Report of the Comptroller and Auditor General of India

for the year ended March 2005

Union Government (Commercial)

(Telecommunications Sector)

No.9 of 2006

Performance Audit

CONTENTS

PREFACE

A reference is invited to the prefatory remarks in Report No. 10 of 2006 of the Comptroller and Auditor General of India where a mention has been made that Performance Audit on some of the activities of the Companies under the Telecommunication Sector are presented in Report No. 9.

Report No. 9 for the year ending March 2005 has been prepared for submission to the President of India under Article 151(1) of the Constitution. It features the performance audit report on Wireless in local-loop (WLL) telephone services and Human resources management (HRM) in Bharat Sanchar Nigam Limited (BSNL) that is under the Department of Telecommunications (Ministry of Communications and Information Technology).

The Report contains two chapters.

- ***Chapter I – Performance audit of Wireless in local-loop (WLL) telephone services in BSNL.***
- ***Chapter II- Performance audit of Human resources management in BSNL.***

OVERVIEW

This Audit report for the year 2004-05 contains two Performance Audits on Wireless-in-Local Loop (WLL) telephone system and Human Resources Management in Bharat Sanchar Nigam Limited (BSNL).

Wireless-in-Local Loop telephone system

The Wireless-in-Local Loop (WLL) telephone system is a digital wireless local loop system designed to substitute underground cables by linking exchanges to the customers through wireless. The Company provides both fixed and limited mobile WLL telephone services under the brand name 'Tarang' while the Company created a capacity of 26.89 lakh lines, only 16.28 lakh lines were provided as of March 2005. The capacity remained grossly underutilised mainly on account of deficient planning; mismatches in the procurement of WLL systems and terminals; poor network coverage and poor quality of service which needs to be improved urgently to optimise the benefits/financial return from the WLL services.

Human Resources Management

The Company on its formation (October 2000) was facing a unique situation of transiting from a bureaucratic governmental setup to a market driven corporate culture which required it to gear up to meet the challenge by inter alia making the necessary reforms in its human resources management. Although the Company appointed KPMG (consultant) for reviewing and strengthening its human resources management system, it had not considered most of the recommendations till January 2006. Issues like preparation of manpower plans, integration of all the human resource functions under the charge of Director (HRD), promotion management system, preparation of human resource manual etc. remained unaddressed.

CHAPTER I

Performance Audit Report of Wireless-in-Local Loop Telephone Service in Bharat Sanchar Nigam Limited

HIGHLIGHTS

- **Bharat Sanchar Nigam Limited (Company) had a target of providing one Wireless-in-Local Loop (WLL) system in each of the 2,642 Short Distance Charging Areas (SDCAs) in the country till 2001-02, but even up to October 2005, it had not reached the target and had provided WLL systems only in 2,185 SDCAs.**

  (Paragraph 1.8)

- **The capacity utilisation' was 60.53 *per cent* against the total equipped capacity of 26.89 lakh lines of WLL systems as of March 2005 mainly on account of deficiencies in planning, procurements, network coverage and poor quality of service.**

  (Paragraph 1.12)

- **The Company formulated the plans for launching of the WLL telephone service and its subsequent expansion with inadequate assessment of demand and requirement and did not consider identification of areas based on population and trade statistics, unutilised capacity, presence of private operators and the envisaged growth of its other telephone services.**

  (Paragraphs 1.9.1.1 to 1.9.1.4)

- **Expansion of the capacity during 2002-03 to 2004-05 in seven circles despite underutilisation of the existing capacity, led to injudicious expenditure of Rs 108.64 crore on expansion.**

  (Paragraph 1.9.1.2)

- **The Company procured WLL systems based on obsolete technologies valued at Rs 1,479.87 crore during October 2000 to March 2005 though the latest WLL CDMA 2000-1X technology was available since October 2000.**

  (Paragraph 1.9.2)

- **The Company did not carry out financial viability and profitability analysis of the WLL projects during the years 2000-01, 2001-02 and 2003-04.**

  (Paragraph 1.9.3)

- **Despite instructions, 13 circles and the two Metro districts did not prepare separate costing records for the WLL telephone service. The records showed a total loss of Rs 122.15 crore in seven circles.**

  (Paragraph 1.9.3)

- **Ten circles, which prepared revenue projections for the WLL telephone service, failed to realize the projected revenue by Rs 139.31 crore during the last five years up to 2004-05.**

(Paragraph 1.9.3)

- **An amount of only Rs 22.05 lakh was spent during 2002-03 to 2004-05 on promotion and marketing of the WLL telephone service compared to Rs 14.25 crore spent on its Cellular Mobile Telephone Service during the above period.**

(Paragraph 1.9.4)

- **Most of the circles failed to make timely arrangements for sites, towers, power supply, etc, which led to delays in installation and commissioning of the WLL telephone systems.**

(Paragraph 1.10.1)

- **The corporate office's failure to monitor receipt of frequency allocations from the WPC Wing of the DoT resulted in operation of CorDect WLL telephone service in five circles and two Metro districts without mandatory 'Agreements in Principle'.**

(Paragraph 1.10.2)

- **The mandatory clearance of sites for installation of wireless equipment from the SACFA was not obtained for 1,330 sites by 19 circles.**

(Paragraphs 1.10.3)

- **Procurement of 40660 FWTs, 3,40,380 HHTs, 8,975 FRS and 8200 Wall Sets for 17 circles and two Metro districts without keeping in view the customers' preferences and demand led to idle investment of Rs 229 crore.**

(Paragraph 1.11.1.2)

- **Procurement of power plants and batteries without requirement by 12 SSAs under five circles and one Metro District resulted in blocking of funds to the extent of Rs 3.26 crore.**

(Paragraph 1.11.1.3)

- **The corporate office delayed the finalisation of rates of FWTs which resulted in excess payment of Rs 5.59 crore to M/s ARM Limited and M/s United Telecom Limited (UTL).**

(Paragraph 1.11.2)

- **Failure to obtain the PBGs and premature release of PBGs resulted in undue financial benefits of Rs 26.40 crore to suppliers.**

(Paragraphs 1.11.3.1 and 1.11.3.2)

- **Absence of any provision in the purchase orders for levy of penalty on suppliers for delays in installation, acceptance testing and commissioning resulted in blocking of capital of Rs 134.97 crore.**

(Paragraphs 1.11.4)

- **The Company incurred a loss of Rs 11.97 crore due to non-levy or short levy of L.D. charges on suppliers who delayed the delivery of WLL equipment and terminals.**

(Paragraph 1.11.5.3)

- **The Company failed to achieve the annual plan targets fixed for replacement of faulty MARR, VPTs for the years 2003-04 and 2004-05 and for installation of new VPTs for the years 2001-02, 2002-03 and 2003-04.**

(Paragraphs 1.13.1.1 and 1.13.1.2)

- **In 16 SSAs of eight circles, due to poor radio frequency coverage of the WLL systems, the underutilisation of capacity ranged between 26 and 100 *per cent*, which led to blocking of funds to the tune of Rs 78.74 crore.**

- **The suppliers' response to attend to complaints regarding network coverage was poor, which led to non-provision of umbrella network coverage, system failures, very low signal or no signal in peak hours, call dropping, frequency overlapping, etc.**

(Paragraphs 1.13.2.1 to 1.13.2.2)

- **55475 defective WLL terminals were lying in 16 circles due to non-execution of AMCs with the suppliers, resulting in unremunerative investment of Rs 47.95 crore.**

(Paragraph 1.13.3)

- **Despite the closure of WLL connections, 16,712 FWTs and 20,590 HHTs were not recovered from the concerned customers in 16 circle and one Metro District, which led to a loss of Rs 25.94 crore.**

(Paragraph 1.13.4)

- **No bills were issued for any of the working connections in the J&K Circle and in the Agra SSA in the UP (East) Circle leading to short billing of revenue of Rs 9.40 crore.**

(Paragraph 1.14.2)

- **Improper monitoring of revenue collection in 35 SSAs under five circle and all SSAs under eight circle resulted in accumulation of revenue arrears of Rs 113.88 crore.**

(Paragraph 1.14.5)

- **Lack of an automatic disconnection facility in the billing packages resulted in delayed disconnections and accumulation of revenue arrears to the tune of Rs 42 crore in nine circle.**

(Paragraph 1.14.7)

- **A survey conducted by Audit, revealed that the Company had failed to achieve the quality of service norms prescribed by TRAI pertaining to release of connections, incidence of faults and their**

rectification, voice quality, getting connections to desired telephone numbers and provision of additional facilities like STD and ISD.

(Paragraphs 1.15.1.1 to 1.15.1.6)

GIST OF RECOMMENDATIONS:

- **The Company should review and strengthen its planning mechanism in the face of stiff competition to avoid the risk of delays and bottlenecks in initial and subsequent expansions of projects.**
- **The Company should conduct surveys and identify the areas based on population, trade statistics and the existing trends of demand for forecasting demand and requirements.**
- **The Company should exercise extreme caution in selecting technology for its various telecom services to avoid the risk of selection of obsolete technology.**
- **The Company should ensure preparation of separate costing records relating to the WLL telephone service by each Circle to ascertain the Circle-wise operational and financial viability of the WLL service.**
- **The Company should formulate appropriate marketing strategies for promotion of the WLL service both in urban and rural areas.**
- **The Company should prescribe time schedules for the various advance activities to be undertaken by circles for creation of necessary infrastructure.**
- **The Company should devise a monitoring mechanism for ensuring timely receipt of 'Agreements in Principle' from the WPC wing for use of allotted frequencies and clearances of SACFA for sites for installation of wireless equipment.**
- **The Company should ensure timely finalisation of firm rates for supplies to avoid the risk of wrong and excess payments to the suppliers.**
- **The Company should ensure simultaneous receipt of WLL equipment and terminals to avoid the risk of delay in release of connections and underutilisation of capacity due to shortages of terminals.**
- **The Company should ensure obtaining of proper performance bank guarantees from suppliers to safeguard its financial interest.**
- **The Company should monitor the performance of the suppliers in carrying out their responsibility towards providing adequate and uninterrupted network coverage to avoid the risk of poor quality of service and losing its customer base.**

- **The Company should take prompt action against suppliers who fail to attend complaints regarding poor network coverage in time.**
- **The Company should finalise the guidelines for execution of AMCs for WLL terminals urgently to avoid the risk of delays in repairs and accumulation of inventories of faulty terminals.**
- **The Company should strengthen the coordination between its various wings for ensuring complete billing and revenue realisation.**
- **The Company should ensure proper coordination amongst its customer care, commercial and operational wings for minimising the delays in attending to customers' complaints and requests for additional facilities to avoid the risks of loosing them to their competitors.**
- **The Company should conduct surveys at regular intervals to obtain feedback from its customers about the quality of its WLL telephone services and take immediate corrective action on the same.**

1.1 INTRODUCTION

The Wireless-in-Local Loop (WLL) telephone system is a digital wireless local loop system designed to substitute underground cables by linking exchanges to the customers through wireless. WLL connections can be provided through various technologies. One of the most advanced technologies is the Code Division Multiple Access (CDMA), which allows many users to occupy the same frequency at the same time in a given band.

A typical WLL telephone system consists of Base Station (BS), Base Station Controller (BSC) or Mobile Switching Centre (MSC) connected to the Telephone Exchange or Public Switched Telecom Network (PSTN), Base Transceiver Stations (BTS), Network Management System (NMS) and Remote Stations (RS). A pictorial representation of the system is given at Appendix-I. The remote stations are the customers' terminals which communicate within the Base Station area.

The WLL telephone system has fixed as well as mobile facilities. In the fixed system, the customers' terminals are fixed like landline telephone instruments known as fixed wireless terminals (FWTs) or fixed remote stations (FRS) or wall sets (WS). In the mobile system, the customers' terminals are akin to cellular mobile telephone handsets known as handheld wireless terminals (HHTs).

The Department of Telecommunications (DoT) proposed the launching of the WLL telephone service in the country in 1994, mainly to provide telephone connections in technically non-feasible (TNF)[♣] areas.

[♣] TNF: areas where it is not possible to lay cable

DoT placed (June 1995) a purchase order for supply of two WLL systems of 1000 lines each, based on Cordless Telephony-second Generation (CT 2) technology, for field trials but the systems were decommissioned (January 1997) due to unsatisfactory performance and technological obsolescence.

DoT subsequently floated (June 1998) one tender for WLL CDMA equipment (IS-95A technology) and another tender for WLL CorDect* equipment. Meanwhile, the Government introduced (1999) the New Telecom Policy (NTP-99), which envisaged telephones on demand and telephone coverage of all the villages in the country by the end of 2002 under Universal Service Obligations (USO)∞

DoT placed (August-September 2000) purchase orders for WLL CDMA equipment for 56,000 lines and thereafter the Company placed (December 2000 and June 2001) add-on purchase orders equipment for 12,000 lines. For WLL CorDect equipment, the Company placed (November 2000) purchase orders for equipment of 25000 lines. The supplies of all these equipment were completed by March 2002.

The Company provides both fixed and limited mobile WLL telephone services under the brand name 'Tarang' The Allahabad and Gorakhpur Secondary Switching Areas (SSAs)Ψ of the Uttar Pradesh (East) Circle were the first to commission the WLL CDMA system in January 2001 and September 2001 in urban and rural area respectively.

1.2 ORGANISATIONAL SETUP

The overall control of the operation of the WLL telephone service rests with the Chairman and Managing Director (CMD) of the Company, who is assisted by Director (Operations) and Director (Planning and Network Management) at the corporate office and respective Chief General Managers (CGMs) at the Circle level.

1.3 SCOPE OF AUDIT

Performance audit of the WLL telephone service in the Company was conducted during April to August 2005, covering the period from 2000-01 to 2004-05. The corporate office, 24 telecom circles and the two metro districts of Chennai and Calcutta were reviewed in Audit. Further, thirty *per cent* of the SSAs, subject to a minimum of five SSAs in each telecom Circle were selected on the basis of their installed capacities.

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* CorDect: Digital Enhanced Cordless Telecommunications system developed by IIT Madras, which is similar to CDMA.

∞ USO: USO envisaged providing telephones on demand, besides telephone coverage in all villages in the country.

Ψ SSA: areas in which the country is divided by the telecom authorities. These are generally co-terminus with revenue districts.

1.4 AUDIT OBJECTIVES

The objectives of audit were to examine:

- whether the planning for launching and expansion of the WLL telephone service was adequate;
- whether the required infrastructure was kept ready before receipt and commissioning of the WLL equipment;
- whether procurement of the WLL equipment was economical, efficient and effective;
- whether the equipped capacity of the WLL system was optimally utilized;
- whether operational performance of the WLL system was effective;
- whether the system for billing and collection of revenue was economical, efficient and effective; and
- whether the quality of the WLL telephone service was satisfactory.

1.5 AUDIT CRITERIA

The main criteria used for audit were as follows:

- Proper planning in keeping with codal provisions for assessment of requirements, provision of infrastructure, selection of technology, availability of trained manpower and financial viability.
- Codal provisions for tendering and procurement.
- Terms and conditions of purchase orders.
- Operational and financial performance indicators fixed by DoT and the Company.
- Adherence to the performance indicators fixed by the Telecom Regulatory Authority of India (TRAI) in respect of quality of service.

1.6 AUDIT METHODOLOGY

The audit methodology involved examination of documents and discussions with the auditee to evaluate the performance of the WLL telephone service on the basis of the audit criteria broadly outlined earlier.

A survey was also conducted by Audit to evaluate the quality of the WLL telephone service provided by the Company to the customers in rural and urban areas.

1.7 ACKNOWLEGEMENT

For conducting Performance Audit, the audit teams of this office visited the corporate office, all the circles and two telephone districts of the Company including the SSAs falling under respective circles. In the course of audit a number of issues were deliberated, besides examination of records and documents. Entry and exit conferences were also held at Circle level and with corporate management. Audit acknowledges the cooperation and assistance extended by all the levels of management at various stages for completion of the Performance Audit. Performance Audit Report was issued to the Ministry/Management in December 2005 and the reply was awaited (January 2006).

1.8 AUDIT FINDINGS

The major objective before the Company on its formation in September 2000 was fulfillment of its Universal Service Obligations under NTP-99. As the WLL telephone service had been identified as the best method for providing telephone connections in TNF areas and villages, it was imperative on the part of the Company to plan the launch of WLL telephone service and its future expansions very carefully. The procurement procedures and practices had to ensure the best value for money for the supplies. There should have been optimal capacity utilisation and efficient operational performance. The system for billing and collection of revenue had to be foolproof. Above all, high quality of service should have been provided to the customers, both in rural and urban areas.

Audit observed that the equipped capacity of the WLL telephone service as on March 2005 was 16.90 lakh lines in rural areas and 9.99 lakh lines in urban areas against which the connections provided were only 11.32 lakh lines and 4.96 lakh lines respectively. The Company had a target of providing one WLL system in each of the 2642 Short Distance Charging Areas (SDCAs)♣ in the country till 2001-02 against which the Company provided WLL system in 2185 SDCAs upto October 2005.

Audit noticed deficiencies in planning, creation of infrastructure, procurement, capacity utilisation, operational performance, billing and collection of revenue and quality of the WLL telephone service, which needed to be addressed urgently, especially in the light of competition from private operators. These deficiencies are discussed in the succeeding paragraphs.

1.9 PLANNING

According to the codal provisions and internal instructions of the Company, all the 24-telecom circles and the two metro districts were to project their requirements for WLL equipment and terminals for initial launching and subsequent expansions of the WLL telephone service in their areas. Based on these projections, the corporate office was to assess the overall demand for the WLL equipment and terminals and plan for their procurement and commissioning.

According to the recommendations (December 1999) of an Empowered Committee headed by the Minister of State for Communications, it was planned to provide one WLL system in each of the 2,642 SDCAs in the

♣ SDCA: the smallest territorial unit for charging purpose. Calls within the same SDCA are charged as local calls. SDCAs normally coincide with Tehsils or Talukas.

country in the first two years of operation i.e. 2000-01 and 2001-02. The Committee also recommended the replacement of all non-functional Multi Access Rural Radio (MARR) based Village Public Telephones (VPTs) by the WLL system as connections through MARR proved to be unsatisfactory.

A review committee constituted (September 2000) by DoT to examine and suggest suitable access technologies, recommended (October 2000) that the WLL CDMA technology offered a better techno-economic solution for speedy installation of telephones in TNF areas and villages, especially those in remote areas.

While formulating detailed plans for initial launching and expansion of any telecom project, the following aspects, *inter alia,* needed to be addressed properly:

- Proper assessment of demand and requirement
- Identification and introduction of latest technology
- Assessment of the financial viability and profitability of the project
- Formulation of appropriate strategies for launching and marketing

Audit, however, observed that the above aspects of project management were not given due attention. Planning for initial launching as well as for expansions was done on ad hoc basis. Deficiencies noticed in the planning process are discussed in the succeeding paragraphs.

1.9.1 Inadequate assessment of demand and requirement of WLL equipment

Audit noticed the following deficiencies in assessment of demand and requirement in respect of the WLL telephone service:

1.9.1.1 Non-identification of the areas on the basis of population and trade statistics and existing trends of demand

While projecting (2000-01) the demand for initial launching of WLL operations and its subsequent expansions, only three circles, viz., Andhra Pradesh, Karnataka and Tamil Nadu and the Chennai Telephone District considered the population and trade statistics and six circles viz., Andhra Pradesh, Chattisgarh, Karnataka, Madhya Pradesh, Maharashtra and Tamil Nadu and the Chennai Telephone district considered the waiting list and the anticipated growth in demand of the areas to be covered. The corporate office did not insist upon the other circles to identify the areas to be covered on the basis of their population and trade statistics.

CMD of the Company approved (June 2001), the conducting of a market survey through a reputed agency to assess the likely demand and customers' responses for WLL connections. The Planning Wing of the corporate office did not conduct any such survey, stating (October 2001) that the customers' responses to WLL connections already provided in urban areas were very good and conducting the survey would be very costly. It was noticed that the estimated cost of the survey, Rs 36 lakh was a nominal amount compared to the expenditure to be incurred on the project.

The survey would have helped the Company in assessing the likely demand in each Circle more accurately. Instead, the circles were simply instructed (April/June 2002) by the corporate office to plan for one BTS per SDCA, one BSC per SSA and one MSC at the Circle headquarters.

1.9.1.2 Non-consideration of the unutilized capacity

The expansion of the WLL project commenced mainly from 2002-03. Audit observed that while projecting the demands for expansion of their existing capacity for the year 2002-03 and the subsequent years, only four circles[†] and the Chennai Telephone District took the unutilized capacity of their existing WLL exchanges into account. Similarly, while drawing up the overall expansion plan for the WLL system for the year 2002-03, the unutilized capacities of the existing WLL exchanges were not considered by the corporate office.

It was also noticed that in 22 SSAs under seven circles[ϕ], detailed in Appendix-II, the total number of working connections at the time of expansion (April 2002 to February 2004) was only 16283 against the installed capacity of 110850 lines mainly due to poor demand and shortages of WLL terminals. In spite of this, the existing capacity was expanded by 113650 lines. As of March 2005, the total number of working connections was only 94866 which was less than the initial capacity of 110850 lines. The expansion of capacity was thus unwarranted and resulted in injudicious expenditure of Rs 108.64 crore.

1.9.1.3 Non consideration of the impact of WLL telephone services provided by private operators

While planning for capacity expansion of the WLL systems, especially in urban areas, the impact of the presence of private operators should have been considered for a more realistic assessment of demand. Year-wise status of the coverage by private operators could have been ascertained from their rollout obligations[#] available in DoT or from their websites. Audit observed that only three circles, viz., Andhra Pradesh, Kerala and Maharashtra and the two metro districts at Chennai and Calcutta considered the impact of the WLL telephone services provided by private operators in their areas in projecting their demands for the period 2001-02 to 2004-05. Even the corporate office did not consider this impact.

1.9.1.4 Non consideration of the envisaged growth of Company's own landline service and Cellular Mobile Telephone Services

It was noticed that only Tamil Nadu Circle and the Calcutta Telephones District considered the anticipated growth of their own landline service and Cellular Mobile Telephone Service (CMTS) while projecting demands for capacity expansion of their WLL systems for the years 2001-02 to 2004-05.

[†] Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu.

[ϕ] Bihar, Haryana, Jharkhand, Punjab, UP (E), UP (W) and West Bengal.

[#] Rollout obligations: Obligations of licensees to commence services within a prescribed time frame and cover the service area, stipulated in the licences received from DoT.

The corporate office, however, considered the envisaged overall growth of its own CMTS while planning for the overall expansion of the capacity of the WLL system for the above years.

1.9.2 Non- introduction of latest technology

The Planning and Network Switching Wing of the corporate office ascertains the availability of various technologies in the market and thereafter submits proposals for procurement of the most suitable ones.

During 2000-01 to 2004-05, the Company opted for IS-95A, V-5.2 and MSC based 2000-IX WLL CDMA technologies as well as CorDect WLL technology. The advanced third Generation (3G) CDMA 2000-1X technology based commercial system developed by SK Telecom (Korea) was launched in October 2000 and available in the global market since then. Even the Management Committee of the Board of Directors of the Company had observed (March 2002) that V 5.2 CDMA technology was an outdated one and that the MSC based solution using International Operating Standards (IOS) was the latest technology for CDMA WLL systems which could be upgraded to the CDMA 2000 1X 3G version. The Committee further observed that the MSC based CDMA 2000-1X technology was expected to be cheaper on per line cost basis due to its higher capacity and as such the Company should go in for this technology.

It was however observed that the Company procured WLL systems worth Rs 1,479.87 crore during the period October 2000 to March 2005 based on tenders floated for obsolete technologies. Out of these procurements, WLL systems worth Rs 1,158.25 crore were procured even after the above-mentioned observations of the Management Committee. The details are given at Appendix-III. The tender for procuring WLL equipment based on CDMA 2000-1X technology was floated (July 2002) but the purchase order was placed in only March 2004. WLL systems worth Rs 243.26 crore were procured (March 2005) based on this tender and a further tender of July 2004.

The reply of the Company was awaited as of January 2006.

1.9.3 Non-analysis of financial viability and profitability

While planning for launching and expansion of the WLL telephone service for the years 2000-01 and 2001-02, no analysis of the financial viability and profitability of the project was done by the Company on the ground that the project had been taken up on the basis of a Cabinet decision, which reflected the social commitment of the Government. The contention was unacceptable, as the analysis would have helped the Company to assess the quantum of losses likely to be suffered for carrying out this social commitment of the Government so that the same could be subsidized from the USO Fund[Ω]. It was noticed that the Company did the analysis in 2002-03 and 2004-05, but

[Ω] USO Fund: A fund created (December 2003) by the Government under DoT for subsidizing the expenditure incurred by the telecom operators for providing telecom services under Universal Service Obligations.

not in 2003-04. It was also seen that the corporate office had not compiled separate year-wise details of the total revenue billed and collected and the profit and loss account pertaining to the WLL telephone service for any of the years from 2000-01 to 2004-05. In the absence of these details, it was not possible to accurately assess the remunerativeness of its WLL telephone service.

The corporate office issued (March 2003 and May, June and October 2004) instructions to all the circles to prepare separate costing records for the WLL telephone service but 13 circles[£] and the two metro districts did not prepare these records. Eleven circles prepared these records only for the year 2003-04 and of these seven circles viz., Andhra Pradesh, Bihar, Haryana, J&K, Karnataka, Kerala and UP (East), had sustained a total loss of Rs 122.15 crore and one Circle (Madhya Pradesh) had earned a profit of Rs 54.68 lakh during the year 2003-04 on operation of the WLL telephone service, as detailed in Appendix-IV. Three circles viz., Himachal Pradesh, Maharashtra and UP (West) did not prepare complete records.

The circles were also required to prepare yearly revenue projections based on the expected number of connections and average revenue per user and compare the same with the actual revenue realisation. Test checks in 10 circles, viz., Assam, Chhattisgarh, Haryana, Jharkhand, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan and UP (East), revealed that there was a total shortfall of Rs 139.31 crore in revenue realisation vis-à-vis the projections during 2001-02 to 2004-05. The details are given at Appendix-V. The shortfall was mainly because of poor capacity utilisation and problems of network coverage, as discussed later. It was noticed that other circles did not prepare the revenue projections in respect of the WLL telephone service.

1.9.4 Non formulation of strategies for launching and marketing

Strategies for launching and marketing of the WLL service had not been formulated either at the initial planning stage or during its subsequent expansions. A Media Plan prepared by the Company (2004-05), incorporating the advertising and marketing strategies for various services did not indicate specifically any plan for the WLL telephone service. Since launching (January 2001), the marketing wing of the corporate office of the Company had incurred (2002-03) Rs 61,000 on printing of 20,000 brochures and Rs 21.44 lakh on newspaper advertisements (2003-04). No budget was exclusively allotted for marketing the WLL service. In comparison, the Company spent Rs 14.25 crore on promotion and marketing of its CMTS up to March 2005 though an investment of Rs 4,967.91 crore (including terminals) was made in the WLL telephone service as against investment of Rs 5657.06 crore made in CMTS upto March 2005.

[£] Andaman and Nicobar, Assam, Chhattisgarh, Gujarat, Jharkhand, North East-I, North East-II, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttaranchal and West Bengal

RECOMMENDATIONS

- **The Company should conduct surveys and identify areas based on population and trade statistics and existing trends of demand for forecasting demand and requirements.**
- **The Company should consider unutilized capacities, presence of other private operators and envisaged growth of its own landline and cellular mobile telephone services while forecasting demand and requirements.**
- **The Company should exercise extreme caution while selecting technology for its various telecom services to avoid the risk of selection of obsolete technology.**
- **The Company should carry out the profitability analysis of each expansion project and ascertain the remunerativeness of the WLL telephone service.**
- **The Company should ensure preparation of separate costing records relating to the WLL telephone service by each Circle to ascertain the Circle-wise operational and financial viability of the service.**
- **The Company should prepare Circle-wise revenue projections for the WLL telephone service.**
- **The Company should formulate appropriate marketing strategies for promotion of the WLL service both in urban and rural areas.**

1.10 INFRASTRUCTURE

With a view to avoiding delays in commissioning of the WLL systems, the corporate office issued (May 2000 to December 2003) instructions to the circles to keep the infrastructure ready in advance and reiterated these instructions from time to time. It was however, observed that these instructions were not fully complied with by the circles. The corporate office on its part did not fix any time schedule for provision of infrastructure and failed to monitor the progress of work done by the circles in their areas. Consequently, there were inordinate delays as discussed below in installation and commissioning of WLL systems at many places.

1.10.1 Non-provision of sites, towers and power supply in time

Sites, towers and power supply were not provided in time in a number of cases which led to delays in installation and commissioning of the WLL telephone system as discussed below:

- The Company was to procure MSC based WLL CDMA equipment of 3.72 lakh lines from M/s United Telecommunications Limited (UTL) by November 2004 as per terms and conditions of the purchase order of March 2004. Due to non-availability of the necessary infrastructure such as sites, towers and power supply at 44 BTS sites in the Kerala, Karnataka, Maharashtra, Tamil Nadu and West Bengal circles, the WLL equipment could not be installed up to March 2005. Further, power supply at Ghaziabad and Kolkata and National Internet Backbone (NIB) connectivity at Ghaziabad, Kolkata, Madurai and Nagpur were not provided up to March 2005, which also delayed installation and commissioning.

- A purchase order for 1.05 lakh lines of CDMA WLL equipment was placed (January 2003) on M/s Icomm Telecommunication Limited. There were delays in commissioning of the equipment, as the towers were not ready at two BSC sites in the Chhattisgarh Circle, one BSC site in the Haryana Circle and two BSC sites in the Rajasthan Circle.
- In respect of 3.52 lakh lines of WLL CDMA equipment ordered (July and September 2002) on M/s LG Electronics, 18 sites and towers at 37 sites were not ready for about six months in the Bihar, Haryana, Karnataka, Kerala, Madhya Pradesh, Punjab, Rajasthan and Uttar Pradesh (West) circles.
- In respect of 0.60 lakh lines of WLL equipment supplied (January-March 2003) by HFCL, it was observed that the towers at one site each in the Maharashtra and Kerala circles were not ready in time, resulting in delays of seven months in radio frequency optimization.
- The Gujarat Circle received WLL CorDect equipment for 0.30 lakh lines in February - March 2004 for installation at 188 locations but due to delays in procurement of tower material, the installation of the same at 79 locations was delayed by more than six months.
- At Mahmoodabad SDCA under the Mau SSA in the Uttar Pradesh (East) Circle, though the BTS was installed in March 2004, the WLL system could not be commissioned till February 2005 due to non-availability of the required power supply.

On these being pointed out, the Management stated (August 2005) that the circles were advised to keep the infrastructure ready at the time of allotment of the WLL equipment to them. They further stated that the micro level monitoring of infrastructure work, installation and commissioning of the equipment was done at the Circle level and the corporate office monitored the overall network switching and commissioning (NSC) targets given to the circles on a monthly basis. The reply is not acceptable since due to inadequate monitoring at the corporate office as well as Circle office, there were delays in installation and commissioning of WLL services.

1.10.2 Commencement of operations without requisite 'Agreement in Principle' from the Wireless Planning and Coordination Wing

Telecom operators have to obtain licence from the Wireless Planning and Coordination (WPC) Wing of DoT for allocation of frequencies for establishment and operation of wireless equipment. Based on the requests from the operators, the WPC Wing allocates frequencies and issues 'Agreements in Principle' for use of the allocated frequencies by the operators.

The Company allotted (2002-03), CorDect WLL systems of 5.77 lakh lines to 13 circles[γ] and two metro districts at Calcutta and Chennai. It was noticed that the 'Agreements in Principle' for the requisite frequencies were received from the WPC Wing only in respect of eight circles[♣] up to December 2004/July 2005. In respect of the remaining five circles and two metro districts, though the 'Agreements in Principle' had not been received (August 2005) from the WPC Wing, the systems were being operated, which violated the conditions of obtaining the licence for use of frequencies.

It was also noticed that detailed records in respect of Circle-wise and site-wise frequency allocations from WPC for the years 2000-01 to 2004-05 were not maintained at the corporate office.

1.10.3 Non-obtaining of SACFA[↓] clearances for sites

Telecom operators also have to seek clearances for the sites where they intend to install wireless equipment from SACFA. SACFA has to give these site clearances within a period of two to six months from the dates of receipt of the applications.

A test check of records of 19 circles and one metro district revealed that out of 2,729 sites for which SACFA clearance had been sought, clearances for only 1,399 sites had been received till June 2005 while clearances for the balance 1,330 sites were still pending (March-September 2005) as detailed in Appendix-VI.

The Management stated (June 2005) that letters regarding site clearance were directly issued to the concerned circles by WPC due to which the status of clearance of sites was not available in corporate office. On this being pointed out, the local managements stated (May-September 2005) that there were considerable delays in receiving clearances from the WPC wing and SACFA in spite of clear instructions from DoT

RECOMMENDATIONS:

- **The Company should prescribe in advance the time schedules for the various activities to be undertaken by circles for creation of necessary infrastructure.**
- **The Company should devise a monitoring mechanism for ensuring timely receipt of 'Agreements in Principle' from the WPC wing for use of allotted frequencies and clearances of SACFA for sites for installation of wireless equipment.**

[γ] Chhattishgarh, Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, UP (East), UP (West), West Bengal.

[♣] Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Rajasthan and Tamil Nadu

[↓] SACFA: 'Standing Advisory Committee on Frequency Allocations' is the apex body in the WPC wing of DoT, consisting of members drawn from DoT and user departments such as All India Radio, Doordarshan, Defence, Railways, Civil Aviation, BSNL, etc for considering matters regarding coordination for frequency allocations and other related issues and for issue of clearance of sites for fixed stations and their antenna masts.

- **DOT should ensure timely issue of 'Agreements in Principle' for use of allotted frequencies by the WPC wing and site clearances by SACFA.**

1.11 PROCUREMENT

The Company during 2000-01 to 2004-05, placed purchase orders worth Rs 4,967.91 crore for procurement of WLL systems on turnkey basis. These systems included equipment for 40.99 lakh lines, besides 18.66 lakh FWTs and 9.73 lakh HHTs as detailed in Appendix-III.

The Company upto June 2003 procured equipment and material either through DGS&D[®] or by calling limited tenders (when the cost of material to be procured was less than Rs 2.00 lakh) or through open tenders (when the cost of material to be procured was more than Rs 2.00 lakh). The Company brought out (June 2003) its own Manual for Procurement of Telecom Equipment and Stores.

Audit noticed various deficiencies related to procurement of WLL equipment, which are discussed in the succeeding paragraphs.

1.11.1 Inadequate procurement planning

The procurement of inter-related equipment should be properly planned and their receipt synchronized in such a way that there are no shortages or excesses of any particular item. Besides, customers' demands and preferences as well as the latest developments in the configuration of terminals should be considered during the procurements. Audit noticed the following deficiencies in procurement planning of WLL equipment and terminals:

1.11.1.1 Delay in procurement of V 5.2 connecting interface equipment

The capacities of the existing WLL systems at Barabanki, Fatehpur, Haidergarh and R.S. Ghat in the Barabanki SSA under the UP (East) Circle were to be expanded by 500 lines each and one WLL Cordect system of 1,000 lines was to be set up at Barabanki for clearing the waiting lists in TNF areas. Audit noticed that although the installation work at all the above sites and those for the WLL CorDect system were completed during January and December 2004, respectively, the systems could not be commissioned till date (July 2005) due to non availability of V 5.2 connecting interface equipment. This resulted in the waiting list not being cleared and consequent loss of potential revenue of Rs 49.50 lakh[•]. The Divisional Engineer stated (September 2005) that the equipment was still to be received against the purchase order placed on the vendor by the Circle Office.

1.11.1.2 Infructuous investment on purchase of terminals

A review of records of 17 circles and two metro districts revealed that 3,40,380 HHTs, 40660 FWTs, 8,975 Fixed Remote Stations (FRS) and 8200

[®] DGS&D: Director General of Supplies and Disposals

[•] calculated by multiplying the capacity with rent per month per connection

Wall sets valued at Rs 229 crore, purchased during January 2003 to December 2004, were lying idle in various circles as of August 2005 as detailed in Appendix-VII. The local managements stated that customers disliked these HHTs due to their bulky size, problems with network coverage, batteries and limited mobility. It was also noticed that FWTs, FRS and Wall sets were lying idle, as there was no demand for them. Thus procurement of terminals without keeping the customers' preferences in view resulted in infructuous investment of Rs 229 crore.

1.11.1.3 Excess procurement of power plants and batteries

Scrutiny of records in 12 SSAs under the Kerala, Madhya Pradesh, Orissa, Punjab and Tamil Nadu circles and the Chennai Telephones District revealed that additional power plants and batteries were procured during 2001-02 to 2003-04 amounting to Rs 3.26 crore, without assessing the actual requirements. These were lying idle since procurement as the existing power plants and batteries were sufficient to cater to the need, resulting in blocking of funds to the tune of Rs 3.26 crore. The local managements accepted the facts and stated that these power plants and batteries would be used in future expansion programmes.

1.11.2 Excess payments due to delay in finalisation of rates

The corporate office places the purchase orders for WLL equipment and terminals and the respective circles that receive the delivery, release the payment to suppliers.

Audit noticed that the Company placed purchase orders on M/s ARM Limited, Hyderabad in September 2002 and on M/s United Telecom Limited (UTL), Bangalore in November 2002 for supply of 28,500 and 34,000 numbers of WLL CDMA FWTs, respectively, at provisional rates. The provisional unit rate for FWT without Patch Panel Antennae (PPA)[$] was Rs 7,453 and for FWT with PPA was Rs 8,092. These rates were firmed up (December 2002) by the corporate office as Rs 8,281 for FWT without PPA and Rs 8,971 for FWT with PPA and communicated to the concerned Circle in the same month. The scheduled delivery periods for the purchase orders were up to 8 January 2003 in respect of M/s ARM Limited and up to 28 February 2003 in respect of M/s UTL.

The corporate office (November 2004) made a downward revision of these firm rates to Rs 5,959 for FWT without PPA and Rs 6,648 for FWT with PPA for the supplies made after the scheduled delivery periods and intimated (November 2004) the same to the concerned circles. It was noticed that there was a delay of about two years in finalising the rates from the date of placement of the purchase orders.

The suppliers made delivery during the period 18 January 2003 to 30 July 2003. However, against the supplies, all the concerned SSAs and the Chennai

[$] Patch Panel Antennae: are designed to optimize the transmission and reception of signals between the base transceiver station and FWT.

Telephones District released payments at the rates communicated by the corporate office in December 2002. Thus due to delayed finalisation of the rates by the corporate office in November 2004, the circles released the excess payments of Rs 5.59 crore to the suppliers. The local managements accepted (June/July 2005) the facts.

1.11.3 Inadequate financial safeguards

In order to ensure satisfactory performance of equipment and stores, prescribed securities in the shape of performance bank guarantees (PBGs) were obtained from suppliers before placement of formal purchase orders. The following deficiencies were noticed in obtaining the PBGs from the suppliers:

1.11.3.1 Short obtaining or non obtaining of additional performance bank guarantees from the suppliers

The Company's manual of procurement of telecom equipment and stores *Addendum-I* (July 2003) provides for an additional PBG at the rate of five *per cent* of the value of the remaining quantity to be supplied during the extended delivery period from the supplier. According to purchase orders (December 2004), M/s Tera Com and M/s HECL were to make bulk supplies of FWTs up to 10 July 2005 valued at Rs 142.60 crore and Rs 71.30 crore respectively. M/s Tera Com and M/s HECL did not supply FWTs valued at Rs 75.57 crore and Rs 64.56 crore within the scheduled delivery period which required submission of additional PBGs of Rs 3.78 crore and Rs 3.23 crore respectively before granting extensions. It was however noticed that the Company directed M/s Tera Com and M/s HECL to furnish additional PBGs for only Rs 1.99 crore and Rs 2.53 crore respectively. Thus additional PBGs amounting to Rs 2.49 crore were short realized from these suppliers.

Similarly, M/s ITI was to make bulk supplies of 4.50 lakh FWTs valued at Rs 183.02 crore and 33,137 FWTs valued at Rs 14.97 crore against purchase orders of November and December 2004 with scheduled delivery periods up to 4 April 2005 and 1 May 2005 respectively. M/s ITI did not supply any FWTs within the scheduled delivery periods.

According to the provisions of the Manual and the terms and conditions of the purchase orders, M/s ITI was to furnish initial PBGs in the form of corporate guarantee amounting to Rs 9.90 crore and additional PBGs of Rs 9.90 crore. The Company neither recovered the initial corporate guarantee nor the additional PBGs before granting extensions to the original delivery schedule up to 30 June 2005 and 31 July 2005. The Company short closed (August 2005) both the purchase orders as M/s ITI could supply only 1.18 lakh FWTs during the extended delivery period against the purchase order of November 2004 and could not supply any FWTs against the purchase order of December 2004. The Company directed (August 2005) M/s ITI to pay the amount of PBGs, which had not been received till date (October 2005).

1.11.3.2 Premature release of additional bank guarantee

According to the general conditions of the contract, 100 *per cent* payment could be made against supplies after delivery, provided an additional bank guarantee for an amount equivalent to five *per cent* of the value of supplies, valid for a minimum period of seven months, was furnished by the supplier along with an undertaking that the equipment supplied would be free from damages and shortages. The additional bank guarantee was to be released only after cases of damages or shortages, if any, in the supplies were settled.

The Company issued (January 2001) a purchase order on M/s HFCL for supply of WLL systems for 49,000 lines along with FRS to three circles, viz., Assam, Himachal Pradesh and Orissa. It was observed in the Orissa Circle that M/s HFCL had furnished an additional bank guarantee of Rs 4.11 crore covering a period of six months (24 January 2002 to 23 July 2002) instead of 7 months as required. Besides, M/s HFCL also did not furnish any undertaking that the WLL systems supplied would be free from damages and shortages. During the validity of this additional bank guarantee, complaints were received by the Orissa Circle from its field units regarding defective FRS, BTSs and BSCs and malfunctioning of the system leading to disconnection of calls, failures in call processing, network coverage problem and poor signals etc. Despite the fact that M/s HFCL did not rectify the complaints the Orissa Circle released the additional bank guarantee of Rs 4.11 crore after six months.

1.11.4 Release of purchase orders with deficient terms and conditions

The Company's manual for procurement of telecom equipment and stores did not specify any specific terms and conditions for levy of penalty on suppliers for delays in installation, acceptance testing and commissioning of the projects to be executed on turnkey basis.

According to the terms and conditions of the purchase orders, acceptance testing (A/T) of WLL equipment was to be got done by the suppliers from the Technical and Development (T&D) Circle of the Company before their commissioning. Further, according to instructions (February 2003) payments for installation and commissioning of equipment were to be made after satisfactory completion of the A/T by the T&D Circle.

Audit observed that due to non-inclusion of any clause for levy of penalty on the suppliers for delays in installation, A/T and commissioning of the WLL equipment, the Management could not levy any penalty on the defaulting suppliers for delays in these activities as discussed below.

- M/s LG Electronics delayed the commissioning of WLL equipment installed in the Punjab Circle by seven to 15 months, as it could not get the A/T certificate from the T&D Circle of the Company due to poor coverage and other defects. This resulted in blocking of capital amounting to Rs 26.65 crore. No penalty was levied on the supplier for these delays.

- At Panjim SSA under the Maharashtra Circle, the WLL equipment supplied (December 2002) by M/s LG Electronics could not be commissioned up to May 2005 due to a number of deficiencies being pointed out by the T&D Circle such as poor quality of calls, discrepancies in meter reading and switching delays. This resulted in blocking of capital of Rs 2.62 crore. No penalty was levied on the supplier for these delays.
- Under eight circles[#] and the Calcutta Telephones District, 40 BSCs and 489 BTS were allowed by the Company to be put to commercial use by the suppliers without satisfactory completion of A/T, as detailed in Appendix-VIII. In UP (East) Circle, it was noticed that full payment of Rs 2.52 crore was released by the Circle to M/s LG Electronics towards installation, commissioning and A/T charges on the basis of a provisional A/T certificate, which was irregular. No penalty was levied on the supplier for not getting A/T cleared.
- In 16 SSAs of seven circles[$], Audit observed that out of 30 WLL systems received during August 2001 to August 2004, 29 systems were commissioned after a delay of two to 19 months. One system had been commissioned provisionally without formal A/T till August 2005 despite the lapse of 28 months. This resulted in blocking of funds aggregating Rs 103.18 crore for periods ranging between two to 28 months as detailed in Appendix-IX. No penalty was however levied on M/s HFCL, M/s LG Electronics, M/s ARM, M/s UTL and M/s ITI for delays in commissioning of the WLL systems.

1.11.5 Non-compliance to terms and conditions on releasing payments

The Management should have ensured that the terms and conditions of the purchase orders and the conditions for granting extensions in delivery schedules were scrupulously adhered to by the circles while releasing payments to safeguard the Company's interest. Some circles failed to adhere to the terms and conditions of the purchase orders while releasing the payments to the suppliers as discussed below.

1.11.5.1 Excess payment due to non-application of subsequent tender rate

Against a tender issued in June 2001, the corporate office placed (July 2002) a purchase order on M/s. HFCL for supply of WLL CDMA equipment for 60,000 lines, out of which, the allotment of equipment for the Tamil Nadu Circle was for 15,000 lines. M/s HFCL failed to supply the complete equipment within the scheduled delivery date (23 January 2003), the corporate office allowed (February 2003) extension up to 30 April 2003 subject to the condition that the payments for the supplies received during the extended delivery period would be made at the lowest of the following rates:

[#] Bihar, Chhattisgarh, Jharkhand, Kerala, Madhya Pradesh, Orissa, UP (East) and Uttaranchal
[$] Himachal Pradesh, J&K, Punjab, Haryana, Maharashtra, Rajasthan and UP (East).

- rate given in the purchase order,
- revised rate which was to be finalised after applying the impact of the Union Budget on the original rate from the date of opening of the tender up to the date of receipt of supplies,
- rate obtained in another tender which was issued in May 2002 for procurement of WLL CDMA equipment.

M/s HFCL supplied WLL CDMA equipment for 10,000 lines to the Coimbatore SSA in February 2003 and for 5,000 lines to the Trichy SSA of the Tamil Nadu Circle in March 2003.

It was noticed that the rate obtained for WLL CDMA equipment against the tender of May 2002 was the lowest amongst the above-mentioned criteria. Thus for the supplies received during the extended delivery period, the rate obtained in the above tender was to be applied. However, Coimbatore and Trichy SSAs released the payment at the original rate given in the purchase order, which resulted in excess payment of Rs 5.45 crore to M/s HFCL.

1.11.5.2 Payment of sales tax in excess of the prescribed percentage

According to instructions (October 2000) of corporate office, no additional sales tax over and above the four *per cent* sales tax already included in the 'all-inclusive prices' was to be paid to the suppliers for supplies within the same state.

It was noticed that the UP (West) Circle made payments (December 2002 and November 2004) aggregating Rs 2.47 crore to M/s LG Electronics towards sales tax over and above the four *per cent* tax for intra state supplies against two purchase orders of January and April 2001. No action for recovery of this amount was taken either by the Circle or the corporate office till the matter was pointed out by Audit in August 2005.

The Management stated (October 2005) that M/s LG Electronics had been requested (September 2005) to deposit Rs 2.47 crore which was erroneously paid to them. Recovery details were however awaited (November 2005).

1.11.5.3 Non-recovery of liquidated damages for delayed deliveries

Purchase orders for WLL projects issued by the corporate office specifically provided for levy of liquidated damage (LD) charges on the suppliers in cases of delays in delivery of WLL equipment. Audit observed that in 34 cases in nine circles[↓] and the Chennai Telephones District, LD charges were either not levied or short levied on the defaulting suppliers despite non delivery and delayed delivery of WLL equipment and terminals by them. Consequently, the Company had to incur a loss of Rs 11.97 crore due to non-levy and short levy of LD charges on the defaulting suppliers as detailed in Appendix-X.

[↓] Assam, Bihar, Gujarat, Haryana, Jharkhand, Maharashtra, Orissa, Punjab and Tamil Nadu.

RECOMMENDATIONS

- **The Company should ensure simultaneous receipt of WLL equipment and terminals to avoid the risk of delays in release of connections and under-utilisation of capacity due to shortages of terminals.**
- **The Company should procure WLL terminals keeping in view the customers' preferences and demands as well as the latest technological advancements to avoid the risk of obsolescence and idling of terminals due to lack of demand.**
- **The Company should ensure procurement of power plants, batteries and other accessories based on actual requirement to avoid the risk of unnecessary blocking of funds.**
- **The Company should ensure timely finalisation of firm rates for supplies to avoid the risk of wrong or excess payments to the suppliers.**
- **The Company should ensure obtaining of proper performance bank guarantees from suppliers to safeguard its financial interest.**
- **The Company should monitor the compliance of the terms and conditions of the purchase orders by its circles to avoid the risk of irregular payments.**
- **The Company should monitor the levy of prescribed liquidated damage charges by the circles on the suppliers to protect its financial interests.**

1.12 UTILISATION OF EQUIPPED CAPACITY

In order to ensure proper returns on the investment made in a project, it is imperative that the equipped capacity of the project is optimally utilised and all prescribed targets for capacity utilisation are met.

The overall utilization of the equipped capacity of 26.89 lakh lines of WLL systems of the Company as of March 2005 was only 16.28 lakh lines i.e. 60.53 *per cent*. Against the equipped capacity of 16.90 lakh lines in the rural areas and 9.99 lakh lines in the urban areas, the capacity utilisation was only 11.32 lakh lines (67 *per cent*) and 4.96 lakh lines (49.6 *per cent*) respectively. The capacity utilisation in different circles and Metro districts ranged between 35.20 *per cent* (Andaman and Nicobar Circle) and 90.07 *per cent* (Madhya Pradesh). The details are given at Appendix-XI.

The capacity utilization was below 50 *per cent* in the rural areas of three circles, viz., Andaman and Nicobar, Karnataka and Uttar Pradesh (East) and in the urban areas of 10 circles, viz., Andhra Pradesh, Gujarat, Himachal Pradesh, Jharkhand, Kerala, Orissa, Punjab, Tamil Nadu, Uttaranchal and Uttar Pradesh (East) circles. The capacity utilisation was more than 100 *per cent* in the urban areas of five circles, viz., Assam, Jammu and Kashmir, Karnataka, North-East-I and West Bengal.

Audit observed that utilisation of the equipped capacity of the WLL systems remained largely unsatisfactory mainly due to deficiencies in planning and procurement, as discussed in paragraphs 1.9 and 1.11 earlier. Besides, poor network coverage and quality of service also contributed to low capacity utilisation, as discussed subsequently in paragraphs 1.13 and 1.15.

RECOMMENDATION

- **The Company should prepare appropriate strategies for ensuring optimum utilisation of the equipped capacity of its WLL systems.**

1.13 OPERATIONAL PERFORMANCE

1.13.1 Achievement of targets

As mentioned earlier in paragraph 1.1s, the USO under NTP 1999 envisaged providing telephones on demand, besides telephone coverage of all the villages in the country by the end of the year 2002. For this purpose, subsidy was to be paid to the operators from the USO Fund to compensate for the losses incurred in providing telephones in the villages. Based on these obligations, DoT decided (August 2000) to replace all faulty irreparable VPTs working on the MARR system by the WLL system by the end of 2002 and to provide new VPTs only through WLL. Audit observed that the Company failed to achieve the targets fixed in its annual plans for replacement of MARR VPTs and for installation of new WLL VPTs as well as providing of VPTs in villages according to the agreement (November 2004) with USO Fund as discussed in the succeeding paragraphs.

1.13.1.1 Non-achievement of targets for replacement of faulty MARR VPTs

The annual plan targets of replacement of faulty MARR VPTs by WLL systems were 40,000, 80,000 and 64,424 for the years 2002-03, 2003-04 and 2004-05 against which the Company replaced 43,430 (109 *per cent*), 36,049 (45 *per cent*) and 28973 (45 *per cent*) MARR VPTs respectively. The Management stated (August 2005) that the targets had been fixed in anticipation of the availability of WLL equipment but equipment could not be made available and that the initial procurement of equipment was not sufficient for covering even 50 *per cent* of the 2,642 SDCAs of the country. They also stated that MARR VPTs were scattered throughout the length and breadth of the country including remote and far-flung areas. The reply was not acceptable, as these aspects should have been addressed adequately at the time of finalising the targets.

1.13.1.2 Non-achievement of targets for installation of new VPTs

In the annual plans, the targets fixed for installation of new VPTs were 144771, 39439, 7135 and 8061 for 2001-02, 2002-03, 2003-04 and 2004-05 against which the achievement was 70755, 36929, 4737 and 9310 respectively. There were shortfalls in achievement of targets by 51 *per cent*, 6 *per cent* and 34 *per cent* during 2001-02, 2002-03 and 2003-04, respectively.

The Management stated that the targets could not be achieved due to delay in supply of equipment by the suppliers and shortage of FWTs besides local problems in certain areas such as insurgency.

1.13.1.3 Non-achievement of USO Fund targets for providing VPTs

The Company signed (November, 2004) an agreement with the USO Fund for providing VPTs to 66,822 villages in 14 circles*. According to the terms and conditions of the agreement, at least 20 *per cent* of the VPTs were to be provided by these circles within one year from the date of agreement, a minimum 60 *per cent* by the end of the second year and the remaining by the end of the third year. It was noticed that a total of 14,233 VPTs (21 *per cent*) were provided during the first year ended during October 2005.

There was overall achievement of the first year target. However, it was observed that only six circles viz., Assam, Gujarat, Himachal Pradesh, Madhya Pradesh, Maharashtra and Rajasthan could achieve their individual targets but eight circles, viz., Andhra Pradesh, Chhattisgarh, Jammu and Kashmir, Jharkhand, Orissa, NE-I, NE-II and Uttaranchal failed to achieve the same. The shortfall in achievements of the first year target by these eight circles was 3.2 *per cent*, 31.15 *per cent*, 39.65 *per cent*, 91.15 *per cent*, 100 *per cent*, 81.90 *per cent*, 90.35 *per cent* and 74.50 *per cent*, respectively.

1.13.2 Optimal operational performance

Optimal operational performances of the WLL telephone service depended upon good network coverage and uninterrupted functioning of the system. To ensure this, WLL equipment should have been constantly covered either by warranty or by annual maintenance contracts (AMCs).

Audit observed that the Purchase orders were deficient as it did not contain any specific penalty clause in case of poor network coverage of the equipments supplied by the suppliers. Following deficiencies were noticed in the operational performance of the WLL telephone service.

1.13.2.1 Inadequate network coverage

According to the terms and conditions of the purchase orders for procurement of WLL systems, it was the responsibility of the suppliers to ensure the good network coverage. Audit observed instances of failure of suppliers to discharge their responsibilities and inadequate monitoring by the Company, resulting in poor network coverage. The instances are discussed below.

The corporate office placed (July 2002) two purchase orders on M/s HFCL for supply of WLL CDMA equipment for 1.48 lakh lines for deployment in 21 cities. Similarly, two purchase orders were placed (July/September 2002) on M/s LG Electronics for supply of WLL CDMA equipment for 3.52 lakh lines for deployment in 59 cities. The suppliers were directed to obtain satisfactory performance reports for each city from the concerned CGMs.

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* Andhra Pradesh, Assam, Chhattisgarh, Gujarat, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Madhya Pradesh, Maharashtra, NE-I, NE-II, Orissa, Rajasthan and Uttaranchal.

Audit scrutiny revealed that the commissioning of the WLL CDMA equipment was delayed in many of these cases due to inadequate network coverage. Despite repeated requests of the Company, the suppliers did not take appropriate action to improve the network coverage. CMD of the Company observed (March 2004) that due to poor network coverage, the Company could not optimally utilize the WLL systems and that customers were complaining about the performance of these systems. Though both the suppliers were given extensions up to 15 September 2004 to meet the coverage requirement by installing additional BTS and repeaters, they failed to fulfill their commitment of providing the requisite network coverage as of August 2005.

The Management stated (August 2005) that a High Powered Committee had been formed for settling the long pending issues relating to non- compliance of the terms and conditions by M/s HFCL and M/s LG Electronics and that the case was under examination of the Committee.

A further test check in 16 SSAs of eight circles[@] revealed that due to poor radio frequency coverage of the systems, under-utilization of capacity of the WLL systems ranged between 26 *per cent* and 100 *per cent*, resulting in idling of the investment of Rs 78.74 crore as detailed in Appendix-XII.

1.13.2.2 Unsatisfactory response of suppliers in attending to complaints regarding network coverage

The tender conditions for supplies of WLL equipment stipulated that support for radio frequency planning, optimization and tuning after commissioning, whenever needed, during warranty and AMC periods was to be provided by the suppliers free of charge. Further, during the period of AMC, the suppliers were to diagnose faults and rectify the same, besides carrying out periodic preventive maintenance.

Scrutiny (August 2005) of the relevant records revealed that M/s LG Electronics did not attend to the complaints pertaining to network coverage and other deficiencies as detailed below:

- The Ahmedabad SSA under the Gujarat Circle reported (July 2002) to the Circle Office and to the corporate office that the WLL switch could not be commissioned as the defects which were pointed out during acceptance testing were not rectified by M/s LG Electronics. It also reported that M/s LG Electronics had been delaying the return of faulty terminals after repairs on the ground that a 'taking over certificate' should first be released to them. The SSA further reported that during the last one and a half years, i.e. January 2001 to June 2002, 939 HHTs, 173 FWTs and 100 batteries supplied by M/s LG Electronics had become faulty due to poor quality.
- The Haryana Circle reported (November 2003-January 2004) to the corporate office that M/s LG Electronics had not attended to problems

[@] Andhra Pradesh, Chhattisgarh, Gujarat, Jharkhand, Kerala, Madhya Pradesh, Maharashtra and UP (East).

relating to repairs of FWTs and FWT cards in Ambala SSA despite repeated requests.

- The Rajasthan Circle reported (March 2004) to the corporate office that in the Ajmer, Beawar, Jaipur and Jodhpur SSAs, the WLL telephone service was very poor and unsatisfactory due to non-rectification of regular radio frequency optimization by M/s LG Electronics which led to frequent call drops; frequent faults in modules due to unreliable power plants and non-rectification of defects pointed out by the T&D Circle during acceptance testing.

Further scrutiny of the records in various circles revealed that various field units of 19 circles[£] and the Calcutta and Chennai Telephones Districts reported to their concerned Circle offices regarding problems related to WLL equipment and terminals such as poor coverage, very low signals or no signals during peak hours, call dropping, frequency overlapping, system failures and repairs and maintenance. These units also reported that the suppliers had not attended to these complaints despite repeated requests.

The local managements accepted the above facts.

1.13.2.3 Non-rectification of faults of the WLL system within the warranty period

Review of records of two SSAs in the Assam and Jharkhand circles revealed that faults had been noticed in the system within warranty periods but the same had not been attended to by the suppliers. In Tejpur SSA under the Assam Circle, the BSC capacity was expanded (November 2003) from 5,000 lines to 10,000 lines, but the software capacity was not similarly expanded. The matter was brought to the notice of the supplier (M/s HFCL) but the problem was not rectified within the warranty period. Similarly in Ranchi SSAs under the Jharkhand Circle, the faults brought (July 2002) to the notice of the supplier (M/s ITI) were not rectified till August 2005.

1.13.3 Non-execution of Annual Maintenance Contracts for WLL terminals due to delay in finalisation of the guidelines

According to the provision of bid documents, Annual Maintenance Contracts (AMCs) for the maintenance of the WLL terminals were to be signed by the circles with the concerned suppliers at the end of the warranty period. Audit scrutiny revealed that against tender enquiries of October 2001 and August 2002, 13 purchase orders were issued (between September 2002 and March 2004) for supply of WLL terminals to different suppliers viz., M/s HFCL, ARM Limited, LG Electronics, and XL Limited. The consignments were received between January 2003 and June 2004 and the one-year warranty period was to expire between January 2004 and June 2005 for these purchase orders.

[£] Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Haryana, J&K, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, UP (East), UP (West), Uttaranchal and West Bengal.

The bid documents and the purchase orders contained the terms and conditions and the rates to be paid to the suppliers for AMC periods. However, the corporate office prepared fresh terms and conditions for AMCs with a view to make them clearer and to further negotiate the rates. The same were circulated (March 2005) to these suppliers for acceptance with the condition that the rates for AMCs would be negotiated with reference to the rates obtained for AMCs against the tender issued on 15 July 2004. None of the suppliers except M/s XL Limited accepted this condition. A Committee constituted (May 2005) by the corporate office recommended that an AMC should be signed only with M/s XL Limited. Further, the corporate office also instructed (June 2005) all the circles not to sign AMCs with the other suppliers till the AMC guidelines were finalized. Thus due to abnormal delay in finalization of the AMC guidelines, AMCs could not be signed with any of the other suppliers till date (November 2005).

Scrutiny of the records of various circles revealed that 55,475 defective WLL terminals valued at Rs 47.95 crore were lying in various SSAs under 16 circles as detailed in Appendix-XIII. The suppliers due to non-execution of AMCs had not repaired these terminals. As a result the entire investment of Rs 47.95 crore in these WLL terminals was rendered un-remunerative till date.

It was also noticed that in the UP (east), Rajasthan and Bihar circles that 7,161 FWTs valued at Rs 6.78 crore which had been sent for repairs to the suppliers had not been returned although a period of more than six months had elapsed from the date of sending. No penalty could be levied on the suppliers due to non-execution of AMCs.

1.13.4 Non recovery of FWT and HHT sets from customers after closure

Rules provide that for closure of connections, closing advice note should be issued by the Commercial branch and forwarded to the concerned Sub-Divisional Engineers for closure of telephone connections and recovery of instruments (FWTs or HHTs) from the customers. A scrutiny of the records of 51 SSAs under 16 circles and the Calcutta Telephones District revealed that 16,712 FWTs and 20,590 HHTs valued at Rs 25.94 crore were not recovered from the customers after closure of their WLL connections as of August 2005 detailed in Appendix-XIV.

RECOMMENDATIONS

- **The Company should monitor the performance of the suppliers in carrying out their responsibility towards providing adequate and uninterrupted network coverage to avoid the risk of poor quality of service and losing its customer base.**

- **The Company should finalise the guidelines for execution of AMCs for WLL terminals urgently to avoid the risk of delays in repairs and accumulation of inventories of faulty terminals.**

- **The Company should ensure timely return of WLL terminals from vendors after their repairs.**

1.14 SYSTEM OF BILLING, COLLECTION AND ACCOUNTING OF REVENUE

Billing, collection and accounting of revenue in respect of all the telephone services of the Company were done by the Telephone Revenue Accounting (TRA) Branch in each SSA. The functions of the TRA Branch were computerized and mainly two types of software viz., 'DOTSOFT' and 'TRICHUR' were used for the purpose.

An efficient and effective system of billing, collection and accounting of telephone revenue would be based on the following:

- timely receipt of advice notes from the commercial wing after completion of activities relating to opening, shifting and closure of connections, so that bills are issued immediately;
- prompt receipt of meter readings from exchanges and billing of the same without delay;
- immediate stopping of billing after disconnection and closure of connections;
- proper monitoring of outstanding revenue.

Billing, collection and accounting of the WLL service and the landline service of the Company were being done together. Due to non-maintenance of separate year-wise details of revenue billed, collected and outstanding in respect of the WLL service the overall return on the investment made in this service could not be ascertained. However, Audit scrutiny revealed various inadequacies in billing, collection and accounting of revenue with respect to WLL connections as discussed in the succeeding paragraphs.

1.14.1 Accumulation of revenue arrears due to delays in submission of completed advice notes to TRA branch

Rules stipulate that completed advice notes should be forwarded by the Commercial branch to the TRA branch within a week after providing the connections to enable the TRA branch to issue bills to the customers. Scrutiny of relevant records revealed that in 69 SSAs under 19 circles, completed advice notes pertaining to 1,858 WLL telephone connections during the period September 2002 to July 2005were not received within the stipulated period in TRA branch as detailed in Appendix-XV. As a result, 19200 bills could not be issued to the concerned customers, which led to accumulation of revenue arrears amounting to Rs 1.00 crore.

1.14.2 Short billing of WLL connections

Audit observed that in the Agra SSA under the UP (West) Circle, bills were issued only for 48843 WLL connections as against 52120 working connections during the year 2004-05. This led to short billing of Rs 3.28 lakh* in respect of 3277 WLL connections. On this being pointed out the Management stated that the billing was not done due to non-receipt of advice notes.

Similarly in J & K Circle, bills in respect of 4,399 and 5,025 WLL connections were issued against 7,119 and 14,508 working connections during 2003-04 and 2004-05, respectively. This resulted in non-billing of Rs 2.23 crore and Rs 7.14 crore during the years 2003-04 and 2004-05 respectively. The reply of the local management was awaited as of November 2005.

1.14.3 Delayed billing of WLL connections

The Company while notifying (February 2001) the tariff for the WLL fixed and mobile services, fixed the billing cycle for this service as a monthly one. Audit, however, observed that in the Hazaribagh SSA under the Jharkhand Circle, bills were issued after delays of two to six months during the year 2004-05. In the Haridwar SSA under the Uttaranchal Circle, bimonthly bills were issued for the initial period of one year (August 2003 to August 2004) and subsequently, the bills were issued monthly. Similarly, in Baripada and Cuttack SSAs under the Orissa Circle, bills were issued bimonthly instead of on monthly basis.

The Management of the Hazaribagh SSA stated (July 2005) that the delay was mainly due to non-receipt of meter readings in time and failure of the computer system and the Management of the SSAs of the Orissa Circle accepted the failure.

1.14.4 Non monitoring of bills of heavy callers

According to instructions (March 2001), customers making over 3,000 calls in a month were to be treated as heavy callers. Such subscribers were to be identified in each SSA and a cell created for ensuring timely billing and collection, besides offering better customer care to them. Test checks in seven SSAs under the Assam, Bihar and Orissa circles revealed that Rs 20.58 lakh was outstanding against heavy callers and no separate monitoring was being done by these SSAs.

1.14.5 Heavy outstanding against WLL customers

The corporate office issued (November 2000) instructions to all the SSAs to sensitize themselves early to the significance and criticality of timely revenue billing and collection. It also emphasized the need to take concrete steps to increase the revenue of the SSAs and to reduce their failures through close monitoring.

Audit noticed that in 35 SSAs in five circles and all SSAs in eight circles, the percentage of collection of revenue over the amount billed during 2002-03, 2003-04 and 2004-05 was 65.60 *per cent*, 64.88 *per cent* and 50.17 *per cent* respectively as detailed in Appendix-XVI. The percentage of outstanding

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* calculated at the minimum rate of rent of Rs 100 per connection

revenue showed an increasing trend. At the end of March 2005, the total outstanding against WLL customers in the above SSAs was Rs 113.88 crore.

1.14.6 Non-closing of WLL connections even after 90 days of their disconnections

Rules provide that a disconnected telephone should be closed permanently after a period of 90 days from the date of disconnection. Thus no bills for rent should be generated thereafter. Audit scrutiny in 20 SSAs under the Chhattisgarh, Jharkhand, Karnataka, Madhya Pradesh, Orissa, Rajasthan and UP (East) circles revealed that WLL connections were not permanently closed after 90 days of the disconnections and bills for rentals continued to be issued to the customers.

It was further observed in 12 SSAs of the Jharkhand, Rajasthan and Orissa circles that closing advice notes were not issued by the respective Commercial branches even after the lapse of 90 days and the TRA branches continued to issue bills. This resulted in issue of wrong bills for Rs 22.36 lakh in respect of 1,663 cases of closed connections in these SSAs.

1.14.7 Non availability of automatic disconnection facilities in billing software

Rules provide that a telephone bill should be paid within 15 days from the date of issue. In cases of non-payment, the telephones in respect of individual customers were liable to be disconnected on the fortieth day after the date of issue of bills. A test checks of records of 19 SSAs under the Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa and Uttaranchal circles revealed that the automatic disconnection facility was not available in their billing software.

Audit further observed that in 30 SSAs under eight circles, viz., Assam, Chhattisgarh, Orissa, Rajasthan, Bihar, UP (east), Uttaranchal and all the SSAs in the Madhya Pradesh Circle and Chennai Telephone District, disconnections of telephone connection were not done on time even when two to 19 bills (between 2001-02 and 2004-05) were pending. This led to accumulation of outstanding revenue to the tune of Rs 42 crore against WLL customers as detailed in Appendix-XVII.

RECOMMENDATIONS

- **The Company should strengthen the coordination among its various wings for ensuring complete billing and revenue realisation.**
- **The Company should ensure effective monitoring of outstanding revenue to avoid the risk of accumulation of revenue arrears.**
- **The TRA branch should prepare separate details of the revenue billed, collected and outstanding in respect of their WLL telephone service to monitor the return on investment on this service.**

1.15. QUALITY OF WLL TELEPHONE SERVICE

Quality of Service (QoS) is the main indicator of the performance of a telephone service as well as of the degree to which the service conforms to the stipulated norms. The norms prescribed by TRAI for the 'Quality of service performance of basic service operators' were applicable for the WLL telephone service of the Company. The quality of the WLL service provided by the Company was not completely satisfactory in most of the circles as there were complaints regarding poor coverage, non-provision of umbrella network coverage, system failures, very low signals or no signals in peak hours, call dropping, faulty WLL terminals, frequency overlapping, etc.

A field survey on the quality of the WLL telephone service of the Company in rural and urban areas was conducted by Audit (Company officials accompanied the audit teams conducting the survey) during August 2005. A total of 3,260 customers in 81 SDCAs of rural and urban areas of 17 circles and two metro districts of the Company were surveyed of which 2,359 customers were from 64 SDCAs of rural areas and 901 customers were from 17 SDCAs of urban areas. The important findings of the survey are described below:

1.15.1.1 Non-releasing of new WLL connections in time

Out of the total number of customers surveyed, 2,313 customers (98.05 *per cent*) of rural areas and 897 customers (99.56 *per cent*) of urban areas responded on this issue. According to the norms prescribed by TRAI for basic service providers, after booking of the new connection by the customer, the connection should be released in 'less than seven days'. However, the response received from the above customers revealed that in the case of 61.52 *per cent* of rural and 48.72 *per cent* of urban customers the time taken by the Company in release of new connections exceeded seven days after the booking of connections.

1.15.1.2 WLL telephones remained out of order

According to the norms prescribed by TRAI for basic service providers, the number of telephones lying out of order in a month should be 'less than three per 100 customers'. Out of the total number of customers surveyed, 2311 customers (97.97 *per cent*) of rural areas and 893 customers (99.11 *per cent*) of urban areas responded on this issue. The response received revealed that in a month, the WLL telephones of 41.11 *per cent* and 48.49 *per cent* of rural and urban customers, respectively, remained out of order.

1.15.1.3 Non-rectification of faults within the prescribed time period

According to the norms prescribed by TRAI for basic service providers, the faults of more than 90 *per cent* of faulty telephones should be cleared by the next working day of their reporting. Out of the total number of customers surveyed, 937 customers (39.72 *per cent*) of rural areas and 462 customers (51.28 *per cent*) of urban areas responded on this issue. The response received revealed that the Company did not repair the faults of the WLL telephones of

29.67 *per cent* and 27.71 *per cent* of rural and urban customers respectively by the next working day showing lack of coordination between the customer care and operational wings of the Company.

1.15.1.4 Poor voice quality of WLL telephone calls

According to the norms prescribed by TRAI for CMTS operators, the number of calls with good voice quality should be 'more than 95 *per cent* of calls'. Out of the total number of customers surveyed, 2,323 customers (98.47 *per cent*) of rural areas and 901 customers (100 *per cent*) of urban areas responded on this issue. The response received revealed that less than 95 *per cent* of calls with good voice quality were received by 35.13 *per cent* and 63.71 *per cent* of rural and urban costumers, respectively indicating of poor network coverage of the WLL system.

1.15.1.5 Repeat dialing to get the desired connections

Out of the total number of customers surveyed, 2345 customers (99.41 *per cent*) of rural areas and 878 customers (97.45 *per cent*) of urban areas responded on this issue. Responses received from the above customers revealed that 17.99 *per cent* and 23.81 *per cent* of rural and urban costumers, respectively, had to dial the desired telephone numbers two or more times from their WLL telephones to get the connections, which was indicative of poor network coverage of the WLL system.

1.15.1.6 Non-provision of additional facilities like STD and ISD in time

According to the norms prescribed by TRAI for basic service providers, additional facilities should be provided to a customer within less than 24 hours of the request received for the same. Out of the total number of customers surveyed, opted for STD/ISD facilities, 260 customers in rural areas and 87 customers in urban areas responded on this issue. The response received revealed that 25 *per cent* and 16.09 *per cent* of rural and urban customers, respectively, got additional facilities such as STD and ISD after more than 24 hours of making requests for the same.

1.15.2 Inadequate arrangement for power supply

Audit observed that power supply had become one of the major bottlenecks in the operation of the WLL telephone service, especially in rural areas and in states like Bihar, Jharkhand, Orissa, Uttar Pradesh and West Bengal. Besides the requirement of power for WLL exchanges, there was the requirement for charging the batteries of the WLL terminals by the customers, which should have been assessed properly. In response to the survey conducted by Audit, 1099 customers in rural and 544 customers in urban areas reported problems in charging of their WLL terminals due to non-availability of power supply. Of these customers, 57.97 *per cent* customers in rural and 24.35 *per cent* customers in urban areas reported that their WLL telephone sets remained non-functional for more than two days due to non-availability of power.

RECOMMENDATIONS

- **The Company should ensure adherence to the quality of service norms fixed by TRAI to avoid the risk of migration of the customers to other operators.**
- **The Company should ensure proper coordination among its customer care, commercial and operational wings for minimising the delays in attending to customers' complaints and requests for additional facilities to avoid the risks of loosing them to their competitors.**
- **The Company should conduct surveys at regular intervals to obtain feedback from its customers about the quality of its WLL telephone services and take immediate corrective action.**

1.16 CONCLUSION

The Company failed to formulate proper strategies and detailed plans at the time of launching the WLL telephone service in 2000-01 and its subsequent expansions. The capacity remained grossly under-utilized both in rural and urban areas mainly on account of deficient planning; mismatches in the procurement of WLL systems and terminals; poor network coverage and poor quality of service. The Company suffered financial losses due to inaccurate assessments of demand and requirement and selection of obsolete technologies.

There is an urgent need for the Company to improve planning and monitoring mechanism in respect of the WLL telephone service, besides improving procurement practices. The system for billing, collection and accounting of revenue from the WLL telephone requires stricter monitoring. The quality of service being provided needs further improvement through better network coverage and customer care.

CHAPTER II
Performance Audit Report on Human Resources Management in Bharat Sanchar Nigam Limited

HIGHLIGHTS

- **The Company appointed a consultant for strengthening its human resource management functions in April 2002. The consultant submitted two reports in July 2002 and February 2003 but most of the recommendations contained in these reports had not been considered by the Company as of January 2006.**

(Paragraph 2.8)

- **Manpower plans were not prepared by the Company till 2003-04. The Company prepared only one Manpower Plan for 2004-05 while the plan for 2005-06 was still to be prepared.**

(Paragraph 2.9.1.1)

- **The Company incurred an expenditure of Rs 16.82 crore on idle manpower in the Telecom Stores Organization during the years 2000-01 to 2004-05.**

(Paragraph 2.10.3)

- **The Company incurred an expenditure of Rs 838.76 crore on manpower in telegraph offices during the years 2001-02 to 2003-04. The workload in these offices had come down substantially, indicating redundancies in staff.**

(Paragraph 2.10.4)

- **The Company incurred an irregular expenditure of Rs 424.34 crore towards pay and allowances of personnel manning temporary posts without retention sanction during 2001-02 to 2004-05.**

(Paragraph 2.10.5)

- **Group 'A' officers, who were on deemed deputation from the Department of Telecommunications (DoT), had not been absorbed even after five years of formation of the Company. Many vital human resources initiatives including several recommendations of the consultant had been kept pending citing this fact.**

(Paragraph 2.11.1)

- **In spite of an urgent need to integrate human resources functions pertaining to all the disciplines under the overall charge of Director**

(HRD), complete integration had not taken place as of November 2005.

(Paragraph 2.11.2)

- **The Company had not prepared human resources manual even after five years of its formation.**

(Paragraph 2.11.3)

- **A new recruitment policy had not been framed to give a definite direction to the process of recruitment.**

(Paragraph 2.12.1)

- **Only 38 *per cent* of posts created for the Marketing Interface Organization were manned as of November 2005, largely defeating the objectives of better customer care and marketing in the face of stiff competition.**

(Paragraph 2.12.3.2)

- **Regular promotions were not given in time. Test check in nine circles revealed that the prevalent practice of giving local officiating promotions resulted in avoidable expenditure of Rs 1.76 crore on traveling and dearness allowances.**

(Paragraph 2.13.1.3)

- **The Company did not adopt a new transfer policy to suit its needs. The consultant's recommendations regarding tenure and terms of transfer were not considered for implementation.**

(Paragraph 2.13.2)

- **Out of 1,71,256 training slots in 22 Training Institutes, 58,756 slots had not been utilized during 2001-02 to 2004-05. The percentage of utilization of training slots with reference to the slots planned declined from 71 *per cent* during 2001-02 to 59 *per cent* during 2004-05.**

(Paragraph 2.15.2)

- **All Group 'C' officials of the Company were to undergo 'Behavioral and Attitudinal Training' till November 2005 but only 58 *per cent* had been trained till March 2005.**

(Para 2.15.2)

- **The Company had not formulated its own conduct and disciplinary rules, based on the rules generally adopted by Public Sector Undertakings, the guidelines of Central Vigilance Commission and the Department of Public Enterprises. Out of 1,459 cases registered during 1994-2005, only 529 cases, i.e. 36 *per cent*, had been settled up to March 2005.**

(Paragraphs 2.16.1 and 2.16.2)

- **The Company could not implement any voluntary retirement scheme to downsize manpower, as of November 2005.**

(Paragraph 2.18.3)

GIST OF RECOMMENDATIONS

- **The Company should ensure timely preparation of annual manpower plans. The Corporate Office should specify time periods for each stage, including receipt of inputs from the circles, and ensure that these dates are adhered to.**

- **The Company should urgently implement fresh staffing norms for Group 'A' and 'B' officers for the fixed line service, as suggested by the consultant.**

- **The Company should either appoint a consultant or an internal committee to work out fresh norms for Group 'C' and 'D' employees, and implement the same.**

- **The Department of Telecommunications (DoT) and the Company should resolve the issue of absorption of Group 'A' officers urgently as many vital human resources initiatives including several recommendations of the consultant had been kept pending citing this fact.**

- **The Company should urgently complete the integration of human resources functions pertaining to all the disciplines under the overall charge of Director (HRD).**

- **The Company should prepare a human resources manual.**

- **The Company should formulate a recruitment policy to give a definite direction to the process of recruitment to its different cadres.**

- **The Company should devise a selective VRS for cadres whose functions have been phased out, after exhausting the possibility of their redeployment.**

- **The Company should formulate a well defined, fair and transparent transfer policy based on the consultant's recommendations.**

- **The Company should expedite the framing of its conduct and disciplinary rules based on rules generally adopted by Public Sector Undertakings, the guidelines of the Central Vigilance Commission and the Department of Public Enterprises.**

- **Administrative measures should be put in place to ensure that training slots do not go unutilized because of lack of nominations and cancellation of nominations.**

2.1 INTRODUCTION

As a precursor to corporatisation of the service providing functions of the Department of Telecommunications (DoT), the Government of India decided to separate the policy and licensing functions of DoT from the service providing functions in pursuance of the New Telecom Policy (NTP) – 1999. Consequently, the Department of Telecom Services (DTS) was carved out of DoT in October 1999, as a part of the continuing process of opening up the telecom sector. Subsequently, DTS was bifurcated (July 2000) and a new department, known as the Department of Telecom Operations (DTO), was created. DTS and DTO were finally corporatised into a wholly owned Government Company named Bharat Sanchar Nigam Limited in September 2000 and the business of providing telecom services in the country was transferred to the Company with effect from October 2000.

The Company was formed with a paid up capital of Rs 5,000 crore. The authorized capital as of March 2005 was Rs 10,000 crore and the preference share capital was Rs 7,500 crore. It had nationwide licences for providing basic, long distance, mobile and Internet services, barring Delhi and Mumbai. At the time of its formation, the Company had a base of 2.38 crore telephone lines which increased to 3.75 crore as on 31 March 2005. Besides, 94.47 lakh cellular mobile telephone connections were also operational as of March 2005.

The main objectives of corporatisation were:

- To accelerate business development in line with recent global trends
- To introduce appropriate autonomy and flexibility in decision making
- To introduce a commercial culture with a focus on service to customers
- To build infrastructure and accelerate network expansion through increased internal resources and tapping of capital markets
- To meet Universal Service Obligations (USO)[1].

As would be seen from the above, each of the objectives of corporatisation had major implications for human resources (HR) management. The envisaged advantages could only be achieved if the HR policies and procedures in the Company were transformed from the departmental setup to that which suited a corporate entity.

Consequent upon corporatisation in October 2000, all officers and employees of DTS and DTO, other than those retained in DoT, were transferred on deemed deputation to the Company on 'as is where is basis' along with their posts, on the

[1] USO – USO envisaged providing telephones on demand, besides telephone coverage in all villages in the country.

existing terms and conditions. The Company decided to continue with the HR policies and procedures of DoT till it framed its own policies and procedures.

The employees of the Company were divided into four groups, viz., 'A', 'B', 'C' and 'D'. The Company categorized the Group 'A' and 'B' cadres as executive class and the Group 'C' and 'D' cadres as non-executive class. While employees in Groups 'B', 'C' and 'D' had been absorbed in the Company, Group 'A' officers were still to be absorbed as of January 2006. As of March 2005, the Company had a staff strength of 3.40 lakh. The details of manpower in different groups as on 31 March 2005 are given at Appendix-XVIII.

2.2 SCOPE OF AUDIT

Performance audit of HR management in the Company covered the period April 2001 to March 2005. Besides the Corporate Office, 35 circles i.e. 20 territorial circles, two metro districts of Chennai and Kolkata and 13 non-territorial circles such as Telecom Stores, Quality Assurance etc. were taken up for performance audit out of a total of 45 circles. In the case of territorial circles, 25 *per cent* of Secondary Switching Areas (SSAs) were selected at random.

2.3 AUDIT OBJECTIVES

The objectives of audit were to examine whether:

- The manpower planning done by the Company was adequate to meet its objectives;
- The Company ensured optimum deployment of manpower;
- The Company introduced new recruitment policies and practices and whether they were adequate;
- Well defined, fair and transparent career progression policies and practices were in place;
- Well defined, fair and transparent transfer policies and practices were in place;
- An effective performance management system was in place;
- The training imparted by the Company was effective;
- Clearly defined and effective conduct and disciplinary rules were in place;
- Incentive and welfare policies and practices were effective.
- An adequate exit policy had been formulated and implemented by the Company.

2.4 AUDIT CRITERIA

The main criteria used for audit were as follows:

- Adequate planning for meeting the requirement of manpower for accelerating business growth in the scenario of frequent technological advancements, a changing business environment and competition from private operators;
- Optimum deployment of manpower based on proper planning;
- Responsive and prompt recruitment procedures;
- Well defined, fair and transparent career progression policies and practices that attract new talents and retain the existing ones;
- Well defined, fair and transparent transfer policies and practices;
- Effective performance management indices that promote the Company's goals;
- Well planned and effective training to help the Company achieve its goals;
- Clearly defined and effective conduct and disciplinary rules;
- Adequate incentive and welfare policies and practices, commensurate with industry standards;
- A comprehensive and effective exit policy;
- Performance indicators fixed by the Company in respect of the above issues; and
- Performance indicators suggested by M/s KPMG, the consultant appointed (April 2002) by the Company to strengthen its HR functions.

2.5. AUDIT METHODOLOGY

The audit methodology involved examination of documents and discussions with the Management to evaluate the performance of human resources management in the Company based on the audit criteria broadly outlined earlier.

2.6 ACKNOWLEDGEMENT

In the course of audit a number of issues were deliberated with the Senior Deputy Directors General, Deputy Directors General concern at Corporate office, Chief General Managers at Circle level and the General Managers at SSA level, besides examination of records and documents. Entry and exit conferences were also held at Circle level and with corporate management. Audit acknowledges the cooperation and assistance extended by all the levels of Management at various stages for completion of the Performance Audit. The Performance Audit Report was issued to the Management and the Ministry in December 2005 and the reply to the same was received (January 2006)

2.7 ORGANIZATIONAL SETUP

The Company is organized into 24 telecom territorial circles and 19 non-territorial circles covering the whole country, besides two Metro Telecom Districts at Chennai and Kolkata. It, however, does not serve the metropolitan cities of Mumbai and Delhi and their adjoining areas, which are served by Mahanagar Telephone Nigam Limited. The territorial circles are further divided into Secondary Switching Areas (SSAs), which are the basic management units of the Company. The non-territorial circles such as Telecom Stores, Quality Assurance, Training, Projects and Maintenance are responsible for specialized activities.

The Company is headed by a Chairman and Managing Director (CMD), who is assisted by a Board of Directors (Board), comprising five functional Directors looking after Finance, Planning and Network Switching, Human Resources Development (HRD), Commercial and Marketing and Operations, besides two non-functional Directors. The Director (HRD) who looks after HR activities is assisted by seven Senior Deputy Directors General and Deputy Directors General, in charge of areas such as establishment, personnel, administration, training, restructuring, staff relations and international relations. The circles are headed by Chief General Managers who are responsible for carrying out day to day administration and management of personnel, besides provisioning, operating and maintaining telecom services in their circles. An organizational chart of the Company related to the HR management is given at Appendix-XIX.

2.8 AUDIT FINDINGS

Realizing the need for streamlining and strengthening the HR functions in the organization to achieve the goals for which it was formed, the Company appointed (April 2002) M/s KPMG, a global management consultant firm, at a cost of Rs 64.20 lakh, to advise it on strengthening of its functions. The Company indicated that HR functions should be aligned to the business strategy of the organization and should be on par with industry norms.

The consultant was required to submit two sets of reports on five human resource deliverables, viz., personnel policy, manpower planning, norms for staffing, incentives/performance appraisal and conduct and disciplinary rules by July 2002 and January 2003. KPMG submitted its first report in July 2002 and the second report in February 2003. Audit observed that the Company had not constituted any specific task force or committee to study the recommendations of KPMG and recommend their feasibility for implementation. The Management stated that the Management Committee had decided (February 2005) to consider acceptance of KPMG's final report on HR strengthening only after the absorption of Group 'A' officers. The Management further replied (January 2006) that a steering committee chaired by CMD and Directors had been formed to over see the implementation of the final report of KPMG in the Company.

Audit observed that although the Company recognized the need for strengthening its HR functions and appointed a consultant for the purpose, prompt and adequate steps in this regard were not taken. The deficiencies observed with regard to manpower planning, deployment of personnel, recruitment, career progression, transfers, performance management, training, conduct and disciplinary rules, welfare and exit policy, are discussed in the succeeding paragraphs.

2.9 MANPOWER PLANNING

In the light of the changed scenario of corporatisation and competition; growth and diversification and technological advancements, the Company's objectives of providing world-class telecom services, including value added services at affordable prices, while ensuring utmost customer satisfaction, could not be achieved without effective manpower planning and deployment. Effective manpower planning and deployment would entail the following:

- Preparation of manpower plans based on the objectives of the Company;
- Regular review and revision of staffing norms;
- Deployment of manpower as per the prescribed norms or actual needs; and
- Effective HR systems to facilitate manpower planning and deployment.

Audit observed that while the Company attempted to improve HR management by addressing all these issues, more needed to be done to achieve its goals and objectives. These issues are discussed in the succeeding paragraphs.

2.9.1 Inadequate Manpower planning

An organization needs to deploy and utilize its available manpower effectively and optimally so as to achieve its goals. This can be done through manpower planning to ensure that the right number and the right kind of people are placed at the right places and at the right time, for completing the tasks economically, efficiently and effectively.

2.9.1.1 Annual manpower planning

Audit observed that the Company had not prepared any long term or medium term manpower plans. The Company decided to prepare an annual manpower plan for the first time in April 2004, almost four years after it was set up. The Manpower Plan for the year 2004-05 was approved in November 2004 and the plan for 2005-06 could not be prepared, as inputs from the circles were not received in time.

The Manpower Plan for 2004-05, submitted to the Board highlighted that the bulk of the prescribed norms related to the fixed line scenario and as the fixed line business was stagnating or coming down, review and redeployment of personnel was necessary. It was also highlighted that the exponential growth of new services such as the Wireless-in-Local Loop (WLL) telephone service and the Cellular Mobile Telephone Service (CMTS) and growth prospects of broadband required significant induction of hands, both in numbers as well as in specific skill sets.

Thus the manpower plan recommended additional posts in SAG[1], JAG[2], STS[3] and Group 'B' posts in the Telecom and Finance discipline of CMTS, WLL and Internet services.

Out of the above proposals Audit, however, observed that the Board sanctioned Group 'A' STS and certain Group 'B' posts for WLL, Internet and Finance based on norms recommended by KPMG in its report. Against the Board's approval for creation of an additional 486 STS posts and 1,767 Group 'B' posts for CMTS, only 150 STS posts and 20 Group 'B' posts had been created between December 2004 and March 2005. Besides, 1,176 posts in STS and Group 'B' approved for WLL, Internet and Finance related posts were not operated which could adversely affect the Company's performance as discussed in paragraph 2.12.3 and 2.18.1.

On this being pointed out, the Management replied (January 2006) that for arriving at the manpower requirements, an estimation approach had been adopted and the actual creation of posts had been done in respect of proposals from circles. The Management further stated that some circles had not submitted any proposals at all or had submitted them at the fag end of the year and due adjustments would be made in the Manpower Plan for 2005-06. The reply that the posts were created on estimation basis is not tenable, as (i) the Board had approved the creation of additional STS and Group 'B' posts for CMTS, WLL and Internet services based on the new norms adopted in January 2003 (ii) the Corporate Office should have ensured, that the circles forwarded the proposals for additional posts promptly

2.9.1.2 No Outsourcing plan

Audit observed that during 2001-02 to 2004-05, an amount of Rs 145.45 crore was incurred in 16 circles, as shown in Appendix-XX, on outsourcing of certain activities, viz. cable laying, house keeping, running of call centres, hiring of vehicles, printing of telephone bills, subscriber identity module (SIM) card packing, watch and ward of buildings, maintenance of exchanges, etc. Though such a large amount was spent on outsourcing during the past four years, neither was the issue included in the Manpower Plan nor were any policy directives or guidelines issued on outsourcing.

2.9.2 Staffing norms not reviewed and revised

The Board approves staffing norms after considering the recommendations of the Vetting Committee on the results of work study. In cases where staffing norms could not be finalised, ad hoc staffing norms of DoT period were adopted for specified periods. These ad hoc staffing norms were to be reviewed from time to time for extending their period of validity based on the working experience during the intervening periods.

[1] Senior Administrative Grade
[2] Junior Administrative Grade
[3] Senior Time Scale

Test checks of 15 ad hoc norms for various posts in cadres such as Directors, Assistant Directors, Divisional Engineers, Sub-divisional Engineers, Junior Telecom Officers, Accounts Officers, Assistant Accounts Officers, Telecom Traffic Assistants and Phone-Mechanics revealed that although these ad hoc norms had been issued during the period 1983 to 1997, they had not been firmed up by the Company till November 2005. Their validity period was initially extended up to March 2002. Thereafter, four ad hoc norms were discontinued and the validity period for the remaining 11 ad hoc norms was extended up to March 2004, as detailed in Appendix-XXI.

KPMG had submitted their report on staffing norms for new services in July 2002 and for Group 'A' and 'B' cadres in February 2003. KPMG had also suggested the appointment of another consultant for developing norms for Group 'C' and 'D' cadres. Audit, however, observed that the Company implemented (January 2003) the staffing norms only for new services of CMTS, WLL and Internet. The Company had not implemented the staffing norms for fixed line services in respect of Groups 'A' and 'B'. They had also not appointed any consultant for developing the norms for Group 'C' and 'D' cadres, as of November 2005.

The Management stated (January 2006) that as most of these norms related to fixed line service, which were lately showing declining trends, the Management Committee decided not to extend the validity of these related norms. It was further stated that the need for engaging consultant for review of Group 'C' and 'D' norms would be assessed after final view on KPMG recommendations were taken. The reply is not tenable as fixed lines form 76 *per cent* of the total lines and deployment of manpower without any norms is not in the best interest of the Company.

The Management further stated (January 2006) that for the purpose of manpower planning, concept of ceiling limit introduced during 1992 was continued in the Company. As a result of this, the ratio of staff to per 1000 telephones as of March 2005 came down to 7.2, which was 13 as of March 2001. Through this along with need based outside induction, optimal and effective utilisation of manpower was being ensured. The reply is not tenable as this fall in staff to telephone ratio was mainly due to exponential growth in cellular and WLL connections by 110.75 lakh subscribers and approximately 8,000 retirements per annum, rather than through an pro active manpower plan.

Recommendations

- **The Company should ensure timely preparation of annual manpower plans. The Corporate Office should specify time periods for each stage, including receipt of inputs from the circles, and ensure that these dates are adhered to.**
- **The Company should ensure that once the Board approves the manpower plan, there is no delay on the part of the circles in implementing the approved plan.**

- **The Company should invariably include aspects relating to cost of manpower in the plans.**
- **The Company should issue guidelines for outsourcing of jobs. The Company should also identify outsourceable jobs.**
- **The Company should urgently revise the staffing norms for fixed lines as per the changes in the business environment and technology.**
- **The Company should urgently implement fresh staffing norms for Group 'A' and 'B' officers for the fixed line service, as suggested by the consultant.**
- **The Company should either appoint a consultant or an internal committee to work out fresh norms for Group 'C' and 'D' employees, and implement the same.**

2.10 MANPOWER DEPLOYMENT

2.10.1 Manpower not deployed as per the prescribed norms or actual needs

With the decline in the fixed line business and advancements in technology such as digitalization of exchanges, introduction of new services, computerization of various commercial and billing functions and increasing focus on customer care and marketing due to increasing competition, there was a need for a properly planned deployment of manpower. Audit, however, observed various deficiencies in deployment of staff, which was not as per the actual requirements of the Company. These deficiencies are discussed in the succeeding paragraphs.

2.10.2 Idle manpower in fixed line service

Audit observed that out of the 24 circles and two metro districts, seven circles, viz., Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Punjab, Tamil Nadu and Uttar Pradesh (East) and the Chennai Telephones District showed a total decrease of 5.45 lakh fixed lines during 2003-04. Five circles, viz., Gujarat, Haryana, Punjab, Uttar Pradesh (East) and Uttar Pradesh (West) and the Chennai Telephones District surrendered 2.32 lakh fixed lines in 2004-05. During the years 2003-04 and 2004-05, the decreasing trend was most persistent in three circles, viz., Gujarat, Punjab and Uttar Pradesh (East) and the Chennai Telephones District, which warranted a review of the number of existing staff and diversion of surplus staff.

Audit, however, found that no such review had been conducted and excess staff was not diverted. The Management stated (July 2005) that the reduction in fixed lines was spread over all the SSAs of the circles and would have no significant effect, warranting a reduction in the sanctioned posts. They further stated that the working strength in these circles was much less than the sanctioned strength and as such no reduction in posts was required.

The above reply is not acceptable since a test check in the Gujarat Circle revealed that against a total decrease of 3.06 lakh lines during 2003-04 and 2004-05, the decreases were the most in three SSAs, viz., Ahmedabad, Surat and Vadodara. The percentage of decrease ranged between 10.14 to 12.49 for 2003-04 and 3.99 to 8.81 for 2004-05 in these SSAs. Further, the working strength of various cadres in these SSAs such as Assistant Chief Accounts Officer, Senior Telecom Office Assistant (TOA), Phone Mecanic, Lineman, Line Inspector and Telecom Assistant, was in excess of the sanctioned strength ranging from 1 to 59 during the period 2003-04 and 2004-2005. Thus review of the staff strength and diversion of surplus staff was warranted in these SSAs.

The Management further stated (January 2006) that the decline in fixed lines was not uniform in different SSAs of the circles. Hence Group 'C' and 'D' staff being a SSA cadre could not normally be diverted to other SSAs. It was also stated that specific comments about staff being surplus in any SSA would be possible after complete review of status vis-à-vis norms. Thus the Company failed to review the staff position with reference to the norms and identify the excess staff. Excess staff in fixed lines would also have an impact on the profitability of the Company. Moreover, excess staff should not be allowed to continue in SSAs where the workload had reduced due to decline in fixed lines merely on account of Group 'C' and 'D' staff being a SSA cadre.

2.10.3 Idle manpower in Telecom Stores Organization

In the DoT setup, the Chief General Manager, Telecom Stores (CGMTS), Kolkata dealt with all aspects of stores such as procurement from telecom factories and private suppliers, stocking and issuing to all the circles. He was assisted by five field units headed by Controllers of Telecom Stores (CsTS) located at Chennai, Jabalpur, Kolkata, Mumbai and New Delhi. Subsequently, DoT decentralized the procurement of stores, whereby the Telecom Stores Organization as well as the other circles dealt with procurement, stocking and issuing of stores. The Company ordered (July 2002) the despatch of all stores to circles or consignees directly by the telecom factories without involving the CGMTS. All these aspects had considerably decreased the workload of CGMTS.

Consequently, the Company, as a first step, issued (October 2002) guidelines for restructuring of the Telecom Stores Organization, which stipulated that CGMTS, Kolkata would continue the procurement of stores for the Andaman and Nicobar, Assam, Jammu and Kashmir, North East-I, North East-II and the West Bengal circles as well as Calcutta Telephones and the Group 'C' and 'D' employees and industrial staff of the five CsTS would be merged with the territorial circles where they were located. The Company issued (February 2004) clarifications with regard to the exact mechanism of the above merger and also issued (May 2004) orders fixing the deadline for the merger as June 2004.

Audit observed that the complete merger of Group 'C', 'D' and industrial staff had not taken place even after three years of the issue of the initial orders in October 2002. Further, no decision had been taken to review and redeploy the excess officers of the Group 'A' and 'B' cadres of the Telecom Stores Organization. Audit further observed that except for CTS Kolkata, the other four CsTS had no stores to handle during the years 2003-04 and 2004-05. A total of 647 officers and employees remained idle in these CsTS and were given pay and allowances to the tune of Rs 16.82 crore during the years 2003-04 and 2004-05. This expenditure could have been avoided had the surplus manpower been redeployed within six months of the issue of the order as envisaged.

The Management replied (June and October 2005) that 50 *per cent* of the staff in the Group 'C' and 'D' cadres had been released to the respective circles and the remaining manpower would be released shortly. They further stated that since the Group 'A' and 'B' cadres were Circle cadres, there was no need for their redeployment. The reply was not tenable as Audit observed that only 16 *per cent* of Group 'C', 'D' and industrial staff had been redeployed till March 2005 i.e. after remaining idle for over two years. Further no stores were handled in CsTS except Kolkata during 2003-05 and hence the redeployment of Gr 'A' and 'B' posts should have been considered. The Management further stated (January 2006) that the main problem was at Kolkata for which solutions were being worked out.

2.10.4 Idle manpower in Telegraph Offices

Telegraph services to the public were being provided through independent telegraph offices, telecom centres and combined Post and Telegraph offices run by the Department of Posts. Over the years, there had been a steady decline in the telegraph traffic booked from 651 lakh in 1991-92 to 151 lakh in 2004-05, mainly on account of increase in telephone density, improved and easy to use value added services like mobile telephones, e-mail, internet, fax, etc. The decline in workload in independent telegraph offices and telecom centres resulted in idling of staff in these offices.

Audit observed that telegraph traffic had come down by 56.10 *per cent* during the last four years. As a result, the revenue from the operation of telegraph services had decreased over these years but there was no decrease in the expenditure incurred on running these telegraph services. During the period 2001-02 to 2003-04, the revenue earned from these services was Rs 120.21 crore against an expenditure of Rs 955.44 crore, out of which Rs 838.76 crore i.e. 87.78 *per cent* was incurred towards pay and allowances. Inspite of this the Company failed to review its manpower deployment in telegraph services.

On this being pointed out, the Management stated (September 2005) that in order to increase the revenue of telegraph services, additional services like collection of telephone bills, sale of integrated telephone cards, web phone cards, Sancharnet cards, recharge coupons of Cell One etc. had been introduced in telegraph offices. The fact, however, remain that the telegraph services incurred a loss of Rs 835.20 crore during the period 2001-02 to 2003-04. The Management further stated (January 2006) that decline in Telegraph traffic is a global trend due to various reasons and judging the profitability of the same in isolation requires reconsideration in totality of scenario. The reply is not tenable, as the Management being aware of declining Telegraph traffic did not take adequate measures to review and gainfully utilise the excess staff and improve the profitability of this service.

2.10.5 Temporary posts continued without retention sanction

The rules of DoT as adopted by the Company stipulated that a temporary post could be created for temporary activities for a specific period and for any further retention, a proposal with adequate justification had to be sent to the Corporate Office. A temporary post could be converted into a permanent provided that it had been in existence for a continuous period of not less than three years and was required for work of a permanent nature.

It was observed during audit that 16 circles[@] continued to retain temporary posts beyond the stipulated period without obtaining any retention sanctions from the Corporate Office. In all, 21,678 temporary posts were not converted into permanent ones in these circles even though they were continued for more than three years. An expenditure of Rs 424.34 crore, as detailed in Appendix-XXII, was incurred towards pay and allowances of the persons manning these posts during the period 2001-02 to 2004-05. Continuance of temporary posts without retention sanction showed that the Corporate Office had failed to monitor the status of temporary posts in the various circles, which had, in their turn, failed to follow the existing instructions in this regard.

The Management stated (January 2006) that a final view over permanency of posts would be possible only after completion of absorption in totality.

2.10.6 Manpower underutilized in the Electrical Wing

The Company has a separate Electrical Wing to plan and execute all the electrical works required in construction and maintenance of electrical equipment and appliances in its departmental buildings and staff quarters. Audit observed that in the Kerala Circle, although the value of works executed decreased year after year, the manpower remained more or less static during the period 2001-02 to 2004-05. In spite of a steep decline in expenditure on works from Rs 56.38 crore during 2001-02 to Rs 13.59 crore during 2004-05, no corresponding reduction in manpower was carried out.

The Management stated (August 2005) that the value of work done should not be the criteria for deployment of staff. Rather the number of works handled by them should be considered. A test check in the Thiruvananthapuram Electrical Division by Audit, however, revealed that there was considerable decrease both in the number and value of works executed during the period 2001-02 to 2004-05. While the decrease in the number of works was 57.43 *per cent*, the decrease in the

[@] Northern Telecom Region, Northern Telecom Project, Southern Telecom Region, Southern Telecom Project, Western Telecom Region, Advance Level Telecom Training Centre, Andhra Pradesh, Chennai Telecom District, Data Network, Gujarat, Kerala, Maharashtra, Rajasthan, Uttar Pradesh (East), Uttar Pradesh (West) and Uttaranchal.

value of works was 67.54 *per cent* during 2001-02 to 2004-05. Thus the considerable reduction in workload required review and redeployment of the excess staff working in the Electrical Division.

The Management in its latest reply (January 2006) stated that apart from capital works the Electrical wing undertook maintenance of various electrical services and energy conservation management, which required considerable manpower. The reply is not tenable as capital works, which had declined drastically is labour intensive and hence the Company cannot identify and redeploy the excess staff in its Electrical Wing without carrying out a review which was yet to be conducted (January 2006).

Recommendations

- **The Company should identify staff rendered surplus in the fixed line service and in other areas in a scientific manner for their redeployment or exit.**
- **The Company should ensure that the merger of employees of the Telecom Stores Organization with the territorial circles is completed.**
- **The Company should immediately stop the practice of operating temporary posts without retention sanction.**
- **The workload in Electrical Wings of the circles should be reviewed and surplus staff redeployed for their optimal utilization.**

2.11 INADEQUATE HUMAN RELATIONS SYSTEM

In order to ensure that there is efficient HR management, the HR systems in respect of control over manpower, laying down of HR policies and procedures, manpower information systems, etc should be effective. Audit observed the following issues, which were adversely impacting effective HR management in the Company.

2.11.1 Group 'A' officers on deemed deputation not yet absorbed

As stated earlier, officials belonging to Groups 'B', 'C' and 'D' had been absorbed, but Group 'A' officers transferred from DoT to the Company had not been absorbed as of January 2006. The Group 'A' officers had been on deemed deputation ever since corporatisation. The Cabinet approved (September 2005) a new package for Group 'A' officers for absorption into the Company. This included a 25 *per cent* rise in emoluments retrospectively and an extension of the date of absorption till 15 October 2005. The package was rejected by the Indian Telecom Service (ITS) Association on the ground that it did not meet the career aspirations of the officers. After the deadline was over, ITS officers who did not agree to the absorption package were initially removed (October 2005) from their positions in the Company. Later, 1,185 officers were taken back without absorption as they obtained stay orders of various courts and administrative tribunals on the orders of the Company. The removed Group 'A' officers were subsequently reinstated on the orders of the courts and were given extension up to 9 December 2005 to decide on getting absorbed in the Company.

The issue of absorption of Group 'A' officers, who manned the senior and middle management posts should have been resolved before corporatisation. The delay on the part of DoT in addressing this issue adequately could lead to crisis, which could jeopardize the working of the Company. Non-absorption of Group 'A' officers was the reason given by the Company for not implementing the major recommendations of KPMG like integration of HR functions across different disciplines, implementation of staffing norms for Group 'A' and 'B' officers, appointment of a consultant for reviewing staffing norms for Group 'C' and 'D' employees.

2.11.2 Human Resource functions not integrated completely

In their interim report, KPMG had recommended (July 2002) the integration of the human resources functions of the Company pertaining to all the disciplines under the overall charge of Director (HRD). They had reported that barring some HR functions like staff relations, most HR functions were not integrated and were being administered through the various cadre-controlling authorities. As a result, different disciplines such as Telecom, Finance, Civil, Electrical, Architectural and Factory services were working more or less like different organizations and were not properly aligned to the Company's objectives and goals. The Company accepted and implemented the recommendation and issued orders (April 2003) for the integration of HR functions. Audit, however, observed that although HR functions of the various wings such as Telecom, Civil, Electrical, Architectural and Factory Services were integrated and brought under Director (HRD), the HR functions of the Finance Wing were not integrated due to resistance from the officers of that Wing. The Management replied that the Management Committee had decided (February 2005) to consider total implementation of HR integration after absorption of Group 'A' officers. The reply is not tenable since the fate of absorption of Group 'A' officers continued to remain uncertain and the two issues were not linked. The Management had failed to take adequate steps to implement the HR integration.

2.11.3 Human Resources Manual not prepared

An HR Manual is a comprehensive compilation of policies and procedures and facilitates the smooth discharge of HR functions and staff relations. It was observed in Audit that the Company had not prepared such a Manual even after five years of corporatisation. Management intimated (July 2005) that the preparation of the Manual had been held up in anticipation of the absorption of Group 'A' officers in the Company. The reply is not tenable as the Company should have prepared the portions of the Manual containing general rules and instructions applicable to all employees as well as those applicable to Groups 'B', 'C' and 'D' cadres and should not have held up the entire exercise pending absorption of Group 'A' officers.

2.11.4 Manpower information system not developed

Manpower planning needs to be supported by a reliable manpower information system so that relevant information is always available to the Management for development, deployment and utilization of personnel in a scientific manner. In its report, KPMG had suggested the maintenance of two types of data i.e. Company-wide distribution of employees and employee profiles. The Company-wide database was to assist the Company in efficient manpower planning.

Audit observed that the Company had not set up any manpower information system for the whole Company till July 2005. Statistics on deployment of manpower in various segments of services such as landline, WLL, cellular and Internet and in different functional wings such as Operation, Finance and Accounts, Marketing, and Customer Care were not being maintained at the Corporate Office. Databases were, however, being maintained in 10 circles, viz., Gujarat, Karnataka, Punjab, Rajasthan, Uttar Pradesh (East), Uttar Pradesh (West), Uttaranchal, Data Networks, Northern Telecom Region (NTR) and Western Telecom Region (WTR) and the Calcutta Telephones District. It was observed that out of these circles, data was being updated regularly only in three circles, viz., Karnataka, Rajasthan and NTR. In the remaining 24 circles and one metro district no database was being maintained. Absence of database or its improper maintenance would adversely affect manpower planning and optimal deployment of personnel.

Audit observed, that a new package for entering the data of the employees had been developed (August 2005) by the Corporate Office but as of November 2005, data entry in respect of only 35,930 employees out of around 3.40 lakh employees had been completed.

Recommendations

- **The Department of Telecommunications (DoT) and the Company should resolve the issue of absorption of Group 'A' officers urgently as many vital human resources initiatives including several recommendations of the consultant had been kept pending citing this fact.**
- **The Company should urgently complete the integration of human resources functions pertaining to all the disciplines under the overall charge of Director (HRD).**
- **The Company should prepare a human resources manual.**
- **The Company should develop an effective manpower information system to facilitate proper planning and deployment of manpower.**

2.12 RECRUITMENT

No fresh recruitments had been made in DoT for 15 years across all levels, prior to corporatisation in October 2000. During 2002-03, most of the officials occupying senior management positions were in their late fifties with less than two to three years of service left. Moreover, 75 *per cent* of the work force were matriculates and below leading to skill gaps. The Company needed to make recruitments to cater to the needs of changing technology and introduction of new services like CMTS, Broadband, WLL, Internet, and Voice over Internet Protocol. Recruitment was also necessary for marketing and customer care in order to deal with the competition.

Recruitment was thus a very significant aspect of HR management in the Company. The Company recruited 6,000 JTOs• and 650 JAOs* in the Group 'B' cadre and 4,500 TTAs♣ in the Group 'C' cadre during the period October 2000 to November 2005. It recruited JAOs and JTOs through direct recruitment and internal examinations. According to the rules, 50 *per cent* of the vacancies in the JAO's cadre were to be filled by direct recruitment through open competitive examinations, 40 *per cent* by promotion from the employees working in the Company, through internal competitive examinations and 10 *per cent* by promotion from Senior Accountants working in the Company through internal competitive examinations. Fifty *per cent* of the vacancies in the JTO's cadre were to be filled by direct recruitment and 50 *per cent* through limited internal competitive examinations.

Prior to the above recruitments, no direct recruitment had been made in the JAO and JTO cadres. Posts in these cadres were manned through internal promotions, after clearance of departmental examinations and the educational qualifications of the officials normally ranged from matriculation to graduation. Audit observed that the Company fixed the qualifications for direct recruitment of JAOs as M.Com./CA/ICWA/CS (August 2001) and of JTOs as BE/B.Tech.(October 2001) in different disciplines, which was a good attempt at skill building of the organization.

Audit, however, observed certain shortcomings in the recruitment process as discussed in the succeeding paragraphs.

2.12.1 Recruitment Policy not formulated

In order to give a definite direction to the process of recruitment, an organization should issue policy guidelines for the recruitments to be made. Such a recruitment policy should, *inter alia*, specify the procedures to be followed in assessing manpower requirements; fixing the qualifications and skills required for different jobs as well as the time periods for the various stages in the process of recruitment. A recruitment policy should also help the organization to review the staff position in its different units and to create or abolish posts based on the changing scenario. Audit observed that the Company had not framed any such policy for recruitment. In the absence of a policy, reviews could not be conducted

• Junior Telecom Officers

* Junior Accounts Officers

♣ Telecom Technical Assistants

by the Company, resulting in continuance of temporary posts as discussed earlier in paragraph 2.10.5.

The Management stated (January 2006) that the Company was broadly following the procedure of recruitment prevalent during DoT period, which was based on availability of posts and recruitment rules of the Company. The reply is not acceptable, as without a recruitment policy the entire recruitment process in the Company would lack direction and purpose.

2.12.2 Non-establishment of a dedicated recruitment cell

KPMG had recommended that the Company should create its own recruitment cell to ensure that the recruitment process received focused attention and also because the services of the Union Public Service Commission and the Staff Selection Commission were no longer available to the Company as a corporate entity. Such a cell would coordinate and monitor the entire recruitment process i.e. assessment of vacancies, notification and selection of candidates, fixing of time taken for recruitment etc. It was observed that as of June 2005, the Company had not created any exclusive recruitment cell to carry out the above activities.

A scrutiny of the recruitment process of JTOs and JAOs revealed that the Personnel and Establishment wings assessed the requirement of JTOs while the Finance Planning wing assessed the requirement of JAOs. The recruitment process, including the examination, was conducted by the Departmental Examination Branch of the Corporate Office. A centralized recruitment cell would have helped in scrutinizing the proposals of the various wings impartially and guarding the process of recruitment from the risks of inequality in career opportunities and lack of uniformity, besides procedural delays.

The Management while agreeing (January 2006) stated that even in the case of recruitments made by the UPSC/SSC the assessment of vacancies was done by the concerned Ministries/Departments and communicated to UPSC/SSC. It is evident from the reply that the Company was still following the Government pattern for identification of the requirement of manpower and assessment of vacancies. The Company needed to develop a recruitment rule that would cater to its needs as a competitive corporate entity.

2.12.3 Recruitment not made to augment skills

It was observed that the ratio of executives (Group 'A' and 'B') to non-executives (Group 'C' and 'D') in the Company was heavily skewed in favour of the latter. Group 'A' and 'B' officers who constituted the best-qualified section of the employees were only around 17 *per cent* of the total workforce as of March 2005. This was far below the benchmark of 33 *per cent* suggested by KPMG in their report, based on the analysis of the performance of some world-class telecom operators. Audit observed that the following efforts of the Company to augment skills met with only partial success.

2.12.3.1 Direct recruitment of Management Trainees not made

KPMG had observed that since the Company was utilizing the services of the existing staff, the latter were unlikely to adopt a professional approach towards their jobs and the desired output might not be achieved. As there was no fresh direct recruitment in the Group 'A' category after corporatisation, the Company felt (November 2003) the need for induction of MTs to avoid the serious vacuum in the middle management level. To look into this aspect, they set up (September 2003) a Committee which recommended (November 2003) the recruitment of 200 MTs, 100 through direct recruitment, and 100 through limited internal competitive examinations and internal selection through seniority-cum-fitness in the areas of telecom operations, marketing, finance, HRD and law. However the recruitment rules for MTs could not be finalized by the Board, as a result of which the direct recruitment of the MTs was held up as of November 2005.

The management stated (January 2006) that the recruitment rules were under finalization. Thus delays in finalization of recruitment rules resulted in non recruitment of Management Trainees for more than two years.

2.12.3.2 Inadequate staff in Marketing Interface Organization

A Marketing Interface Organization (MIO) was created (September 2001) by the Company, to put in place a modern and energetic marketing setup at the corporate and Circle levels with a view to accelerate performance and equip the Company to face the competitive environment. Altogether 82 posts were sanctioned to be filled up by internal selection as well as through direct recruitment. The terms and conditions of recruitment for internal candidates were finalized and applications from eligible candidates were invited in January 2002. Audit, however, observed that only 31 candidates were selected for various marketing and public relations (PR) posts. Thus the MIO was functioning with only 38 *per cent* of the posts created for the purpose, even after four years of its formation, which showed that adequate attention was not being paid towards marketing.

The Management stated (January 2006) that officers were appointed in December 2002 (for one year) for MIO and that the Marketing was streamlined. It was further stated that the officers were now fully conversant and undertook their job effectively. The reply is not tenable as it has not addressed the core issue of inadequate manning of MIO and the purpose of setting up the MIO to face the competition from private operators was, therefore, largely defeated.

2.12.4 Prolonged recruitment process

The process of recruitment should be initiated well before vacancies arise, to ensure timely availability of manpower. The time taken for recruitment, from identification of requirement to placement should be reasonable. KPMG recommended the time cycle for completion of the recruitment processes from manpower requisition to induction of the employees in the organization as shown in Appendix-XXIII. However, it was noticed during audit that time periods for the various stages in the process of recruitment for different cadres had not been fixed by the Company. The time taken for recruitment of JAOs and JTOs, from identification of vacant posts to selection and allotment of the recruited personnel to different wings, ranged from six months to two years. Scrutiny of the recruitment process of JAOs revealed that 600 vacant posts were identified as of April 2001, while the examination was held only in May 2003. Candidates were selected and allotted to different circles in July 2003 and sent for training in November 2003. Thus, the process initiated in 2001 could be completed only in 2003, after a delay of more than two years.

Similarly, the notification for recruitment of JTOs was issued in November 2000, the examination was held in March 2001 and the candidates selected were allotted to different circles in October 2001. The time taken to complete the entire process of JTO recruitment was almost one year.

The Management replied (January 2006) that the notification for recruitment of 800 JAOs was issued during March 2003 and the process was completed during November 2003. The reply is not tenable as the need for recruitment of JAOs was identified and a recruitment committee was constituted in December 2000 for evolving a detailed procedure for direct recruitment of JAOs in the Company. Further 600 vacant posts were identified as of April 2001. Hence, there was a delay of over two years from assessment of vacancy to final placement of JAOs.

Recommendations

- **The Company should formulate a recruitment policy to give a definite direction to the process of recruitment to its different cadres.**
- **The Company should clearly spell out the procedures for identifying anticipated vacancies and skill gaps and fixing of qualifications and standards for recruitment of personnel, especially for new services and marketing.**
- **The entire process of recruitment for all the cadres should be integrated and processed through an exclusive recruitment cell for speedy completion and uniformity.**
- **The time to be taken to complete each stage of the process of recruitment should be fixed for timely availability of manpower.**

2.13 CAREER PROGRESSION AND TRANSFERS

2.13.1 Career Progression

Career progression traditionally refers to advancements of employees to positions of increased responsibility i.e. promotions. The promotion process in an organization needs to be fair, transparent and non-arbitrary in order to increase the effectiveness of the process. Promotions are generally based on seniority or competence, or combination of the two.

The Company decided (August 2002) to continue with its inherited promotional policies from DoT such as One Time-Bound Promotion (OTBP), Biennial Cadre Review (BCR) and Assured Career Progression (ACP) for its non-executives i.e. the Group 'C' and 'D' cadres till it framed its own rules. Initially, the Company waited for KPMG's recommendations before adopting a new promotion policy. Audit observed that in the second National Council meeting (July 2003), the Management and the employees' union decided to follow the OTBP and the BCR scheme in its existing form as a general promotional policy for non-executives till the next wage revision, even though KPMG had submitted its report containing its recommendations regarding career progression in February 2003. It was found that the Company had not introduced its own promotion policy as of July 2005. As mentioned earlier in paragraph 2.12, the recruitment rules of JTOs and JAOs framed in September 2001, provided for filling up of 50 and 40 *per cent* of vacant posts in JTOs and JAOs cadres, respectively, through internal competitive examinations from non-executive grades. For Group 'B' cadres, the career progression was as per the recruitment rules in force i.e. promotion to the higher grade was on the basis of seniority-cum-fitness. Both were governed by the rules from the DoT period. The Group 'A' officers had not been absorbed in the Company and continued to be governed by the rules of DoT.

The deficiencies noticed by Audit with respect to career progression in the Company are discussed in the succeeding paragraphs.

2.13.1.1 Career progression opportunities not equal across different disciplines

Although the minimum eligibility period stipulated for promotions from one cadre to another was uniform across all disciplines such as Finance, Technical, Electrical, Civil and Telecom Factories, Audit observed that due to non-availability of posts in the different cadres of the various disciplines, the promotional opportunities varied considerably between them. For example, in 2002, the junior most officers promoted to the Higher Administrative Grade (HAG) in the Finance discipline belonged to the 1974 batch. The same was not true of the Electrical, Civil and Technical disciplines where the junior most officers promoted to HAG belonged to the 1965, 1966 and 1969 batches respectively.

The Management stated (January 2006) that equal career progression opportunities for different disciplines would be considered after the absorption of Group 'A' officers.

2.13.1.2 Lack of equality in career progression opportunities

During September and December 2003, the Company created 92 posts of Principal General Manager (PGM) at the HAG level and 123 posts of General Manager in the Senior Administrative Grade (SAG) level respectively by upgrading an equal number of SAG and Junior Administrative Grade (JAG) level posts. The justification given for creating these posts was the changed scenario of corporatisation, competition, growth and diversification and the necessity for providing career growth opportunities to senior officers so as to arrest the turnover of these employees. No posts were, however, created or upgraded in respect of other levels such as JAG, STS, JTS, SDE, JTO, AO and JAO so as to arrest their turnover. This defied the principle of providing equitable opportunities for growth for all levels of employees.

2.13.1.3 Regular promotions not given in time

Audit observed that the Company did not give regular promotions on time and followed a system of giving local officiating promotions. It was observed during audit that in nine circles, viz., Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Jharkhand, Maharashtra, Northern Telecom Project, Tamil Nadu and Uttaranchal, local officiating promotions for 90 to 180 days at the level of Group 'A' and 'B' were made against regular vacancies. Officers were promoted again for 90 to 180 days by providing suitable breaks. This resulted in avoidable expenditure of Rs. 1.76 crore on payment of Travelling Allowance (TA)/Dearness Allowance (DA). The details are given in Appendix-XIV.

The Management replied (January 2006) that there was a substantial decrease in TA/DA to the Accounts & Finance Service Personnel consequent to orders of April 2004 according to which the officials were being transferred to the SSA in the substantive cadre and then given local officiating promotion. The reply is not tenable as the above orders were implemented only in Accounts & Finance Service while the audit observation pertains to all disciplines.

2.13.2 Transfers

The transfer policy of an organization needs to be aligned to its business strategy. At the same time, it has to be employee friendly to check the turnover of staff. Group 'C' and 'D' employees of the Company were Circle based cadres i.e. they could be transferred only within their Circle. The Group 'B' employees were also Circle based cadres, except for JAOs, who had an all India transfer liability like the Group 'A' officers. In the absence of a new transfer policy, all aspects of transfers such as request postings, hard tenure postings and minimum periods of postings were governed by rule which were applicable during the DoT period i.e., rules applicable to all Central government employees.

It was, therefore, important for the Company to adopt a transfer policy, which permitted greater flexibility to the Management. In its report, KPMG had recommended the following: -

- Request transfers should not be permitted more than twice in the complete span of service of an employee.
- Employees should be required to serve a fixed minimum period at the post of transfer before requesting for a transfer.

- Minimum and maximum tenures for being eligible for transfer should be fixed.
- Benefits should be fixed for hard tenure transfers to encourage employees to go in for them.
- Disciplinary action should be taken if an employee did not relocate to a newly assigned post within the time frame specified in the transfer order.
- Adequate measures should be taken to ensure that transfers were not used as disciplinary or retaliatory measures.

Audit observed that the Company had not finalized any new transfer and posting policy for its employees even after five years of corporatisation.

The Management agreed (January 2006) that the transfer policy was not formulated as the absorption of Group 'A' officers was still pending. It was also stated that the transfer policy of DoT, which was being followed by BSNL, was time tested and suited the needs of BSNL. However, audit observed that though the existing policy addressed the issues like hard tenure postings, request transfers, action of officials bringing external influence on the transfers etc., issues like inter-Circle transfers of Group 'B', 'C' and 'D' staff to balance the excess or deficit manpower across the circles, measures to ensure that transfers were not used as disciplinary measures, transfer of employees to suitable positions based on their knowledge and experience remained unaddressed.

Recommendations

- **The Company should ensure equitable opportunities of work and growth for employees of different disciplines.**
- **The Company should ensure that all promotions are given in time.**
- **The Company should formulate a well defined, fair and transparent transfer policy based on the consultant's recommendations.**

2.14 HUMAN RESOURCES DEVELOPMENT

Measures such as performance management, enforcement of discipline, training and welfare all combine to ensure the development of human resources in an organization. While appointing KPMG, the Company had identified absence of motivation, indiscipline and the need for more professionalized training as problem areas to be addressed by the consultant. It was therefore imperative on the part of the Company to urgently consider the recommendations of KPMG in these areas, for implementation. The observations of Audit with regard to aspects related to HR development are discussed in the succeeding paragraphs.

2.14.1 Performance Management

A performance management system should support the achievement of the goals of an organization through the setting of targets for employees and evaluating their performance against these targets. The targets for each year should be realistic and growth oriented and should be based on the targets and achievements of the previous year.

In the DoT setup, employees' performance was monitored through their Annual Confidential Reports (ACRs). The Company continued with the same performance management system that existed in the DoT setup.

2.14.1.1 Targets for individual employees not fixed

The Company prepared annual operational plans, which provided physical targets for direct exchange lines (cellular, fixed and WLL), switching capacities, village public telephones, trunk automated exchanges, optical fibre cable and microwave transmission routes. Based on these targets, Circle-wise targets were fixed and the same were communicated to the respective circles for follow up action. Audit, however, observed that individual targets for employees were not fixed. Absence of targets for individuals made it difficult to measure their performances and pinpoint areas of non-achievement, which were required to be strengthened in future.

The Management stated (January 2006) that targets were fixed by the different levels of Management for the officers working under them and targets so fixed were duly assessed to ensure that the overall performance of the organization was improved. Audit, however, observed that employees' performance was monitored only through their Annual Confidential Reports as was done under DoT.

2.14.1.2 Open review system not introduced

Commercial entities the world over use 'open review system' for judging the performance of individuals. In this system, the superior officer discusses the self-appraisal submitted by his/her subordinate so as to make the appraisal of his/her performance totally transparent. Despite KPMG's recommendations of introducing this system in the Company, the Company continued with the old system of secret evaluation of the performance of its employees.

The Management stated (January 2006) that the KPMG recommendation of implementing Balance Business Score-Card methodology of Performance Management system had been accepted by the Management Committee and a group had been formed for implementation of the scheme. However the fact remains that the open review system is yet to be implemented.

Recommendations

- **The Company should fix performance targets for each individual employee.**
- **The Company should consider switching over to the 'open review system' of performance management as recommended by the consultant.**

2.15 TRAINING

Training is a continuous process for improvement of the skills of an organization's manpower. Training assumes greater significance in the case of the Company because of the frequent technological advancements in the telecom sector and the increasing competition from private service providers. With the introduction of new services like CMTS, WLL, leased lines, Internet and broadband, the development of training courses suited to these services is of optimum importance to equip the employees in these areas. Special attention must also be paid to training in marketing skills and customer care to retain the existing subscribers as also to attract new subscribers.

The Company has 42 training institutes, comprising three apex level institutes, 14 Regional Telecom Training Centres (RTTCs), 19 Circle Telecom Training Centres (CTTCs) and six District Telecom Training Centres (DTTCs). The three apex training institutes, viz., the Advanced Level Telecom Training Centre (ALTTC), Ghaziabad, the Bharat Ratna Bhim Rao Ambedkar Institute of Telecom Training (BRBRAITT), Jabalpur and the National Academy of Telecom Finance and Management (NATFM), Hyderabad are independent units and develop their own training modules. The Training Cell of the Corporate Office along with BRBRAITT, controls and coordinates the training activities of all the RTTCs, CTTCs and DTTCs. The Training Finance Cell acts as a coordinator for the various activities of NATFM and plans and coordinates training aspects of Group 'A' and 'B' (Accounts and Finance) officers. The training courses are mainly of two types, viz., induction courses for new recruits and promotees and in-service courses for existing employees. Training needs arising out of induction of new services and new technologies are addressed initially by the suppliers.

Audit observed certain deficiencies in the area of training in the Company, which are discussed in the succeeding paragraphs.

2.15.1 Training not adequately planned

It was observed in Audit that the Company had not framed any mission statement or medium and long term plans for training. Annual training schedules were, however, being framed by the various institutes. Audit also observed that KPMG's recommendation of establishing training goals in terms of percentage of revenue or number of hours per employee was not implemented.

It was further seen that the Company had not fixed any targets for training till 2003-04. In the year 2004-05, a target of 10 *per cent* of staff to be trained was fixed. As the Company did not maintain any database indicating the profiles of employees, viz., qualifications, field of duties, past experience, future training needs, etc either at the Corporate Office level or at the training institute level, it could not select its trainees in a scientific manner. The Management intimated (January 2006) that database was now being prepared by Information Technology Project Circle. However 65 *per cent* data porting was yet to be completed.

Audit also observed that out of 42 training centres, only six had so far obtained International Standards Organization (ISO) certificates and that there was no action plan to get ISO certificates for other institutes.

2.15.2 Training slots not utilized

A test check of records in 22 Training Institutes (RTTCs, CTTCs and DTTCs) revealed that out of 1,71,256 training slots, 58,756 slots had not been utilized during 2001-02 to 2004-05. The percentage of utilization of training slots with reference to the slots planned declined from 71 *per cent* during 2001-02 to 59 *per cent* during 2004-05. It was also seen that 177 course weeks were cancelled in BRBRAITT during 2000-01 to 2004-05 due to non-receipt of nominations from the circles and SSAs. In BRBRAITT and three CTTCs, viz. Kalyani, Raipur and Kurukshetra, against 32,381 personnel sponsored for training, only 22,836 attended the courses.

In the CTTCs at Bhopal and Raipur, the average number of personnel trained per batch was only three during 2004-05 and seven during 2001-02. This was because CTTC, Bhopal had not been closed despite the shifting of its work to CTTC, Indore and the training slots at CTTC, Raipur remained vacant as employees were not relieved for training by the concerned circles and SSAs.

In order to develop effective communication skills and to inculcate courteous behaviour for dealing with customers, the Company introduced (November 2000) a scheme of "Behavioral and Attitudinal Training" of Group 'C' staff to inculcate the values of punctuality, cleanliness at the work place and team spirit amongst them. As per the scheme, 20 *per cent* of Group 'C' staff was to be trained per year so that all officials could be trained by November 2005. Against this, 58 *per cent* of Group 'C' employees were imparted training up to March 2005.

The Management while accepting the facts (January 2006) replied that under-utilization of slots was because the circles did not relieve their staff due to shortage, pressure to achieve the targets and provide new services. Regarding "Behavioral and Attitudinal training" it was intimated that the training for the remaining employees would be completed by March 2006

2.15.3 Inadequate feedback and assessment of impact of training

There was no mechanism available in the Company to evaluate the impact of training on its employees. This sort of evaluation would have helped the Company to judge whether the existing training courses needed any further modifications and improvement. On this being pointed out, the Company decided (July 2005) to create separate cells in training centres to evaluate the impact of training, after receiving feedback from the offices of the trainees.

2.15.4 Foreign Training

For training abroad, a Screening Committee comprising Director (HRD) and the Director related to the concerned course, selected officers from the nominations received from various wings. Approval of DoT for selection of these officers was to be obtained except for the period from March 2003 to April 2005 when CMD of the Company was given the powers. It was noticed in audit that in two cases, officers were selected by DoT for foreign training without the receipt of any recommendations from the Screening Committee.

Audit also observed that the proforma for calling for nomination particulars from field offices for foreign training though standardized did not contain certain important information such as Vigilance or discipline cases if any, against the personnel.

Audit further noticed that the Company could not utilize three free training programmes offered by three sponsors, Asia Pacific Telecommunity, Japan International Co-operative Agency and United States Telecom Training Institute. In the first case, the nomination could not be finalized due to shortage of time while in the other two cases, approval was not received from DoT in time.

2.15.5 Training activities not adequately monitored and integrated

The Training Cell at the Corporate Office did not have a proper MIS and monthly activity reports were received from training institutes in varying formats. The information from these reports was being used mainly to compile the total number of officials trained during the period.

The Management stated (January 2006) that instructions already existed in this regard, which had since been reiterated. The fact however, remains that proper MIS and activity reports were not received by the Company's Corporate office to monitor the training activities.

Recommendations

- **The Company should select its trainees in a scientific manner. For this purpose, it should maintain a database of employee profiles.**
- **Administrative measures should be put in place to ensure that training slots do not go unutilized because of lack of nominations and cancellation of nominations.**
- **In-house training should be imparted to cover shortfalls in training through the training institutes.**
- **Feedback should be obtained and made use of in respect of improvements made in the performance of employees as a result of training. The Company should ensure that the cells created in the training institutes for the purpose perform effectively.**

2.16 DISCIPLINE AND CONDUCT RULES

While appointing KPMG, the Company identified indiscipline as one of the problem areas facing the Company. KPMG was expected to study and review the existing framework of conduct and disciplinary rules and recommend modifications to ensure compliance of the Company's goals.

2.16.1 Conduct and Disciplinary rules not formulated

KPMG formulated conduct and disciplinary rules, taking into consideration the rules generally adopted by Public Sector Undertakings, the guidelines of the Central Vigilance Commission and the Department of Public Enterprise. Audit, however, observed that the Company did not adopt these rules. Instead, it decided (May 2004) to continue with the existing CCS (Conduct) and CCS (Classification, Control and Appeal) Rules, applicable to Central Civil Services, for its employees in the Group 'B', 'C', and 'D' cadres. A Committee was, however, constituted (November 2001) by the Company to draft new Conduct, Discipline and Appeal policy guidelines. The Committee submitted its report in May 2002 but the Board had not finalized the policy till June 2005.

2.16.2 Delayed Settlement of disciplinary cases

Delays in settlement of disciplinary cases could on the one hand undermine the discipline in an organization due to delays in meting out punishments for the deviant behaviour of its employees. On the other hand, it could affect the morale of the employees, resulting in poor performance and non-achievement of targets. KPMG also identified delays in finalizing disciplinary cases as an issue of concern. Audit observed that out of 1,459 disciplinary cases registered during 1994-2005, 529 cases i.e. 36.26 *per cent* were settled during the period October 2000 to March 2005, leaving 930 cases pending as of March 2005. Audit also observed that the number of pending cases had consistently increased over the years after formation of the Company as detailed in Appendix-XXV.

Audit also noticed that there was a shortage of officers and staff in the Vigilance Cell in the Corporate Office, which was responsible for monitoring the settlement of disciplinary cases. In spite of the orders (July 2004) of the Board for creation of more posts in the Vigilance Cell of the Corporate Office so that these cases could be expedited, no action had been taken till date. Against the sanctioned strength of the Cell of one Chief Vigilance Officer, three Deputy Vigilance Officers, five Senior Vigilance Officers and five Vigilance Officers, the Vigilance Cell in the Corporate Office was functioning with one Deputy Chief Vigilance Officer and three Senior Vigilance Officers only as of November 2005.

Recommendations

- **The Company should expedite the framing of its conduct and disciplinary rules based on rules generally adopted by Public Sector**

Undertakings, the guidelines of the Central Vigilance Commission and the Department of Public Enterprises.

- **The Company should adopt proper measures to minimize delays in settlement of disciplinary cases.**

2.17 WELFARE MEASURES

Welfare measures in an organization comprise financial and non-financial benefits paid to facilitate the growth and well being of employees and their families. These benefits relate to health, insurance, retirement, vacations, holidays, leave, child care, education, etc. The Company pursued several welfare programmes, including scholarships and book awards; incentives for meritorious students; financial assistance to physically handicapped and mentally retarded children of employees; financial assistance in cases of serious or major illness and death; financial assistance for victims of natural calamities riots etc; grants-in-aid for recreation clubs and subsidy on transport for excursion trips. Besides, holiday homes and crèches etc. were also established. To oversee these activities, a Welfare Board was created in December 2000. The Company released Rs. 50.57 crore since corporatisation to this Board for carrying out the welfare activities. Audit observed that the Welfare Board had met only three times till November 2005 to deliberate on welfare issues.

2.17.1 Grievance Redressal Machinery was not framed in all circles

As per the orders (December 1988) of DOPT, grievance redressal machinery was to be set up in each office for redressal of grievances of staff. The National Federation of Telecom Employees also raised (March 2004) a demand for creating a grievance redressal mechanism in the Company. A staff grievance cell was created (October 2004) at the Corporate Office and instructions were issued to all the field units to set up cells in each of the circles and SSAs. Audit observed that cells had been framed in all the units by November 2005 except for four circles viz., Jharkhand, North East-I, North East-II and Uttaranchal.

The Management stated (January 2006) that in Uttranchal Circle staff grievance cell was formed in December 2005 and the CGMs Jharkand, NE-I and NE-II circles were instructed to immediately form the staff grievance cell in their circles.

Recommendations

- **Welfare measures are an integral part of healthy industrial relations. Hence the Companys', Welfare Board should be proactive and promote various welfare measures in the Company.**
- **Management should expedite setting of staff cell in the remaining four circles.**

2.18 EXIT POLICY

In order to have a staff to line ratio[α] comparable with industry standards, the Company needed to identify surplus staff and take measures to downsize their workforce with the help of a proper exit policy. This would have enabled the Company to bring down the cost of operations and face competition squarely. At the time of corporatisation, the Company had set itself a target of bringing down the staff to line ratio from 12.7 in 2001 to 6 per 1,000 by 2005. Audit observed that the staff to line ratio had come down to 7.2 in March 2005. However, this fall in staff to line ratio was mainly due to the exponential growth in cellular and WLL connections by 110.75 lakh subscribers and approximately 8,000 retirements per annum, rather than through an effective exit policy.

While developing options for the Company to achieve the targeted staff to line ratio, KPMG had recommended three options, viz., freezing recruitment, exit from non-core businesses and a targeted voluntary retirement scheme (VRS). With regard to freezing of recruitment, KPMG had opined that it could result in skill gaps, warranting redeployment of existing staff in large numbers. Considering the age and skill profile in the Company, they declared this option as undesirable.

Audit found that the Company had failed to identify its surplus staff and its non-core businesses and had not implemented any VRS scheme. These issues are discussed below.

2.18.1 Surplus staff not properly identified

As would be seen from Appendix XVIII, which shows the persons-in-position in different groups in the Company, as of March 2005, there were 2.33 lakh employees in Group 'C' as compared to 6,947, 51,242 and 48,791 in Groups 'A', 'B' and 'D', respectively. While Group 'A' and 'B' categories of employees were faced with skill gaps and required further recruitment, it was basically the Group 'C' and to a lesser extent the Group 'D' cadres, which needed to be downsized.

As mentioned earlier in paragraph 2.10.3 and 2.10.4 the work in the telecom stores organization, telegraph offices, etc had come down considerably, rendering the staff surplus. The Telecom Office Assistant (TOA) cadre in Group 'C' had already been declared (November 2003) a wasting cadre by the Company due to computerization of various activities in the offices. Faced with such a situation, the Company needed to review the manpower deployed in different wings, especially in the fixed line business, to identify the surplus staff, initiate action for their redeployment and to plan their exit after exhausting the options of their effective redeployment by imparting necessary training.

KPMG had recommended the appointment of a consultant for developing norms for Groups 'C' and 'D' cadres based on the existing business scenario so that

[α] Number of staff per 1000 direct exchange line redundant manpower could be identified. As stated earlier, no consultant had been appointed for the purpose.

2.18.2 Non-core businesses not identified

KPMG had pointed out exit from non-core business as one of the options for downsizing manpower. They had identified telecom factories and building works as non-core businesses and had recommended a detailed feasibility study for their exit. Audit, however, observed that the Company as of November 2005 had carried out no such feasibility study. As such, the number of staff which would become surplus as a result of the closure of non-core businesses could not be identified.

2.18.3 Non implementation of voluntary retirement scheme

As a third option, KPMG had recommended a targeted Voluntary Retirement Scheme (VRS) for downsizing manpower. A targeted VRS would identify a particular group of employees who could be urged to accept the scheme. The Management Committee approved (October 2004) a VRS for consideration of the Board. The scheme envisaged voluntary retirement for Group 'C' and 'D' employees of 55 years of age and above. A rough estimate of surplus manpower in the Group 'C' and 'D' cadres, totaling around 20,000, as proposed by KPMG was considered, while drafting the VRS. This was an open-ended scheme without any target regarding the number of employees to be covered. Audit observed that the National Council i.e. the committee of members from the staff side and the Management, decided (February 2005) to withdraw the scheme due to opposition from the staff side.

Recommendations

- **The Company should revise the norms in respect of Group 'C' and 'D' employees, especially in the fixed line business, in order to identify surplus manpower.**
- **The Company should conduct a feasibility study to identify their non-core business and plan to exit from the same.**
- **The Company should devise a selective VRS for cadres whose functions have been phased out, after exhausting the possibility of their redeployment.**

2.19 CONCLUSION

At the time of formation of BSNL in September 2000, the Company was faced with a business scenario, which was highly competitive and subject to rapid technological changes. The Company needed to address the challenges with the help of well-qualified and skilled personnel. Recognizing this need, BSNL appointed KPMG for strengthening its human resources management. However, as brought out in the report, the Company till November 2005 had not considered most of the recommendations of the consultant. Although the Company was relatively new and was facing a unique situation of transiting from a bureaucratic governmental setup to a market driven corporate culture, it was yet to gear up to this new challenge by carrying out the necessary reforms in its human resources management.

A. Basu

New Delhi
Dated : 1 3 मार्च MAR 2006

(A. BASU)
Deputy Comptroller and Auditor General
cum Chairperson, Audit Board

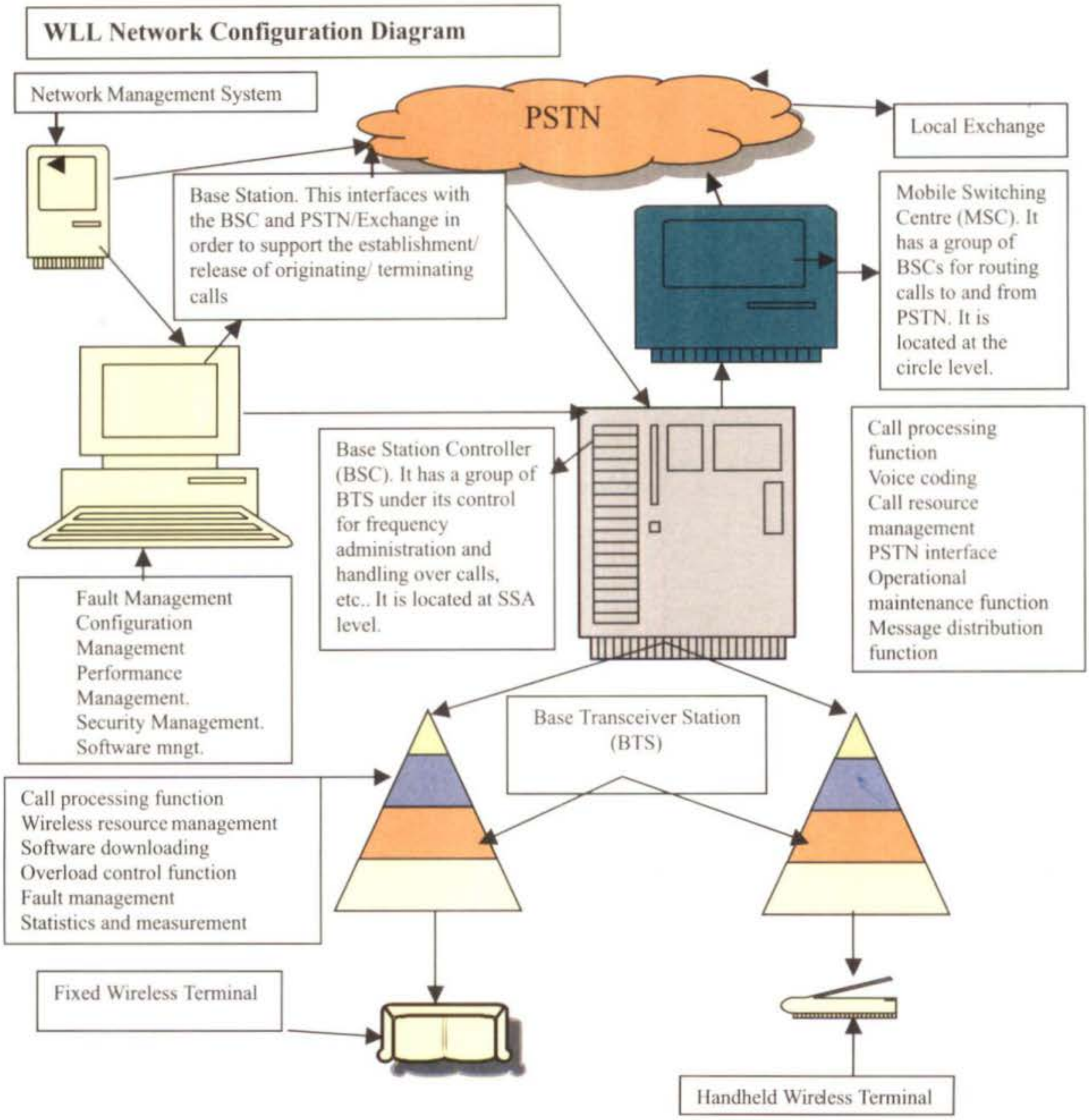
Countersigned

New Delhi
Dated : 1 3 मार्च MAR 2006

(VIJAYENDRA N. KAUL)
Comptroller and Auditor General of India

APPENDICES

Appendix 1
(Referred to in paragraph 1.1 at Page5)



Appendix-II

(Referred to in paragraph 1.9.1.2 at Page no. 10)

Details showing injudicious expenditure on expansion of WLL system capacities during 2002-03 to 2004-05 due to non consideration of unutilised existing capacities of the systems

Sl. No	Name of Circle	No. of SSA	Initial capacity (lines)	Working connections at the time of expansion	Expanded by (lines)	Total capacity (lines)	Total working connections	Percentage of utilization of total capacity	Idling of capital (Rs in crore)
1	2	3	4	5	6	7	8	9	10
1	Bihar	3	35000	-	35000	70000	24995	36	4.00
2	Haryana	2	14850	5647	5150	20000	12730	64	13.00 (Estimated
3	Jharkhand	1	4500 (9 BTS)	2837	4500	9000	3256	36	1.27
4	Punjab	3	21000	-	40500	61500	29833	48	54.00
5	UP (East)	7	16000	7206	14000	30000	7773	26.00	15.00
6	UP (West)	5	17500	-	13500	31000	14872	48.00	20.00 (Estimated
7	West Bengal	1	2000	593	1000	3000	1407	47	1.37
	Total	**22**	**110850**	**16283**	**113650**	**224500**	**94866**	**-**	**108.64**

Appendix-III
(Referred to paragraphs 1.9.2 & 1.11 at Page 11,16)

Statement showing details of purchase orders placed by the Company for procurement of WLL equipments and terminals during 2000-01 to 2004-05

A. Purchase orders for WLL equipments:

Sl. No.	Month of Purchase Order	Name of the supplier (M/s)	Capacity (lakh lines)	Value (Rs in crore)	Technology
2000-01					
3.	November 2000	Shyam Telecom	0.17	24.98	Cor-Dect
4.	November 2000	HFCL	0.08	11.76	Cor-Dect
5.	December 2000	LG Electronics	0.03	8.43	CDMA (IS-95A)
6.	January 2001	HFCL	0.49	152.92	CDMA (V-5.2)
7.	January 2001	LG Electronics	1.00	327.37	CDMA (V-5.2)
8.	January 2001	ITI	0.51	165.22	CDMA (V-5.2)
	Total (2000-01)		**2.28**	**690.68.**	
2001-02					
9.	April 2001	HFCL	0.98	265.23	CDMA (V-5.2)
10.	April 2001	LG Electronics	2.00	557.80	CDMA (V-5.2)
11.	April 2001	ITI	1.02	287.67	CDMA (V-5.2)
12.	June 2001	LG Electronics	0.09	20.60	CDMA (IS-95A)
14.	February 2002	LG Electronics	0.16	21.75	CDMA (V-5.2)
	Total (2001-02)		**4.250**	**1153.05**	
2002-03					
15	July 2002	LG Electronics	1.42	103.95	CDMA (V-5.2)
16.	July 2002	HFCL	0.60	42.29	CDMA (V-5.2)
17.	July 2002	HFCL	0.88	60.56	CDMA (V-5.2)
18.	August 2002	ITI	0.60	80.07	Cor-Dect
20.	September 2002	LG Electronics	2.10	162.82	CDMA (V-5.2)
21.	November 2002	LG Electronics	2.70	74.58	CDMA (V-5.2)
22.	November 2002	ITI	1.50	73.49	CDMA (V-5.2)
23.	December 2002	ITI	0.77	102.75	Cor-Dect
24.	December 2002	UTL	2.45	114.28	CDMA (V-5.2)
25.	January 2003	HFCL	1.92	256.41	Cor-Dect
27.	January 2003	ITI	0.96	128.12	Cor-Dect
28.	January 2003	ARM	1.05	48.77	CDMA (V-5.2)
29.	February 2003	ITI	0.97	129.61	Cor-Dect
30	February 2003	HTL	0.55	73.40	Cor-Dect
	Total (2002-03)		**17.92**	**1451.10**	
2003-04					
31.	April 2003	HFCL	1.23	28.77	CDMA (V-5.2)
32.	March 2004	UTL	3.72	61.31	MSC based CDMA 2000-1X
33.	March 2004	ITI	2.30	38.10	MSC based CDMA 2000-1X
	Total (2003-04)		**7.25**	**128.18**	

Sl. No.	Month of Purchase Order	Name of the supplier (M/s)	Capacity (lakh lines)	Value (Rs in crore)	Technology
2004-05					
34.	August 2004	ITI	1.43	34.49	MSC based CDMA 2000-1X
35.	August 2004	ITI	2.81	49.16	MSC based CDMA 2000-1X
36.	March 2005	ITI	4.50	60.20	MSC based CDMA 2000-1X
	Total (2004-05)		**8.74**	**143.85**	
Grand total (2000-01 to 2004-05)			**40.99**	**3566.86**	

B. Total value of technology-wise WLL equipments procured:

Type of Technology	Month & Year of tender issued during DoT period	Month & Year of purchase order issued	Capacity procured (in lakh lines)	Value of POs (Rs in crore)	Month & Year of tender issued during BSNL period	Month & Year of purchase order issued	Capacity procured (in lakh lines)	Value of POs (Rs in crore)
1. CDMA IS - 95A	June 1998	December 2000 & June 2001	0.12	29.03	-----	-----	0	0
2. CDMA V-5.2	May 2000	January 2001 to February 2002	6.16	1777.96	June 2001, April 2002 & May 2002	Between July 2002 & April 2003	(June 5.00 2001 Tender) (April 8.9285 & May 2001 Tender)	321.62 387.89
3. CorDect	October 1998	November 2000	0.25	36.74	May 2002	August 2002 to February 2003	5.77	770.36
Sub-total			***6.530***	***1843.73***			***19.6985***	***1479.87***
4. MSC based CDMA 2000 1X	-------	-------	0	0	July 2002 & July 2004	March 2004 to March 2005	14.7585	243.26
Grand total			**6.530**	**1843.73**			**34.4570**	**1723.13**

C. Purchase orders for WLL terminals (FWTs and HHTs):

Sl. No.	Month of Purchase Orders	Supplier	Number of FWTs and HHTs	Value (Rs. in Crore)
2002-03				
1	September 2002	HFCL	94312 HHTs	53.19
2	September 2002	LGE	93188 HHTs	52.48
3	September 2002	ARM	187500 HHTs	105.60
4	September 2002	ARM	28500 FWTs	22.15
5	October 2002	LGE	5000 FWTs	NA
6	November 2002	UTL	34000 FWTs	29.33
7	November 2002	Shyam Telelcom	62500 FWTs	53.91
	Total (2002-03)		**375000 HHTs** **130000 FWTs**	**211.27** **105.39**
2003-04				
11	July 2003	ITI	180000 HHTs	88.76
12	September 2003	XL Tel.	82091 HHTs	40.48
13	September 2003	UTL	85909 HHTs	42.36
14	September 2003	Teracom	168000 HHTs	82.84
15	November 2003	BML	81144 FWTs	53.95
16	November 2003	ITI	41854 FWTs	27.83
17	November 2003	Surana	41854 FWTs	27.83
18	March 2004	ICOMM	82281 HHTs	38.54
	Total		**598281 HHTs** **164852 FWTs**	**292.98** **109.61**
2004-05				
19	August 2004	ITI	38008 FWTs	23.41
20	November 2004	ITI	450000 FWTs	183.02
21	December 2004	ITI	33137 FWTs	NA
22	December 2004	Teracom	525000 FWTs	237.68
23	December 2004	HFCL	262514 FWTs	118.85
24	December 2004	HFCL	262486 FWTs	118.84
	Total		**1571145 FWTs**	**681.80**
	Grand total		**973281 HHTs** **1865997 FWTs** **2839278 terminals**	**504.25** **896.80** **1401.05**

C. Total value of WLL equipments and terminals:

(i) Value of 40.99 lakh lines of WLL equipments = Rs. 3566.86 crore

(ii) Value of 2839278 WLL terminals (973281 HHTs and 1865997 FWTs) = Rs. 1401.05 crore

TOTAL = **Rs. 4967.91 crore**

Appendix-IV
(Referred to in paragraph 1.9.3 at Page 12)

Statement showing the loss incurred/profit earned (as per costing records) by the circles of BSNL on operation of WLL telephone service during 2003-04

A. Loss incurring circles:

Sl.No.	Name of Circle (No. of SSA/whole circle)	Total cost incurred during 2003-04	Total revenue earned during 2003-04	Loss as per costing record [col. 3 – 4]
1	2	3	4	5
		(Rs in lakh)		
1..	Andhra Pradesh (2 SSAs)	371.02	64.25	306.77
2.	Bihar (whole circle)	4621.07	1685.37	2935.70
3.	Haryana (whole circle)	615.58	300.94	314.64
4.	Jammu & Kashmir (whole circle)	1041.28	239.27	802.01
5.	Karnataka (whole circle)	4446.28	616.30	3829.98
6.	Kerala (9 SSAs)	NA	NA	3888.00
7.	U.P. (East) (1 SSA)	343.66	206.18	137.48
Total				**12214.58**

i.e. Rs 122.15 crore

B. Profit earning circle:

Sl.No.	Name of Circle (No. of SSA/whole circle)	Total cost incurred during 2003-04	Total revenue earned during 2003-04	Profit as per costing record [col. 4 – 3]
1	2	3	4	5
		(Rs in lakh)		
1..	Madhya Pradesh (whole circle)	2288.52	2343.20	54.68

Appendix-V
(Referred to in paragraph 1.9.3 at Page 12)

Statement showing the shortfall in projected revenue in respect of WLL telephone service

Sl. No	Name of the circle	Whether projects sanctioned were remunerative	Short fall in projected revenue (in lakh)
1	Assam	Yes	1085.22
2	Chhattisgarh	Yes	1980.14
3	Haryana	Yes	531.02
4	Jharkhand	Yes	311.01
5	Madhya Pradesh	Yes	3848.78
6	Maharashtra	Yes	262.57
7	Orissa	Yes	3208.07
8	Punjab	Yes	2059.55
9	Rajasthan	Yes	451.70
10	UP (East)	Yes	193.18
		Total	**13931.24**

i.e., Rs 139.31 crore

Appendix-VI

(Referred to in paragraph 1.10.3 at Page 15)

Statement showing details of BSCs/BTSs sites where SACFA clearances were pending

Sl. No.	Circle	Number of sites for which clearance sought	Number of sites for which clearance received	Number of sites for which clearance pending	Latest position
1	Andhra Pradesh	137	22	115	Application submitted for 133 sites and ID allotted by WPC wing. SACFA clearance rejected for 4 sites of Hyderabad and BTS in these sites were radiating without permission of competent authority. **(as on 31 March 2005)**
2	Bihar	196	177	19	Non-submission of application for 7 sites and clearance was awaited for 12 sites. **(as on 30 August 2005)**
3	Chhattisgarh	82	53	29	Applied for all sites but clearance was given only for 53. SACFA clearance for CorDect WLL system is under process. **(as on June 2005)**
4	Gujarat	367	81	286	Applications were not made in time. **(as on July 2005)**
5	Haryana	44	35	9	Final clearance awaited for 9 sites. **(as on June 2005)**
6	Himachal Pradesh	22	22	0	Clearance was received for all sites. **(as on July 2005)**
7	J&K	61	34	27	ID was obtained in respect of WLL sites from WPC but the final clearance was still awaited. **(as on August 2005)**
8	Jharkhand	103	102	1	Clearance of 1 BTS was awaited. **(as on August 2005)**
9	Karnataka	167	81	86	ID clearance was obtained in respect of all WLL sites from WPC but the final clearance for 86 sites was still awaited. **(as on August 2005)**
10	Kerala	293	98	195	Position **as on 31 July 2004**
11	Madhya Pradesh	252	90	162	Applications were not made in time. **(as on August 2005)**
12	Maharashtra	136	136	0	Clearance of all sites were received in May 2001.
13	Orissa	124	97	27	Applied for all sites but clearance was given only for 97. **(as on December 2004)**
14	Punjab	63	53	10	ID no. was given for all sites of Chandigarh SSA but final clearance was awaited from WPC. **(as on April 2005)**
15	Rajasthan	133	50	83	Position **as on 31 July 2004**
16	Tamil Nadu	107	36	71	Position **as on 31 July 2004**
17	UP (East)	227	107	120	Position **as on 31 July 2004**
18	UP (West)	94	58	36	Position **as on 31 July 2004**
19	Uttaranchal	52	29	23	Position **as on 31 July 2004**
20	Kolkata Telephones	69	38	31	SACFA clearance for 31 sites was awaited. **(as on September 2005)**
	Total	**2729**	**1399**	**1330**	

Appendix-VII
(Referred to in paragraph 1.11.1.2 at Page 17)

Details showing the circlewise position of idle stock of HHTs/FWTs/LMTs/Wall mounted sets in the circles/SSAs

Sl. No	Name of Circle	No. of units	Number of sets lying idle in stock				Idle investment (Rs in lakh)	Idle since
			HHTs	FWTs	LMTs	WMTs		
1	Andhra Pradesh	1	2513	-	-	-	124.00	January 2004
2	Assam	1	2000	-	-	-	95.00	September2004
3	Chhattisgarh	ALL	8494	3724	-	-	646.00	-
4	Gujarat	ALL	41639	8705	-	-	2624.00	-
5	Haryana	ALL	7942	757	8975 (FRS)	-	1441.00	-
6	Himachal Pradesh	ALL	2510	-	-	-	123.00	March 2004
7	Jharkhand	1	8369				437.00	March 2003 & 2004
8	Kerala	ALL	80573				4522.00	
9	Madhya Pradesh	5	7001	2875			480.00	
10	Maharashtra	1 SSA of Mumbai and ALL SSAs of Nagpur	42047	3569			3028.00	January to April 2003 May 2003 & Mar. 2005
11	N.E.II	1	839				39.00	Sept. 2004
12	Punjab	4	25738	1587			1487.00	
13	Rajasthan	2	2392				98.00	
14	Tamil Nadu	3	19655				1006.00	
15	UP (East)	ALL	30862				1543.00	
16	UP (West)	ALL	12703	4611			1193.00	Dec 2004
17	West Bengal	ALL	3040				149.00	
18	Chennai Telephones	1	37345	10369		8200	3422.66	March to December 2004
19	Kolkata Telephones	1	4718	4463			429.16	March/ June 2004
	TOTAL		**340380**	**40660**	**8975**	**8200**	**22886.82**	

or, Rs. 229 crore

Appendix - VIII
(Referred to in paragraph 1.11.4 at Page 20)

Statement showing the number of BSC / BTS commissioned without A/T or with provisional A/T

S.No	Name of circle	Number of BSC / BTS commissioned without A/T or provisional A/T	
		BSCs	BTS
1	Bihar	0	124
2	Chhattisgarh	11	132
3	Jharkhand	0	102
4	Kerala	3	0
5	Madhya Pradesh	21	123
6	Orissa	3	1
7	U.P. (East)	1	6
8	Uttaranchal	1	0
9	Kolkata Telephones	0	1
	Total	**40**	**489**

Appendix-IX

(Referred to in paragraph 1.11.4 at Page 20)

Statement showing undue delays in commissioning of WLL systems after their receipt in the circles during 2001-02 to 2004-05

Sl. No.	Name of the Circle	No. of SSA	No. of system	Period of receipt of equipment	Period of commissioning	Undue time taken in commissioning for after receipt	Blocking of capital (Rs. in crore)
1.	Himachal Pradesh	2	2 CDMA system	August 2001 to February 2002	January 2002 to November 2003	19 months	Not available
2.	Jammu & Kashmir	1	2 CDMA system	December 2001 to January 2002	January 2003 to February 2003	12 months	24.97
3.	Punjab	3	5 CDMA system 2 Cordect	April 2001 to December 2003	November 2001 to July 2004	18 months	34.80
4.	Haryana	3	8CDMA systems	June 2001 to January 2004	January 2002 to March 2004	6 months (till August 2005)	28.70
5.	Maharashtra (Kalyan SSA)	1	1 CDMA system	January/ February 2003	March 2003 without formal A/T	28 months (till August 2005)	5.14
6.	Rajasthan (Udaipur SSA)	1	1 CorDect	March 2004	April 2005	12 months	Not available
7.	UP (E)	5	9 CDMA system	November 2003 to August 2004	March 2004 to July 2004	4 months to 18 months (till August 2005)	9.57
	Total =	**16**	**3 CorDect and 27 CDMA systems**			**2 to 28 months (till August 2005)**	**103.18**

Note: Out of total 30 WLL systems received in 16 SSAs of 7 circles of BSNL, time taken in commissioning of 29 WLL systems was ranged between 2 months and 19 months during 2001-02 to 2004-05. Remaining 1 system has been commissioned (March 2003) so far despite a lapse of 28 months from the date of its receipt.

Appendix-X
(Referred to in paragraph 1.11.5.3 at Page 21)

Statement showing details of non/short levy of liquidated damage (LD) charges on the suppliers by various circles of BSNL for delays in delivery of <u>equipments and terminals (FWTs and HHTs) for WLL telephone project during 2001-02 to 2004-05.</u>

Sl No	Name of Circle/ Name of SSA	Purchase order number and date	Name of the suppliers	Nature of supply	Schedule date of supply as per purchase order	Actual date of supply	Delay (in weeks/ part thereof)	Liquidated damage charges levied (Rs)	Liquidated damage charges due (Rs)	Short/ non-levy of liquidated damage charges (Rs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1.	**GUJARAT** a Ahmedabad Telecom District.	CE/PO/006/ 02-03. dtd.: 4.09.02	M/s LG	WLL CDMA equipments 20 K	03.03.03	22.01.03 to 07.03.03	1 week	NIL	870699	870699
		CE/PO/013/ 02-03 dtd.:01.11.02	M/sU.T.L	WLL-CDMA FWT's 2025	28.02.03	25.06.03 to 09.07.03 27.07.03	22 weeks	1311072	2340750	1029678
	b GMTD, Surat	CE/PO/004/0 2-03. dtd: 25.07.02	M/s HFCL,	WLL-CDMA equipment 10 K	25.01.03	08.05.03 and 01.12.03	41 weeks	4970890	17186394	12215504
		CE/PO/013/0 2-03. dtd:01.11.02	M/sU.T.L,	WLL-CDMA FWT+PPA 1250+625	28.02.03 28.02.03	19.06.03 23.06.03 24.07.03	21 weeks	928282	1368893	440611
		CE/PO/34/00 -01. Dtd17.11.20 00	M/s HFCL,	WLL CORDECT System (2 K)	16.05.01	18.8.01	14 weeks	198661	2364886	2166225
		CE/PO/008/0 3-04. Dtd102.09.0 3	M/ XL Telecom ,Securandea bad	WLLCDMA-HHTs 800	01.12.033 01.01.04 01.02.04 01.03.04	05.03.04	14 weeks 10 week 5 weeks 1 week	145957	623273	477316
	c GMTD, Rajkot	CE/PO/014/0 3-04. dtd: 05.11.03.	I.T.I,	FWTs 3130	4.02.04 4.03.04 4.04.04 4.05.04	05.04.04	9 weeks. 8 weeks.	Not available	1759954	1759954
		CE/PO/02/02 -03. dtd.: 15.07.02.	M/s LG	WLL- CDMA equipments 10 K	14.01.03	31.03.03	11 weeks	NIL	3491081	3491081

Sl No	Name of Circle/ Name of SSA	Purchase order number and date	Name of the suppliers	Nature of supply	Schedule date of supply as per purchase order	Actual date of supply	Delay (in weeks/ part thereof)	Liquidated damage charges levied (Rs)	Liquidated damage charges due (Rs)	Short/ non-levy of liquidated damage charges (Rs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		CE/PO/014/02-03.dtd: 18.11.02.	M/s I.T.I,	CDMA WLL equipments 9750	17.05.03.	April' 03 to September' 03	20 weeks	N/A	5732976	5732976
		CE/PO/05/03-04. dtd: 29.07.03	M/s I.T.I,	CDMA HHT's 1685	28.10.03 28.11.03 28.12.03 28.01.04	15.04.04 06.05.04	Up to 25 weeks.	N/A	939396	939396
	d GMTD - Mehsana	CE/PO/014/02-03.dtd.: 18.11.02	M/s I.T.I	CDMA WLL equipment 9750	17.05.03.	April '03 to September'03	20 weeks	N/A	5732976	5732976
		CE/PO/014/03-04. dtd: 05.11.03	M/s I.T.I	FWT's 2290	4.02.04 4.03.04 4.04.04 4.05.04	12.04.04	10 weeks 6 weeks 1 week	518621	1507392	988771
		CE/PO/005/03-04.dtd: 29.07.03	M/s I.T.I	HHTs 3125	28.10.03 28.11.03 28.12.03 28.01.04	26.07.04 26.04.04 30.09.04	26 weeks 22 weeks 40 weeks 36 weeks	-----	2875702	2875702
		CE/PO/008/03-04. dtd. 02.09.03	M/s XL Telecom,	CDMA-HHTs 200	50-1.12.03 50-1.01.04 50-1.02.04 50-1.03.04	09.03.04	15 weeks 10 weeks 6 weeks 1 week	-----	41912	41912
	e GMTD – BHUJ	MT/PO/02/01-02..dtd.: 20.01.01	M/s Escorts	WLL equipment 4 K	14.01.02	02.10.01 to 10.10.01	8 weeks	Nil	4462780	4462780
		CE/PO/013/2002-03 dated 1.11.02	M/s U.T.L,	WLL CDMA FWT 875	28.02.03	24.06.03 28.06.03 18.07.03	20 weeks	666638	905787	239149
		CE/PO/014/03-04.Dtd. 05.11.03	M/s I.T.I	FWTs 1700	04.02.04 04.03.04 04.04.04 04.05.04	26.05.04	Upto 15 weeks	-----	2362326	2362326
		CT/P/038/02-03.Dtd. 21.02.03	M/s HTL,	WLL CorDECT 1 K	20.08.03	06.02.04 and 07.02.04	25 weeks	1140516 2517668	6206112	2547928

SI No	Name of Circle/ Name of SSA	Purchase order number and date	Name of the suppliers	Nature of supply	Schedule date of supply as per purchase order	Actual date of supply	Delay (in weeks/ part thereof)	Liquidated damage charges levied (Rs)	Liquidated damage charges due (Rs)	Short/ non-levy of liquidated damage charges (Rs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	TOTAL-1							12398305	60773289	48374984
2.	Tamil Nadu	CE/PO/9/02-03. dt: 9.9.02	M/s ARM	FWTS	8.1.03	20.01.03	2 weeks	-	754789	754789
3.	Chennai Telephones	-	-	-	-	23.01.03	3 weeks	-	425524	425524
4.	Orissa Circle	(a) CT/PO/38/02-03. dt.21.02.03	M/s HTL	Cor-DECT WLL	18.01.04 30.04.04	16.05.04 to 26.06.04	3 weeks to 20 weeks	1549688	4699854	3150166
		(b) CE/PO/013/02-03. dt.01.11.02	M/s UTL	FWT with and without Antanna	28.02.03	23.06.03 07.08.03	15 weeks to 20 weeks	-	823497	823497
		(c) MT/PO/03/01-02. dt.24.04.01	M/s ITI	WLL Rural equipments	19.08.01	15.02.02	Max. 20 weeks	4013695	9632868	5619173
5.	Haryana	CT/PO/33/02-03. dt.07.01.03	M/s HFCL	WLL Cor-DECT	24.01.04 24.02.04 24.03.04 24.04.04	27.04.04 28.04.04	5 weeks to 14 weeks	-	4320000	4320000
6.	Punjab	CT/PO/08/02-03. dt.06.09.02	M/s HFCL	HHTs	05.10.02 05.11.02 05.12.02 05.01.03	01.04.03 31.03.03	13 weeks to more than 20 weeks	5745536	8294614	2549078
7.	Assam	CT/PO/02-03. dt.19.02.03	M/s ITI	WLL Cor-DECT FRS	18.08.03 18.08.03	03.06.04 09.08.04	more than 20 weeks	-	11319599	11319599
8.	Maharashtra (Mumbai)	CE/PO/07/02-03. dt.06.09.02	M/s Icomm (M/s ARM)	HHTs	05.01.03	21.01.03	3 weeks	-	623000	623000
9.	Maharashtra (Nagpur)	CE/PO/15/03-04. dt.05.11.03	M/s ITI	IFWTs	04.05.04	09.11.04	more than 20 weeks	-	1260125	1260125

Sl No	Name of Circle/ Name of SSA	Purchase order number and date	Name of the suppliers	Nature of supply	Schedule date of supply as per purchase order	Actual date of supply	Delay (in weeks/ part thereof)	Liquidated damage charges levied (Rs)	Liquidated damage charges due (Rs)	Short/ non-levy of liquidated damage charges (Rs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
10.	**Bihar**	MT/PO/03/01-02. dt.20.04.01	M/s ITI	WLL Equipments	19.08.01	14.02.02 15.02.02 02.05.02 27.04.02 21.02.02	more than 20 weeks	6458316	15499812	9041496
11.	**Jharkhand**	(a) MT/PO/02/01-02. d.20.04.01	M/s LGE	WLL Equipments	19.08.01	19.10.01 to 29.04.02	9 weeks to more than 20 weeks	17746312	29273819	11527507
		(b) MT/PO/03/01-02. dt.20.04.01	M/s ITI	WLL Equipments	19.08.01	02.03.02 12.03.02	more than 20 weeks	3923808	9417138	5493330
		(c) MT/PO/03/01-02. dt.20.04.01	M/s ITI	WLL Equipments	19.08.01	14.03.02 11.03.02 12.02.02	more than 20 weeks	470154	1128371	658217
		(d) MT/PO/25/01-02. dt.19.01.01	M/s ITI	WLL Equipments	18.05.01	28.09.01 29.09.01	18 weeks	3892275	8251623	4359348
		(e) MT/PO/03/01-02. .dt.20.04.01	M/s ITI	WLL Equipments	19.08.01	12.03.02 .02.02	20 weeks	6731962	16175908	9443946
Total (1 to 11)								**62930051**	**182673830**	**119743749**

or Rs 11.97 crore

Appendix-XI

(Referred to in paragraph 1.12 at Page 22)

Statement showing the utilisation of equipped capacity of WLL services in different circles and metro districts of BSNL for the year ending 31 March 2005

Sl. No.	Name of Circle	Equipped Capacity			Capacity Utilisation			Percentage: capacity utilised		
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
1	Andaman & Nicobar	-------	4,000	4,000	-------	1,408	1,408	0.00	35.20	35.20
2	Andhra Pradesh	70,000	59,500	129,500	22,390	64,010	86,400	31.99	107.58	66.72
3	Assam	1,000	55,250	56,250	1,385	28,083	29,468	138.50	50.83	52.39
4	Bihar	13,000	131,000	144,000	11,094	87,371	98,465	85.34	66.70	68.38
5	Chattisgarh	29,350	57,950	87,300	21,041	42,021	63,062	71.69	72.51	72.24
6	Gujarat	93,600	57,350	150,950	22,752	41,513	64,265	24.31	72.39	42.57
7	Haryana	55,600	42,400	98,000	34,620	33,739	68,359	62.27	79.57	69.75
8	Himachal Pradesh	8,000	10,500	18,500	306	11,540	11,846	3.83	109.90	64.03
9	Jammu & Kashmir	3,000	14,000	17,000	3,397	11,111	14,508	113.23	79.36	85.34
10	Jharkhand	11,000	63,500	74,500	3,497	37,263	40,760	31.79	58.68	54.71
11	Karnataka	28,500	111,250	139,750	34,543	50,484	85,027	121.20	45.38	60.84
12	Kerala	44,000	189,000	233,000	12,959	102,805	115,764	29.45	54.39	49.68
13	Madhya Pradesh	125,350	10,400	135,750	82,487	39,786	122,273	65.81	382.56	90.07
14	Maharashtra	56,000	199,000	255,000	40,012	127,477	167,489	71.45	64.06	65.68
15	North East - I	1,000	17,500	18,500	1,307	10,105	11,412	130.70	57.74	61.69
16	North East - II	-------	15,000	15,000	-------	13,168	13,168	0.00	87.79	87.79
17	Orissa	3,000	101,500	104,500	1,244	63,910	65,154	41.47	62.97	62.35
18	Punjab	101,800	47,450	149,250	21,052	64,018	85,070	20.68	134.92	57.00
19	Rajasthan	120,750	31,000	151,750	64,832	56,080	120,912	53.69	180.90	79.68
20	Tamil Nadu	42,000	88,750	130,750	15,476	50,230	65,706	36.85	56.60	50.25
21	Uttaranchal	8,000	29,500	37,500	3,740	20,902	24,642	46.75	70.85	65.71
22	Uttar Pradesh (East)	69,000	190,250	259,250	26,938	83,380	110,318	39.04	43.83	42.55
23	Uttar Pradesh (West)	32,500	66,500	99,000	20,409	35,438	55,847	62.80	53.29	56.41
24	West Bengal	5,000	97,000	102,000	5,104	56,177	61,281	102.08	57.91	60.08
	Sub-total - circles	***921,450***	***1,689,550***	***2,611,000***	***450,585***	***1,132,019***	***1,582,604***	***48.90***	***67.00***	***60.61***
1	Calcutta Telephones	45,400	-------	45,400	28,792	-------	28,792	63.42	0.00	63.42
2	Chennai Telephones	33,000	-------	33,000	16,715	-------	16,715	50.65	0.00	50.65
	Sub-total - metros	***78,400***	-------	***78,400***	***45,507***	-------	***45,507***	***58.04***	***0.00***	***58.04***
	BSNL - circles + metros	**999,850**	**1,689,550**	**2,689,400**	**496,092**	**1,132,019**	**1,628,111**	**49.62**	**67.00**	**60.54**

Appendix-XII
(Referred to in paragraph 1.13.2.1 at Page 25)

Statement showing details of idle investment due to poor radio frequency coverage

S.No.	PO Number/date	Name of circle	Name of SSA	Installed capacity	Date of installation/ commissioned	Number of working connections	Idle investment (Rs. in crore)
1	CE/PO/03/02-03 DT.25.7.02	Maharashtra	Nagpur	5000	31 July 2003	1271	2.95
2		Kerala	Trivandrum	10000	March 2003	2303	5.14
3		Jharkhand	Ranchi	10000	February 2003	996	5.14
4	CE/PO/04/02-03 DT.25.7.02	UP (East)	Varanasi	10000	Sept. 2002	102	4.27
5		Madhya Pradesh	Bhopal Gwalior	8000 5000	August 2003 September 2003	2300 1972	7.89
6		Maharashtra	Nasik	5000	Sept. 2003	764	2.63
7		Andhra Pradesh	Guntur Vijayavada Vishakhap-attnam	10000 Each	-	1957 233 530	19.82
8		Gujarat	Surat	10000	March 2004	284	5.15
9		Chhatisgarh	Durg Raipur	4000 6000	Both in Sept. 2003	2764 2651	5.09
10		Kerala	Trichur	10000	Sept. 2003	568	4.03
11	CE/PO/06/02-03 DT 4.9.02	Maharashtra	Pune	20000	NA	14770 (including DEL provided from initially installed capacity)	6.97
12		Andhra Pradesh	Hyderabad	20000	August 2003	12487 (Due to poor coverage connection surrendered by subscribers)	9.66
						TOTAL	**78.74**

Appendix-XIII
(Referred to in paragraph 1.13.3 at Page 27)

Details showing faulty HHTs/FWTs/Wall sets lying in the stock of Circles/SSAs

Sl. No.	Name of Circle	No. of SSAs	Number of faulty sets lying in stock			Unproductive investment (Rs. in lakh)
			HHTs	FWTs	WS	
1.	Bihar	ALL	0	4360	0	412.73
2.	Chhattisgarh	ALL	349	1195	0	90.74
3.	Gujarat	2	165	0	0	10.16
4.	Haryana	ALL	0	0	2499	267.86
5.	Himachal Pradesh	ALL	0	2783	0	321.00
6.	Jharkhand	3	0	244	0	23.11
7.	Karnataka	ALL	650	736	1000	196.28
8.	Kerala	ALL	0	13011	0	1231.67
9.	Madhya Pradesh	6	0	468	3091	192.27
10.	Maharashtra	6	2416	623	483	247.73
11.	Punjab	3	496	541	0	60.36
12.	Rajasthan	2	179	278	0	33.89
13.	UP (East)	ALL	1075	14284	0	1405.00
14.	UP (West)	ALL	774	1664	0	192.24
15.	Uttaranchal	1	46	110	0	8.93
16.	West Bengal	ALL	0	1955	0	97.95
	TOTAL		**6150**	**42252**	**7073**	**4795.13**

i.e. Rs 47.95 crore

Note : All SSAs in nine circles and 23 SSAs in seven circles

Appendix-XIV
(Referred to in paragraph 1.13.4 at Page 27)

Statement showing cases of non recovery of FWTs / HHTs after closure of connection

Sl. No.	Name of Circle	No. of SSAs	No. of sets not recovered		
			FWT	HHT	Value (Rs in lakh)
1	Andhra Pradesh	17	3405	8420	739.05
2	Assam	2	731	-	48.60
3	Bihar	2	2035	-	203.60
4	Haryana	2	732	-	32.10
5	Himachal Pradesh	1	400	-	46.06
6	J&K	1	331	174	47.24
7	Jharkhand	1	252	-	25.20
8	Karnataka	2	441	-	44.10
9	Maharashtra	1	441	265	64.29
10	NE-II	1	249	-	24.65
11	Orissa	5	1755	-	236.52
12	Punjab	3	1374	-	109.08
13	Rajasthan	4	591	3288	223.50
14	Tamil Nadu	1	21	516	30.62
15	U.P. (East)	5	2188	-	120.94
16	West Bengal	2	218	177	30.65
17	Kolkatta Telephones District	1	1548	7750	567.88
	TOTAL	**51**	**16712**	**20590**	**2594.08**

i.e. Rs 25.94 crore

Appendix-XV
(Referred to in paragraph 1.14.1 at Page 28)

Delay in submission of complete advice notes resulting into accumulation of revenue in respect of unaddressed bills

Sl. No.	Name of the Circle	No. of the SSA	No. of Telephones	No. of Bills	Amount involved (Rs in crore)
1	Andhra Pradesh	1	18	154	0.00843
2	Assam	3	-----	1428	0.09400
3	Bihar	3	65	251	0.02805
4	Chhattisgarh	6	918	4778	0.16375
5	Gujarat	5	235	488	0.02194
6	Haryana	1	18	-----	0.00069
7	Jharkhand	1	104	325	0.02762
8	Karnataka	19	-----	1365	0.07022
9	Madhya Pradesh	8	-----	3935	0.15071
10	Maharashtra	1	-----	15	0.00161
12	NE - II	1	-----	1063	0.24100
13	Orissa	3	497	695	0.02740
15	Punjab	3	3	26	0.00197
16	Tamil Nadu	1	-----	20	0.00500
17	Uttar Pradesh (E)	4	-----	2636	0.05663
18	Uttar Pradesh (W)	5	-----	97	0.01101
19	West Bengal	4	-----	1924	0.09047
	G. TOTAL	**69**	**1858**	**19200**	**1.0005**

Appendix-XVI
(Referred to in paragraph 1.14.5 at Page 29)

Statement showing details of revenue billed and revenue collected during the year and the revenue outstanding for recovery at the end of each of the years 2002-03 to 2004-05 in 8 circles, 35 SSAs in other 5 circles and one metro district

Sl. No.	Particulars	2002-03	2003-04	2004-05
		Amount in Rupees in lakh		
1	Total actual amount billed during the year for WLL connections	1664.68	5528.65	20596.94
2	Total of outstanding amount for recovery as at the beginning of the year (1 April) from WLL connections	303.81	992.98	2256.97
3	Total revenue collection during the year from WLL connections	1291.22	4231.21	11465.93
	GRAND TOTAL of outstanding amount for recovery as at the end of the year (31 March) from WLL connections (1 + 2 – 3)	**677.27**	**2290.42**	**11387.98**

i.e. Rs 113.88 crore

Appendix-XVII

(Referred to in paragraph 1.14.7 at Page 30)

Statement showing the name of circles where disconnection of telephones were pending despite outstanding of bills from 2 to 19

Sl. No.	Name of circle	No. of SSA	Disconnection effected in time or not	Outstanding revenue (Rs in lakh)	Remarks
1	Assam	2	No	11.13	3 bills to 19 bills
2	Chhattisgarh	6	No	306.00	3 bills to 6 bills
3	Madhya Pradesh	Whole circle	No	2209.00	2 bills to 13 bills
4	Orissa	4	No	5.34	3 bills to 7 bills
5	Rajasthan	5	No	14.19	2 bills to 11 bills
6	Bihar	5	No	1319.30	3 bills-to 10 bills
7	UP (East)	6	No	138.09	N/A
8	Uttaranchal	2	No	11.13	D/List not issued
9	Chennai Telephone District	Whole district	No	186.00	2 bills to 12 bills and in one case 25 bills
	TOTAL	**30 SSAs in 7 circles & all SSAs in one circle and one Metro District**		**4200.18**	

Appendix-XVIII

(Referred to in Paragraphs 2.1 and paragraph 2.18 at pages 38 and 64)

(A) Men-in-position during 2000-01 to 2004-05 in BSNL

Cadres	As on 31st March 2001	As on 31st March 2002	As on 31st March 2003	As on 31st March 2004	As on 31st March 2005
Group A	6,516	7,071	7,026	7,889	6,947
Group B	41,276	44,662	46,797	49,158	51,242
Group C	2,40,515	2,40,878	2,31,656	2,39,648	2,32,873
Group D	64,649	59,824	63,189	49,127	48,791
Industrial	4,316	3,237	3,112		
Total	3,57,265	3,55,672	3,51,780	3,45,822	3,39,853

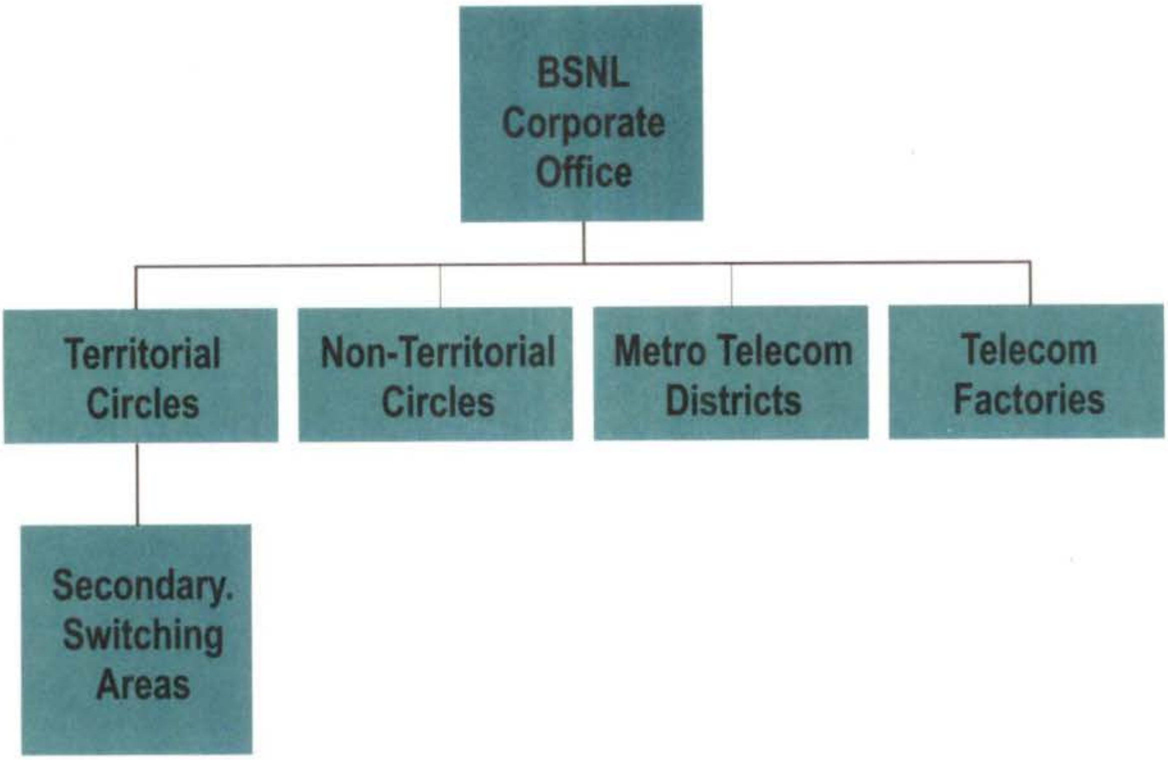
(B) Number of employees in different circles/units of BSNL as of 31-03-2005

Sl. No.	Name of Circle/Unit	Group-A	Group-B	Group-C	Group-D	Total
1	A&N	12	58	131	57	258
2	A.P	539	3799	24966	6037	35341
3	ALTTC	50	80	105	64	299
4	Assam	95	733	3804	1646	6278
5	Bihar	99	814	4613	2476	8002
6	BRBRAITT	34	115	77	109	335
7	Calcutta Telephones	165	2636	7702	2990	13493
8	Chennai Telephones	187	1559	6369	1511	9626
9	Chhattisgarh	83	380	2025	347	2835
10	Data Net	18	34	10	7	69
11	ETP	35	202	262	499	998
12	ETR	82	748	1001	911	2742
13	Gujarat	361	3090	20467	3044	26962
14	HP	94	578	2114	1002	3788
15	Haryana	136	1113	4445	670	6364

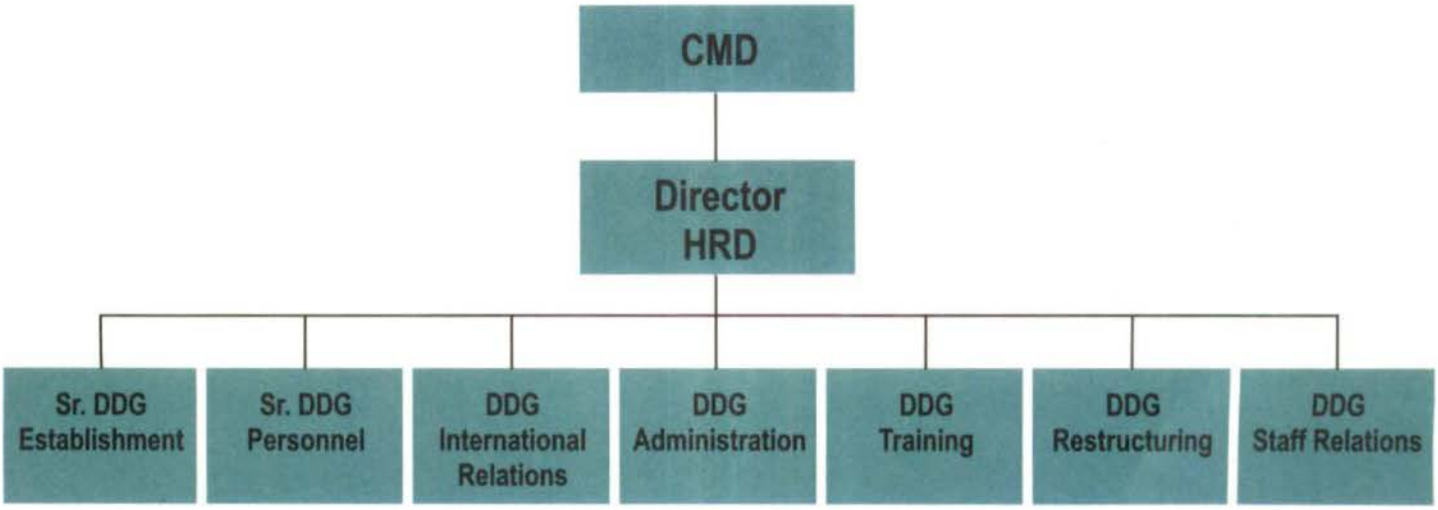
16	J&K	58	429	2082	403	2972
17	Jharkhand	70	445	2111	1155	3781
18	Karnataka	429	3982	17997	1960	24368
19	Kerala	606	3214	16161	1380	21361
20	M.P	249	1945	9014	2078	13286
21	Maharashtra	496	4821	22879	2872	31068
22	NCES	21	41	19	9	90
23	NE Task Force	27	123	114	248	512
24	NE-I	58	309	1279	618	2264
25	NE-II	29	180	858	550	1617
26	NTP	65	187	376	371	999
27	NTR	123	1111	2834	998	5066
28	Orissa	139	1103	3909	1230	6381
29	Punjab	370	2224	8180	1037	11811
30	QA	38	306	149	29	522
31	Rajasthan	351	1941	10114	1730	14136
32	STP	46	450	418	97	1011
33	STR	117	1393	1382	280	3172
34	T&D	36	406	185	66	693
35	Tel Stores	14	79	703	440	1236
36	Tel Fact. Richhai	4	33	297	166	500
37	Tel Fact. Jabalpur	8	48	551	217	824
38	Tel Fact. Kolkata	12	96	970	476	1554
39	Tel Fact. Mumbai	12	64	628	412	1116
40	TN	355	4333	22155	1672	28515
41	UP (West)	222	1183	6738	1165	9308
42	UP (East)	395	1906	11977	3034	17312
43	Uttaranchal	69	390	1984	234	2677
44	WB	154	996	6595	1245	8990
45	WTP & REPN	36	295	587	607	1525
46	WTR	79	795	1287	503	2664
47	BSNL CO	261	448	244	139	1092
48	ITI Bills	1	10	3	0	14
49	NATFM	7	17	2	0	26
Total		**6,947**	**51,242**	**2,32,873**	**48,791**	**3,39,853**

Apendix - XIX
(Referred to in Paragraph 2.17 at page40)

(A) Organisational Chart of BSNL



(B) HRD Organisation at BSNL HQ



Appendix -XX
(Referred to in Paragraph 2.9.1.2 at page 42)

Expenditure on outsourcing

(Amount in Rupees)

Sl.No.	Circle	Expenditure during the period from 2001-02 to 2004-05
1	Rajasthan	53,850
2	Orissa	9,63,64,105
3	Jammu &Kashmir	14,99,942
4	Himachal Pradesh	2,54,262
5	Kerala	76,07,91,000
6	Delhi	5,55,000
7	Andhra Pradesh	1,27,39,297
8	STP (Chennai)	1,01,44,000
9	CTD (Chennai)	49,18,155
10	Karnataka	26,32,39,274
11	T&D (M.P. Circle)	10,58,636
12	BRBRAITT (MP)	6,22,089
13	Gujarat (Ahd.)	24,53,56,354
14	Chattisgarh	2,47,950
15	ALTTC	85,05,540
16	Maharashtra	4,82,00,000
Total		**145,45,49,454**

Appendix – XXI
(Referred to in Paragraph 2.9.2 at page 43)

List of ad hoc norms extended for validity by BSNL

SL. No.	File No.	Name of the ad-hoc norms	Date of notification of ad-hoc norms / extended upto
1.	11-5/92-TE I	Ad-hoc norms for sanction of posts for operation and maintenance of C_DOT Exchanged in respect of AE, JTO, Technicians	14.12.93 / 31.3.2000
2.	12-1 / 97-TE I @	Ad-hoc norms for creation of posts in vigilance cell at Telecom Circles in respect of AE (Telecom), AE (Civil / Elect.), AO / SR. AO, JTO	3.3.97 / 31.3.2000
3.	2-2 / 88-TE I	Ad-hoc norms for AEs / JTOs for maintenance of Digital Optical Fibre system	29.12.89 / 31.3.2000
4.	11-3 / 91-TE I	Ad-hoc norms for sanctioning the posts of Directors for planning functioning the Major Telecom Districts	28.8.91 / 31.3.2000
5.	2-3 / 88-TE I @	Ad-hoc norms for AEs / JTOs and technicians for maintenance of Digital M/W systems	25.10.91 / 31.3.2000
6.	1-34 / 88-TE I	Revised ad-hoc norms for the posts of AE (planning) for all planning functions except cable planning in Telecom Districts. Under the charge of GM & TDMs.	31.7.89 & 30.9.96 / 31.3.2000
7.	1-32 / 90-TE I	Ad-hoc norms for installation of small exchanges in circles in respect of AE, JTO and Technicians	9.1.92 / 31.3.2000
8.	11-1 / 91-TE I	Ad-hoc norms for the installation of C-DOT (MAX) exchanges (M) in Telecom Circles in respect of Directors, AE, JTOs & TTA	30.4.92 & 27.5.94 / 31.3.2000
9.	11-2 / 92-TE I	Ad-hoc norms for installation of exchanges of New Technology, FETEX 150 (Fujitsu), EWSD (siemens) AEX-10	8.10.93 / 31.3.2000

		(Ericsson) in r/o Directors, AE, JTO, wiremen & Technicians	
10.	11-9 / 93-TE I	Ad-hoc norms for opening of Repair Centres for the C-DOT equipments in circles in r/o AE, JTO, TTA	11.8.94 / 31.3.2000
11.	3-6 / 77-TE I	Standards of JE/Technicians / AE for maintenance of PCM systems, PCM Repair Centres and Radio terminals in r/o JE, TTA and AE	27.9.83 / 31.3.2000
12.	2-59 / 92-TE I	Ad-hoc norms for the installation of Optical Fibre transmission systems in r/o Director, AE, JTO, JAO, AAO, Steno-typist, Sr. TOA, Gr. 'D', Phone-Mechanics and Technicians	6.7.92, 31.5.94 & 8.10.97 / 31.3.2000
13.	6-24 / 90-TE I @	Ad-hoc norms for the installation of UHF systems below 30 channels and above 30 channels in Telecom Circles in r/o AE, JTO, JAO, Clerk-cum-Typist & Peon	15.11.91 & 8.5.92 / 31.3.2000
14.	11-7 / 92-TE I @	Ad-hoc norms for sanction of staff for maintenance of MARR systems in r/o AE, JTO and technicians	9.12.92 / 31.3.2000
15.	11-7 / 87-TE I	Ad-hoc norms for the posts of AD / AE / JTO for all planning functions in Telecom circles (Excluding Telecom Districts under the charge of GMs and TDMs)	19.10.89 & 9.1.97 / 31.3.2000

NOTE: The validity of the above norms for creation of posts in various streams (excluding DEs), had been extended upto 31-3-04 except the norms at Sl. 2, 5, 13 and 14.

Appendix XXII
(Referred to in Paragraph 2.10.5 at page 47)

Statement of expenditure incurred on pay and allowances consequent on continuation of temporary posts

(Amount in Rupees)

Sl. No	Circle	Period	No. of posts in Gr. A, B,C & D cadre	Pay & allowances
1	ALTTC, Ghaziabad	2001-02	42	39059004
		2002-03	38	
		2003-04	28	
		2004-05	44	
2	Andhra Pradesh	2001-02	280	1338700000
		2002-03	280	
		2003-04	3142	
		2004-05	4793	
3	Chennai Telephone	2001-02	30	42700000
		2002-03		
		2003-04		
		2004-05		
4	Data Network	2004-05	33	9000000
5	Gujarat	2001-02		451800000
		2002-03		
		2004-05		
6	Kerala	2001-02	71	197100000
		2002-03	86	
		2003-04	96	
		2004-05	516	
7	Maharastra	2001-02	153	1097078462
		2002-03	996	
		2003-04	1369	
		2004-05	1378	
8	NTP	2001-02 to 2004-05	6	7700000
9	NTR	2001-02	46	62700000
		2002-03	50	
		2003-04	57	

		2004-05	59	
10	Rajasthan	2001-02	76	338500000
		2002-03	358	
		2003-04	359	
		2004-05	435	
11	STP	2002-03	15	18400000
		2003-04	15	
		2004-05	18	
12	STR	2001-02	910	62500000
		2002-03	1180	
		2003-04	1116	
		2004-05	1242	
13	UP (East)	2001-02	416	496900000
		2002-03	495	
		2003-04	533	
		2004-05	546	
14	UP (West)	2002-03	12	21000000
		2003-04	32	
		2004-05	32	
15	Uttranchal	2001-02	13	22025676
		2002-03	21	
		2003-04	21	
		2004-05	28	
16	WTR	2001-02	53	38255076
		2002-03	53	
		2003-04	53	
		2004-05	53	
			21678	**424,34,18,218**

Appendix –XXIII
(Referred to in Paragraph 2.12.4 at page 53)

Cycle-time for recruitment process to be completed from manpower requisition to induction of the employees into the organization as recommended by M/s KPMG is given below.

External recruitment:

Senior Management (JAG to HAG)	60 to 90 days
Middle Management (JTS to STS)	45 to 60 days
Junior Management	30 to 45 days

Internal recruitment:

The process of internal selection should be time bound and should be completed within 30 days, after which application should be requested from people outside BSNL in case the positions remain unfilled.

Appendix-XXIV

(Referred to in Paragraph 2.13.1.3 at page 56)

Table showing the TA/DA paid on local officiating promotions during 2001-02 to 2004-05. **(Amount in Rupees)**

Local officiating promotions			
1	Andhra Pradesh	2001-02	1822810
		2002-03	2391920
		2003-04	1785330
		2004-05	219075
2	Bihar	2001-02	194235
		2002-03	162350
		2003-04	77240
		2004-05	0
3	Chattisgarh	2001-02	0
		2002-03	0
		May 03 to March o4	262537
		2004-05	312960
4	Gujarat	2001-02	44010
		2002-03	164331
		2003-04	124688
		2004-05	44037
5	Jharkand	2001-02	4417
		2002-03	19417
		2003-04	72209
		2004-05	102300
6	Maharashtra	2001-02	40800
		2002-03	43200
		2003-04	22400
		2004-05	800
7	Northern Telecom Project	2004-05	82400
8	Tamil Nadu	2001-02	1011674
		2002-03	2828552
		2003-04	4715503
		2004-05	930036
9	Uttaranchal	2001-02	0
		2002-03	0
		2003-04	75680
		2004-05	14600
		Total	**1,75,69,511**

Appendix-XXV
(Referred to in Paragraph 2.16.2 at page 62)

Number of disciplinary cases pending year-wise

Sl.No.	Year-wise pending	Number of cases
1	1994	5
2	1996	3
3	1997	1
4	1998	11
5	1999	7
6	2000	22
7	2001	51
8	2002	70
9	2003	246
10	2004	361
11	2005	120
12	Date not mentioned	33
Total		930

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