

Chapter No. 1

Introduction

1.1 History of telecommunications growth in India

1.1.1 Telecommunications services prior to 1990s

The history of Indian telecommunications can be traced back to the introduction of telegraph by the then British rulers in mid of nineteenth century. In 1850, the first experimental electric telegraph line was started between Calcutta and Diamond Harbour. At that time the Posts and Telegraphs department occupied a small corner of the Public Works Department in the government.

Some of the major milestones achieved in telecommunications in India till 1990s are listed as under:

Table No. 1.1: Major achievements in Telecom in India till 1990s

Year	Landmark event or Milestone achieved
1850	First experimental electrical telegraph line between Calcutta and Diamond harbor
1853	Work on erecting telegraph lines between important Indian cities was started
1854	A separate department was created when telegraph facilities were opened to the public
1882	Telephone exchanges opened in Calcutta, Bombay and Madras
1907	First Central Battery of telephones introduced in Kanpur
1913-14	First Automatic Exchange installed in Shimla
1933	Radiotelephone system inaugurated between the UK and India.
1953	12 channel carrier system introduced
1960	First STD route commissioned between Lucknow and Kanpur
1975	First PCM system commissioned between Mumbai City

- and Andheri telephone exchanges.
- 1976 First digital microwave junction system
- 1979 First optical fibre system for local junction commissioned at Pune
- 1980 First satellite earth station for domestic communications established at Sikandarabad , U.P.
- 1983 First analogue Stored Programme Control exchange for trunk lines commissioned at Mumbai.
- 1984 C-DOT established for indigenous development and production of digital exchanges.
- 1985 Separation of Department of Telecom from erstwhile Indian Post & Telegraph department
- 1986 Mahanagar Telephone Nigam Limited was carved out of DoT to provide telecom services in Mumbai and Delhi only.
- 1986: Videsh Sanchar Nigam Limited was carved out of DoT for providing international long distance service
- 1989 Telecom Commission was set up with administrative and financial powers of the Government of India to deal with various aspects of Telecommunications

(Source: Telecom Laws & Regulation handbook, Vol.1, IBP, USA and www.dot.gov.in)

1.1.2 Major achievements in telecommunications since 1990s

Recognizing telecom services as an important tool for socio-economic development for the nation, government of India initiated process of liberalisation of telecom sector in early 1990s. Indian telecommunication sector has undergone a major process of transformation through significant policy reforms, particularly beginning with the announcement of NTP 1994 and was subsequently re-emphasized and carried forward under NTP 1999. Driven by various policy initiatives, the Indian telecom sector witnessed a complete transformation in the last two decades. It has achieved a phenomenal growth during the last few years and is poised to take a big leap in the future also.

Some of the major milestones achieved in telecommunication since 1990s are as under:

Table No. 1.2: Major achievements in Telecom in India since 1990s

Year	Landmark Event or Milestone achieved
1991	Telecom equipment manufacturing was delicensed in 1991 in pursuit of process of liberalization undertaken by the country with the announcement of the New Economic Policy in July 1991.
1992	Value Added Services were declared open to the private sector in 1992, following which radio paging, cellular mobile and other value added services were opened gradually to the private sector.
1994	Government announced the National Telecom Policy, 1994 which defined certain important objectives, including availability of telephone on demand, provision of world class services at reasonable prices, improving India's competitiveness in global market and promoting exports, attractive FDI and stimulating domestic investment, ensuring India's emergence as major manufacturing / export base of telecom equipment and universal availability of basic telecom services to all villages.
1995	Mobile services were launched first time in India at Kolkata by Modi Telstra "MobileNet"
1995	VSNL started providing Internet services to the public for first time in India on 15 th August, 1995.
1997	The Telecom Regulatory Authority of India (TRAI) was to regulate telecom services, including fixation/revision of tariffs for telecom services.
1998	Internet service was opened for private participation with a view to encourage growth of Internet and increase its penetration.
1999	The most important milestone and instrument of telecom reforms in India was the New Telecom Policy 1999 (NTP 99) which became effective from 1st April 1999. NTP-99 laid down a clear roadmap for future reforms, contemplating the opening up of all the segments of the telecom sector for private sector

- 2011 participation. It clearly recognized the need for strengthening the regulatory regime as well as restructuring the departmental telecom services to that of a public sector corporation so as to separate the licensing and policy functions of the Government from that of being an operator. It also recognized the need for resolving the prevailing problems faced by the operators so as to restore their confidence and improve the investment climate.
- 2017
- 1999 Migration of cellular licenses from fixed license fee regime to revenue sharing scheme was permitted
- 2015
- 1999 TRAI issued Telecommunication Tariff Order, 1999 which initiated the process of tariff balancing with a view to bring them closer to the costs.
- 1999 Department of Telecom Services (and later Department of Telecom Operations) was created for service provisioning works while DoT will continue to do policy and licensing functions
- 2000 Telecommunications Dispute Settlement and Appellate Tribunal (TDSAT) was set up to take over the adjudicatory and disputes functions from TRAI.
- 2000 National Long Distance was opened for private participation when Government announced on 13.08.2000 the guidelines for entry of private sector in National Long Distance Services without any restriction on the number of operators.
- 2000 BSNL came into existence w.e.f. 1st October 2000 by taking over service provisioning functions from DTS/DTO
- 2002 International long distance service was opened for private competition
- 2002 BSNL started providing cellular mobile services
- 2002 The Universal Service Obligation Fund was set up which was to be used exclusively for meeting the Universal Service Obligation.
- 2003 Unified Access License regime was introduced in November, 2003.
- 2004 Broadband Policy was announced in October 2004.
- 2008 TRAI abolished Access deficit Charge regime (ADC) for all calls w.e.f. 1st October, 2008

- 2011 Intra service area mobile number portability launched in January
- 2012 National Telecom Policy (NTP) 2012 was unveiled by DoT with objectives of provisioning of broadband on demand by 2015, high speed broadband access to all village panchayats by 2014, strive to create One Nation - One License across services and service areas, achieve One Nation - Full Mobile Number Portability and work towards One Nation - Free Roaming and many other initiatives for giving further impetus and push to telecom growth in India.
- 2015 Inter service area mobile number portability implemented in July

(Source: www.dot.gov.in and www.trai.gov.in)

1.1.3 Status of Telecom Sector today

The Indian Telecommunications network with 1029.34 million connections (as on 3rd October, 2015) is the second largest in the world after china (DoT Annual report 2014-15). The sector has been growing rapidly since last few years and this rapid growth has been possible due to various proactive and positive decisions of the Government and contribution of both by the public and the private sectors. The rapid strides in the telecom sector have been facilitated by liberal policies of the Government that provides easy market access for telecom equipment and a fair regulatory framework for offering telecom services to the Indian consumers at affordable prices. Presently, all the telecom services have been opened for private participation.

The status of telecom services in India as on 31st October, 2015 is as under:

Table No. 1.3: Status of Telecom services as on 31.03.2015

	Wireless	Wireline	Total
Total telephone subscribers (in Million)	1,003.49	25.85	1,029.34
Urban Telephone Subscribers (in Million)	578.11	21.14	599.25
Rural Telephone Subscribers (in Million)	425.38	4.71	430.09

Overall Tele-density	79.39	2.05	81.44
Urban Tele-density	147.19	5.38	152.58
Rural Tele-density	48.83	0.54	49.37
#Broadband Subscribers (Million)	108.95	16.27	125.22

(Source: Press release 74/2015 issued by TRAI)

1.2 Introduction to Bharat Sanchar Nigam Limited

Bharat Sanchar Nigam Limited was incorporated on 15th September 2000 under the Companies Act, 1956 with registered and corporate office at New Delhi. It took over the business of providing telecom services and network management from the erstwhile Central Government's Department of Telecom Services (DTS) and Department of Telecom Operations (DTO), with effect from 1st October, 2000 on going concern basis. It is one of the largest & leading public sector unit providing comprehensive range of telecom services in India.

BSNL has installed Quality Telecom Network in the country & now focusing on improving it, expanding the network, introducing new telecom services with ICT applications in villages & winning customer's confidence.

BSNL is the only service provider, making focused efforts & planned initiatives to bridge the rural-urban digital divide in ICT sector. In fact there is no telecom operator in the country to beat its reach with its wide network giving services in every nook & corner of the country & operates across India except New Delhi & Mumbai. Whether it is inaccessible areas of Siachen glacier or North-Eastern regions of the country, BSNL serves its customers with a wide bouquet of telecom services namely Wireline, CDMA mobile, GSM mobile, Internet, Broadband, MPLS-VPN, VSAT, VoIP, IN Services, FTTH, etc.

BSNL is one of the leading service provider in all services in its license area. The company offers wide ranging & most transparent tariff schemes designed to suit every customer.

BSNL has set up a world class multi-gigabit, multi-protocol convergent IP infrastructure that provides convergent services like voice, data & video through the same Backbone & Broadband access network.

The vision and mission statement of the company are as under:

VISION:

- Be the leading telecom service provider in India with global presence.
- Create a customer focused organization with excellence in customer care, sales and marketing.
- Leverage technology to provide affordable and innovative telecom services/products across customer segments.

MISSION:

- (a) Be the leading telecom service provider in India with global presence.
- Generating value for all stakeholders - employees, shareholders, vendors & business associates
 - Maximizing return on existing assets with sustained focus on profitability
 - Becoming the most trusted, preferred and admired telecom brand
 - To explore International markets for Global presence

- (b) Creating a customer focused organization with excellence in customer care, sales & marketing
- Developing a marketing and sales culture that is responsive to customer needs, customer care, sales & marketing
 - Excellence in customer service-”friendly, reliable, time bound, convenient and courteous service”
- (c) Leveraging technology to provide affordable and innovative products/ services across customer segments
- Offering differentiated products/services tailored to different service segments
 - Providing reliable telecom services that are value for money
- (d) Providing a conducive work environment with strong focus on performance
- Attracting talent and keeping them motivated
 - Enhancing employees skills and utilizing them effectively
 - Encouraging and rewarding individual and team/group performance
- (e) Establishing efficient business processes enabled by IT
- Changing policies and processes to enable transparent, quick and efficient decision making
 - Building effective IT systems and tools

Objectives of the BSNL are as under:

- To be the Leading Telecom Services provider by achieving higher rate of growth so as to become a profitable enterprise.
- To provide quality and reliable fixed telecom service to our customer and thereby increase customers confidence.
- To provide customer friendly mobile telephone service, with focus on Value added service and data services, of high quality and play a leading role as GSM operator in its area of operation.
- Strategy for
 - Rightsizing the manpower
 - Providing greater customer satisfaction
- Contribute towards
 - Broadband customers base in India as envisaged in draft National Telecom Policy 2011.
 - Providing broadband connectivity to 2.5 lakhs Village Panchayats as per Government Policy
- To leverage the existing infrastructure of BSNL for facilitating implementation of other government programmes and initiatives particularly in the rural areas.
- To look for the opportunity of possible expansion of BSNL footprint globally by exploring international telecom in developing markets such as Africa.

The business profile of BSNL encompasses a gamut of telecommunication services being provided through state of the art telecom network technologies. These can be summarized as under:

Table No. 1.4: Services being provided by BSNL

Mobile Services

GSM :- 2G, GSM 3G

CDMA :- Mobile, CDMA Fixed and CDMA Data Card Services

Enterprise Business

Enterprise Voice and Mobility:- EPABX, Voice

VPN, ISDN/PRI/BRI, Centrex, 2G/3G Mobile, Blackberry services

Internet Data Centre Services:- IDC Overview,

Managed Co-location services, Managed/Hosting Services, Managed IT Services, Cloud Services(PCaaS)

Enterprise Data Services:- Leased Circuit (DLC),

MPLS VPN, Internet Leased Line, VSAT, VPN Services (Over BB, CDMA/3G)

Enterprise Broadband:- Wi-Max, Wi-Fi, EVDO, DSL Broadband/FTTH Broadband

Managed Services:- Managed Network Services (MNS), Managed Global Audio Conferencing, Managed SaaS(Mail), Internet Data Centre

Other Enterprise Services:- Web Co-location, Fleet Tracking, Video Conferencing(VC), Video Surveillance, Web Hosting, USOF Project and host of other innovative Enterprise Business Solution Services

(Source: BSNL annual report 2014-15 and www.bsnl.co.in)

Broadband Services

Landline Broadband

3G Mobile Broadband

GSM Wi-Fi

WiMAX Broadband

Dial up Internet (DIAS)

Fiber Broadband(FTTH)

CDMA Broadband :- EVDO Prepaid, EVDO Postpaid, EVDO Router.

Landline Services

Telephone Lines, FLPP B-fone, Phone plus services

Intelligent Network Services:-

Universal ITC, UAN service, Toll free numbers /services, VPN service, Televoting services

BSNL PCO:- FLPP-PCO

PRI/BRI/Dial-up Internet:- Dial up internet, ISDN PRI, ISDN BRI

Bharat Sanchar Nigam Limited came into existence on 01.10.2000. The existing telecom network along with staff pertaining to DTS/DTO was transferred to BSNL w.e.f. 01.10.2000. As on August, 2000, DTS/DTO had 238 lakh direct exchange lines (fixed telephones), switching capacity of 292.2 lakh lines, OF cable route KM of 1,85,000 Km and 3.63 lakh employees. The revenue achieved by DTS/DTO for the year 1999-2000 was Rs. 18250/- crores. Since then BSNL has expanded its network through different technological platforms for providing different types of services to customers. The network status of BSNL as on 31st March, 2015 is as under:

Table No. 1.5: Network status of BSNL as on 31.03.2015

Sr. No.	Item	Unit	Status as on 31.03.2014	Status as on 31.03.2015	Net achievement during 2014-15
1.	Total Telephone Connections	Lakh connections	1131.37	932.40	- 198.98
1(a)	Wireline	....do....	184.88	164.12	- 20.76
1(b)	WLL	....do....	22.49	19.85	- 2.64
1(c)	Mobile	....do....	924.00	748.42	- 175.58
2	Total Switching Capacity	Lakh lines	1275.31	1320.29	44.99
2(a)	Wireline	....do....	383.99	376.89	- 7.11
2(b)	WLL	....do....	84.54	83.64	- 0.90
2(c)	Mobile	....do....	806.78	859.78	52.99
3(a)	Broadband Wireline	Lakh connections	99.65	99.09	- 0.56
3(b)	FTTH	Nos	25,146	41,584	16,438
3(c)	EVDO connections	Nos	93,671	86,024	- 7647
3(d)	Wi-Max connections	Nos	1,24,963	1,19,134	- 5829
3(e)	3G	Lakh connection	67.68	89.24	21.57
4	OF Cable	Route km	7,34,323	7,45,345	11,022

(Source: BSNL annual report 2014-15)

Some of the major achievements of BSNL from the time it came into existence on 01.10.2000 are as under:

Table No. 1.6: Major achievements of BSNL

Year	Milestone or landmark achieved
2002	Countrywide mobile services were launched.
2005	Broadband services were launched.
2009	Wireless broadband services using Wi-Max technology were launched in December, 2009.
2009	3G services were rolled out in March, 2009.
2013-14	MPLS based Next Generation Transport project completed for enhancing capacity of carrying internet traffic.
2015	Launched free incoming call facility for BSNL mobile customers while roaming all across the country w.e.f. 15.06.2015.

(Source: BSNL annual reports and www.bsnl.co.in)

BSNL had been a profit making company till financial year 2008-09. From financial year 2009-10 and onwards, BSNL has been incurring huge losses. The revenue and net profit figures for BSNL since it came into existence are as under:

Table No. 1.7: BSNL's revenues and profit status

Sl. No.	Financial year	Revenue from operations (in Rs. Crores)	Net Profit (in Rs. Crores)
1.	2000-01 (six months only)	11596	747
2.	2001-02	24299	6312
3.	2002-03	25293	1444
4.	2003-04	31399	5976
5.	2004-05	33450	10183
6.	2005-06	36139	8939
7.	2006-07	34616	7805
8.	2007-08	32842	3009
9.	2008-09	30169	574
10.	2009-10	27913	-1822
11.	2010-11	27045	-6384
12.	2011-12	25998	-8850
13.	2012-13	25655	-7884
14.	2013-14	26153	-7019
15.	2014-15	27242	-8234

(Source: BSNL's financial statements and annual reports from 2000-01 to 2014-15)

1.3 Statement of the Problem

Bharat Sanchar Nigam Limited (BSNL) came into existence on 01.10.2000 when Government of India corporatised the service provisioning functions of Department of Telecommunications into a public sector enterprise.

BSNL is a leading telecom service provider of the country and provides a gamut of telecom services like landline, mobile (2G, 3G, Wi-Max, CDMA), Broadband, Intelligent network, enterprise business etc.

BSNL also provides telecom services in non-remunerative areas like rural/tribal/hilly areas where other telecom service providers are reluctant to enter into.

Since its inception, BSNL had been a profit making company up to the financial year 2008-09. However, from financial year 2009-10, BSNL has been incurring heavy losses.

1.4 Objectives of the Research

The objectives of this research study/work are as under:

- To study and analyse the financial performance of BSNL over the period of last 10 years from 2005-06 to 2014-15.
- To identify the areas of concern in the financial performance of BSNL
- To suggest remedial measures for way forward

1.5 Rationale of the study

BSNL is the only pan-India (except in Delhi and Mumbai) public sector Telecom Service Provider operating in a highly competitive environment and sector of strategic importance of Indian economy. BSNL is providing all types of telecom services like Fixed Telephony, Broadband, Internet, Mobile Telephony, Leased Circuits, National Long

Distance, International Long Distance, Intelligent Network services, Managed Network Service, Services for Enterprises and so on. Since its inception, BSNL has been playing an important role in keeping telecom tariffs to affordable and lowest level in the country due to its sheer presence in the nook and corner of the country apart from providing a quality alternative as an operator to choose from for provision of telecom services. Further, BSNL is providing telecom services in non-remunerative areas like rural/tribal/hilly areas and thereby doing a great social service to the nation in making telecom services accessible to weaker sections of the society. BSNL is also playing an important role in the execution of GoI's ambitious Digital India Programme, aiming to transform India into a digitally empowered society.

BSNL has been making heavy losses during last six years and the deteriorating financial condition of BSNL has been a matter of concern for the management, Government of India, and also for the employees, customers, general public and other stakeholders. A loss making and cash starved BSNL would find itself in a difficult situation to fund investments for expansion of existing telecom network and/or induct new technology equipments to compete effectively with the private operators.

Therefore, a financially sound BSNL is in the interest of nation and all stakeholders including general public.

The study aims to analyse the financial performance of BSNL over a period of 10 years so as to identify areas of concern and suggest remedial measures for way forward.

1.6 Research Questions

The study is intended to address following research questions:

1. What are the areas of concern in the financial performance of the BSNL during last ten years?
2. What are the remedial measures which may lead to improvement in the respective areas of concern as way forward?

1.7 Research Methodology

The research methodology followed for the present study/research work is as under:

- The research is exploratory and analytical in nature, wherein the data from secondary sources like Financial Statements/Annual reports of BSNL, websites of DoT/TRAI/BSNL, periodicals, authentic Website sources etc. on the subject will be collected.
- Apart from descriptive analysis of the data collected and information gathered, tools like ratio analysis, trend analysis etc. will be utilised to carry out analysis of financial performance of BSNL to find out areas of concern and conclusions shall be drawn accordingly.
- Relevant Liquidity, Activity, Leverage and Profitability ratios shall be calculated to reveal information about the changes in the financial condition of BSNL over the period of study.
- Trend lines for key items in the financial statements i.e. revenues, expenses for staff etc. over 10 year time period will drawn to know whether the financial health of BSNL is improving in the course of time or it is deteriorating.

1.8 Scope/Limitations/Delimitations

The scope of this study shall be descriptive and analytical in nature and it is subjected to following limitations:

- The study covers 10 years period from 2005-06 to 2014-15 for analyzing financial performance of the BSNL.
- The secondary data used in this study/research work have been taken from financial statements/annual reports of BSNL which are available on its website www.bsnl.co.in.
- As per requirement of the study, some data have been grouped and sub-grouped for presenting the information in desired manner.
- Financial tools like ratio analysis and trend analysis have been use utilized to identify areas of concern in the financial performance of BSNL.
- The study is limited to identifying areas of concern in the financial performance of BSNL through analysis of financial statements and information contained in the financial statements/annual reports only. The study do not intend to look into managerial, operational and strategic issues which also might have contributed to the deteriorating financial condition of the BSNL during last ten years.
- The study is limited to identifying areas of concern in the financial performance of BSNL without resorting to comparison with other firms operating in the telecom sector. Such comparative study could be matter of future research for those who may be interested in the subject.