

## PRE REFORM PERIOD & FUTURE GROWTH OPPORTUNITIES OF INDIAN TELECOM SECTOR

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### **Introduction:**

Before 1990's Telecommunication services in India were complete government Monopoly - the Department of Telecommunication (DoT). Government also retained the rights for manufacturing of Telecommunication equipments. MTNL and VSNL were created in the year 1986. Early 1990's saw initial attempts to attract private investment.

### **Telecommunication in India:**

Telecommunication equipment manufacturing was delicensed in the year 1991. A notable revolution has occurred in the telecom sector. In the pre reforms era, this was entirely in the hands of the central government and due to lack of competition, the call charges were quite high. Further, due to lack of funds with the government, the government could never meet the demand for telephones. In fact, a person seeking a telephone connection had to wait for years before he could get a telephone connection. The service rendered by the government monopoly was also very poor. Wrong billing, telephones lying dead for many days continuously due to slackness on the part of the telecom staff to attend to complaints, cross connections due to faulty / ill maintained telephone lines, obsolete instruments and machinery in the telephone department were the order of the day in the pre reforms era.

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Today, there are many players in the telecom sector. The ultimate beneficiary has been the consumer. Prices of services in this sector have fallen drastically. Telephone connections are today affordable to everyone and are also easily available. Gone are the days, when one had to wait for years to get a telephone connection. The number of telephone connections which was only 2.15 million (fixed lines) in 1981 increased to 5.07 million (fixed lines) in 1991. as in 2003), there are 54.62 million telephone connections of which 41.33million are fixed line telephone connections, 12.69 million are cellular mobiles and the remaining 0.60 million are WLL telephones as in 2003. Wireless in Local Loop (WLL) telephones and cellular mobile telephones were unknown in India a few years ago. Cell phones charges have come down so much that today one can see even a common man going around with a cell phone in his hand. The private companies are giving various incentives to attract customers, a situation which is entirely opposite to the conditions prevailing in the pre reforms era when one had to wait for years to get a telephone connection. The first step toward deregulation and beginning of liberalization and private sector participation was the announcement of National Telecom Policy 1994.NTP 1994 , for the first time, allowed private/foreign players to enter the 'basic' and the new cellular mobile section. FDI up to 49% of total equity was also allowed in these sectors. The policy allowed one private service provider to compete in basic services with the incumbent DoT in each DoT internal circle. It allowed duopoly in cellular mobile services in each circle. As part of the implementation of the NTP 94, licenses were issued against license fees through a bidding process. This policy initiated the setting up of an independent regulator—the Telecom Regulatory Authority of India (TRAI), which was established in 1997. The main objective of TRAI is to provide an effective regulatory framework to ensure fair competition while, at the same time, protect the interest of the consumers. Liberalization and reforms in Telecom sector since early 1990's till date are briefed below:

**1991-92:**

1. On 24th July 1991, Government announced the New Economic Policy.
2. Telecom Manufacturing Equipment license was delicensed in 1991.
3. Automatic foreign collaboration was permitted with 51 per cent equity by the collaborator.

**1992-93:**

Value added services were opened for private and foreign players on franchise or license basis. These included cellular mobile phones, radio paging, electronic mail, voice mail, audio text services, video text services, data services using VSAT.s, and video conferencing.

**1994-95:**

1. The Government announced a National Telecom Policy 1994 in September 1994. It opened basic telecom services to private participation including foreign investments.
2. Foreign equity participation up to 49 per cent was allowed in basic telecom services, radio paging and cellular mobile. For value added services the foreign equity cap was fixed at 51 percent.
3. Eight cellular licenses for four metros were finalized.

**1996-97:**

1. TRAI was set up as an autonomous body to separate the regulatory functions from policy formulations and operational functions.
2. Coverage of the term "infrastructure" expanded to include telecom to enable the sector to avail of fiscal incentives such as tax holiday and concessional duties.
3. An agreement between Department of Telecommunication (DoT) and financial institutions to facilitate funding of cellular and basic telecom projects.
4. External Commercial Borrowing (ECB) limits on telecom projects made flexible with an increased share from 35 per cent to 50 per cent of total project cost.
5. Internet Policy was finalized.

**1998-99:**

FDI up to 49 per cent of total equity, subject to license, permitted in companies providing Global Mobile Personal Communication (GMPC) by satellite services.

**1999-2000 :**

1. National Telecom Policy 1999 was announced which allowed multiple fixed Services operators and opened long distance services to private operators.
2. TRAI reconstituted: clear distinction was made between the recommendatory and regulatory functions of the Authority.
3. DOT/MTNL was permitted to start cellular mobile telephone service.
4. To separate service providing functions from policy and licensing functions, Department of Telecom Services was set up.

5. A package for migration from fixed license fee to revenue sharing offered to exist cellular and basic service providers.
6. First phase of re-balancing of tariff structure started. STD and ISD charges were reduced by 23 per cent on an average.
7. Voice and data segment was opened to full competition and foreign ownership increased to 100 per cent from 49 per cent previously.

**2000-01:**

1. TRAI Act was amended. The Amendment clarified and strengthened the recommendatory power of TRAI, especially with respect to the need and timing of introduction of new services provider, and in terms of licenses to a services provider.
2. Department of Telecom Services and Department of Telecom operations corporatized by creating Bharat Sanchar Nigam Limited.
3. Domestic long distance services opened up without any restriction on the number of operators.
4. Second phase of tariff rationalization started with further reductions in the long distance STD rates by an average of 13 per cent for different distance slabs and ISD rates by 17 per cent.
5. Internet Service Providers were given approval for setting up of International Gateways for Internet using satellite as a medium in March 2000.
6. In August 2000, private players were allowed to set up international gateways via the submarine cable route.
7. The termination of monopoly of VSNL in International Long Distance services was antedated to March 31, 2002 from March 31, 2004.

**2001-02:**

1. Communication Convergence Bill, 2001 was introduced in August 2001.
2. Competition was introduced in all services segments. TRAI recommended opening up of market to full competition and introduction of new services in the telecom sector. The licensing terms and conditions for Cellular Mobile were simplified to encourage entry for operators in areas without effective competition.
3. Usage of Voice over Internet Protocol permitted for international telephony service.
4. The five-year tax holiday and 30 per cent deduction for the next five years available to the telecommunication sector till 31st March 2000 was reintroduced for the units commencing their

operations on or before 31st March 2003. These concessions were also extended to internet services providers and broadband networks.

5. Thirteen ISP's were given clearance for commissioning of international gateways for Internet using satellite medium for 29 gateways.

6. License conditions for Global Mobile Personal Communications by Satellite finalized in November 2001.

7. National Long Distance Service was opened up for unrestricted entry with the announcement of guidelines for licensing NLD operators. Four companies were issued Letter of Intent (LOI) for National Long Distance Service of which three licenses have been signed.

8. The basic services were also opened up for competition. 33 Basic Service licenses (31 private and one each to MTNL and BSNL) were issued up to 31st December 2001.

9. Four cellular operators, one each in four metros and thirteen were permitted with 17 fresh licenses issued to private companies in September/October 2001. The cell phone providers were given freedom to provide, within their area of operation, all types of mobile services equipment, including circuit and/or package switches that meet the relevant International Telecommunication Union (ITU)/ Telecom Engineering Centre (TEC) standards.

10. Wireless in Local Loop (WLL) was introduced for providing telephone connection in urban, semi-urban and rural areas.

11. Disinvestment of PSU's in the telecom sector was also undertaken during the year. In February 2002, the disinvestment of VSNL was completed by bringing down the government equity to 26 per cent and the management of the company was transferred to Tata Group, a strategic partner. During the year, HTL was also disinvested.

12. Government allowed CDMA technology to enter the Indian market.

13. Reliance, MTNL and Tata were issued licenses to provide the CDMA based services in the country.

14. TRAI recommended deregulating regulatory intervention in cellular tariffs, which meant that operators need no longer have prior approval of the regulator for implementing tariff plans except under certain conditions.

### **2002-03;**

1. International long distance business opened for unrestricted entry.

2. Telephony on internet permitted in April 2002.

3. TRAI finalized the System of Accounting Separation (SAS) providing detailed accounting and financial system to be maintained by telecom service providers.

**2003-04;**

1. Unified Access Service Licenses regime for basic and cellular services was introduced in October 2003. This regime enabled services providers to offer fixed and mobile services under one license. Consequently 27 licenses out of 31 licenses converted to Unified Access Service Licenses.

2. Interconnection Usage Charge regime was introduced with the view of providing termination charge for cellular services and enable introduction of Calling Party Pays regime in voice telephony segment.

3. The Telecommunication Interconnection Usage Charges Regulation 2003 was introduced on 29th October 2003 which covered arrangements among service providers for payment of Interconnection Usage Charges for Telecommunication Services and covered Basic Service that includes WLL (M) services, Cellular Mobile Services, and Long Distance Services (STD/ ISD) throughout the territory of India.

4. The Universal Service Obligation fund was introduced as a mechanism for transparent cross subsidization of universal access in telecom sector. The fund was to be collected through a 5 percent levy on the adjusted gross revenue of all telecom operators.

5. Broadcasting notified as Telecommunication services under Section 2(I) (k) of TRAI Act.

**2004-05:**

1. Budget 2004-05 proposed to lift the ceiling from the existing 49 percent to 74 per cent as an incentive to the cellular operators to fall in line with the new unified licensing norm.

2. 'Last Mile' linkages permitted in April 2004 within the local area for ISP's for establishing their own last mile to their customers.

3. Indoor use of low power equipments in 2.4 GHz band de-licensed from August 2004.

4. Broadband Policy announced on 14th October 2004. In this policy, broadband had been defined as an "always-on" data connection supporting interactive services including internet access with minimum download speed of 256 kbps per subscriber.

5. The Telecommunications (Broadcasting and Cable Services) Interconnection Regulation 2004 was introduced on 10th December 2004.

6. BSNL and MTNL launched broadband services on 14th January 2005.

7. TRAI announced the reduction of Access Deficit Charge (ADC) by 41 percent on ISD calls and by 61 per cent on STD calls which were applicable from 1st February 2005.

#### **2005-2006;**

1. Budget 2005-2006 cleared a hike in FDI ceiling to 74 per cent from the earlier limit of 49 per cent. 100 per cent FDI was permitted in the area of telecom equipment manufacturing and provision of IT enabled services.

2. Annual license fee for National Long Distance (NLD) as well as International Long Distance (ILD) licenses reduced to 6 per cent of Adjusted Gross Revenue (AGR) with effect from 1st January 2006.

3. BSNL and MTNL launched the 'One-India Plan' with effect from 1st March 2006 which enable the customers of BSNL and MTNL to call from one end of India to other at the cost of Rs. 1 per minute, any time of the day to phone.

4. TRAI fixed Ceiling Tariff for International Bandwidth, Ceiling Tariff for higher capacities reduced by about 70 per cent and for lower capacity by 35 percent.

5. Regulation on Quality of Service of Basic and Cellular Mobile Telephone Services 2005 introduced on 1st July 2005.

6. BSNL announced 33 per cent reduction in call charges for all the countries for international calls.

7. Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2006 introduced on 21st March 2006.

#### **Future Growth Opportunities of Indian Telecom Sector**

As per TRAI, two other associated aspects for market growth are availability of spectrum and availability of resources for network rollout and expansion. The government is currently looking into these two areas. The 79% hike in FDI has been cleared by the government to ensure continuous flow of investments to expand the reach of the mobile operators. To realize full market potential and achieve the forecasts, telecom operators have to work on a segmented approach and focus on the five key strategies given below:

- Mobile in the hand of every urban youth (age group 15 to 24 years).
- Mobile in the hand of every executive/businessman/ skilled worker.
- Mobile in every household with income above Rs. 4000.

- Mobile penetration in every town/village, with a population of over 3,000.
- Mobile Phones affordable and available wherever mobile services available.

(Source: [www.indiamba.com/Faculty/FC701/fc701.html](http://www.indiamba.com/Faculty/FC701/fc701.html))

### **Growth of Telecom Sector in Punjab**

However, it is not going to be easy and needs support in several areas:

- To ensure that every youth has a mobile, service providers have to offer services like SMS/MMS at low cost/free and ensure that the total mobile bill for the youth does not cross Rs.300-400 per month, which is the maximum this segment of customers can afford from their pocket money.
- In the same way, for executives/businessmen, to tap the full potential, it is essential that services like Closed User Group, National Closed User Groups, low STD/ISD rates, fixed cost for Network calling etc., are offered so that they can lap up the services and go mobile soon.
- To ensure that every household has a mobile connection, it is essential that the utility of mobile phones is increased through better STD and ISD rates vis-à-vis landline, friends and family offers, special rates to landlines etc., with easy/low deposit schemes to acquire these facilities.
- To ensure that the penetration targeted in towns and villages is achieved, service providers have to invest in network expansion and reach out on priority; to exploit the untapped potential in these markets.
- To expand the network to a large number of towns and villages by all the operators, network sharing should be allowed by BSNL and the government should allow 74% FDI in mobile companies for easy access to funds.



### References-

- Ahn, J.H., Han, S.P., and Lee. U.S. (2006), "Customer churn analysis: Churn determinants and mediation effects of partial defection in the Korean mobile telecommunications service industry", Telecommunications Policy, Volume 30, Pages 552-568.
- Akwule R U (1992), "Telecommunications in Kenya; Development and policy issue" in telecommunication policy, sept- oct.pp.603-11.
- Amanjyot singh (2005), "Customer satisfaction and quality audit report of Escotel mobile communication limited and suggested that for maximizing the service quality in service industries the relationship between the dealers and customers "
- Anita S., Momaya K., Gupta H.M.(2005) "E-Service Delivery in Cellular Mobile Communication", Global Journal of e-Business and Knowledge Management 2005, Vol. 2, No. 2, pp 30-42.
- Anita seth (2007), "quality of service parameters in cellular mobile communication", international journal of mobile communications, vol-5, issue 1, jan-2007.
- Aul (2001) "Liberalised reforms in the country has been on banking and Telecommunication sector"
- B.J.Pine II, Mass customization (Boston, Mass; Harward Business School Press,1993), and D.Peppers and M.Rogers, The one to one Future (Newyork;currency/doubleday,19930) .
- Balachandran ( 2004) , "Customer driven service marketing" 2nd , Response books.  
Ball, D.A., Wendell, H., Paul, L., Michael, J. & Michael, S., 2002,