Indian Telecom Sector: Structure and Opportunities

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Abstract

The telecom sector is one of the fastest developing segments in the world. India stands at the second largest communication market in the world. Telecommunication is considered worldwide as a noteworthy apparatus for socio-economic development for a country and plays a vital role in development and modernization of different sectors of the economy. The telecom services are globally recognized as one of the driving force for the overall economic development in the nation. There has been major transformation in Indian telecom sector due to various policy initiatives. It has achieved the remarkable growth during the last few years and will grow in the future as well. Those organizations that are unable to cope with the changes have to face the consequences for their survival of the fittest and the other basic gadgets utilized for the financial improvement of a country.

History of Indian Telecom Sector

The authentic backdrop of Indian telecom sector began in the year 1851, where the British Government set out foremost basic operational landlines in Kolkata. Various telephone services were introduced in 1881 thereby rendering telegraph facilities to the public. "Telephone administrative was amalgamated with the postal system in the year 1888. At the first, Rajdhani of East India Company was introduced at Kolkata; whereas in the year 1911, the company was shifted to Delhi and then it was set aside for being the capital of India. From about then, Public Works Department (PWD) was controlled by the elements of telecom operations with its head office located at New Delhi. With the passage of time, the control of telecom operations shifted to the hands of Director General Postal and Telegraph (DGP&T) from PWD (public works department and then landed to Bharat Sanchar Nigam Limited (BSNL). Within this period, New Delhi became the head office of Telecom Segment. In the year 1923, the Indian Radio Telegraph Company (IRT) was introduced. And in the

year 1947, soon after the independence, all the foreign telecom organizations were nationalized to start up the Telephone, Telegraph and Postal (PTT) services, which was run by the Government of India" (Kumar, 2014). Further for more improved performance, Government decided to bring the Indian Telecom Sector within the control of State. In 1980, private sector got the admittance to manufacture telecom equipment, which helped in transforming this telecom sector more effectively. The telecom sector brought various amendments and also introduced various policies to bring to the best for the public. The following are the yearly evolutions that took place inthe telecommunication sector

Yearly evolution that took place in telecom industry

Phase-I (1980-1989)

- The entry of private sector in telecommunication equipment manufacturing in the year 1984.
- Formulation of mahanagar telephone nigam limited (MTNL) and videsh sanchar nigam limited (VSNL)-1986
- Telecom commision was set up in the year 1986.

Phase II (1990-1999)

- Liberalisation of the indian economy in 1990s.
- Private sector participation in provision of value added services such as cellular and paging servicesin the year 1994.
- Telecom regulatory policy was announced in the year 1994.
- Telecom regulatory authority of india (TRAI) was established in the year 1997.
- The new telecom policy with the amendments was introduced in the year 1999.

Phase-III (2000 onwards)

- BSNL bharat sanchar migam limited was established in the year 2000.
- National long distance (NLD) and international long distance (ILD) services opened to competition-2000.
- CDMA technology was launched in the year 2000.
- Reduction of license fees-2000.
- VSNL privatised in the year 2002.
- BSNL mobile services launched by BSNL in the year 2002.
- Unified access licensing (UASL) regime was introduced in the year 2003.
- Calling parties pays (CPP) was implemented in 2003.
- Broadcast policy was formulated in the year 2004.

- FDI limits increased from 49% to 74% in 2005.
- 3G services were launched in the year 2008.
- 4G services were launched in the year 2012.
- MNP scheme was started all over India in 2015.

Telecom Bodies

Since telecommunication has become the essential requirement of every country which helps in establishing coordination between different parts of the country and also among various countries too. The various telecom companies established at different times to ensure the smooth and structured functioning of this sector possible. They are briefly discussed under:

Department of Telecommunications: Began in 1985, as result of division of Department of Posts and Telecommunication into Department of Posts and Department of Telecommunications respectively, it is only telephone service provider in India till 1986 as well as the body for making policies in telecom sector. Though it was a profitable body but it relied on Govt. of India for its expansion and funding. It played central role in telecommunication field till Telecom Regulatory Authority of India (TRAI) was introduced.

Telecom Regulatory Authority of India (TRAI): TRAI was started as an independent regulatory body to check progress of telecom sector in India. It was formed through an act of parliament and the primary role of this body is to frame tariff structure and to resolve the disputes between the telecom players. The major policy document framed after TRAI was National Telecom Policy in 1994, which was the result of ongoing process of liberalization.

Telecom Commission: It was started in 1989 and was assigned financial and administrative power to handle different aspects of telecommunication. The Telecom commission and department of telecommunications both are in charge for policy formation, licensing, research and development, standardization and execution of telecom related equipment. The Telecom Commission implemented approach which has not only changed the structure of this sector but has also inspired other players to put in best efforts.

Telecom Regulations

The Indian Telegraph Act, 1885: It is one of the oldest legislation formed in India and it is an Act to change the law relating to telegraphs in India.

The Telecom Regulatory Authority of India Act, 1997: The Telecom Regulatory Authority of Indian Act, 1997 was framed at the establishment of the TRAI. The 1997 Act authorized

the TRAI with quasi-judicial authority to resolve telecom disputes. Later this act was changed by the Telecom Regulatory Authority of India (Amendment) Act, 2000 to ensure clarity and transparency between the regulatory and recommendatory functions of TRAI.

The Information Technology Act, 2000: Information Technology Act, 2000 (ITA) was framed in Indian Parliament in 2000 basically to propel e-commerce and assign legal validation to electronic documents and digital signatures in order to verify electronic documents. Later on, the Information Technology (Amendment) Act, 2008 (ITAA 2008) was passed having more emphasis on information security additionally includes different new sections on offences including cyber terrorism and data protection.

Communication Convergence Bill: In the year 2000, the Government of India passed a proposed Communication Convergence Bill i.e. Convergence Bill. The objective of this bill is to manage a new "converged" regulatory framework to promote and build up the communication sector including broadcasting, telecommunications and multimedia in an environment of expanding convergence of technologies, services, innovations and service providers.

National Telecom Policies: Inspired by strategy initiatives from NTP'94 and NTP'99, the Indian telecom sector enrolled a complete change in the recent decade. But, since then there has been a rapid growth in technology, and many changes have taken place in the telecom scenario in the world. National Telecom Policy 2012 is aimed to ensure that India's growth doesn't slow down as well as playing a leadership role effectively.

Telecom Services in India

The Indian telecom industry can be isolated into basic, mobile and Internet services. There are also some smaller divisions such as radio paging services, Very Small Aperture Terminals (VSATs), Public Mobile Radio Trunked Services (PMRTS) and Global Mobile Personal Communication through Satellite (GMPCS).

Basic Services: Basic services cover the fixed wire line and Wireless in Local Loop (WLL-fixed) administrations. BSNL and MTNL are the two biggest operators in this competitive scenario which covers the huge amount of market sector in the telecom industry. MTNL is present in Mumbai and Delhi, whereas BSNL covers the rest of the country. Though private associations, such as Bharti and Reliance, have enrolled prominent growth, the Government-owned BSNL dominates the section in terms of subscriber base. Indian players like Bharti, Reliance and the Tata group have forayed into the basic terminology of this telecom services. In 2006, the aggregate of these basic service subscribers outshined the 50 million.

Mobile Services: Mobile services have led down the incredible growth of the Indian telecom industry. Presently, 12 players are dealing in this division. GSM continues dominating this segment with a large amount of margin as compared to CDMA, with the share of only 23 per cent. India is one of out of those countries in the world to have more GSM subscribers than fixed line subscribers. All the operators provide different services like voice services, value added and data services such as SMS, mobile internet-service, email, chatting, video conferencing, GPRS service, etc. The accommodation of voice services has been a major magnet for service providers, but also convincing them to increase their prominence on data service facility

Internet Services: Around 400 Internet Service Providers (ISPs) are providing Internet services in India. Regardless of a slow penetration rate, this division embodies extreme growth potential in India. BSNL is holding top spot in the market share under this segment. With the execution of Broadband Policy in 2004, the Government has given signals of its positive plan to enhance the internet penetration in the country.

Radio Paging Services: Radio paging services have been enrolling negative progression since year 2000. Radio paging services got promising start in India in the year 1995. The segment, though, could not compete well with cellular services in general and SMS facilities in particular and is declining regularly. Right now, all four radio paging service providers have been focused out in the Indian telecom market sector.

Very Small Aperture Terminals (VSATs): The market for VSAT services shows an appreciation by 5.73 per cent during the quarter ending in December 2014 and the segment had a total customer base of 55,070. HCL Cornet is having highest share of the eight players dealing in the telecom market.

Public Mobile Radio Trunked Services (PMRTS): The prominent part of the PMRTS subscribers (72.05 %) is situated in metropolitan cities like Delhi, Mumbai, Chennai and Bangalore. The PMRTS industry has not created up to its image then potential image in India. High license fee for this service leaves low brim for the operational services providers, thereby preventing its growth. Approximately 31,000 endorsers are availing this service in India from 12 different operators.

Global Mobile Personal Communications by Satellite (GMPCS): GMPCS services were introduced in India in the year 1999. These services permit user to communicate from any place on earth through a hand-held terminal. Besides, this telephone number stays unchanged, and also feels independent of his location. The Government has limited foreign equity participation in this segment to 49 perc

Opportunities in Telecom Services

There are various opportunities under this telecom service some of them are explained as following:

Rural Telephony – Connecting the Real India: With the urban markets meeting saturation points for telecom services, particularly the voice telephony services, the vast rural market surely have potential to pace the future growth of the telecom companies. "The Tele density in rural areas is near about 15%, which indicates the extent of opportunity remained unexplored for telecom companies. In addition to, the government initiatives for upgrading telecom connectivity in rural areas are also likely to assist telecom service providers to render their services in the unconnected rural areas". Initiatives such as USO Fund and infrastructure sharing will be playing a noteworthy role in expanding the coverage area of telecom services in the far-flung areas.

3G and 4G Services – Potential Growth Driver: Presently the 4G Service in India is at the nascent stage. "In India 3G services have been started in February 2009. The 3G services have been instrumental in pacing up the future growth opportunities of the telecom segment. With a 4G-empowered handset and video services via 3G, companies would be able to see the match on the move but also enjoy it uninterrupted, as streamed on a live television set" (TRAI Annual Report, 2014-15). Introduction of 4G will be helpful for Indian telecom industry by upgrading the level of their competitiveness. The high-end customers may have fascination towards these services and render a first-move advantage to the first entrants in this 4G space.

Worldwide Interoperability for Microwave Access (WIMAX): In the wireless communication arena, WIMAX technology has one of the most significant developments. "Implementation of WIMAX would ensure the provision of high speed web administration through high bandwidth spectrum as a useful mode of communication in inaccessible terrains. WIMAX can be used as an alternative to cable and DSL for giving broadband access in rural areas and hence could be a crucial factor in enhancing the growth of Indian telecom services, especially the wireless services" (TRAI Annual Report, 2014-15). Keeping in view fact that WIMAX deployment does not require much resources, it will also be an economically-feasible solution to meet rural communication needs.

Mobile Value Added Service (MVAS): The value added services segment is quickly growing as a potential revenue generator for the telecommunication services industry. Knowing that a noteworthy (around 60%) of the total VAS revenue goes to service providers, the growth of this segment is likely to offer them an opportunity. "The demand for new VAS

services is likely to expand given that increasing number of youngster has been using mobile services and are more inclined to adopt the VAS services. The introduction of the next generation networks would help in decreasing the expenses and play role in growth of the VAS".

Foreign Direct Investment in Telecom Sector

Foreign Direct Investment refers to investment by non-resident entity/individual resident outside India in the capital of an Indian organization under Schedule 1 of Foreign Exchange Management (Transfer or Issue of Security by a Person Resident Outside India) Regulations, 2000. "In 2014 -15, telecom sector was positioned number one regarding FDI (foreign direct investment) equity inflows in India. First changes came into effect in National Telecom Policy of 1994. Thereafter, the policy on private participation and FDI has been evolving. The amount of FDI equity inflow from the year April, 2000 to till May, 2015 in the telecommunication sector is 86,412.10 crore and in terms of US$ is 17,421.78 million Indian telecom sector is going at a steady rate as more and more people becomes connected" (TRAI Annual Report, 2014-15). Foreign investment has also improved quality of telecom infrastructure, maximum connectivity to people of country as well as ensured freedom of choice between available networks.

Review of the FDI policy of the nation is ongoing process and the government has taken a numerous steps in the recent past to make India an alluring and investor-friendly venture destination. Government has kept in place an investor-friendly policy on FDI, under which FDI up to 100 percent is permitted under the automatic programmed route in many of the segments. The government has also set up 'Invest India', a joint endeavor organization between the Department of Industrial Policy & Promotion (DIPP) and FICCI, as a not-revenue, single window facilitator, for prospective overseas investors and to act as a structured and organized mechanism to attract the investors. These efforts are unquestionably useful for all the areas and particularly telecom as government has reported lots of projects like Digital India, Make In India and Smart City where telecom segment will definitely benefit in a big way.

Conclusion

In nutshell, the liberal and reformist policies of the government of India have been instrumental along with strong customer demand in the rapid growth in the Indian telecom

sector. The government has empowered easy market access to telecom equipment and a fair and proactive regulatory system that has ensured the availability of telecom services to consumer at moderate prices. The deregulation of foreign direct investment (FDI) norms has made the sector one of the fastest growing and major employment opportunity generators in the country. The Indian telecom sector is expected to generate four million direct and indirect jobs over the next five years according to estimates by Randstad India. The employment opportunities are expected to be created due to the combination of government's efforts to increase penetration in rural areas and the rapid increase in smartphone sales and rising internet usage".

Telecommunication is considered worldwide as a noteworthy apparatus for socio-economic development for a country and plays a vital role in development and modernization of different sectors of the economy. Amid recent couples of years ago, Indian telecom division has demonstrated huge development on account of residential demand, policy initiatives taken by the legislature and constant endeavors by the players by the industry and simultaneously, has managed to emerge as one of fastest developing economies in the planet today. Elements like administrative liberalization, auxiliary reforms and rivalry assumed a significant role in this rapid transformation. The telecom business has registered rapid development in endorser base throughout the recent decade, with expanding network coverage and a competition-instigated decline in tariffs acting as indicator for the development in subscriber base. The development story and the potential have additionally contributed to attract fresher players in the business, with the outcome that the intensity of competition has continued expanded. Liberalization in this segment has not only contributed to rapid development as well as helped a great deal towards maximizing consumer benefits, resulting from a tremendous fall in duties.

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