition of 20.15 lakh¹⁰ DSLAM ports during April 2011 to March 2016, the net accretion of consumers was only 3.42 lakh (connections) and the WLBB consumer base merely increased from 48.48 lakh (April 2011) to 51.90 lakh (March 2016). As the net accretions in connections were far lesser than additions in capacities, there was idling of the capacities leading to idle investment of ₹ 150.91 crore with annual interest outgo to the tune of ₹ 11.30 crore¹¹.

Management replied that combo ports were economical in operation and that the spare capacities would be shifted to Base Transmitting Stations (BTS) to reduce copper length resulting in increase of broadband speed.

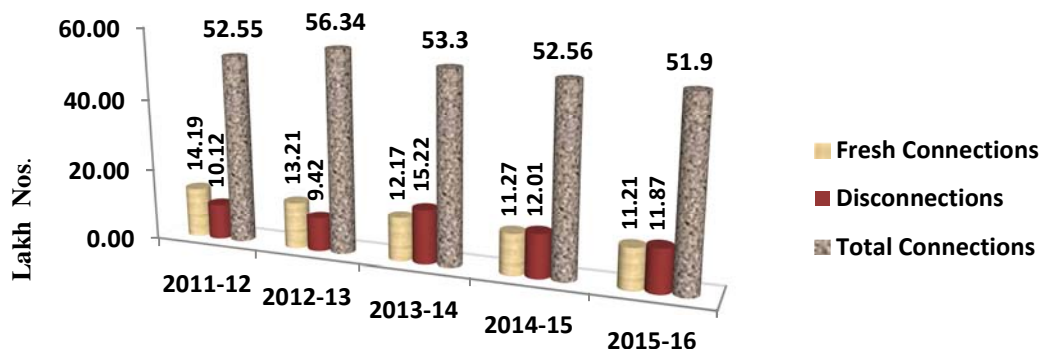
Thus, it could be seen that procurement was made without assigning the market demand and shifting/utilization of spare capacities was decided (September 2015) only as an aftermath of excessive procurement.

4.1.2.3 Trend of new Broadband Connections and disconnections

The year wise details of new BB connections, disconnections and total connections for the five year period ending 2015-16 are shown below:

¹⁰ The supply of 20.15 lakh DSLAM ports during April 2011 to March 2016 consists of supply of 1.74 lakh against purchase made prior to March 2011, 15.91 lakh against phase 1 and 2.50 lakh against Next Generation Network (NGN).

¹¹ Calculated based on average interest rate on bank loans availed by the Company.



It can be seen that the quantum of fresh connections being provided during the year was steadily showing a decreasing trend and that the quantum of disconnections started exceeding the new connections from 2013-14. This led to the erosion of the consumer base of the Company. The Company commissioned a study during 2014 to identify the reasons for such large scale disconnections as detailed in *paragraph 4.1.2.7*.

It was also seen that there was large scale disconnections in basic telephone connections throughout the period from 2011-12 to 2015-16 which has reduced the market for cross selling of broadband connections to the existing consumers as given in Table below:

Table 4

Trend of BSNL Connections vis-à-vis Competitors

Year	BSNL		BSNL		Competitors	
	Basic telephone (Nos in lakh)	Year on Year Trend of B in percentage	Wireline DSL Broadband (Nos in lakh)	Year on Year Trend of D in percentage	Wireline Broadband (Nos in lakh)	Year on Year Trend of F in percentage
A	B	C	D	E	F	G
2011-12	224.68		52.55		48.95	
2012-13	204.46	-9.00	56.34	7.21	51.20	4.59
2013-14	184.88	-9.58	53.30	-5.40	48.60	-5.08
2014-15	164.12	-11.23	52.56	-1.39	55.40	13.99
2015-16	147.62	-10.05	51.90	-1.26	70.40	27.08

As may be seen from above, while basic telephony is gradually losing its appeal, overall WLBB is still a growth trajectory. However, WLBB from BSNL was declining requiring suitable measure to stem the decline.

Thus, the annual rate of BB disconnections exceeded that of fresh connections since 2013-14. It was also noticed that the quantum of disconnections was higher at 15.22 lakh and 12.01 lakh during the years 2013-14 and 2014-15 respectively than average of 11.69 lakh a year. As a matter of prudence, analysis of consumer

behavior is of utmost importance to retain the existing consumer base and to broaden the market share.

4.1.2.4 Marketing and Broadband services

A. No Specific Allotment of Budget for Marketing and Broadband services

It was noticed that Wireline Broadband operation was depicted as a separate segment in the Annual accounts of the Company. However, scrutiny revealed that the Company did not provide any special focus for the marketing of Broadband services as there was no Budget planning and allocation specific to Broadband services. It was seen that except for allotting funds to SSAs, the Management at Circle level neither specified any proportion of funds to be utilized by SSAs for marketing of BB services nor gave any instructions regarding utilization of funds in such manner so that the targets for provisioning of BB connections may be achieved by SSAs.

On being pointed out, it was replied that circles could allocate the budget among Consumer Fixed Access(CFA), Consumer Mobility(CM), Enterprise Business(EB) and always ask for more funds, if need arises.

The reply is not convincing as the budgeting exercise of the Company did not have a specific focus on the marketing of BB services despite being a major segment of revenue.

B. Lack of emphasis on promotional plans

The Corporate office of the Company receives tariff proposals duly approved by tariff committees at Field units (Circle/SSAs) for introducing a tariff plan to increase the business under Broadband/FTTH tariff along with the comparative study of tariff plan of competitors or specific request from a group of consumers as the case may be. Further, there would be tariff proposals at the Corporate Office level as well. These tariff proposals are reviewed by the Tariff Committee at the corporate level which would analyse and decide the same for issuing tariff orders for SSA/Circle/Pan India. Audit noticed the following:

- During 2014-15 there was no pan India promotional plan introduced by the Company;
- In case of circle specific promotional orders, it was noticed that the number and coverage of the orders in subsequent years were less in number than that in 2011-12. There were six orders covering 12 circles in 2011-12 which decreased to one order covering one circle in 2013-14 and subsequently increased to five orders and five circles in 2015-16;

- Lack of initiative on the part of circles to take up matter with Corporate Office for issue of circle specific promotional offers/tariff orders for promoting the offtake of WLBB connections was quite evident. Circle specific promotional offers were not issued for nine circles¹² and similarly circle specific tariff orders were not issued for other nine circles¹³ during the period of Audit.
- Each promotional order/tariff order plan was to be followed by the evaluation of the performance of the scheme to be received from the circle/SSA to enable the Management to sense the market perception for effective decision making in extending the period or expansion of the same for garnering more connections. Due to non-availability of information/reports, effectiveness of tariff orders could not be analysed in audit.

Inaction on the part of the Company to introduce adequate number of promotional plans/tariff orders resulted in decrease in number of connections of the Company where as that of the competitors were increasing as detailed in paragraphs 4.1.2.1 A and 4.1.2.4 C.

C. Upward revision of entry level plans

As per the guidelines (April 2010) followed by the Company, the net additions of consumers under the plan during the previous six months should also be considered before arriving at revision of tariff plans. Audit noticed that there was upward revision in the entry level tariff plan of 'FMC 250' from ₹ 250 per month to ₹ 275 per month (10 *per cent* increase) in February 2014 even though approximately one lakh consumers had discontinued the connections under the plan during the last one year before revision.

Similarly as per the TNS¹⁴ Survey conducted (April/ May 2014) by the Company, there was indication to show that disconnections on account of competitors offering connection at low start up cost was one of the factors. However, it was seen that the Company made (December 2014) the upward revisions to the tune of 36 *per cent* in the entry level tariff plan of 'FMC 275' when it was again revised by the Company to ₹ 375 per month from ₹ 275 per month.

Audit is of the opinion that upward revisions in the entry level plans and lack of promotional plans could have led to the erosion of the consumer base of the Company. The Company, by increasing tariff charged, concentrated on

¹² HP, J & K, Andaman & Nicobar, Assam, Jharkhand, NE I & II, Uttaranchal & West Bengal

¹³ Bihar, Orissa, Andaman & Nicobar, Assam, Jharkhand, NE I & II Uttaranchal & West Bengal

¹⁴ M/s. TNS India Private Limited is one of the largest research agencies

increasing Average Revenue per User (ARPU) from ₹ 612.73 (2012-13) to ₹ 790.70 (2015-16). In doing so, the market share of the Company which was 51.95 *per cent* in 2011-12 fell to 42.80 *per cent* in 2015-16. During 2014-16, when the net accretions were 20.97 lakh connections in wireline broadband market, the Company instead of adding consumers ended up losing 0.84 lakh connections.

4.1.2.5 Availability of Consumer Premises Equipments

The planning and procurement of Consumer Premises Equipment (CPE)/modems were done at the Corporate Office based on the MoU targets for WLBB connections and the stock in hand.

A. Delay in finalization of purchase orders and non-adherence to supply schedule resulting in short availability of modems

In case of purchase of modems, Audit observed that the minimum time taken to issue Purchase Orders (PO) after assessment of requirement had increased from four months in 2009-10 to ten months during 2011-12 and then to 24 months during 2012-13. Similarly, the time taken to complete delivery of modems from the date of placement of purchase order which was seven months in 2009-10 increased to 14 months in 2012-13 as detailed in *Annexure III*.

Based on information supplied to Audit in respect of 16 circles¹⁵ out of 26 Circles for the period of 2011-12 to 2015-16 the shortage of modems were noticed as detailed below:

- in eight circles¹⁶ out of 16 circles in 2011-12, no ADSL modem had been received either by way of supply or by diversion from other circles.
- in 2013-14 and 2014-15, no modems were received by nine circles¹⁷ and four circles¹⁸ respectively.
- in spite of 'nil' balance for consecutive four years up to 2014-15, no ADSL modems were made available either by supply or diversion to NE-I circle.

The Company had internally observed (June 2012) that as there was acute shortage of Consumer Premises Equipment (modems), the demand for the modems in the field was not met for more than eight months. Further, the Company had attributed (September 2012) non-procurement of Modems in a time

¹⁵ NE 1 & II, PB, HP, AS, MP, Karnataka, UP(W), UP(E), TN, Kerala, Rajasthan, WB, JHKD, Odisha, Maharashtra, Gujarat

¹⁶ Jharkhand, UP(E), MP, Punjab, HP, Tamil Nadu, Assam and NE(I)

¹⁷ UP(W), NE-I, PB, HP, TN, WBTC, Karnataka, UP(E), Kerala

¹⁸ NE-1, PB, KTK and Kerala

bound manner as a reason for non-achievement of MoU targets for 2011-12 and attributed non-availability of modems to loss of revenue.

In 2014-15, the Company went in for empanelment of suppliers for modems to cope up with the shortage of modems. As the delayed supply against purchase order placed in 2014-15 started flowing in, it lead to accumulation of stock of more than 10,000 nos. each in seven circles¹⁹ out of 16 circles as on 31 March 2016; the empanelment had to be accordingly withdrawn in May 2016.

This indicates that the Company failed to understand the pulse of the market. While during 2011-12 it failed to tackle the non-availability of modems, demand for its services vanished when the Company procured modems during 2014-15 and had to withdraw the empanelment of vendors in May 2016.

B. Inability to ensure timely receipt of supply

The Company floated (August 2013) techno-commercial bid for procurement of ten lakh Type II (Wifi enabled) Modems. After the processes of evaluation, e-reverse auction and price negotiations with the L1 bidder (M/s Teracom Infosolutions Private Limited) and L2 bidder (M/s Syrma Technology Private Limited), the Company finalized the rate at ₹ 1178.60 per modem and procured the equipment.

It was seen that the purchase order for six lakh modems which was placed during October 2014 (14 months after floating of tender) wherein the supply, which was to be completed by April 2015 was extended by 8 months up to December 2015. The second purchase order for four lakh modems was placed only during March 2015 which was completed after September 2015.

Hence, it could be seen that the Company could not ensure timely receipt of modems from the vendors. Thereby, the Company also lost business opportunity of garnering more broadband connections by providing prompt service and meeting consumer demands.

4.1.2.6 Quality of Service

As per the Quality of Service (QoS) of Broadband Service Regulations 2006 (11 of 2006), the Telecom Regulatory Authority (TRAI) w.e.f January 2007 had set benchmarks for maintenance of QoS of broadband. The reporting procedure required the service providers to submit the Performance Monitoring Reports on the QoS benchmarks for all the parameters in the format as prescribed by the Authority on Quarterly basis. As per regulation 3A of the principal regulations (Quality of service of Broadband Service Regulations 2006), if a service provider providing Broadband service fails to meet the benchmark of QoS parameter

¹⁹ UP(W), MP, Gujarat, Punjab, Karnataka, Odisha, Maharashtra

specified under serial (i) to (viii) of regulations(3), it shall, without prejudice to the terms and conditions of its license, or the Act or rules or regulations or orders made, or directions issued, there under, be liable to pay an amount, by way of financial disincentive, not exceeding rupees fifty thousand per parameter and in case of second or subsequent such contravention, to pay an amount not exceeding one lakh per parameter for each contravention, as the Authority may, by order direct.

Audit findings regarding QoS are given in the following paragraphs:

A. Non-compliance with QoS guidelines in respect of service provisioning of New Broadband Services

TRAI specifies that 100 *per cent* connection should be provided within 15 days from the date of registration for new connection. Management had reported to TRAI that 100 *per cent* provision of broadband connections was done within 15 days of registration of applications during the period 2014-15 and 2015-16. However, Audit scrutiny revealed that there were delays in provision of new Broadband connection beyond 15 days as detailed below:

- Out of 1.08 lakh applications received during 2014-15 in 21 SSAs²⁰ of ten circles²¹, only 0.96 lakh BB connections were provided within the stipulated time. 8055 applications were pending for 15 days to 30 days and 3043 applications were pending for more than 30 days as detailed in **Annexure IV**.
- Similarly, in 22 SSAs²² of ten circles²³, out of 1.24 lakh applications registered during 2015-16, only 1.11 lakh broadband connections could be provided within 15 days. It was also noticed that 7167 applications were pending after 15 days and 3694 applications remained pending even after 30 days.
- It was also seen in Rajasthan Circle that as per Business intelligence report generated from CDR in the selected SSAs, the percentage of connections that could be provided within 15 days was in the range between 73.16 to 98.33 during the year 2014-15 and 2015-16 whereas the circle's performance monitoring report in respect of selected SSAs wrongly showed provision of connections within 15 days as 100 *per cent*.

²⁰ Vadodara, Indore, Ujjain, Ratlam, Jabalpur, Jamshedpur, Kota, Sriganganagar, Udaipur, Ajmer, Jodhpur, Jaipur, Dakshin Kannada, Hubli/Dharwad, Belgaum, Kolkata, Kharagpur, Ludhiana, Mirzapur, Bhubaneswar, Kannur

²¹ Gujarat, M.P, Jharkhand, Rajasthan, Karnataka, West Bengal, Punjab, UP(E), Odisha, Kerala

²² Vadodara, Indore, Ujjain, Ratlam, Jabalpur, Jamshedpur, Kota, Sriganganagar, Udaipur, Ajmer, Jodhpur, Jaipur, Dakshin Kannada, Hubli/Dharwad, Belgaum, Kolkata, Kharagpur, Ludhiana, Lucknow, Mirzapur, Bhubaneswar, Kannur

²³ Gujarat, M.P, Jharkhand, Rajasthan, Karnataka, West Bengal, Punjab, UP(E), Odisha, Kerala

This indicated that, the figures furnished in Monthly Performance Monitoring Report (MPMR) have been misreported to TRAI and wrongly inflated to show better performance and avoid penalty.

B. Non-compliance with QoS parameter pertaining to responses to customer calls

As per TRAI benchmarks of Quality of service, the response time to the customer for assistance, is to ensure that more than 60 *per cent* of calls are answered by the operator (Voice to Voice) within 60 seconds and more than 80 *per cent* of calls gets answered within 90 seconds. Scrutiny of records revealed the non-achievement of target during 2013-14 and 2014-15 as detailed in *Annexure V*:

The non-achievement of specified parameters resulted not only in dissatisfaction among the subscribers but also in TRAI imposing financial disincentives of ₹ 8.00 lakh. It was seen that instead of addressing the issue, Management tried to attribute the failure to attend to responses to the customers disconnecting the call even before hearing the announcement or before the threshold time set in IVRS.

4.1.2.7 Inaction of the company to contain disconnections

The Company had undertaken a Wire-line Broadband Lapsur Study (April/May 2014) engaging M/s TNS India Private Limited, Gurgaon (TNS Survey) which was based on sample of 500 each users from six cities²⁴ with the objective of understanding the reasons for surrender of WLBB connections and identify corrective actions for same²⁵. The major reasons identified were poor surfing speed, frequent disconnections due to poor line conditions, quality of broadband and compliant management. It was revealed that 61 *per cent* of former BSNL WLBB customers who had surrendered the broadband connection due to poor surfing speed and frequent disconnection of broadband had switched to other service providers and 85 *per cent* were satisfied with the other service provider.

The Company had also been collecting information on reasons through forms from customers who have disconnected/applied for disconnections of WLBB services. A test check of such forms filled in by 634 customers during 2015-16 at four²⁶ Customer Service Centres spread over Bangalore Telecom District of Karnataka circle was scrutinized during audit. It was seen that customers had filled in the feedback in only 334 forms and the remaining 300 forms had 'Nil' feedback. The feedback in these 334 forms were as follows:

²⁴ Bangalore, Hyderabad, Chandigarh, Ahmedabad, Kolkata, Pune

²⁵ The Outcome of the performance indicators of Lapsur survey have been examined during the survey conducted by audit as discussed in paragraphs 4.1.2.8

²⁶ Rajajinagar CSC, BTM Layout, Banashankari II Stage, Kammanahalli CSC

Table 5
Results of Feedback from Customers

Reason for surrender	No. of customers	Out of 634 in percent
Slow speed of internet connection	334	52.68
Cost/rentals are high	154	24.29
Quality/technical/security issues with connection	138	21.77
Maintenance Issues	138	21.77
Modem related	75	11.83

It was also observed that 39.91 *per cent* of consumers switched to another Internet service provider due to better broadband speed/data on similar cost. 22.91 *per cent* of disconnected consumers advised BSNL to improve the internet speeds for considering using BSNL services.

The Company, having identified the reasons for disconnections, instead of aggressively addressing the problems and enhancing the consumer satisfaction had set a modest target of 1.2 lakh as a parameter in MoU (2015-16) for bringing back the disconnected broadband connections against an average of 11.69 lakh disconnections annually. Against the same, a total of 2.93 lakh connections disconnected due to nonpayment were shown to have been reconnected in 2015-16.

In spite of the exercise in 2015-16 of reconnection of disconnected lines due to non-payment, a total number of 11.87 lakh fresh disconnections were reported during the same period. This shows that the significant reasons which led to the alarming rate of disconnections such as poor quality of services, lack of reasonable tariff and maintenance issues were not adequately addressed by the Management.

4.1.2.8 Customer Survey conducted as part of Performance Audit

As part of the Performance Audit, a survey of customer satisfaction was undertaken during July-October 2016. The survey was to be conducted by the Company at the instance of Audit in 56 specified SSAs of the 12 selected circles. However, the Company conducted the survey only in nine²⁷ out of 12 circles covering 48 out of 56 selected SSAs. The following were the questions asked in the survey and the responses there to:

²⁷ Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Tamil Nadu and UP(E)

Table 6
Responses to the Survey

Survey Question	Survey Response (% in brackets)		
a) Are you satisfied with the monthly charges vs internet speed	No (69.59%)	Yes (30.41%)	
b) Are you satisfied with modem supplied by BSNL	Not Applicable ²⁸	Not Satisfied (46.22%)	Satisfied (53.78%)
c) Time Taken by BSNL to rectify the complaints lodged, if any	Within 3 days (49.87%)	Beyond 3 days (32.28%)	Closed out (17.85%)
d) Overall performance of BSNL broadband services rated by you	Poor (43.06%)	Good (50.10%)	Outstanding (6.84%)

The results of response to the above questions indicated general dissatisfaction of customers with the broadband services of the Company as detailed in succeeding paragraphs.

A. Speed vis-à-vis tariff

It was seen that low speed and increased tariffs have continued to be a matter of dissatisfaction of the Company's Broadband customers. As per the TNS survey conducted during May 2014, 68 *per cent* of ex-customers do not want to reconsider the Company owing to 'poor surfing speed' and frequent disconnection of broadband. The issue had not been addressed by the Company till date as seen from the recent findings of the customer survey conducted during July-October 2016 as part of the audit. Out of 1,58,454 responses received, 1,10,270 (69.59 *per cent*) had expressed dissatisfaction over speed vis-à-vis tariff charges.

Thus, in view of the high levels of dissatisfaction among the WLBB customers continuing even after two years of the TNS survey of May 2014, Management needs to take immediate measures to properly address the issue of poor surfing speed.

B. Quality of Modems supplied

In the survey conducted by Audit, 1,58,457 customers responded of whom 1,10,885 were provided with Modems by BSNL. Out of these 1,10,885 customers, 51,283 were not satisfied with the modems supplied by the Department and the level of dissatisfaction was 46.22 *per cent*. It was seen that Management failed to ensure rectification of faulty Modems from vendors in a time bound manner. The faulty Modems were leading to customer dissatisfaction which may result in loss of customers. The Company therefore needs to address the issue of poor quality of modems.

²⁸ Represents customers who did not procure modems from BSNL

C. Delay in rectification of faults

It was seen from the survey that, out of 1,58,447 responses received regarding rectification of faults, 79,020 (49.87 *per cent*) have reported that the faults had been addressed within 3 days, 51,151 (32.28 *per cent*) reported the time taken for fault to be repaired was beyond 3 days and 28,276 (17.85 *per cent*) had reported that the fault complaints were closed without rectification of the same.

It was seen during the Audit that Management had reported to TRAI that they had achieved the TRAI parameter of 99 *per cent* rectification of faults within 3 days. The finding of the recent survey and the findings of paragraph 4.1.2.11 B directly contradicts the Company's claims before the TRAI and calls for a thorough review by Management of its system of addressing the issue of rectification of faults and of the reports furnished to concerned authorities.

D. Overall quality of BSNL Broadband services as per survey

In the TNS survey conducted by the Company in six cities covering 3000 customers in May 2014, 26 *per cent* of existing and ex-customers had indicated high level of dissatisfaction.

In response to the customer survey conducted by Audit, out of the 1,58,457 responses, 68,239 (43.06 *per cent*) had rated the services as poor, indicating that there were no improvement in the level of dissatisfaction. Therefore, it is seen that Management had not undertaken significant measures to improve the quality of services rendered. This stands confirmed by the increasing number of disconnections over the past two years.

4.1.2.9 Provision of Rural Broadband

A. Poor loading of Rural DSLAMS

Audit observed that as of March 2016, in the 12 circles test checked, 14503 DSLAMS were allotted for rural BB connection. In ten²⁹ circles, against the equipped capacity of 11.19 lakh broadband connections, 1503 DSLAMs were with zero connections and 3852 DSLAMs had provided a mere 1 to 10 *per cent* of the capacity. During the years 2011-12 to 2015-16, in seven circles test checked, 24.23 to 33.05 *per cent* of the DSLAMs allotted for rural BB connections were having connections between 1 and 10 *per cent only*, as shown in *Annexure VI*.

From the above, it may be seen that there has been abysmal utilization of the total equipped capacity of the lines. During the above period, there was increase in the percentage of DSLAMs having zero connections, in spite of BSNL's policy of closing of exchanges with less than ten *per cent* connections.

²⁹ Gujarat, Tamil Nadu, Odisha, Rajasthan, WestBengal, Maharashtra, Jharkhand, MP, UP(E), Karnataka

Further, though all rural exchanges in the test checked circles were loaded adequately for provision of broadband connectivity, connections to the extent of even 50 *per cent* of equipped capacity was not achieved in the test checked circles, as per *Annexure VII*. In seven circles³⁰, there has consistently been less than 50 *per cent* utilization.

Four circles³¹ replied that DSLAMs were installed in rural areas to cover USO sites on the instructions of Corporate Office. The capacity was underutilized due to various reasons like increase of Mobile operators who were providing data service at low tariff, frequent power failure in rural exchanges, lack of computer literacy, non-affordability and non-awareness of internet. Further, it was stated that all efforts were taken to increase the rural broadband connections in rural areas.

The replies are not tenable as the DSLAMs having 'Zero' connection or Single digit connections were not given special attention to improve the revenue of the Company. Gross under-utilization/non-utilization of DSLAMs indicated poor planning on the part of Management as the villages/locations were not identified properly to ensure the optimum utilization of DSLAMs, the required capacity of DSLAMs was not assessed properly, marketing of rural BB was inadequate at Circle level and separate marketing of rural BB was not done by SSAs test checked. Management should draw up marketing plan to bring in customers so that the spread of Broadband internet connectivity in rural areas can be achieved and DSLAMs could be properly utilized. The Company should also offer a customized tariff plan suitable to the regions within the stipulated rules so as to give boost to rural internet spread.

B. Inadequate Rural marketing

As per Universal Service Obligation Fund (USOF) agreement, the Company shall give wide publicity to the scheme by way of appropriate marketing tools.

It was seen that as per Impact Assessment Study of Rural Wire Line Broadband Scheme conducted in November 2012, 57.10 *per cent* attributed lack of knowledge about internet/Broadband as the main reason for not using the broadband. The report also highlighted the need for aggressive marketing campaigns and innovative adoption schemes towards the untapped market. The report also specified the need for developing the marketing strategy targeted at students and Government Institutions in view of demand potential.

Scrutiny of records revealed that there was no exclusive advertisement for rural broadband services at Circle/SSA levels. Similarly, no specific marketing activity

³⁰ Gujarat, Rajasthan, West Bengal, Maharashtra, Jharkhand, MP, UP(E)

³¹ Madhya Pradesh, Jharkhand, Tamil Nadu, Maharashtra

was taken up for popularization of rural BB service such as highlighting the availability of BB connection at ₹ 99 per month, Browsing of Kiosk at ₹ 5 per hour, etc. which shows inaction of the Company.

C. Shortfall in provision of connections and kiosks under Universal Service Obligation Fund Scheme

The Company entered into Universal Service Obligation Fund (USOF) agreement with Department of Telecommunications (January 2009) towards provision of Wireline Broadband connectivity in rural and remote areas from existing Rural and Remote Telephone exchanges. This entailed setting up of internet kiosk, providing of broadband connections from 28672 rural exchanges in order to promote availability of broadband facilities in rural and remote areas as detailed in Table below:

Table 7

Broadband facilities under USOF Scheme

Particulars	Kiosks	Connections
Parameters	One internet kiosk per ten DSLAMs ensuring geographical distribution of at least one kiosk in each SDCA ³²	Six connections to Government institutions and 25 individual connections per DSLAM in 28672 rural exchanges
Target numbers to be achieved by January 2015	28672 kiosks	888832 connections
Subsidy for connections/kiosk made functional at the end of each quarter	In the form of equated front loaded subsidy for three years from the date of installation or till the validity of the Agreement (January 2018), whichever is earlier.	In the form of front loaded and equated operational subsidy for two years from the date of installation or till the validity of the Agreement (January 2018), whichever is earlier
Penalty for shortfall in rollout obligation	Liquidated Damages at the rate of 2.5 <i>per cent</i> of front loaded subsidy/annual equated subsidy for each calendar month of delay or part thereof which remain unfulfilled, subject to a maximum of 10 <i>per cent</i> of the front loaded subsidy/annual equated subsidy for those wireline broadband connections /kiosks.	

In respect of achievement of provisioning of kiosks and connections it was observed that:

- The Company in its achievement reports stated that 15671 kiosks (January 2015) were installed under USOF scheme which fell to 15424 kiosks (January 2016) as against 28672 kiosks targeted. Further 6,56,345 connections (January 2015) were installed under USOF scheme which

fell to 465,160 connections (January 2016) as against 888832 connections targeted.

- Test check in 12 circles by Audit revealed that in 11 circles³³, as detailed in **Annexure VIII**, there was shortfall in installation of 7471 kiosks within the roll out period resulting in potential loss of USO subsidy of ₹ 65.01 crore. The non-achievement of targets entailed actual recovery of ₹ 3.55 crore as liquidated damages by Controller of Communication Accounts (CCA) offices. Further potential levy of liquidated damages of ₹ 1.57 crore was warranted.
- Testcheck in 12 circles revealed that in 11 circles³⁴, there was short provision of 3,09,122 connections within the roll out period resulting in potential loss of USO subsidy of ₹ 190.55 crore. Non-achievement of targets entailed actual recovery of ₹ 5.36 crore as liquidated damages by the CCA authorities and likely levy of liquidated damages of ₹ 5.43 crore.
- As per the MIS reports of the Company for January 2015, in nine circles³⁵ apart from the 12 circles discussed above, short provision of connections by 79,964 was seen leading to potential loss of USO subsidy of ₹ 42.98 crore³⁶.

Management stated that Low literacy rate, low internet awareness and non-affordability of PCs, non-availability of power supply/frequent disruption in power supply were reasons for shortfall in offtake of kiosks/connections.

4.1.2.10 Maintenance and Operation of Broadband Service

A. Issues in Annual Maintenance Contracts (AMC) contracts

As per the extant provisions, the terms and conditions of the Purchase Orders (PO) entered into by the Company with various vendors provide that the supplier shall quote for year wise comprehensive Annual Maintenance Contract (AMC) which shall become effective at the end of the warranty period. The circles may sign AMC congruously with expiry of warranty which means that there should not be any gap between the date of expiry of warranty and date of start of AMC. However, circles will be at the discretion to decide the quantity for entering into AMC as per the requirements.

³³ Punjab, Kerala, West Bengal, Jharkhand, Gujarat, Rajasthan, UP(E), Maharashtra, Madhya Pradesh, Karnataka, Odisha

³⁴ Punjab, Kerala, West Bengal, Jharkhand, Gujarat, Rajasthan, UP(E), Maharashtra, Madhya Pradesh, Karnataka, Tamil Nadu

³⁵ A&N, Assam, Bihar, Chhattisgarh, Haryana, NE-I, UP(W) Uttaranchal, Andhra Pradesh

³⁶ $79964 \times ₹ 4500(\text{FLS}) (\text{approx}) = ₹ 359838000 + 79964 \times ₹ 175 (\text{approx}) \times 5 = ₹ 69968500$

As per Rule 204 (v) of GFR, no work should be commenced without proper execution of an Agreement. It also specifies that a Performance Bank Guarantee (PBG) at the rate of 5 per cent to 10 per cent of the PO value was to be submitted by the vendor for compliance of the Purchase order conditions.

As per the general conditions of the tenders floated by the Company, the vendors were required to produce a Bank guarantee (BG) two months before the expiry of the PBG for AMC. Further, as per the PO conditions for supply of items, the PBG should be forfeited either on default of vendor to submit BG for AMC or to enter into AMC within two months before expiry of the warranty period of supply of equipment.

Audit scrutiny of the AMCs in respect of broadband equipment³⁷ entered by BSNL during the Audit period revealed the following:

- There were delays ranging from 55 days to more than three years in signing the AMC agreements in 45 cases³⁸ as summarized below:

Table 8
Delays in signing of AMC

Period of delay (in months)	No of AMCs
Up to 6 Months	16
6 Months to 1 Year	7
1 Year to 3 years	18
3 years and above	4
Total	45

Since April 2013, the Broadband Network circle (BBNW) of the Company was made the nodal circle for monitoring of AMC of broadband equipments. Prior to this period, Karnataka Telecom Circle signed the AMC agreements. Karnataka Circle stated that there were delays in signing of AMC agreements because of various reasons attributable to Company and vendors. However, the intervening period was well covered not only by the agreement but also the vendors maintained the supplied equipments. BBNW stated that even though signing of AMC agreements were delayed or signed with retrospective dates, during this period purchase order bank guarantees of higher value than AMC PBGs, were extended for full period by the vendors. Further, AMC payment was paid by respective circles on quarterly basis based on reports received from SSAs after deducting necessary penalties.

³⁷ DSLAMs, Modems, Line cards and other networking equipments

³⁸ ₹ 17.45 crore was paid in four circles towards AMC of broadband equipments to the vendors for the period February 2009 to June 2016. The total AMC amount (ceiling limit) as per PO with respect to 45 AMC agreements signed with retrospective effect was ₹ 246.54 crore.

The reply justifying the delay in signing of AMC on account of vendors assurance was not acceptable as the terms and conditions of the PO were not adhered to. The delay in signing of the agreements resulted in delay in providing AMC services by the vendors. Also the Company did not exercise the option of encashment of bank guarantee for not entering into AMC on time and submission of BG for AMC. Further the Company cannot make the vendors legally binding in the absence of AMC agreements in the event of non-provision of maintenance services. The payment on account of AMCs made during that period without having a valid agreement was irregular.

- As per the conditions of AMC, quarterly schedule of preventive maintenance during the AMC period was to be submitted by the vendor in advance. However, scrutiny of records in West Bengal Circle revealed that no such document was submitted by the vendors. Further, instances of non-authentication, non-mentioning of software details, working conditions, etc., were noticed in the preventive maintenance reports submitted by the vendors after signing of AMCs. Therefore, it cannot be ensured that maintenance services, preventive or otherwise, were being rendered by the vendors during the period between effective date of commencement of AMC and actual date of signing AMC contracts.
- Audit scrutiny also revealed various deficiencies in AMCs entered into with various vendors:
 - a) Clause 19.4(iii) of the AMC agreement for cards/modules/modems entered into with M/s ZTE Telecom India Private Limited (ZTE) stated that not more than one *per cent* of the equipments would be declared as Repair Not Possible (RNP) by the supplier. However, it was noticed that in Karnataka, Madhya Pradesh and Gujarat circles, ZTE had declared as much as 22 *per cent* to 42 *per cent* equipments as RNP, which hampered the smooth operations of the Company.

The Company acknowledged this and stated that following discussions in BSNL CO (Sept 2016), M/s ZTE accepted to put efforts once again to repair all these types of cards.

- b) There was lack of efforts on the part of the Company in tying up with AMCs in a transparent manner after the expiry of the initial tenure. Even though the Company was aware of the ensuing expiry of AMCs, the AMCs were extended to the same vendors without exploring the tendering option. It was also noticed that AMCs extended with three vendors during 2015-16 for similar equipments were at different rates ranging from 7 *per cent* to 15 *per cent* of the PO value whereas the

then existing agreements with all three vendors were within the range of 7 per cent. Resultantly, the excess expenditure as detailed in **Annexure IX** incurred over and above the lowest rate of 7 per cent worked out to ₹ 2.76 crore up to September 2016 with committed excess liability of ₹ 8.22 crore.

B. Non-levy of penalty for delay in repairing of equipments

As per terms and conditions of the AMC agreements penalty applicable for non-repair of:

- ❖ Cards, was ₹ 500 per day beyond 15 days and up to 30 days and ₹ 1000 per day beyond 30 days to 60 days from the date of dispatch. This was subject to capping of penalty which shall not exceed 20 per cent of AMC amount in a quarter subject to 25 per cent of Annual AMC amount in last quarter of a year or 0.5 per cent of the PO value whichever was higher.
- ❖ CPEs, was ₹ 100 per day beyond 15 days up to 30 days of delay and ₹ 200 per day beyond 30 days from the date of dispatch of CPE.

Audit observed the following in this regard:

- In Odisha Circle, wherein the vendor failed to repair the cards within the turnaround period of 60 days, while calculating the penalty, the circle failed to apply the Annual AMC capping clause resulting in a short recovery of penalty amounting to ₹ 6.86 lakh in ten SSAs³⁹ during the period January 2011 to June 2015 from vendor, Nokia Siemens Networks Private Limited, New Delhi.
- In Bangalore Telecom District of Karnataka Circle, the penalty of ₹ 1.40 lakh was not levied for the delay of one to 82 days in the receipt of 2487 Nos of repaired modems from two vendors viz UT Starcom India Private Limited, Gurgaon (₹ 0.94 lakh) and ZTE Telecom India Private Limited, Gurgaon (₹ 0.46 lakh).
- In Mysore SSA of Karnataka Circle, no penalty was deducted from the vendor for delayed return of eight cards beyond 45 days which worked out to ₹ 3 lakh⁴⁰. Similarly, in Mysore SSA of Karnataka Circle, instance of non-levy of penalty to the tune of ₹ 8.64 lakh for a delay of 124 days was noticed in respect of repair of 80 modems during 2015-16.

³⁹ Balasore, Baripada, Berhampore, Bhubaneswar, Bolangir, Cuttack, Dhenkal, Koraput, Rourkela, Sambalpur

⁴⁰ The penalty for delayed receipt works out to ₹ 3 lakhs (₹ 500 x 15 days x 8 Nos of cards and ₹ 1000 x 30 days x 8 cards). Penalty calculated for 45 days i.e. from 15 to 60 days, since the date of receipt was not available.

4.1.2.11 Other Issues

A. Undue favour to MSME vendor

In October 2014, BSNL floated an e-tender for procurement of one lakh Type-I non Wi-Fi ADSL2+ Modems. Against this tender, techno commercial bids were received from three vendors namely, M/s Pramod Telecom Private Limited (PPTL), M/s Supernet Infocomm Private Limited and M/s Zyxel Technology India Private Limited. After evaluation of the technical and financial bids, the committee recommended procurement of Modems from M/s Zyxel Technology India Private Limited being the L1 bidder and M/s PPTL being Medium Small and Medium Enterprise (MSME) bidder in the ratio of 80:20. After placing Purchase Order(August 2015)on M/s Zyxel Technology India Private Limited, PO was also placed (November 2015) on M/s PPTL for 20,000 modems.

As per the MSME Act, 2006 and clarifications thereto, registered MSMEs participating in the tender and quoting price within price band of L1+ 15 *per cent* are allowed to supply up to 20 *per cent* of the total order quantity by bringing down their price at par with L1 price where L1 is a non-MSME. Therefore, the quoted unit price of M/s PTPL of ₹ 614.84 should have been brought down to ₹ 569.37 as quoted by the L1 bidder. However, BSNL extended an undue favour on M/s PPTL by making payment at higher unit price of ₹ 614.84 consequently leading to excess payment.

B. Misreporting to TRAI on performance of fault clearance

TRAI guidelines on QoS in respect of Fault repairing provide that ‘greater than’ 90 *per cent* of the faults registered are to be repaired within the next working day and 99 *per cent* of the faults registered are to be repaired with 3 working days.

- Rebate in rental is provided suo-moto by the Company to subscribers when the services are interrupted over a prolonged period due to departmental reasons. Since third quarter of 2013-14, it was seen that the Company had been reporting the compliance data for this parameter in such a manner that it is complying with the TRAI parameter in all the quarters. However, test check of records in selected SSAs revealed that during 2014-15, in 24 SSAs⁴¹ of 11 circles⁴², the fault clearance by next working day ranged between a mere 12 *per cent* to 89 *per cent* against the TRAI benchmark of 90 *per cent*.

⁴¹ Surat, Indore, Ujjain, Ratlam, Bhopal, Jabalpur, Salem, Kota, Sriganganagar, Udaipur, Ajmer, Jodhpur, Jaipur, Hubli, Dharwad, Belgaum, Kolkata, Ludhiana, Lucknow, Jhansi, Gorakhpur, Allahabad, Bhubaneswar, Kannur, Nasik

⁴² Gujarat, MP, TN, Rajasthan, Karnataka, WB, Punjab, UP(E), Odisha, Kerala and Maharashtra

Similarly, during 2014-15, in 26 SSAs⁴³ of 11 circles⁴⁴, the fault clearance within three working days ranged between just 22.95 *per cent* and 98.50 *per cent* against the TRAI benchmark of 99 *per cent*. Consequently, owing to non-clearance of faults, the Company had to pay ₹ 12.89 lakh as rent rebate to 1282 customers. Similarly, in 2015-16 in 25 SSAs⁴⁵ of 11⁴⁶ circles, the fault clearance within three working days ranged from only 26.29 to 95.87 *per cent* leading to a rent rebate of ₹ 6.98 lakh to 1792 customers. It was, however, seen that the Company had misreported payment of rent rebate to TRAI during same period as 'nil'.

- A survey conducted by BSNL through TNS in May 2014 also confirms that the percentage of fault clearance within one day was a mere and that within 3 days is only 65.

Non-clearance of faults in timely manner has been a matter of consumer dissatisfaction and one of the major reasons for disconnection of BB services of BSNL by the subscribers.

C. Shortfall in achievement of connections under National Mission of Education through Information and Communication Technology (NMEICT) Project

Ministry of Human Resource Development (MHRD) had envisaged a plan to equip all the Colleges and Universities with Broadband services with Virtual Private Network over Broadband (VPNoBB) in collaboration with the Company under National Mission of Education through Information and Communication Technology (NMEICT). The project approved in 2009 was envisaged to be completed in three phases over three years by 2010-11 which entailed provision of at least 20 VPNoBB connections in about 20000 colleges.

As per the agreement, the cost of providing the VPNoBB connections was to be shared by the Company (10 *per cent*) by allowing discount in rent bills and the remaining 90 *per cent* was to be met by the Ministry/the concerned institution sharing the same in the ratio of 3:1 The targeted colleges later increased to 31876 colleges which was scrutinized by the Company and after excluding 9957

⁴³ Surat, Indore, Ujjain, Ratlam, Bhopal, Jabalpur, Salem, Jamshedpur, Kota, Sriganganagar, Udaipur, Ajmer, Jodhpur, Jaipur, Hubli/Dharwad, Belgaum, Kolkata, Ludhiana, Lucknow, Kanpur, Jhansi, Gorakhpur, Allahabad, Bhubaneswar, Kannur, Nasik

⁴⁴ Gujarat, MP, TN, Jharkhand, Rajasthan, Karnataka, WB, Punjab, UP(E), Odisha, Kerala and Maharashtra

⁴⁵ Surat, Indore, Ujjain, Ratlam, Bhopal, Jabalpur, Salem, Jamshedpur, Kota, Sriganganagar, Udaipur, Ajmer, Jodhpur, Jaipur, Hubli/Dharwad, Belgaum, Kolkata, Ludhiana, Lucknow, Jhansi, Gorakhpur, Varanasi, Allahabad, Bhubaneswar, Kannur

⁴⁶ Gujarat, MP, TN, Jharkhand, Rajasthan, Karnataka, WB, Punjab, UP (E), Odisha and Kerala.

colleges as technically not feasible from the same identified 21919 colleges were to be provided with 4,38,380 VPNoBB connections.

Against the target of 4,38,380 VPNoBB connections only 1,96,736 number (44.87 *per cent*) VPNoBB connections were provided (September 2016) leading to a shortfall of 2,41,644 numbers of connections⁴⁷. The shortfall has resulted in non-fulfilling of the objectives of MHRD in providing the Broadband facilities to Colleges and the Company also lost opportunity to earn a revenue of ₹ 108.74 crore⁴⁸ per annum.

4.1.3 Conclusion

The Company, despite having 50 *per cent* of its wireline broadband capacity lying unutilized, went into unwarranted augmentation of capacity. In procurement, there were instances of non-ensuring of supplies in a timely manner, extending undue favour to vendors, etc. As regards compliance with Telecom Regulatory Authority of India (TRAI) parameters on Quality of Services (QoS), there was scope for further improvement on part of the Company. Issues relating to maintenance of the broadband equipment such as delay in entering into Annual Maintenance Contract (AMC), non-levy of penalty on defaulting vendors, etc. hampering quality of broadband services were also noticed.

In spite of the fact that Broadband being a prominent segment, the Company did not specifically focus on promotion and marketing of broadband services. Despite identifying the reasons for heavy disconnections through a survey, the company failed to address the causes and prevent further disconnections. There were indications to show that the tariff planning was not aligned to consumer behaviour and extant guidelines of the Company which may lead not only to non-retention of existing consumers but also non-expansion of existing consumer base. The social objective of providing broadband connections in rural areas and Colleges under various Government schemes were also not met.

4.1.4 Recommendations

The Company having built up capacities should ensure availability of final leg connectivity till consumer premises, proper services under AMC for broadband equipment at exchanges and resolution of consumer complaints in a timely manner. The Company should ensure availability of around the clock connectivity of broadband with assured speeds. It needs to revisit its tariff plans and value added services offered after proper market study so that it can keep up with the competitors and capture new consumers. It need to ensure entry level plans at lower tariff, timely promotional schemes, publicity of the various

⁴⁷ 20 VPNoBB connections were to be provided by third Quarter.

⁴⁸ 241644 x ₹ 4500

tariff/schemes. This will ensure optimal utilisation of capacities built up, provision of connectivity in urban/rural exchanges, meeting of revenue targets and ultimately ensure wider, effective spread of wireline Broadband services across the country. The Company should also ensure fair reporting of actual number of connections, Quality of Service parameters to TRAI.

The matter was reported (December 2016) to the Ministry; their reply was awaited (April 2017).

Mahanagar Telephone Nigam Limited

4.2 Inadequate verification of Customer Acquisition Forms

Lack of monitoring/supervision by MTNL to ensure proper verification of subscribers as per the guidelines issued by DoT resulted in avoidable imposition of Customer Acquisition Form (CAF) penalty of ₹ 11.58 crore.

Department of Telecommunications (DoT) issued guidelines in November 2006 to Cellular Mobile Telecom Service (CMTS)/Unified Access Service (UAS) Licensees to ensure adequate verification of each and every customer before enrolling him as a subscriber and to scrupulously follow instructions issued by the licensor in this regard from time to time. As per the guidelines, the Licensees were to ensure that the authorized person at the point of sale shall record in the application form that he has seen the subscriber and verified his documents with the original; and the connections are activated only after filling up of Customer Acquisition Form (CAF) and copies of documentary proof as per requirement have been fulfilled by the customer. It was also stated that a minimum penalty of ₹ 1000 per violation of subscriber number verification was to be levied on the licensee after 31 March 2007.

DoT introduced (December 2008) a scheme of penalty for violation of terms and conditions of the Licence Agreement in respect of Subscriber verification failure cases effective from 1 April 2009. As per the scheme, the correct subscriber percentage vis-à-vis financial penalty per unverified subscriber was as given in Table below:

Table 9
Details of Penalty per Unverified Subscriber

Sl. No.	Correct subscriber verification percentage in a service area	Amount of financial penalty per unverified subscriber (in ₹)
1	Above 95%	1000
2	90%-95%	5000
3	85%-90%	10000
4	80%-85%	20000
5	Below 80%	50000

DoT further clarified (February 2011) that the penalty was to be calculated as per rate applicable in the slab relating to the percentage of correct subscriber verification for all the failed CAFs.

Telecom Service Providers (TSPs) challenged this instruction of DoT and Hon'ble TDSAT in their Judgment ordered (April 2012) that the financial penalty be calculated on the principles followed in the Income Tax system, i.e. rate of financial penalty to be calculated separately for each slab and the total amount of penalty arrived at.

Audit observed that MTNL failed to ensure proper verification of subscribers in accordance with the guidelines of DoT as evident from rejection of 15725 and 12067 CAFs in Delhi (April 2007 to July 2015) and Mumbai (April 2007 to January 2016) respectively. Consequently, DoT imposed penalty of ₹ 11.58 crore as detailed in Table below:

Table 10
Details of Penalty imposed for Unverified Subscribers

Year	CAF Rejection	Penalty Amount	CAF Rejection	Penalty Amount
	Delhi(Upto July 2015)		Mumbai (Upto January 2016)	
2007-08	830	830000	10558	10558000
2008-09	3332	3332000		
2009-10	2624	50970000	393	1001000
2010-11	1846	11670000	103	103000
2011-12	1789	9870000	50	50000
2012-13	2130	14838000	272	392000
2013-14	1725	6995000	129	129000
2014-15	1016	2930000	162	162000
2015-16	433	1444000	400	484000
Total	15725	102879000	12067	12879000

Management in their reply (November 2016) stated that MTNL started capturing CAFs in Document Management System (DMS) followed by tele-verification since November 2012 and hence, non-compliant CAFs have been miniscule. It was also stated that CAFs of active numbers pertaining to earlier period were being verified and non-compliant CAFs would either be corrected or number terminated. Further, in case of Mumbai, there has been no reduction in the CAF rejection even after 2012-13 and 400 CAF rejections during 2015-16 has been the highest during the period 2009-10 to 2015-16.

The reply clearly indicates that MTNL has not been able to ensure complete verification of CAFs even as on date.

Thus, lack of adequate monitoring/supervision to ensure proper verification of subscribers by MTNL as per the guidelines of DoT led to avoidable imposition of CAF penalty of ₹11.58 crore for subscriber verification failure.

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The matter was reported (September 2016) to the Ministry; their reply was awaited (April 2017).

4.3 Delay in issue of rent bills for space occupied in Mahanagar Telephone Nigam Limited building

Delay in issue of bills towards rent for space occupied in Mahanagar Telephone Nigam Limited building resulted in non-realisation of ₹14.49 crore for the period from April 2013 to December 2016

Department of Telecommunications (DoT) constituted (June 2013) a Committee comprising of officers from Mahanagar Telephone Nigam Limited (MTNL), Bharat Sanchar Nigam limited (BSNL) and DoT for treating BSNL and MTNL as a single entity for pursuant to Group of Ministers recommendations. The Committee recommended (September 2013) provisional rent of ₹ 125 per square feet per month for space occupied by BSNL in MTNL buildings in Delhi and payments were to be made effective from April 2013. The Committee also recommended constitution of Fair Rent Assessment Committee (FRAC) for finalisation of the rates for buildings occupied by each other and the Committee was to submit the report in three months’.

Audit noticed (March 2016) that though 2392.82 square meter (25746.74 square feet) of space was occupied by BSNL in MTNL building at Lodhi Road, New Delhi, no bills for the rent was raised as per the recommendations of the Committee. It was pointed out that non-claiming of rent resulted in non-realisation of ₹ 11.26 crore for the period from April 2013 to February 2016.

Based on the Audit observation, MTNL issued (August 2016) bills to BSNL for the period up to July 2016. Bills were raised periodically thereafter.

Though the bills were raised, no amount was received from BSNL till date (February 2017) and the amount non-realised increased to ₹ 14.49 crore as of December 2016. Further, though the FRAC was to finalise the rates within three months’ the Committee had not met even once as of October 2016 since the recommendation for its constitution in September 2013 and thus, the rates were yet to be finalized.

Thus, delay in issue of bills for rent as per the recommendation of the Committee resulted in non-realisation of ₹ 14.49 crore.

The matter was reported (November 2016) to the Ministry; their reply was awaited (April 2017).

MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY

National Informatics Centre Services Inc.

4.4 Unfruitful expenditure of ₹ 15.54 crore on hiring of building and interior fit-outs

Due to awarding the work without following the due procedures and its subsequent cancellation, delay in submission of layout plans to Delhi Metro Rail Corporation (DMRC) and delay in approval of plans by DMRC, the building hired by National Informatics Centre Services Inc. could not be put to gainful use. As a result, the expenditure of ₹ 15.54 crore on payment of rent till December 2016 was rendered unfruitful.

National Informatics Centre Services Inc. (NICS) was set up in 1995 as a Section 25 Company under National Informatics Centre (NIC) to provide IT solutions to Government organizations.

NICS took on license (April 2013) 7102.44 square meter super built up area on the fourth (3649.42 square meter) and fifth (3453.02 square meter) floors of the Delhi Metro Rail Corporation (DMRC) building at Shastri Park, Delhi for office purpose/software development and/or IT enabled service operations for a period of 20 years at the rate ₹ 675 per square meter per month of super built up area plus Service Tax as applicable from time to time subject to enhancement by 15 per cent at the end of each term of three years. In addition to this, maintenance, water and electricity charges for common facilities were also payable to DMRC. Separate agreements were entered (July 2013) into with DMRC for each floor. DMRC handed over the licensed premises to NICS on 23 April 2013.

The buildings were hired for extension of NICS Development Centre on fourth floor and setting up of National Information Infrastructure Centre on the fifth floor. Subsequently, the fifth floor was decided (July 2015) to be handed over to Immigration Visa and Foreigners' Registration and Tracking (IVFRT) Centre of the Ministry of Home Affairs, Government of India (MHA). Similarly, the utilisation of fourth floor was changed (June 2013) from NICS Development Centre to National Knowledge Network Centre.

As per the agreement, the fit-out period was 45 days from the date of handing over of the premises to licensee. The licensee may commence fit outs of the licensed premises within the Fit out period of 45 days and no license fee would be payable for this period.

The agreement also stipulated that fit out had to be done as per the drawing approved by DMRC.

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NICSI placed a work order (25 April 2013) to M/s Teekays Interior Solutions Private Limited (Teekays) for interior fit outs of fifth floor at an amount of ₹ 8.06 crore. The work was awarded as the firm was empanelled with NICSI and had satisfactorily completed works at second and third floors which were taken (July 2010) on lease by NICSI. Mobilisation advance of ₹ 0.80 crore was also paid (June 2013) to Teekays. A committee formed (September 2013) to examine and sign the working drawing and also examine the progress of the work of Teekays observed that as per Government's instructions, a new Open tender was to be floated. Based on the observations of the Committee, NICSI cancelled (November 2013) the work order placed on Teekays. Teekays claimed ₹ 0.03 crore for the Design work done till cancellation which was accepted by NICSI.

NICSI awarded (January 2014) the work of interior fit-out of both fourth and fifth floors to M/s National Building Construction Corporation (NBCC), a Central Public Sector Enterprise of Government of India. The work was awarded on nomination basis based on the internal Office Memorandum from the Ministry of Urban Development (Work Division) to NBCC. The work was to be completed within eight and a half months from the date of payment of 10 *per cent* advance to NBCC.

NICSI submitted (May 2014) the layout plan of fifth floor to DMRC and the plan was approved (June 2015) by DMRC. The layout plan of the fourth floor submitted (September 2015) by NICSI was approved (February 2016) by DMRC.

The fifth floor, works of which were completed in September 2015, was handed over to MHA in July 2016 after obtaining (May 2016) clearance from the Delhi Fire Service. The interior work of fourth floor was still in progress (December 2016).


Thus, while work on fifth floor was completed after 38 months' from the date of taking possession of the licensed premises, interior work of fourth floor was still in progress (December 2016) even after 44 months' from the date of taking possession of the licensed premises. NICSI paid ₹ 19.56 crore as rent to DMRC during this period despite not occupying the building. Excluding the rent paid for time allowed to NBCC (which was eight and a half months) for completion of the fit out work, the idle rent paid without occupying the building from 18 February 2014 till 31 December 2016 worked out to ₹ 15.54 crore.

Management stated (December 2016) that NBCC handed over the fifth floor to NICSI in July 2016 and the same was handed over to MHA in the same month. Management further stated that the site preparation work for the fourth floor was in full swing and would be completed shortly.

Due to awarding the work without following the due procedures and its subsequent cancellation, delay in submission of layout plans to DMRC and delay in approval of plans by DMRC resulted in unfruitful expenditure of ₹ 15.54 crore till December 2016 (after excluding the fit out time of eight and a half months given to NBCC).


The matter was reported (February 2017) to the Ministry; their reply was awaited (April 2017).

New Delhi
Dated : 22 May 2017


(P K Tiwari)
Director General of Audit
(Post and Telecommunications)

Countersigned

New Delhi
Dated : 25 May 2017


(Shashi Kant Sharma)
Comptroller and Auditor General of India

