

NRUPS NEWSLETTER

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(Telecom Industry)

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News Flash

Home-bred handset maker Karbonn mobiles to invest Rs. 150 Cr to set up Smart TV manufacturing unit in Noida
 (Source: www.economictimes.indiatimes.com)

Reliance Jio Invests Rs. 1.34 lakh Cr in 4G network, readies 'transformative Services'
 (Source: www.economictimes.indiatimes.com)

Nokia to acquire electronics company named WITHINGS SA, for US \$ 191 mn.
 (Source: www.moneycontrol.com)

Digital India is going to create US \$ 1 trillion economy which will include US \$ 400 billion worth of electronics market, US \$ 350 billion worth IT and ITes Sector and US \$ 250 billion communication business.
 (Source: www.moneycontrol.com)

Japan's Softbank will buy Britain's most valuable technology company ARM for US \$ 32 billion in cash
 (Source: gadgets.ndtv.com)

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Editorial

Dear Friends,

Hello Everybody!

In today's information age, the telecommunication industry has a vital role to play. Considered to be the backbone of industrial and economic development, this industry has been aiding delivery of voice and data services at rapidly increasing speed, and thus, has been revolutionising human communication. Indian telecom industry is one of the fastest-growing industries in the world. Telecommunication services are globally recognised as one of the driving force for overall economic development of the nation. The Government of India recognised this fact and hence, has taken several major initiatives to provide a business friendly environment for companies in this sector.

“Telecom industry can be seen as a major infrastructure for the growth of many other sectors in the economy and a multiplier force”

At present, in telecom sector the number of telephone subscribers' in India increased from 996.49 million at the end of FY 2015 to 1058.86 million at the end FY 2016, thereby showing growth rate of 6.25%. The Indian telecom industry is currently undergoing a phase of transition. The telecom service providers are witnessing a gradual shift in the revenue mix from voice to data. Increase in data consumption and a low user base provides ample opportunity for data revenue growth. However, as data gains scale and with improvement in technology, data may start cannibalising voice revenues. Driven by 3G and 4G services, it is expected that there will be huge machine-to-machine (M2M) growth in India in 2016-17.

There is also a lot of scope for growth of M2M services in the government's ambitious US \$ 1.1 billion Smart City program. The rapid strides in the telecom sector have been facilitated by liberal policies of the Government of India that provide easy market access for telecom equipment and a fair regulatory framework for offering telecom services at affordable prices. According to a study by GSMA, it is expected that smart phones will account for two out of every three mobile connections globally by 2020. India will emerge as a leading player in the virtual world by having 700 million internet users of the 4.7 billion global users by 2025. With the current development in the sectors and favourable government policies, rapid growth is expected in services such as security and surveillance, remote monitoring of ATM machines, home automation, traffic management, retail, logistics and grid energy.

PE/VC deals are moving at a snail pace with CAGR of 8 % since 2005. We have seen lot of major consolidation in this space. M&A in telecom sector picked up the fast pace Since 2008 - Bharti Airtel, Vodafone, NTT DoComo are the case in point. Majority deals happened in the phone service providers. Due to internet and smart phones penetration in India, internet service provider is another sub-sector where large players are eyeing to acquire small players in this area.

High growth in telecommunication and internet penetration will be a major contributory factor for the economic growth of the country.

Enjoy Reading!

-Team Nrups

Overview of Telecom Industry

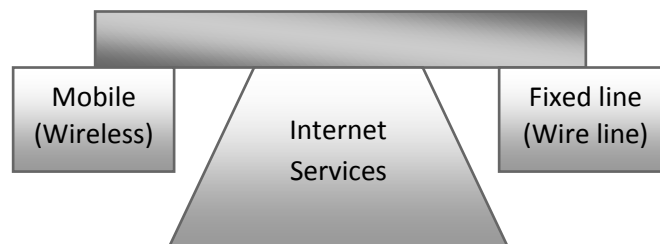
Pre-Liberalisation Scenario:

Prior to liberalisation, the telecom sector was monopolised by the public sector and recorded marginal growth. In fact, during 1948-1998, the incremental teledensity in the country was just 1.92%. However, the introduction of National Telephone Policy (NTP'99) accelerated the growth of the sector and the teledensity increased from 2.33 in 1999 to 36.98 in 2009. However, much of this growth was brought about by the NTP-99 policy changes such as migration from fixed license fee to revenue sharing regime and cost-oriented telecom tariffs. From 2003 onwards the government has taken certain initiatives such as unified access licensing regime, reduced access deficit, introduction of calling party pays (CPP) and revenue sharing regime in ADC that has provided further impetus to the sector.

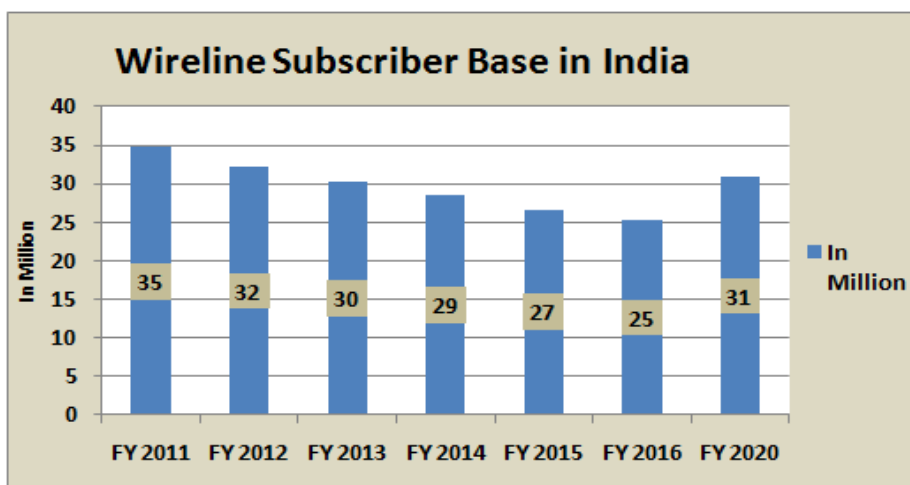
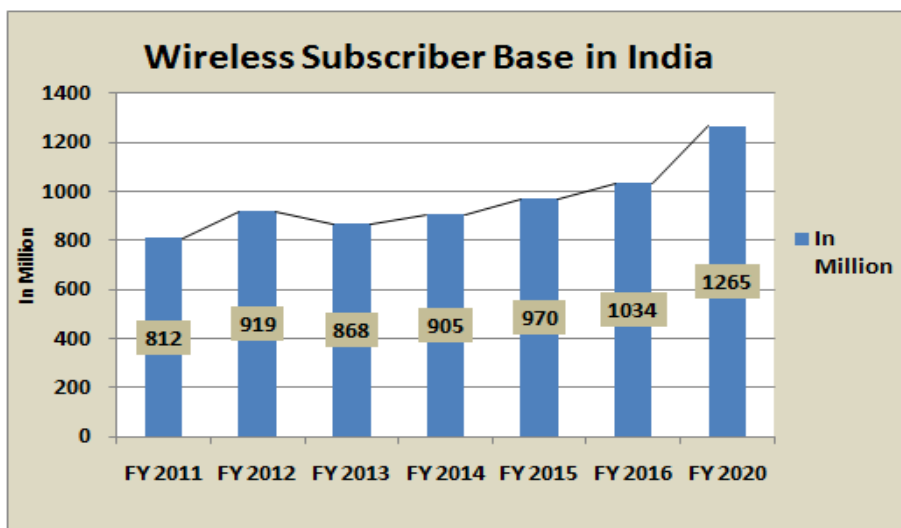
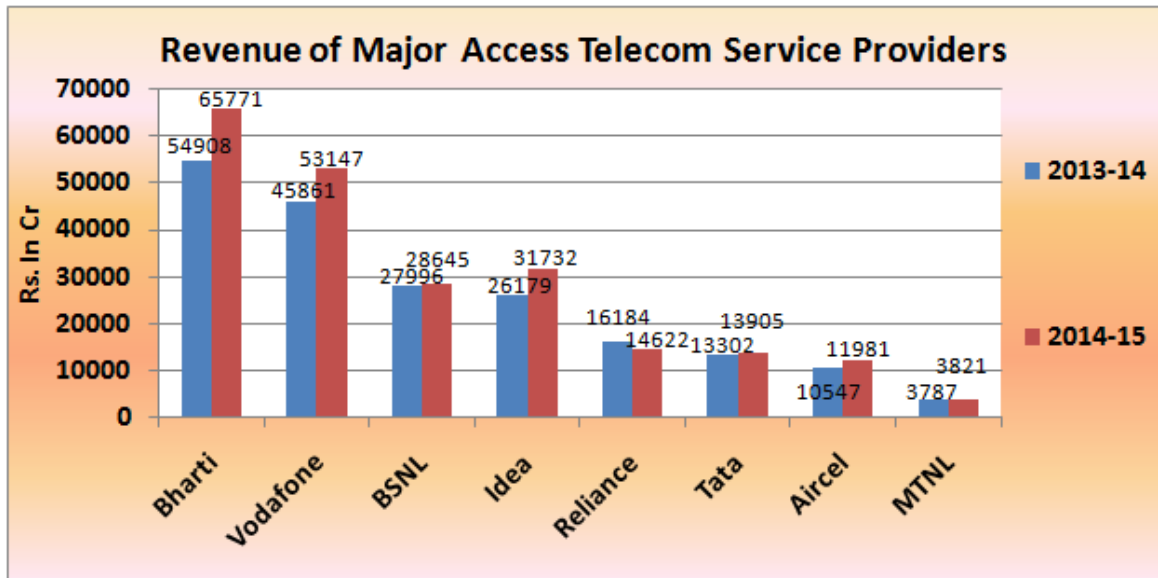
Current Scenario of Telecom Sector in India:

The telecom sector in India experienced a rapid growth over the past decade on account of regulatory liberalisation, structural reforms and competition, making telecom one of the major catalysts in India's growth story. Globalisation has made telecommunication an integral part of the infrastructure of the Indian economy. However, much of this growth can be attributed to the unprecedented growth in mobile telephony as the number of mobile subscribers grew at an astounding rate from 10 million in 2002 to more than 1 billion in 2015. Besides, the growth in the service and IT and ITeS sector also increased the prominence of the telecom industry in India. Telecom has emerged as a key infrastructure for economic and consumer growth because of its multiplier effect and the fact that it is beneficial to trade in other industries. The contribution of the sector to GDP has been increasing gradually.

Telecom Industry Structure



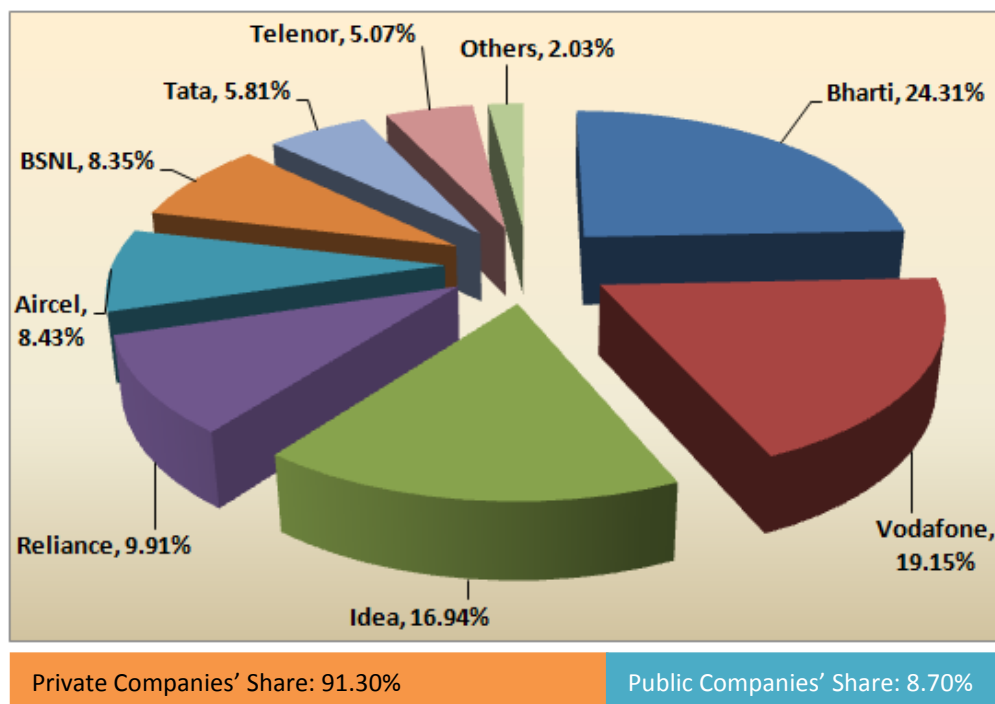
Important Facts and Figures of Telecom Industry in India :



Segment		Category	Internet Subscribers (In Millions)		% Growth
			March-2014	March-2015	
A.	Wired	Broadband	14.86	15.52	4.45%
		Narrowband	3.64	3.55	-2.46%
		Total	18.50	19.07	3.09%
B.	Wireless Fixed Wireless (Wi-Fi, Wi-Max, Radio & VSAT)	Broadband	0.40	0.44	11.00%
		Narrowband	0.04	0.03	-15.82%
		Total	0.44	0.48	8.55%
	Wireless Mobile Wireless (Phone + Dongle)	Broadband	45.61	83.24	82.48%
		Narrowband	187.04	199.57	6.70%
		Total	232.65	282.81	21.56%
Total Internet Subscribers		Broadband	60.87	99.20	62.96%
		Narrowband	190.72	203.15	6.52%
		Total	251.59	302.35	20.18%

MARKET SHARE OF KEY PLAYERS IN TELECOM INDUSTRY

Service Provider-wise Market Shares in term of Wireless Subscriber base as on March-2016



Telecom Industry - Road Ahead

The Indian Telecom industry has made the mobile phone a mass market device at affordable rates. The penetration has increased very substantially with a subscriber base of more than 1 billion as of March 2016 and growth rate of 0.68% for the month of March 2016. Due to the entry of new players, profit margin pressure, the industry need to focus more on following factor to invent new ways to increase the revenue and reduce the cost.

A) Rural Penetration:



The telecom industry has covered about 90% of the population and 80% of the geography. More than 50% of the new additions are coming from the rural areas. However the concern is the low ARPU customers from rural areas and the additional cost incurred for network roll out in rural areas. The industry seeks support from government for sustaining operations in rural areas.

B) Price Wars:

Pricing is a global phenomenon across the industry but in telecom sector after the launch of 3G and MNP, players' needs to re-strategize their focus on pricing. TRAI will also play a significant role to control the telecom tariff in the industry.



C) Shift from Voice to Data:



In today's cut-throat competition, telecom players shift their focus from voice to data to increase the revenue growth. Penetration of smart phones and 3G and 4G internet services will help to drive growth and revenue in telecom industry. Telecom players already started data services in metro and big cities and it will also reach to smaller towns.

D) Mobile Commerce:

The Banking and telecom sector will come closer to reach the large number of rural population who are yet to avail the banking services. Introducing mobile banking and money transfer would be cost effective to reach to the masses. E-commerce will play a major role in mobile commerce which ultimately affects the numbers of mobile users and data subscribers.



E) Spectrum Management:



The recent auction of 3G and Broadband Wireless Access (BWA) has changed the spectrum allocation policy of the Government of India. The industry has moved towards a market based approach for pricing of spectrum which ensured that the government realized true value of these precious resources. There will be fair pricing of 2G and the operators are expected to utilize the spectrum more effectively to keep their cost low.

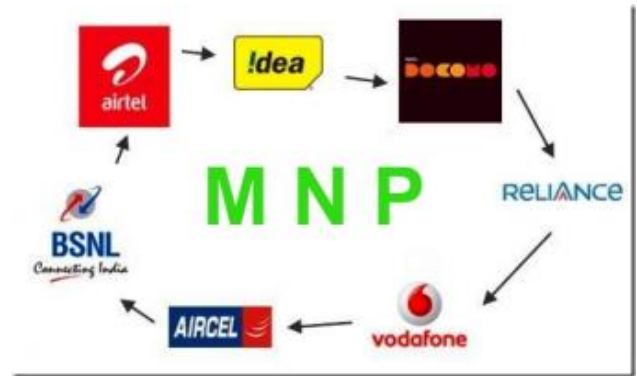
F) 3G and 4G:

Launch of 3G and 4G by private operators will make a major difference. Availability of 3G and 4G enabled handsets improved the customer services. The 3G and 4G services offer huge potential for VAS industry. In some countries like US, the share of VAS increased to 25% of the revenue after 3G & 4G launches.



G) MNP:

The Subscribers are expected to move towards the operators who provide better network and customer services. However Indian telecom market is predominantly a prepaid market where the churn is already very high. Operators will have to bind a tight knot to retain existing subscriber who would like to change the operator which ultimately impact its subscriber database.



H) Broadband evolution



Due to mobile and internet penetration, subscribers of broadband increases since last decade. Broadband growth continues to lag behind due to high cost of network roll out and regulatory hurdles. However spectrum allocation for Broadband Wireless Access (BWA) is expected to take the Broadband penetration to new heights in India.

I) Regulatory Reforms:

The Open licensing policy of Government of India resulted in an unprecedented competition. The Government will need to review its policies on lock in period and M&A guidelines to facilitate faster consolidation. The other policy which government needs to review is uniform license fee and utilization of USO fund which will be used for improving the broadband penetration and incentivizing rural penetration.



J) Convergence



The Convergence of voice, video and data is called Triple Play. 3G technology will drive the next round of sustainable growth through convergence of entertainment, infotainment and voice communication in one single device. The innovative value added services will bring all services under just one convergent device.

K) Mobile Cloud Computing

Cloud computing has made an impact on mobile industry also. The increased network connectivity and popularity of the smart phones and tablet devices like ipad have considerably increased the usage of the applications on mobile devices. As there is a huge scope for mobile cloud computing, large investments are being made in this technology. It is projected that in the next 5 years mobile cloud computing will become a significant contributor to the revenue pie of the telecom industry.



L) Green Telecom



The Information and Communication Technology Sector contributes to 2% of the world's total carbon emission. Each telecom site is consuming nearly 300 litres of diesel. The Industry is focusing on reducing their opex cost by implementing energy efficient power solution products. The Industry is exploring the possibility of using solar systems, micro wind turbines, adoption of free cooling methods and energy audit. The Industry is expecting support from the USO fund as the Capex required for these alternate energy solutions are very high.

Telecom Industry – Investments

With daily increasing subscriber base, there have been a lot of investments and developments in the sector. The industry has attracted FDI worth US \$ 17.7 billion during the period April 2000 to September 2015, according to the data released by Department of Industrial Policy and Promotion (DIPP). Some of the major developments in the recent past are:



Walmart India Private Limited's president has shown interest in opening its chain of stores in Haryana, while Micromax has also offered to set up a mobile handset manufacturing unit in the National Capital Region (NCR).



Vodacom SA, a subsidiary of Vodafone Plc, has entered into an agreement with Tata Communications Ltd to buy the fixed-line assets of TataComm's South African telecom subsidiary Neotel Pty Ltd.



Bharti Airtel has planned to invest Rs 60,000 crore (US\$ 9.02 billion) over a period of three years with a view to boost its telecom network capacity thereby improving the quality of voice and data services to its customers.



Reliance Communications Ltd, India's fourth largest mobile services provider, has agreed to acquire Sistema Shyam TeleServices Ltd (SSTL), the local unit of Russian company Sistema JSFC, in a deal valued at Rs 4,500 crore (US\$ 687 million), which includes payments to the government for spectrum allotted to Sistema.



Videocon Industries Ltd plans to set up a mobile handset assembly plant along with manufacturing set top boxes in Punjab for an investment of Rs 500 crore (US\$ 76.7 million) over three years.



American Tower Corporation, a New York Stock Exchange-listed mobile infrastructure firm, has acquired 51 per cent stake in telecom tower company Viom Networks in a deal worth Rs 7,635 crore (US\$ 1.17 billion).



Global telecom equipment makers like Ericsson, Nokia Networks and Huawei are looking forward to over US\$ 1 billion revenue opportunity as mobile phone operators in India roll out high-speed broadband services on the 4G LTE technology across the country.



Foxconn, the world's largest contract-manufacturing firm for consumer electronics and manufacturer for Apple products, has signed a Memorandum of Understanding (MoU) with Maharashtra state government to invest US\$ 5 billion over the next three years for

Following are the PE and M&A transactions in the Telecom Sector:

PE Investments for the period of 2015-2005

2015-2012					
					Rs. In Cr
	< 100	101-500	501-1000	> 1000	Total
PE Deals	0	301	0	9,768	10,069
No of Deals	0	1	0	3	4
2011-2008					
					Rs. In Cr
	< 100	101-500	501-1000	> 1000	Total
PE Deals	427	2,158	2,612	21,508	26,705
No of Deals	15	10	3	8	36
2007-2005					
					Rs. In Cr
	< 100	101-500	501-1000	> 1000	Total
PE Deals	969	1,867	560	13,491	16,887
No of Deals	22	7	1	3	33

Total					
					Rs. In Cr
	< 100	101-500	501-1000	> 1000	Total
PE Deals	1,396	4,326	3,172	44,638	53,661
No of Deals	37	18	4	14	73

Sub Sectors of Telecom	Deal Amount (Rs. In Cr)	No of Deals
Phone Services	34,052	17
Telecom Infrastructure	16,111	31
Internet Service Provider	2,129	9
Network Support Service	1,231	11
Others	117	4
Mobile VAS	21	1
Total	53,661	73

Top PE Transaction in Telecom Industry

Name of Company	Name of PE Fund	Transaction	Year	Deal Amount (Rs. In Cr)	% of Stake	Valuation (Rs. In Cr)
Bharti Airtel Limited	Qatar Foundation Endowment	PIPE	2013	Rs. 6,500	-	-
Vodafone Essar Limited	Piramal Healthcare Limited	Growth	2011	Rs. 4,183	5.50%	Rs. 76,055
Idea Cellular Limited	2i Capital PCC Axiata Group Bhd (Earlier Telekom Malaysia Berhad)	Early Stage	2008	Rs. 7,567	15%	Rs. 50,447
Bharti Airtel Limited	Temasek Holdings Advisors India Pvt. Ltd	Growth	2007	Rs. 8,146	-	-
Bharti Infratel Limited	India Equity Partners Fund I Investment Corporation of Dubai Temasek Holdings Advisors India Pvt. Ltd AIF Capital Limited Goldman Sachs (Principal Investments) Macquarie Group Limited Citigroup-Special Situations Group	Early Stage	2007	Rs. 3,943	10%	Rs. 39,430

M&A for the period of 2016-2005

2016-2013					
					Rs. In Cr
	< 100	101-500	501-1000	> 1000	Total
M&A Deals	80	824	780	24,324	26,008
No of Deals	1	2	1	7	11
2009-2012					
					Rs. In Cr
	< 100	101-500	501-1000	> 1000	Total
M&A Deals	340	1,869	1,576	1,24,165	1,27,950
No of Deals	6	8	2	15	31
2008-2005					
					Rs. In Cr
	< 100	101-500	501-1000	> 1000	Total
M&A Deals	112	576	1,777	34,377	36,842
No of Deals	5	3	3	8	19

Total					
					Rs. In Cr
	< 100	101-500	501-1000	> 1000	Total
M&A Deals	532	3,268	4,133	1,82,866	1,90,800
No of Deals	12	13	6	30	61

Sub-sectors	Deal Amount (Rs. In Cr)	No of Deals
Phone Services	1,55,438	29
Telecom Infrastructure	25,250	18
Internet Service Provider	7,793	5
Other	1,240	2
Network Support Service	1,074	6
Mobile VAS	5	1
Total	1,90,800	61

Top 5 Transactions in Indian Telecom Industry

Name of Buyer	Name of Seller	Year	Deal Amount (Rs. In Cr)	% of Stake	Valuation (Rs. In Cr)
American Tower Corporation	Viom Networks Limited	2014	6,300	51%	12,353
Vodafone Group Plc	Essar Group	2011	22,325	33%	67,652
Bharti Airtel Limited	Zain Africa Enterprise	2010	47,936	100%	47,936
GTL Infrastructure Limited	Aircel Limited	2010	8,280	-	-
NTT DoCoMo, Inc.	Tata Sons Limited	2008	13,500	26%	51,923

Conclusion:

India's telecom sector has registered phenomenal growth during the past few years and has become the second largest telephone network in the world, next only to China. The telecom sector continues to be at the epicentre for growth, innovation, and disruption for virtually any industry. Mobile devices and related broadband connectivity continue to be more and more embedded in the fabric of society today and they are key in driving the momentum around some key trends such as video streaming, Internet of Things (IoT), and mobile payments.

A series of reform measures by the government, innovations in wireless technology and active participation by the private sector, played an important role in the growth of the telecom sector in the country. Foreign Direct Investment in telecom and computer sectors outshone other top key sectors such as financial/non-financial services, construction, hotels and tourism. Due to static growth in revenue and resultant pressure on the profit margins forced many operators to re-strategize its future business plans. It is observed that players with large cash flow acquired other small operators. The other reason for consolidation would be spectrum deals. There were dozens of telecom players purchased spectrum in the five auctions held in 2010, 2012, 2013, 2014 and 2015 for as many as 22 circles in the country, most of the providers could not utilise the spectrum to the maximum as it required huge investments to develop infrastructure so, small and marginal companies existing the industry, with new players taking part in the next round of auction of spectrum, likely to be held in 2016. The consolidation rally will also continue not only among the service providers but also among the tower companies. The clarity on policy and regulatory front and the expectation of new government clearly enhanced attractiveness of India as investment destination.

Source & Reference:

Research firms

www.pwc.in
www.bain.in
www.kpmg.in
www.ey.com
www.deloitte.com
www.dnb.co.in
www.frost.com

Data Provider

www.dealcurry.com
www.vccircle.com
www.ventureintelligence.com

Government and Others

www.ibef.org
www.indiaratings.com
www.coai.com
www.trai.gov.in
www.indiatelecomonline.com
www.brainyquote.com
Other Websites

Newspapers / Magazine/Media

www.economicstimes.indiatimes.com
www.dnaindia.com
www.business-standard.com
www.timesofindia.indiatimes.com
www.thehindu.com
www.financialexpress.com
www.moneycontrol.com
www.businesstoday.in
www.newindiaexpress.com
www.businessworld.in
www.livemint.com

About NRUPS

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- Mezzanine funding
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