



IMA Market Report
India's
Telecommunications
Market

Prepared for
IMA's Operator Workshop
India
June 2009

INDIA FACTS

- Population: 1,166,079,217.
- Second most populous country in the world after China.
- Age structure: 0-14 years: 31.1%
 15-64 years: 63.6%
 65 years and over: 5.3%
- Government Type: Federal Republic.
- Administrative Divisions: 28 states and 7 union territories.
- GDP (Per capita): \$2,800, compared to worldwide average of \$7,880 and Israeli GDP of \$28,900.
- Labor force: 532.5 million.
- Population Growth (2001- 2007) : 1.4%
- GDP Growth (2007- 2008): 9%
- GDP Growth (Government estimates for 2008-2009): 7.1%



Prepared by IMA (Israeli Mobile & Communication Association)
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ECONOMIC OVERVIEW

India's economy has been one of the stars of global economics in recent years, growing 9.2% in 2007 and 9.6% in 2006. Growth had been supported by markets reforms, huge inflows of FDI, rising foreign exchange reserves, both an IT and real estate boom, and a flourishing capital market.

Like most of the world, however, India is facing testing economic times in 2008. Not clear. Has it faced "testing time" in 2008 or was the inflation target set in 2008? The Reserve Bank of India had set an inflation target of 4%, but by the middle of the year it was running at 11%, the highest level seen for a decade. The rising costs of oil, food and the resources needed for India's construction boom are all playing a part.

India has to compete ever harder in the energy market place in particular and has not been as adept at securing new fossil fuel sources as the Chinese. The Indian Government is looking for alternatives, and has signed a wide-ranging nuclear treaty with the US, in part to gain access to nuclear power plant technology that can reduce its oil thirst. This has proved contentious though, leading to leftist members of the ruling coalition pulling out of the government.

As part of the fight against inflation a tighter monetary policy is expected, but this will help slow the growth of the Indian economy still further, as domestic demand will be dampened. External demand is also slowing, further adding to the downside risks.

The Indian stock market has fallen more than 40% in six months from its January 2008 high. \$6b of foreign funds have flowed out of the country in that period, reacting both to slowing economic growth and perceptions that the market was over-valued.

It is not all doom and gloom, however. A growing number of investors feel that the market may now be undervalued and are seeing this as a buying opportunity. If their optimism about the long term health of the Indian economy is correct, then this will be a needed correction rather than a downtrend.

ECONOMIC OVERVIEW

The Indian government certainly hopes that is the case. It views investment in the creaking infrastructure of the country as being a key requirement, and has ear-marked 23.8 trillion rupees, approximately \$559 billion, for infrastructure upgrades during the 11th five year plan. It expects to fund 70% of project costs, with the other 30% being supplied by the private sector. Ports, airports, roads and railways are all seen as vital for the Indian Economy and have been targeted for investment.

Further hope comes from the confidence of India's home bred companies. As well as taking over the domestic reins, where they now account for most of the economic activity, they are also increasingly expanding abroad. India has contributed more new members to the Forbes Global 2000 than any other country in the last four years.

<http://www.economywatch.com/indianeconomy/indian-economy-overview.html>



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KEY FACTS

The global financial crisis has caused a major turmoil in India's policy priorities, as inflationary threats (at least in the short term) have completely receded and risks to economic growth are now the main concern. Monetary policy will be loosened further in 2009. Real interest rates will remain negative this year, but should become positive in 2010-13 as monetary policy is adjusted to a more neutral setting.

Global de-leveraging and moves to reduce risk exposure will continue to hit India hard, and real GDP growth (on an expenditure basis) is forecast to slow to 5% in 2009/10. The economy should regain momentum gradually, with real GDP growth averaging 7.6% per year between 2010/11 and 2013/14.

Notwithstanding the current global recession, India's huge population of more than 1bn people will continue to become an increasingly important market for consumer goods in the forecast period. The large number of middle-class households offers considerable potential for manufacturers and retailers.

Source: <http://www.economist.com/countries/India/profile.cfm?folder=Profile-Forecast>

KEY TELECOM DATA

Mobile subscribers: 391 million

Landlines: 40 million

April 2009 added subscribers: 15.64 million

Annual net adds (mobile): 113.26 million

Monthly average mobile subscribers: 15.41 million

Penetration: 37%¹

Projected cellular penetration: 500 million by 2010 (40%)

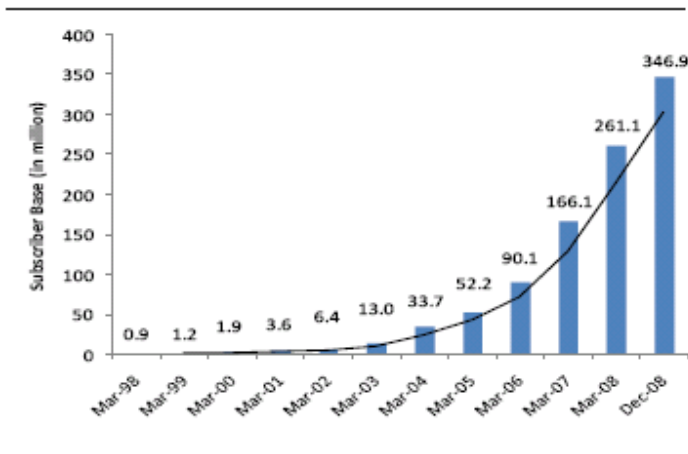
Broadband connection: 6.22 million



¹<http://www.trai.gov.in/WriteReadData/trai/upload/PressReleases/671/pr21apr09no38.pdf>

INDIAN TELECOMMUNICATIONS INDUSTRY

Chart 1: Growth in Indian Mobile Subscriber Base

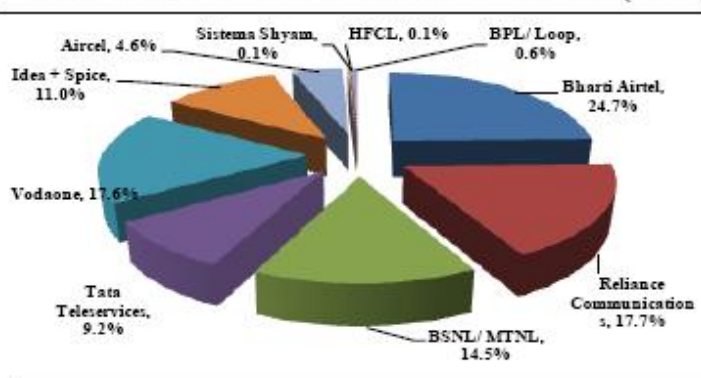


Source: Telecom Regulatory Authority of India (TRAI) Database

Blended Average of ARPU: \$5.51.

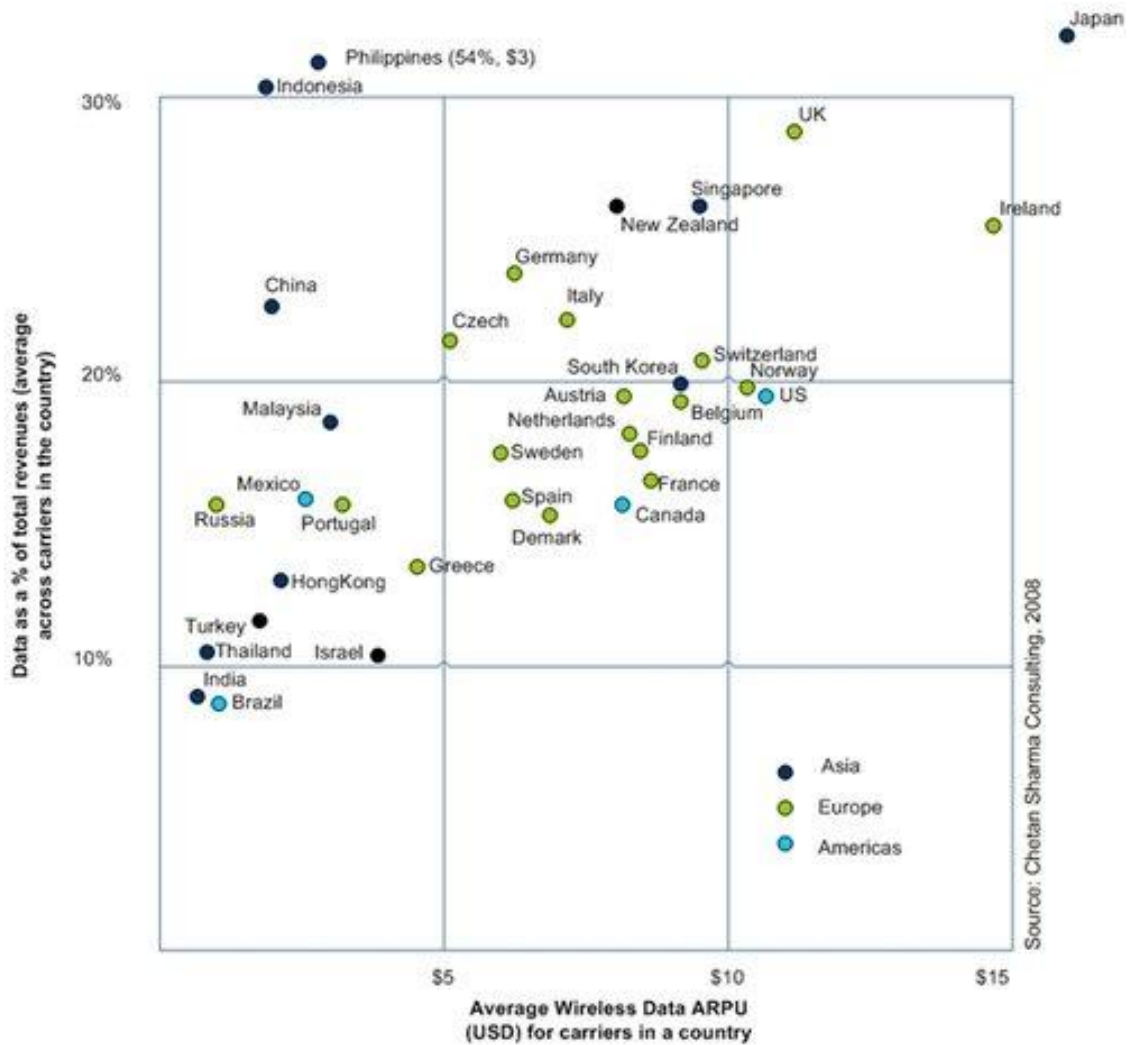
Prepaid connection comprise 85% of total subscriber base (expected to increase to 90%); and over 95% of new additions.

Chart 8: Market-share Distribution–Mobile Subscribers (Dec'08)



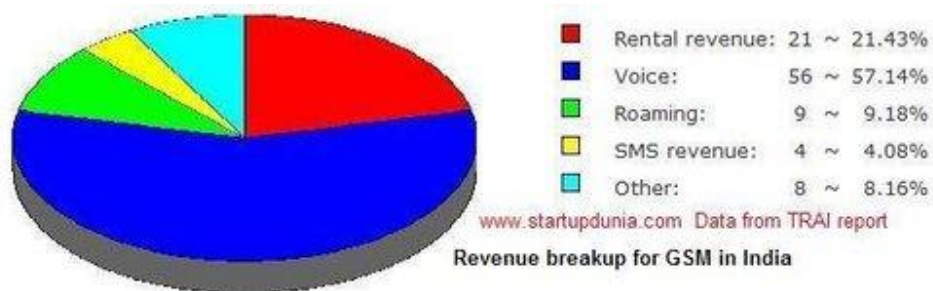
Source: TRAI Database

INDIAN TELECOMMUNICATION INDUSTRY

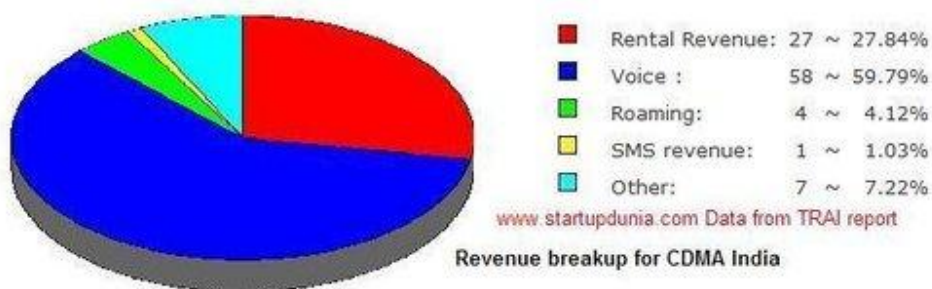


INDIAN TELECOMMUNICATION INDUSTRY

Revenue breakup for GSM users in INDIA:

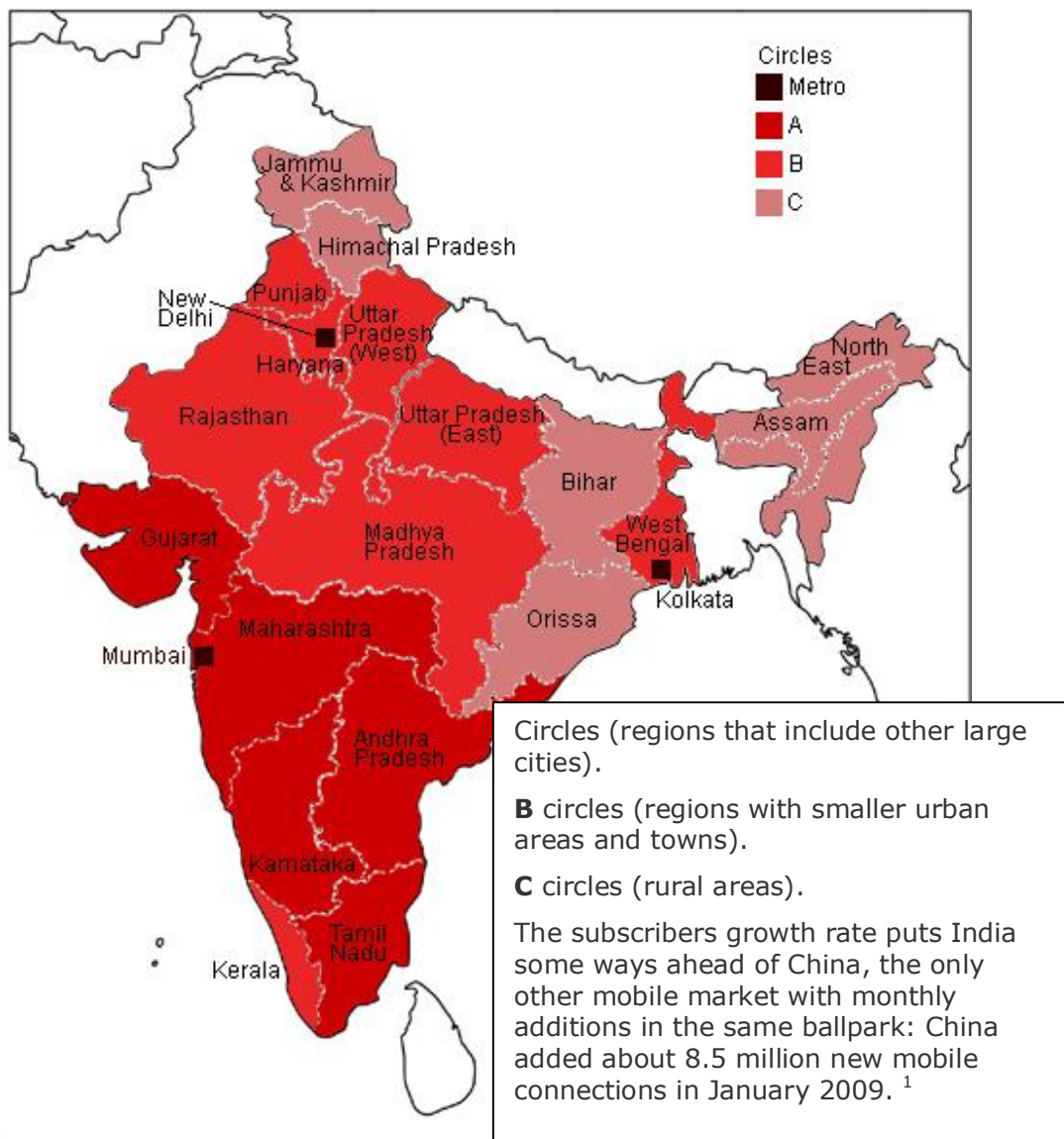


Revenue breakup for CDMA players in India:²



INDIAN TELECOMMUNICATION INDUSTRY

The Telecom Regulatory Authority of India (TRAI) has divided the market into³ 22 service areas known as "circles." The circles are divided roughly in line with the country's 29 provinces and are divided into four categories, as shown below. Service providers require a separate license for each circle:



³ http://www.lightreading.com/document.asp?doc_id=175079&page_number=2

INDIAN TELECOMMUNICATION INDUSTRY

India's current wireless operators fit into four main categories:

1. State-owned operators: BSNL, which covers 20 circles, and MTNL, which offers mobile services in the remaining two (Mumbai and New Delhi), offer GSM services.
2. The original private service providers with a national presence: Bharti Airtel and Vodafone Essar .
3. Those who took fourth-round licenses or the opportunity provided by UAS licenses to create a national presence: Reliance Communications, Tata Teleservices, and, more recently, IDEA Cellular, Sistema Shyam, and Aircel Ltd.
4. Greenfield operators issued new licenses in January 2008: Datacom Solutions, Loop Telecom, S Tel, Swan Telecom, and Unitech.

Bharti Airtel is by far the biggest mobile operator in India, with more than 91 million (!) subscribers at the end of February 2009. The table below ranks the country's wireless operators by the size of their customer bases.

The big issue for the operators is how to build significant subscriber customer bases in order to generate meaningful revenues and enjoy economies of scale.

One way is through consolidation: For example, in 2008 Spice Telecom merged with IDEA Cellular, Another way is to secure the experience and financial support of an overseas investor.

TELECOMMUNICATION MARKET FORECAST

3G

The Indian mobile market has recorded impressive growth over the past few years⁴ on the back of easy availability of low cost devices, better network coverage and affordable services. The uptrend in growth is expected to continue in near future owing to the lower teledensity, which currently hovers at around 30-35%. Moreover, there is a wide gap between rural and urban areas in terms of mobile penetration. For instance - the mobile penetration in urban areas stood at around 70% in 2008 while in rural areas, it was pegged at less than 15%, indicating to the immense potential of Indian mobile market for future growth. Nationwide deployment of 3G telecom services will help the country to bridge this huge gap.

The projected growth in the Indian 3G market will largely depend upon the decision of Indian government to auction 3G frequencies. At present, state-owned BSNL and MTNL have been allowed to rollout 3G services in India while rest of the operators will be issued 3G spectrum via auction. With the finishing of auction process, there will be massive investment in the domestic 3G deployments and the country will be able to reap the value of mobility by developing its telecom infrastructure for the propagation of this next generation technology.

Indian 3G Mobile forecast to 2012: Indian 3G subscriber base is forecasted to reach over 50 Million by 2012. The total number of mobile subscribers crossed the 340 Million mark in 2008 and is projected to grow at a CAGR of over 14% till 2012 to reach 650-660 Million subscribers. 3G will account for around 7-10% of the total mobile subscriber base⁵.

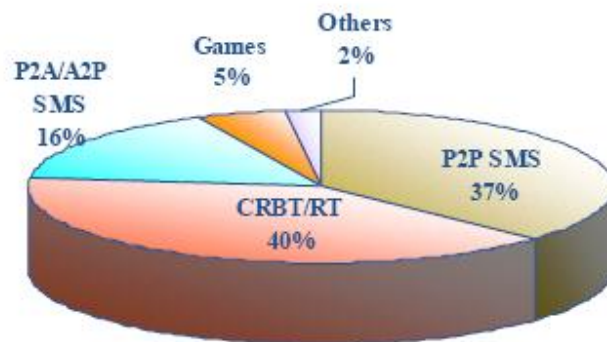
TELECOMMUNICATION MARKET FORECAST

VAS⁶

- VAS constitutes 7% of total telecom revenue for Indian operators.
- SMS constituted 55% of VAS revenue in 2006 [P2P/A2P/P2A, A = Application, P=Person), the growth was mainly driven by reality shows like Indian Idol/Kellogg's/KBC etc.
- Digital music (including CRBT and ringtones) constitutes 35% of VAS revenue.
- CAGR of 44% (2007 – 2010), VAS revenues will reach USD 2,744 million (926mn \$ by 2007): This is dependent on several factors like regulatory (e.g. number portability) and non-regulatory factors.
- Growth acceleration will begin in 2009, as various challenges are overcome, size of mature user base increases, and telco focus on high end user VAS heightens
- [Bollywood](#) and Cricket is the killer content - though no significant investment has gone beyond developing local apps or even content/services.
- Revenue share between telcos & content providers / aggregators is 70:30, substantially more skewed in favor of telco than in other countries - further aggravated by lack of payment mechanisms.
- SMS/IVR/Music downloads/Internet Apps/Search will see an upsurge; limited growth of UGC and mCommerce
- Almost half of Indians use ULCH (Ultra Low Cost Handsets)

TELECOMMUNICATION MARKET FORECAST

VAS Revenue contribution- by Services- Jun 2008



- New technologies Implementation will stimulate demand (3G).
- Shorter Rollout time, key necessity.
- The Entry of New players and Expansion of Existing operators.

INFRASTRUCTURE FUTURE TRENDS

Reliance communications

- Founded: 2004.
- Headquarters: Mumbai.
- 66.77 per cent of the company owned by Anil Dhirubani.
- Revenue: \$4 billion.
- Employees: 33,000.
- Technology: CDMA-One, GSM.
- Subscribers: 74 million.
- Licensed in all India circles.



Vodafone – Essar

- Founded in 1994 as Hutchison Essar.
- Headquarters: Mumbai.
- Owned by Vodafone 52%, Essar Group, 33% and other Indian nationals, 15%.
- Technology: GSM, Edge.
- Subscribers: 69 million.
- Licensed in all India circles.



INFRASTRUCTURE FUTURE TRENDS

Idea-Cellular

- Founded in 1995.
- Headquarters: Indore, Delhi, Pune.
- Owned by Currently, Birla Group holds 49.1%.
- Technology: GSM, GPRS, Edge.
- Subscribers: 44 million.
- Licensed in 19 circles.



Loop Mobile

- Founded in 2009 (Formerly BPL).
- Headquarters: Mumbai.
- Technology: GSM, GPRS.
- Subscribers: 2 million.
- Licensed in all circles.



Tata-Teleservices

- Founded in 2000.
- Tata Group and group firms own about 80 percent of the company, while investor C. Sivasankaran holds 8 percent
- Headquarters: Mumbai.
- Technology: CDMA-One, GSM.
- Subscribers: 37 million.
- Licensed in all circles.
- Tata Teleservices is no. 2 slot in terms of Market Share in Delhi NCR region with a subscriber base of 3 million.



INFRASTRUCTURE FUTURE TRENDS

Airtel

- Founded in 1985.
- Globally, Bharti Airtel is the 3rd largest in-country mobile operator by subscriber base, behind China Mobile and China Unicom.
- Revenue \$6 billion.
- Headquarters: New-Delhi.
- Airtel is fully owned by Bahrtly group.
- Subscribers: 97 million.
- Technology: GSM, Edge.
- Licensed in all circles.



BSNL

- Founded in 2000.
- BSNL is India's oldest and largest Communication Service Provider.
- Headquarters: New-Delhi.
- Owned by the government of India.
- Subscribers: 47 million.
- Technology: GSM, GPRS, Edge, HSDPA.
- Licensed in all circles except Delhi and Mumbai.



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