

Telecom Industry in India

1. INDUSTRY OVERVIEW

1.1 Background

The Indian Telecommunications network is the third largest in the world and the second largest among the emerging economies of Asia. Today, it is the fastest growing market in the world. The telecommunication sector continued to register significant success during the year and has emerged as one of the key sectors responsible for India's resurgent India's economic growth.

1.1.1 Growth

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 sector. The rapid strides in the telecom sector have been facilitated by liberal policies of the Government that provide easy market access for telecom equipment and a fair regulatory framework for offering telecom services to the Indian consumers at affordable prices.

1.1.2 Wireline Vs Wireless

It has also undergone a substantial change in terms of mobile versus fixed phones and public versus private participation. The preference for use of wireless phones has also been predominant in the sector.

Participation of the private entities in the telecom sector is rapidly increasing rate there by presenting the enormous growth opportunities. There is a clear distinction between the Global Satellite Mobile Communication (GSM) and Code Division Multiple Access (CDMA) technologies used and the graph below shows the divide between the two.

1.2 Segment wise Status

1.2.1 Wireline Services

With increasing penetration of the wireless services, the wireline services in the country is becoming stagnant.

On the other hand, Broadband demand has picked up and promises to stabilise fixed line growth.

1.2.2 GSM Sector

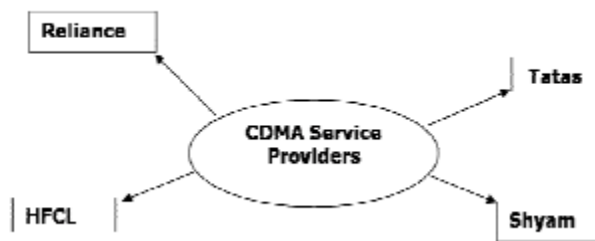


In terms of the Global System for Mobile Communication (GSM) subscriber base this now places India third after China and Russia. China had 401.7 million GSM subscribers

1.2.3 CDMA Services

CDMA technology was introduced in India as a limited mobility solution. The introduction of CDMA services has created competition, lowered tariffs and offered many citizens access to communication services for the first time

1.2.4 Internet Services



Internet services were launched in India on August 15, 1995. In November 1998 the government opened up the sector to private operators. A liberal licensing regime was put in place to increase Internet penetration across the country.

The growth of IP telephony or grey market is also a serious concern.

Government loses revenue, while unlicensed operation by certain operators violates the law and depletes licensed operators market share.

New services like IP-TV and IP-Telephony are becoming popular with the demand likely to increase in coming years. The scope of services under existing ISP license conditions are unclear.

1.3 Manufacture of Telecom Equipment

Rising demand for a wide range of telecom equipment, particularly in the area of mobile telecommunication, has provided excellent opportunities to domestic and foreign investors in the manufacturing sector. The last two years saw many renowned telecom companies setting up their manufacturing base in India. Ericsson has set up GSM Radio Base Station Manufacturing facility in Jaipur. Elcoteq has set up handset manufacturing facilities in Bangalore. Nokia set up its manufacturing plant in Chennai. LG Electronics set up plant of manufacturing GSM mobile phones near Pune.

The Government has already set up Telecom Equipment and Services Export Promotion Forum and Telecom Testing and Security Certification Centre (TETC). A large number of companies like Alcatel, Cisco have also shown interest in setting up their R&D centers in India. With above initiatives India is expected to be a manufacturing hub for the telecom equipment.

2 POLICY AND INITIATIVES

2.1 Regulatory Framework

The Telecom Regulatory Authority of India (TRAI) was set up in March 1997 as a regulator for Telecom sector. The TRAI's functions are recommendatory, regulatory and tariff setting in telecom sector.

Telecom Disputes Settlement and Appellate Tribunal (TDSAT) came into existence in May, 2000. TDSAT has been empowered to adjudicate any dispute –

- between a licensor and a licensee
- between two or more service providers
- between a service provider and a group of consumers
- hear and dispose of appeal against any direction, decision or order of TRAI

Tariffs for telecommunication services have evolved from a regime where tariffs were determined by Telecom Regulatory Authority of India to a regime where tariffs are largely under forbearance. TRAI intervenes by regulating the tariffs for only those services, the markets of which are not competitive.

Universal Service Obligation Fund (USOF) exclusively for meeting the Universal Service Obligation was established in April, 2002. The Universal Service Levy is presently 5 per cent of the Adjusted Gross Revenue (AGR) of all telecom service providers except the pure value added service providers like Internet, Voice Mail, E-Mail service providers etc. Indian Telegraph Act has been amended in October'2006 to provide support for all telegraph services including mobile and broadband to bridge the digital divide.

With the introduction of the Unified Access Licensing Regime, operators can offer telecom access services to consumers in a technology neutral manner, subject to fulfilling certain conditions. Introduction of this regime has also broken the legal/regulatory impasse between the cellular and basic service providers. Issuance of Intra-Circle Merger and Acquisition Guidelines provide investors an opportunity to take stakes in existing telecom operations.

2.2 Government Initiatives

The Government has taken the following main initiatives for the growth of the Telecom Sector:

- All telecom services have been opened up for free competition for unprecedented growth
- 217 (Information Technology Agreement) ITA-I items are at zero Customs Duty. Specified capital goods and all inputs required to manufacture ITA-I, items are at zero Customs Duty
- Availability of low cost mobile handsets

- The international Long Distance Services (ILDS) opened with effect from April 2002. Calling Party Pays (CPP) regime was implemented with effect from 1st May
- Guidelines for Unified Access Service License regime were issued in November 2003, 27 licenses out of 31 Basic Service Licenses were converted to Unified Access Service Licenses
- In April 2004, license fee for Unified Access Service Providers (UAS) was reduced by 2 per cent
- License fee for infrastructure Provider-II reduced from 15 per cent to 6 per cent of the Adjusted Gross Revenue and spectrum charges between 2 to 4 per cent in June 2004
- Entry fee for NLD licenses was reduced to Rs. 2.5 Crore from Rs. 100 Crore. Entry fee for ILD reduced to Rs. 2.5 Crore from Rs. 25 Crore
- Lease line charges have been reduced to make the bandwidth available at competitive prices to facilitate growth in IT enabled services
- One India plan i.e. single tariff of Re. 1/-per minute to anywhere in India was introduced from 1st March 2006 by the Public Sector Undertakings. This tariff was emulated by most of the private service providers also. This scheme has led to death of distance in telecommunication and is going to be instrumental in promoting National Integration further
- The robust telecom network has also facilitated the expansion of BPO industry that is having 500,000 employees now and adding 400 employees per day.
- Annual license fee for National Long Distance (NLD), International Long Distance (ILD), Infrastructure Provider-II, VSAT commercial and Internet Service Provider (ISP) with internet telephony (restricted) licenses was reduced to 6 per cent of Adjusted Gross Revenue (AGR) with effect from Jan 2006.
- The Government's policy is neutral on use of technology by telecom service providers subject to availability of scarce resources such as spectrum etc.
- Licence Fees 6-10 per cent of Adjusted Gross Revenue (AGR)

2.3 Foreign Direct Investment Policy

Foreign Direct Investment (FDI) was permitted in the telecom sector beginning with the telecom manufacturing segment in 1991 - when India embarked on economic liberalisation. FDI is defined as investment made by non-residents in the equity capital of a company. For the telecom sector, FDI includes investment made by Non-Resident Indians (NRIs), Overseas Corporate Bodies (OCBs), foreign entities, Foreign Institutional Investors (FIIs), American Depository Receipts (ADRs)/Global Depository Receipts (GDRs) etc.

Present FDI Policy for the Telecom sector:

- In Basic, Cellular Mobile, National Long Distance, International Long Distance, Value Added Services and Global Mobile Personal Communications by Satellite, FDI is limited to 49 per cent (under automatic route) subject to grant of licence from the Department of Telecommunications and adherence by the companies (who are investing and the companies in which investment is being made) to the licence conditions for foreign equity cap and lock-in period for transfer and addition of equity and other license provisions.

- Foreign Direct Investment up to 74 per cent permitted, subject to licensing and security requirements for the following:
 - Internet Service (with gateways)
 - Infrastructure Providers (Category II)
 - Radio Paging Service
- FDI up to 100 per cent permitted in respect to the following telecom services:
 - ISPs not providing gateways (Both for satellite and submarine cables)
 - Infrastructure Providers providing dark fibre (IP Category I)
 - Electronic Mail
 - Voice Mail

The above is subject to the following conditions:

- FDI up to 100 per cent is allowed subject to the condition that such companies would divest 26 per cent of their equity in favour of Indian public within 5 years, if these companies are listed in other parts of the world.
- The above services would be subject to licensing and security requirements, wherever required.
- Proposals for FDI beyond 49 per cent shall be considered by Foreign Investment Promotion Board (FIPB) on a case-to-case basis.
- In the manufacturing sector 100 per cent FDI is permitted under the automatic route.
- In Basic, Cellular Mobile, paging and Value Added service, and Global Mobile Personal Communications by Satellite, FDI is permitted up to 49 per cent (under automatic route) subject to grant of license from Department of Telecommunications
- Foreign direct investment up to 74 per cent permitted, subject to licensing and security requirements for the Internet Service (with gateways), Infrastructure Providers (category-II), Radio Paging Service
- FDI up to 100 per cent permitted in respect of
 - ISPs not providing gateways (both for satellite and submarine cables),
 - Infrastructure Providers providing dark fibre (IP Category I);
 - Electronic Mail; and
 - Voice Mail
- FDI up to 49 per cent is also permitted in an investment company, set up for making investment in the telecom companies licensed to operate telecom services. Investment by these investment companies in a telecom service company is treated as part of domestic equity and is not set off against the foreign equity cap.
- Manufacturing - 100 per cent FDI is permitted under automatic route.
- FDI is subject to the following conditions
- FDI up to 100 per cent is allowed subject to the conditions that such companies would divest 26 per cent of their equity in favour of Indian public in 5 years, if these companies are listed in other parts of the world.
- The above services would be subject to licensing and security requirements, Wherever required.
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3. COMPETITION OVERVIEW

3.1 Major Players

There are three types of players in telecom services:

- State owned companies (BSNL and MTNL)
- Private Indian owned companies (Reliance Infocomm, Tata Teleservices,)
- Foreign invested companies (Hutchison-Essar, Bharti Tele-Ventures, Escotel, Idea Cellular, BPL Mobile, Spice Communications)

Bharat Sanchar Nigam Limited (BSNL)

Name	Bharat Sanchar Nigam Limited (BSNL)
Year of Establishment	2000
Company Profile	Bharat Sanchar Nigam Ltd. is World's 7th largest Telecommunications Company providing comprehensive range of telecom services in India: Wireline, CDMA mobile, GSM Mobile, Internet, Broadband, Carrier service, MPLS-VPN, VSAT, VoIP services, IN Services etc. Within a span of five years it has become one of the largest public sector unit in India.
Global Presence/ Marketing Network	It has a network of over 45 million lines covering 5000 towns with over 35 million telephone connections.
Acquisitions / Strategic Alliances	
Future Prospect	BSNL plans to expand its customer base from present 47 millions lines to 125 million lines and infrastructure investment plan to the tune of Rs. 733 crores (US\$ 16.67 million) in the next three years.

Mahanagar Telephone Nigam Limited (MTNL)

Name	Mahanagar Telephone Nigam Limited (MTNL)
Year of Establishment	1986
Company Profile	MTNL was set up by the Government of India to upgrade the quality of telecom services, expand the telecom network, introduce new services and to raise revenue for telecom development needs of India.s key metros. MTNL with a market share of about 13% of the National telecom Network has a customer base of 5.92 million. The Govt. of India currently holds 56.25% stake in the company.
Acquisitions / Strategic Alliances	MTNL has formed a Joint Venture company in Nepal by the name of United Telecom Ltd. (UTL) in collaboration with Telecom Consultants India Limited (TCIL) in 2001 for providing WLL based basic services in Nepal. MTNL has set up its 100% subsidiary .Mahanagar Telephone Mauritius Limited. (MTML) in Mauritius, for providing basic, mobile and international long distance

Videsh Sanchar Nigam Limited (VSNL)

Name	Videsh Sanchar Nigam Limited (VSNL)
Year of Establishment	1986
Company Profile	The Videsh Sanchar Nigam Limited (VSNL) - a wholly Government owned corporation. The company operates a network of earth stations, switches, submarine cable systems, and value added service nodes to provide a range of basic and value added services and has a dedicated work force of about 2000 employees. VSNL's main gateway centers are located at Mumbai, New Delhi, Kolkata and Chennai.
Global Presence/ Marketing Network	The company has 52 subsidiaries in 21 countries as well as operations across four continents.

Acquisitions / Strategic Alliances	<p>VSNL acquired Nasdaq-listed Teleglobe International Holdings Ltd for \$239 million in 2005 Videsh Sanchar Nigam Ltd acquired Tyco Global Network, submarine cable system, for USD 130 million in 2005</p>
Future Prospect	<p>The company plans to expand its wholesale voices services across the EU, to effectively enable enterprise customers and retail voice carriers to connect to India. VSNL is adding its capacity to meet the overwhelming demand for connectivity to India in the wholesale voice services domain. The company is also offering flexible agreements and charging methods to meet the growing demands of the wholesale voice market</p>

Bharti

Name	Bharti
Year of Establishment	1985
Company Profile	<p>Bharti Tele-Ventures Limited was incorporated on July 7, 1995 for promoting investments in telecommunications services. Its subsidiaries operate telecom services across India. Bharti's operations are broadly handled by two companies: the Mobility group and the Infotel group.</p>
Global Presence/ Marketing Network	<p>The mobile business provides mobile & fixed wireless services using GSM technology across 23 telecom circles while the Airtel Telemedia Services business offers broadband & telephone services in 94 cities.</p>
Acquisitions / Strategic Alliances	<p>Bharti Telecom and British Telecom formed a 51%:49% joint venture, Bharti BT Internet for providing Internet services, in 1998 Bharti Tele-Ventures acquired an effective 32.36% equity interest in Bharti Mobile (formerly JT Mobiles), the cellular services provider in Karnataka and Andhra Pradesh circles in 1999 Bharti Telesonic entered into a joint venture, Bharti Aquanet, With SingTel for establishing a submarine cable landing station at Chennai in 2001 A 50:50 joint venture between Bharti and SingTel, to undertake the largest infrastructure</p>

	project between Singapore and Indian companies in 2001
Future Prospect	Bharti Airtel company is planning to set up 3000 more towers as part of enhancing their rural coverage and will now focus on rural and semi-urban areas.

Reliance Communication

Name	Reliance Communications
Year of Establishment	1999
Company Profile	Reliance Telecom's cellular services are available in 340 towns within its eight-circle footprint. Reliance Infocomm also offered for the first time in India, mobile data services through its R-World mobile portal. This portal leverages the data capability of the CDMA 1X network. Reliance Infocomm offers a complete range of telecom services covering mobile and fixed line telephony including broadband, national and international long distance services, data services and a wide range of value added services and applications aimed at enhancing productivity of enterprises and individuals.
Global Presence/ Marketing Network	Reliance Communications has IP-enabled connectivity infrastructure comprising over 150,000 kilometers of fiber-optic cable systems in India, the US, Europe, Middle East, and the Asia Pacific region.
Acquisitions / Strategic Alliances	International wholesale telecommunications service provider, FLAG Telecom amalgamates with Reliance Gateway, a wholly owned subsidiary of Reliance Infocomm in 2004

Tata Teleservices

Name	Tata Teleservices
Year of Establishment	1996

Company Profile	Tata Teleservices is a part of the \$12 billion Tata Group, which has 93 companies, over 200,000 employees and more than 2.3 million shareholders. Tata Teleservices' bouquet of telephony services includes Mobile services, Wireless Desktop Phones, Public Booth Telephony and Wireline services. Other services include value added services like voice portal, roaming, post-paid Internet services, 3-way conferencing, group calling, Wi-Fi Internet, USB Modem, data cards, calling card services and enterprise services.
Global Presence/ Marketing Network	Tata Teleservices has presence in across 19 circles that includes Andhra Pradesh, Chennai, Gujarat, Karnataka, Delhi, Maharashtra, Mumbai, Tamil Nadu, Orissa, Bihar, Rajasthan, Punjab, Haryana, Himachal Pradesh, Uttar Pradesh (E), Uttar Pradesh (W), Kerala, Kolkata, Madhya Pradesh and West Bengal.
Acquisitions / Strategic Alliances	Tata Teleservices has acquired Hughes Tele.com (India) Limited [now renamed Tata Teleservices (Maharashtra) Limited] in 2002
Future Prospect	The company is also expanding its footprint, and has paid Rs. 4.17 billion (\$90 million) to DoT for 11 new licenses under the IUC (interconnect usage charges) regime.

Vodafone

Name	Vodafone
Year of Establishment	Acquired majority stake in Hutch Essar in India, by buying out complete stake of Hutch in 2007, Essar is still minority stakeholder in company
Company Profile	Vodafone Essar in India is a subsidiary of Vodafone Group Plc and commenced operations in 1994 when its predecessor Hutchison Telecom acquired the cellular licence for Mumbai. Vodafone Essar now has operations in 16 circles covering 86% of India's mobile customer base, with over 45.78 million customers. Vodafone Essar, under the Hutch brand, has been named the 'Most Respected

	Telecom Company', the 'Best Mobile Service in the country'
	and the 'Most Creative and Most Effective Advertiser of the Year'.
Global Presence/ Marketing Network	It has operations in 25 countries across 5 continents and 40 partner networks with over 200 million customers worldwide.
Acquisitions / Strategic Alliances	
Future Prospect	Vodafone Essar is expecting to touch over 35 million customers across 400,000 shops and thousand of hutch's own employees along with employees of its business associates.

Idea

Name	Idea
Year of Establishment	1995
Company Profile	Idea Cellular is part of the Aditya Birla Group, which is India's first truly multinational corporation. Aditya Birla Nuvo Ltd. holds 35.7 per cent, Birla TMT Holdings Ltd. 44.9 per cent, Grasim 7.5 per cent, and Hindalco 10.1 per cent in Idea.
Global Presence/ Marketing Network	Has a customer base of over 17 million, IDEA Cellular has operations in Delhi, Maharashtra, Goa, Gujarat, Andhra Pradesh, Madhya Pradesh, Chattisgarh, Uttaranchal, Haryana, UP-West, Himachal Pradesh and Kerala.

<p>Acquisitions / Strategic Alliances</p>	<p>Merged with Tata Cellular Limited in 2001, thereby acquiring original license for the Andhra Pradesh Circle Acquired RPG Cellular Limited and consequently the license for the Madhya Pradesh (including Chattisgarh) Circle in 2001 In 2004 acquired Escotel, incumbent cellular service provider in Haryana, UP(W) & Kerala and new licensee in HP Acquired Escorts Telecommunications Limited (subsequently renamed as Idea Telecommunications Limited) in 2006 Merger of seven subsidiaries with Idea Cellular Limited in 2007</p>
<p>Future Prospect</p>	<p>Idea also plans to enter rural and neglected circles as a strategy to gain subscribers. Other advancements in the telecom industry will help it cut costs - use of e-mail to send bills to customers; sharing cell sites; smaller base transmission stations that will mean lesser infrastructure requirements and expenses and independent tower operators. Along with its plan to go for a national long distance licence, it will also look at international long distance in the near future.</p>

4. CHALLENGES AND OPPORTUNITIES

4.1 Opportunities

The telecom sector has been one of the fastest growing sectors in the Indian economy in the past 4 years. This has been witnessed due to strong competition that has brought down tariffs as well as simplification of policy environment that has promoted healthy competition among various players..

The mobile sector alone has been growing rapidly and has emerged as the fastest growing market in the whole worlds. Currently of a size nearing 70 million (GSM and CDMA), this sector is expected to reach a size of nearly 200 million subscribers by financial year 2008.

The government has eased the rules regarding inter circle and intra circle mergers. This has led to a slew of mergers and acquisitions in the recent past. Also as the sector is moving closer to maturity, further consolidation is a reality and this will lead to the survival of more profitable players in this segment

In order to further promote the use of Internet in the country the government is taking proactive steps to develop this sector with the help of the various players in this segment. For this purpose, the use of broadband technology is being mooted and this will go a long way in improving the productivity of the Indian economy as well as turn out to be the next big opportunity for telecom companies after the mobile communications segment

Non-voice services and VAS are the gold mines. The big takeoff is expected with the rollout of 3G services in early 2007, once the spectrum issues are sorted out.

Internet users base fast reaching near the English speaking population base. Local language and content required for further growth

Infrastructure equipment cost is down to a fraction of what prevailed just a few years ago. Operators can plan better expansion plan now

Increased viability for the operators to expand to semi-urban and rural markets, hence, accelerate growth further

It's not without reason that India is tipped to be the world's third-largest economy by 2050! No wonder if it happens much earlier

Investors can look to capture the gains of the Indian telecom boom and diversify their operations outside developed economies that are marked by saturated telecom markets and lower GDP growth rates.

At a time when global telecom majors are struggling to cope with their losses and the rollout of 3G networks, which has been a non-starter for close to a year now; India, with its telecom success story, represents an attractive and lucrative destination for investmen.