

TELECOM



Industry - Telecom

The Indian telecom industry is the second largest in the world with a subscriber base of over 1.2 bn.

The sector has witnessed an exponential growth over the last few years primarily driven by affordable tariffs, wider availability, roll out of Mobile Number Portability (MNP), expanding 3G and 4G coverage, evolving consumption patterns of subscribers and a conducive regulatory environment.

The number of smartphone users in India crossed the 300 mn mark in 2016, making it the largest smartphone market in the world.

- Total number of Subscriber Identity Module (SIM) connections is expected to reach 1.4 bn by 2020 from 1.1 bn in 2017.
- Telecom sector contribution to GDP is expected to reach 8.2% by 2020 from 6.5% in 2017.

100% FDI is allowed in telecom sector, of this up to 49% is allowed through the automatic route and beyond 49% under government route.

For further details, please refer [FDI Policy](#)

Contribution in Indian Economy

Contribution
to India's
GDP - 6.5%

Total
employment
(2016) - 4
**mn (direct
& indirect)**

Rate of
market
penetration
(excluding
M2M) in
2016 - 51.5%

No. of smart
cities (2018)
- 99

Highlights



Indian mobile industry contributed over USD 140 bn to India's GDP in 2015



Digital India is expected to create USD 1 tn business opportunity by 2020



Number of internet users in India is expected to reach 829 mn by 2021

Industry Scenario

The Indian mobile industry is expected to create a total economic value of USD 217.4 bn by 2020.

The telecommunications industry is divided into following subsectors: infrastructure, equipment, Mobile Virtual Network Operators (MVNO), White Space Spectrum, 5G, telephone service providers and broadband.

According to a study by GSMA, smartphones are expected to account for two out of every three mobile connections globally, making India the fourth largest smartphone market by 2020. India is expected to lead in the growth of smartphone adoption globally with an estimated net addition of 350 mn by 2020.

Telecom tower in India is set to boom as its tenancy ration will increase from 1.95 times in 2016 to 2.9 times by 2020 due to the expansion of 3G and 4G and the onset of 5G technologies.

More than 60 companies have received approval from Department of Telecommunications (DoT) in May 2017 to provide MVNO services; the majority of these companies are focused on Tier 2 and Tier 3 cities.

Growth Drivers

Growing Demand

Nominal per capita income recorded a CAGR of 10.4% from 2011-12 to 2016-17

Increasing Internet Revenues

Mobile value-added service industry expanded at a CAGR of 29.3% to reach USD 11.08 bn in 2016

Increased Equipment Manufacturing

38 new mobile manufacturing units have been set up in India since September 2015

Make in India

Gol announced Phased Manufacturing Program (PMP) to promote domestic production of mobile handsets

BharatNet

Optical fibre cables laid over 100,000 gram-panchayats

Industry Trends



Mobile Payments

Aadhaar Pay, BHIM app, UPI to connect masses to provide banking interfaces, security and storage.

Non-traditional telecom services

OTT, digital content, e-banking, e-education, e-health, e-commerce



5G

4G and 5G ecosystem

High data rates, low latency, high reliability and low energy consumption

Industry 4.0

Automation and data exchange with technologies including IoT, VR, AR and cloud computing



Start Ups

India #2 start-up ecosystem in the world. Focus sectors: Fintech, Edtech, Enterprise tech and Healthtech

Key Policies

BharatNet

Digital India

National Digital Communications Policy - 2018 (Draft)

Relaxation of FDI Norms

Spectrum Reforms

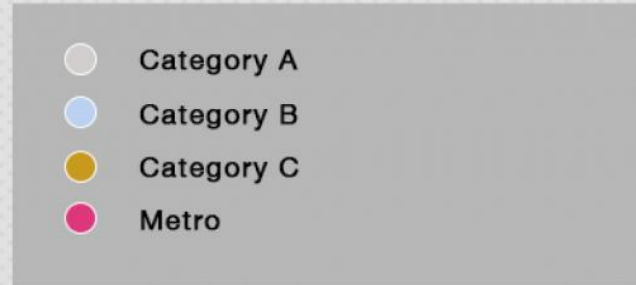
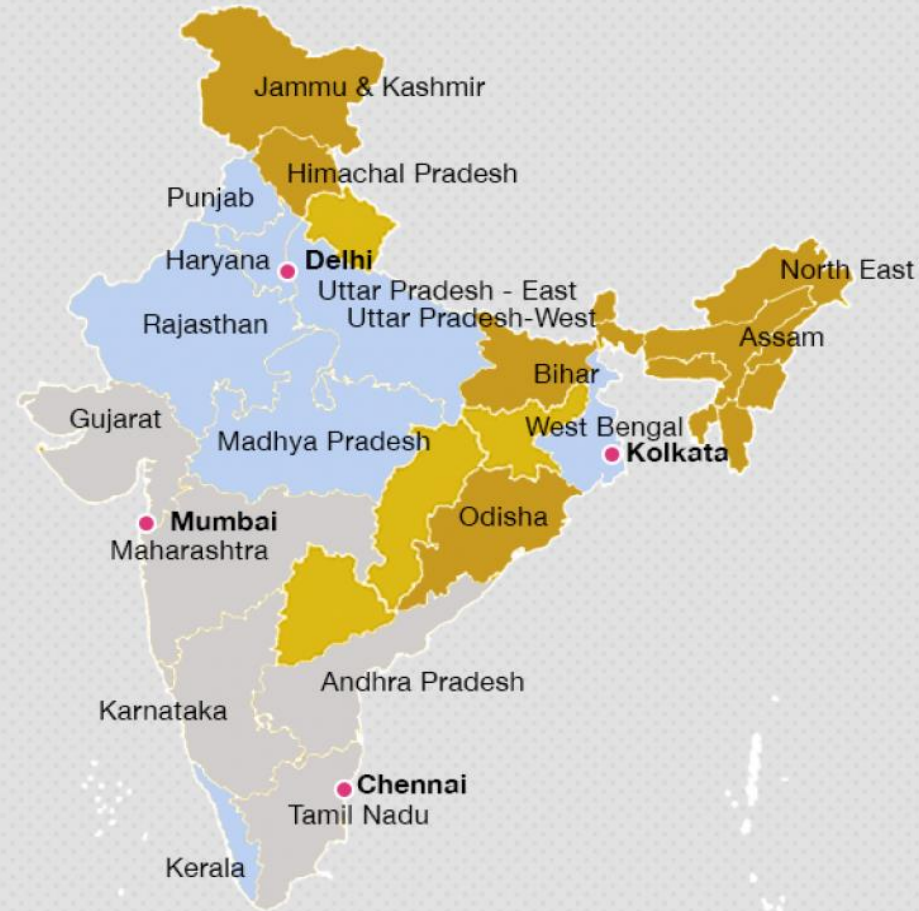
Recent Investments

- Mar 27, 2018 - The **Department of Telecommunications (DoT)** is in the final stages of approving the merger between **Idea Cellular** and **Vodafone India**, a development which will create India's largest mobile phone operator and bring to an end a phase of rapid consolidation triggered by the entry of Reliance Jio.
- Jun 07, 2017 - **Japan NEC** to invest **\$ 10 mn** in a New Centre of Excellence in Noida to develop Big Data and Analytics Solutions

Major Investors



Telecom Circle/ Metro Service Area



The 'A', 'B', and 'C' circles cover various geographic territories of varying population sizes.

'A' circles are the largest in terms of population coverage. 'C' circles contain the smallest population.