



Department of Industrial Policy and
Promotion

Department of
Telecommunications

Telecommunications Sector

Achievements Report

November 24, 2016*



MAKE IN INDIA

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Telecommunications Sector

The Indian telecommunications sector shaped by consumer demand, innovation and competitive forces offers tremendous investment opportunities. With the **second largest subscriber base in the world with 1.06 billion connections** (including fixed phone lines), the telecom industry is booming. Recently, **India with 275 million smart-phone subscribers, outpaced the United States, to become the second largest smart-phone subscriber market** in the world.

The mobile industry in India, currently contributing 6.5% (USD 140 billion) to country's GDP, and employing over 4 million people (direct and indirect), is projected to grow rapidly in the coming years. By 2020, the industry is expected to contribute 8.2% to country's GDP, and add 800,000 more jobs. In terms of unique mobile phone subscribers, India is expected to cross the 1 billion mark by 2020 and demand for telecom equipment is estimated to exceed USD 30 billion by 2020. India will see an increase in adoption of 4G services with number of 4G connections estimated to grow to 280 million by 2020 from just 3 million in 2015.²

Some of the remarkable achievements over the last two years are:

- As per the Index of Industrial Production (IIP), production of telephone instruments including mobile phones & accessories rose by 7.1% in 2015-16.
- 38 new mobile manufacturing units, with over 20 million units per month capacity, have been set up since September 2015. These units have generated 38,300 employment opportunities.
- Number of mobile phone units manufactured in FY 2015-16 grew by 83% to 110 million in FY 2015-16 from 60 million in FY 2014-15.
- Rural tele-density reached over 51% at the end of September, 2016.
- The National Optical Fibre Network (NOFN) programme to provide broadband to 2.5 lakh gram panchayats was rebranded in April 2015 as Bharat Net and has reached 65,000 Gram Panchayats and optical fiber cable has been laid for 1,50,000 km.
- BSNL has commissioned 2504 Wi-Fi hotspots in over 1227 locations such as Tourist Places, Heritage Sites, Airports, Parks, University Campuses, Schools, Colleges, etc.



DoT has constituted a **Fast Track Task Force (FTTF)** to 'catalyze and reestablish' significant growth in mobile handsets and component manufacturing ecosystem in India. It is expected to promote large scale manufacturing/ assembling activity to achieve production of 500 million mobile handsets by 2019. The Task Force is also looking at the establishment of a sizable components industry worth USD 8 billion and creating 1.5 million jobs.

Policy Initiatives & Major Investments

FDI Policy

100% FDI is allowed in telecom sector, of this 49% is allowed through the automatic route.

This is applicable in case of Basic, Cellular, Unified License (Access Services), Unified License, National/ International Long Distance, Commercial V-Sat, Public Mobile Radio Trunked Services (PMRTS), Global Mobile Personal Communications Services (GMPCS), all types of ISP licenses, Voice Mail/ Audiotex/Unified Messaging Services (UMS), Resale of International Private Leased Circuits (IPLC), Mobile Number Portability Services, etc.

FDI in Telecom sector is subject to observance of licensing and security conditions by licensee as well as investors as notified by the Department of Telecommunications (DoT) from time to time, except "Other Service Providers", which are allowed 100% FDI on the automatic route.

FDI Inflow

In the last two years from April 2014-16, FDI jumped to USD 4.2 billion as compared to USD 1.61 billion in FDI inflow in the two year period from April 2012-14

FDI worth USD 10 billion has been received in the first 8 months of FY 2016-17. 2.6 times growth in FDI (2014-2016).

Fiscal Incentives

- **Basic customs duty (BCD) and special additional duty have been withdrawn.**
- Importers of mobile handset components such as chargers, adaptors, batteries and wired headsets need to **pay only the countervailing duty of 12.5%.**
- A duty advantage of 10.5% exists for local manufacturers of mobile speakers and batteries.



Major foreign investments in the sector since April 2014 are listed below:

Foreign Collaborator	Country	Indian Company	FDI (USD million)
Prime Metals Limited	Mauritius	Vodafone India	1,500.79
NTT Docomo Inc	Japan	Tata Teleservices Ltd.	1457.66
Videocon Mauritius Energy Limited	Mauritius	Videocon International Electronics Limited	719.76
ATC Asia Pacific PTE Ltd.	Singapore	Viom Networks Limited	881.08
Federal Agency For State Property Manage	Russia	Sistema Shyam Teleservices Limited	451.83
Telenor Asia Pte Limited	Singapore	Unitech Wireless Tamilnadu Private Limited	298.75
Telenor South Asia Investment Pte Limited	Singapore	Telewings Communication Services Private Limited	274.40
QIB Class	Mauritius	Bharti Infratel Limited	240.37
Axiata Investments 2(India) Limited	Mauritius	Idea Cellular Limited	123.22
NTT Communications Corporation	Japan	Netmagic Solutions Private Limited	85.79
Omega FII Investment Pte Limited	Singapore	Tata Sky Limited	53.89
Tiger Global Eight Holdings	Mauritius	Hike Private Limited	50.80
Essel International Limited	Mauritius	Siti Cable Network Limited	48.17
International Finance Corporation	U.S.A	Tikona Digital Networks Private Limited	46.39
Anchor Investors(Total 6 Investors)	Mauritius	Bharti Infratel Limited	32.59
Essar Telecom Limited	Mauritius	Agc Networks Limited	29.13
Network Digital Distribution Services FZ	UAE	Tata Sky Limited	23.77
Tower Vision Mauritius Limited	Mauritius	Tower Vision India Private Limited	23.71
EGN B.V	Netherlands	Orange Business Services India Network P, Global One (India) Private Limited	19.39
GS Investment Partners (Mauritius) I Lim	Mauritius	Tikona Digital Networks Private Limited	16.17
South Asia Entertainment Holdings Limite	Mauritius	Sun Direct TV Private Limited	16.17



2nd Largest subscriber base-
1.06 billion Connections,
616 million unique mobile
service subscribers

~70
million connections in
rural areas in last 2
years

2nd
largest smart-phone
subscriber base with
275 million users

90%
jump in number
of mobile
phone units
manufactured



Rural tele-
density reaches **51.04%**

**Telecom
Equipment Demand**
USD 30 billion
in 2020
2015-16:
USD 20 billion

**Mobile Broadband
connections**
670 million in 2020
Mid-2016:
430 million

**SIM connections
(excluding M2M)**
1.4 billion in 2020
2016: 1.06 billion

**Unique
subscribers**
~ 1 billion in 2020
(68% penetration rate)
Mid-2016: 616 million
(47% penetration rate)

**Contribution to GDP
(Mobile Economy)**
8.2% in 2020
2015: 6.5%

**Employment
(Mobile Economy)**
5 million (direct &
indirect jobs) in 2020
2014: 4 million
(direct & indirect)



Spectrum Management

In 2016, the Government took the following initiatives for the efficient utilisation of the radio frequency spectrum in the country.

Spectrum Sharing

Spectrum sharing was allowed on April 21, 2016 between two telecom service providers. **21 cases of spectrum sharing exists** between telecom service providers as on December 14, 2016.

Spectrum Trading

Trading or selling of spectrum by one telecom service operator to another was initiated on May 17, 2016. Spectrum trading has been utilised 17 times by a number of telecom service providers as on December 14, 2016.

Spectrum Harmonization

Harmonisation of spectrum in 800 MHz and 1800 MHz bands was carried out from April to September, 2016 resulting in recovery of 197 MHz of additional spectrum for auction.

Spectrum Auction

The spectrum auction conducted in October, 2016 sold 965 MHz of spectrum. The auction fetched a total bid of INR 66,000 crore, and highest ever upfront payment of INR 33,000 crore since 2012.

Innovation and R&D

Artificial Intelligence would be the catalyst driving future innovation in global mobile technology according to GSMA, the global mobile industry association and standards body (personal assistants like Amazon Alexa, Apple Siri – voice interface that controls and coordinates devices and data across wide range of applications would be in higher demand).

Telecom Centres of Excellence (TCoE)

- **Centres of Excellences (CoE) established at 8 premier technical institutes**, Indian Institute of Technology in Delhi, Chennai, Kanpur, Kharagpur, Mumbai and Roorkee and one each at Indian Institute of Science, Bangalore and Indian Institute of Management, Ahmadabad, in PPP mode.
- A CoE for Internet of Things (IoT) was launched in Bengaluru in PPP mode in August 2016. Bringing together academic Institutions, telecom industry and Government will create an ecosystem for sustainable growth of Telecom Sector in the country.



- Two of the **major technologies** in areas of Advanced Communication, Convergence and Broadband Technologies that have been **recently developed and transferred to industry** to enable manufacturing are:

- ✓ Software Defined Radio for Naval Communication (SDR-NC), and
- ✓ TETRA - Terrestrial Trunked Radio technology for usage by Police and Army

Ease of Doing Business

- **Right of Way Rules were modified in November 2016.** Applications for laying fibre underground cable as well as for setting up telecom towers have to be accepted or rejected within a period of 60 days failing which application will be deemed to have been approved.
- An alternate process of providing new connections by using Aadhaar e-KYC has been prescribed since September, 2016. 30 minute activation of new sim cards using Aadhaar Based E-KYC.
- DoT has **abolished the wireless operating licence for telecom providers w.e.f November 2, 2016.** This would prevent the delay in utilisation of scarce infrastructure as radio transmission can be started immediately on installation of base stations without waiting for obtaining clearance from DoT.

Skill Development

Telecom Sector Skill Council (TSSC) has empanelled **650 training partners across the country and trained 3.5 lakh persons** so far in telecom training courses, which include 60,000 enrolled under the scheme of skill development in Electronic System Design & Manufacturing (ESDM).





Annexure I

New mobile handset manufacturing units established in India since September 2015 to October 2016.

Name Of The Brand / Company / Ems Company	No. of Units	Location of Units	Mfg. Capacity (Mn Units / month)	Employment (In Nos.)
Foxconn (Rising Star Mobiles India (P) Ltd.)	5	1. Sri City	2.5	8000
		2. Sri City		
		3. Sri City		
		4. Sri City		
		5. Maharashtra		
Micromax (Bhagwati Products Ltd.)	1	Hyderabad, Telangana	0.3	600
MCM (Million Club Manufacturing)	1	Noida, UP	1.0	1500
Lava International	2	1. Noida, UP	2.0	5000
		2. Noida, UP		
Intex Technologies	4	1. Noida, UP	3.0	5000
		2. Noida, UP		
		3. Jammu		
		4. Baddi, HP		
Celkon Mobiles	1	Medchal, Telangana	0.5	1200
Dixon Technologies (India) Private Limited	1	Noida, UP	1.0	900
GDN	1	Greater Noida, UP	1.0	1200
Vivo Mobile	1	Greater Noida, UP	0.3	500
Videocon	2	Aurangabad, Maharashtra	1.0	2000
		Kasipur, Uttarakhand		
Flextronics	1	Sriperumbudur, TN	1.3	2500
SEPL	1	Haridwar, Uttarakhand	0.5	1000
TMB Electronics	1	Kundli, Haryana	0.4	800
Innovative Industries	1	Delhi	0.4	700
Labanyo Electronics	1	Noida, UP	0.2	500
KMC Electronics	1	Kotdwar, UP	0.7	1000
Champion Computers	1	Delhi	0.3	500
BGM Electronics	1	Shahibabad, UP	0.4	500
SST Electronics	1	Kundli, Haryana	0.4	500
Hyve Mobiles	1	Delhi	0.3	300
Bingo Mobiles Tech.	1	Noida, UP	0.2	300
Delhi Phone Battery	1	Haridwar, Uttarakhand	0.5	800
ADCOM	1	Delhi (Kirti Nagar)	0.1	300
VSUN	1	Bawal, Haryana	1.7	1800
Hi-Tech	1	Kolkata, WB	0.2	600
Higher Industries (India) Pvt. Ltd.	1	Mundka, Delhi	0.5	300
Runsheng Technologies Pvt. Ltd.	1	Faridabad, UP		
Compal (Mnfc. for LeEco)	1	Greater Noida, UP		
Penguin Electronics	1	Daman		
Total	38		20.7	38300

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