



# The Indian mobile market – an overview

29 April 2005

Martin Garner

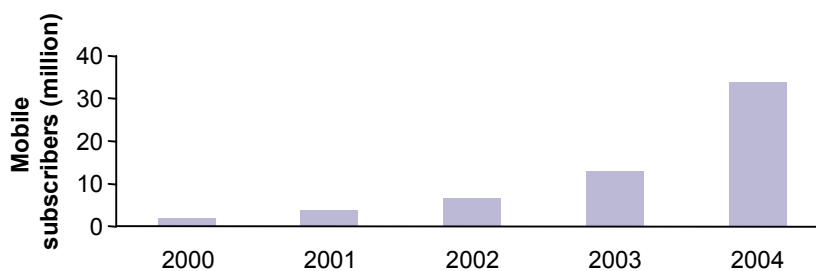
## Market size and growth

The Indian mobile market has experienced high customer growth rates since 2000. According to the Telecom Regulatory Authority of India (TRAI), India's 46 million mobile customers have already surpassed its fixed-line customers (source: TRAI news release dated 9 November 2004).

### Customers

In March 2000, there were 1.9 million mobile customers in India. This increased to 33.7 million by March 2004 at a compound annual growth rate (CAGR) of 105.2% (source: TRAI annual report 2003–2004). As of December 2004, there were 49 million mobile customers in India. The growth in the number of mobile customers is illustrated in *Figure 1*.

Figure 1 Indian mobile customers (March 2000–March 2004)



Source: TRAI Annual Report 2003–2004

The customer growth during 2000–2004 can be studied under two phases:

#### Phase one: 2000–2002

During this phase, customer numbers grew from 1.9 million to 3.6 million at a CAGR of 85.5%. This growth was primarily due to a shift from a fixed licence fee structure,



as had been in place prior to 1999–2000, to a revenue sharing structure. Under the fixed fee regulation, operators had to pay a lump-sum fee to acquire a licence. The major disadvantages of this fee structure were:

- it increased the fixed costs to the company and consequently acted as an entry barrier for the Indian mobile industry
- higher fixed costs pushed up the mobile tariffs, which led to slower subscriber growth prior to 2000.

The revenue-sharing licence fee structure was introduced in 1999–2000. As per this regulation, instead of a lump-sum payment the companies have to pay a fixed portion of their adjusted gross revenues as licence fees. This helped mobile operators rationalise their tariffs and increase their coverage to smaller metros with low penetration levels. For example, the GSM tariffs decreased from euro14 (Rs650) per 100 minutes in 2000 to euro3.3 (Rs170) per 100 minutes in 2002.

#### **Phase two: 2002–2004**

During this phase, customers grew from 3.6 million to 33.6 million at a CAGR of 127%. This period of high growth can be attributed to the following factors:

##### **Introduction of Unified Access Licensing (UAL)**

In November 2003, the government introduced UAL, which allowed wireless local loop (WLL) operators with limited geographical coverage to offer full mobility services on payment of an additional entry fee. Under this regulation, an operator with fragmented WLL licences in many areas could obtain a single, unified licence. This helped the operators make wider use of their infrastructure and to shift to full mobility services. This move sparked an increase in competition in the market and caused controversy with existing cellular licence holders.

##### **Affordability of mobile services**

Increased competition between the mobile operators led to a huge reduction in tariffs. Mobile service tariffs have been falling steadily. Currently, service charges in India are among the lowest in the world (source: COAI). In financial year 2000, call tariffs stood at euro14 (Rs650) per 100 minutes. These have fallen at a CAGR of -34.4% to euro2.6 (Rs130). A reduction in import duties also led to lower mobile handset costs.

##### **TRAI makes incoming calls free**

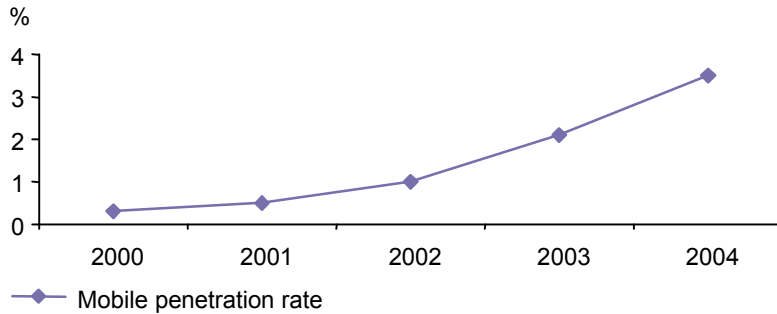
In May 2003, TRAI removed charging for incoming calls to mobile phones. Before this regulatory change, both the caller and the receiver of the call had to pay. This regulatory change led to customer growth, which is expected to continue with the lowering of tariffs (as interconnection charges are rationalised further).



## Mobile penetration

In March 2000, mobile penetration was at approximately 0.3%. This increased to 3.5% in March 2004 at a CAGR of 85%. This trend is depicted in *Figure 2*.

Figure 2 **Mobile penetration (March 2000–March 2004)**



Source: World Markets, Global Mobile, CIA Fact Book

## Industry usage – minutes of use (MOU)

In financial year 2000, average blended MoU (per customer per month) stood at 197 minutes. This increased to 302 minutes in financial year 2004 at a CAGR of 11.3%. This trend is illustrated in *Figure 3*.

Figure 3 **Average MoU (per customer per month) for incoming and outgoing mobile services (March 2000–2004)**

Financial year	Postpaid MoU	Prepaid MOU	Blended MOU
2000	238	112	197
2001	312	106	223
2002	363	89	218
2003	460	99	225
2004	590	208	302

Source: COAI report

There has been a rapid growth in MoU in financial year 2004. This increase is attributable to the following factors:

- **free incoming calls.** Before 2003, incoming calls were charged – a person receiving a call on a mobile would have to pay for it as well as the calling party. This acted as a deterrent to higher mobile usage. At the beginning of 2003, charging for incoming calls was stopped. This led to accelerated usage growth in 2003–2004

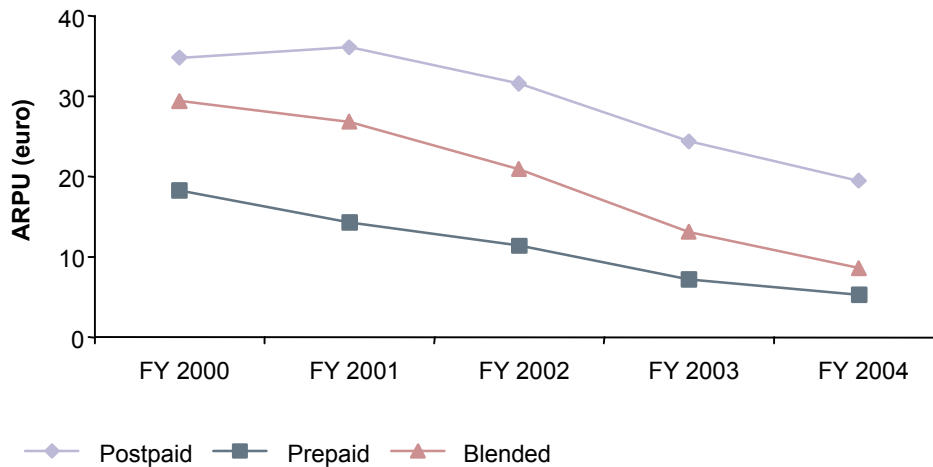


- **lowering of outgoing call rates.** There was further rationalisation of call rates in 2003–2004. This also increased usage during this period.

### Average revenues in the Indian mobile market

In financial year 2000, the average revenue per user (ARPU) for postpaid services stood at euro34.8 (Rs1,560). This declined to euro19.5 (Rs1,056) in financial year 2004 at a CAGR of -13.5%. During the same period, prepaid ARPU also declined, from euro18.3 (Rs822) in 2000 to euro5.3 (Rs288) at a CAGR of -26.6%. *Figure 4* gives a comparison of blended, postpaid and prepaid ARPU.

Figure 4 **ARPU per month – mobile services (March 2000–March 2004)**



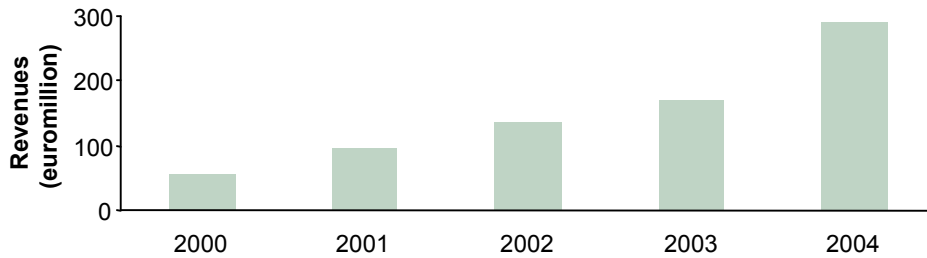
Source: TRAI

### Industry revenues

In financial year 2000, the revenues from the mobile industry stood at euro56 million (Rs2.5 billion) (source: TRAI data ). This increased to euro292 million (Rs15.8 billion) in financial year 2004 at a CAGR of 51.1%. This trend is illustrated in *Figure 5*.



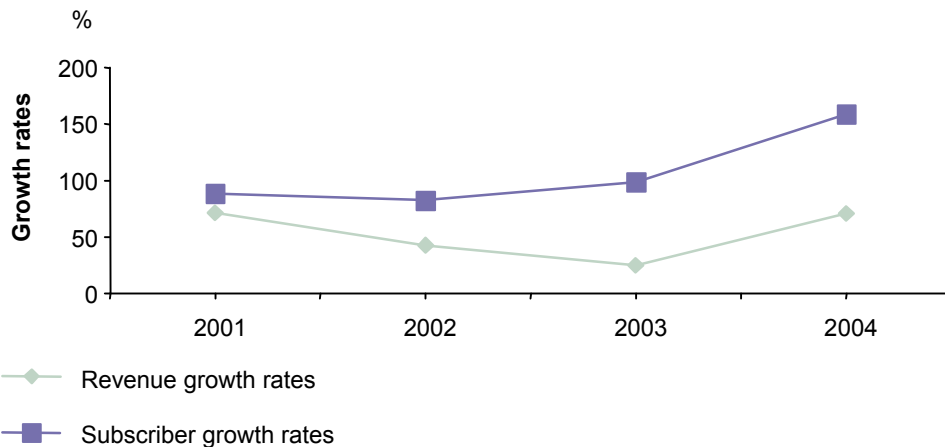
Figure 5 Indian mobile industry revenues, March 2000–March 2004



Source: TRAI

However, revenue growth has not kept pace with the growth in customer numbers. This is illustrated in Figure 6.

Figure 6 Revenue and customer growth rates, year-on-year (March 2001– March 2004)



Source: TRAI

This can be attributed to the following factors:

- ARPU levels have fallen for both prepaid and postpaid services. Prepaid ARPU has remained considerably lower than postpaid ARPU (prepaid ARPU is approximately 27% of postpaid). Therefore, the increase in the market share of prepaid customers from 39% in 2000 to 75% in 2004 has resulted in lower revenue growth
- there has been an increase in usage for prepaid customers, from 99 minutes in 2003 to 208 minutes in 2004 at a CAGR of 110% (source: TRAI) in just one year. As of 2004, incoming calls constitute about 75% of prepaid MoU. Incoming call charges were removed by TRAI in 2003; therefore, revenue growth has been lower than usage growth

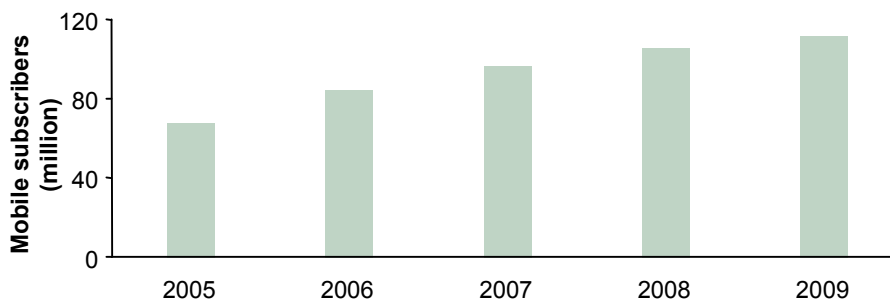


- the combined effect of all these factors pulled the CAGR for revenues down to 25% (source: TRAI).

### Future scenario

The strong growth experienced by the Indian mobile market is expected to continue. According to Ovum, the number of mobile customers is expected to reach 105 million by 2008. The expected growth is illustrated in *Figure 7*.

Figure 7 India's mobile customer growth (2005–2008)



Source: Ovum

In future, the following trends can be expected in the Indian mobile market:

- **rural markets as an avenue to future growth.** Much of the future growth in customers is expected to come from rural areas. The teledensity in the rural markets is only 1.7%, as compared to 19.7% in the urban market (source: TRAI consultation paper). TRAI is also expected to introduce regulations that will help increase the rural penetration levels (source: TRAI). The vast untapped potential and improving regulatory climate make these markets attractive for mobile operators
- **decrease in ARPU levels.** ARPU levels are expected to decrease further as the customer base expands to lower income groups. In addition, usage levels in smaller markets are expected to be low. The spread of mobile services to these segments will skew the mobile market in favour of prepaid services
- **increase in share of value-added services.** Value-added services will have a greater share of the total mobile revenues. According to Ovum, value-added services' share of total revenues is expected to increase from 12.3% in 2004 to 30.5% in 2009. One of the factors responsible for this growth is a higher literacy rate among mobile customers. At the end of 2003, 80% of mobile customers were below the age of 36 (with a 75% literacy rate). This segment is generally more receptive to new technologies
- **consolidation expected in the market.** As the content level and tariff charges offered by national players become industry standards, smaller players will find it difficult to meet them. This will lead to further consolidation of the market. In this

regard, the proposal for the merger of Bharat Sanchar Nigam Limited (BSNL) and Mahanagar Telephone Nigam Limited (MTNL) is already under consideration.

## Market dynamics

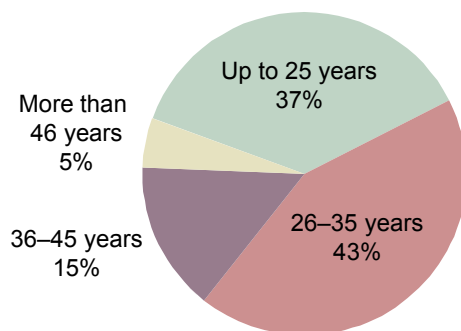
### Segmentation

#### Age profile

In India, approximately 42% of the population are below 20 years old and more than 74% are below the age of 40.

The Indian mobile customers' age profile follows a similar distribution. Approximately 37% of Indian mobile customers are below the age of 25 and 95% are below the age of 45, as shown in *Figure 8*.

Figure 8 **Mobile users by age in India (2003)**



Source: *Voice&Data*

#### Prepaid/postpaid mix

The Indian mobile market has shown a shift towards prepaid services. The prepaid/postpaid customer mix has changed from 39/61 in March 2000 to 75/25 in March 2004. This trend is illustrated in *Figure 9*.

Figure 9 Prepaid/postpaid customer mix



Source: TRAI Annual Report 2003–2004

The shift towards prepaid services can be attributed to the following major factors:

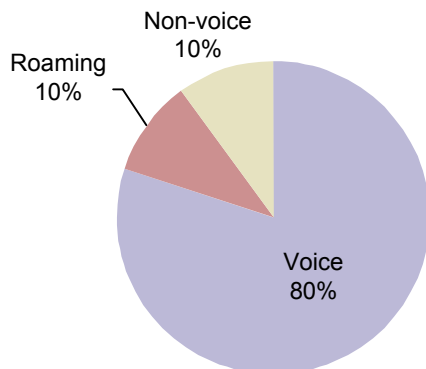
- cheaper tariffs offered by prepaid services
- in May 2001, TRAI made it mandatory for the mobile service providers to offer prepaid cards with a value of Rs300 and a validity period of at least one month. This increased the affordability and the utility of prepaid cards
- high growth of mobile phone users in the youth segment has also resulted in increased demand for prepaid services.

## Revenue split

### Voice and data usage

As of May 2004, the revenue split between voice, roaming and data was in the ratio of 80/10/10. This trend is illustrated in *Figure 10*.

Figure 10 Voice and non-voice revenue shares as of May 2003



Source: Voice&Data



Voice revenues are expected to remain a dominant part of overall mobile revenues. According to Ovum, Indian mobile revenues are expected to reach euro10.4 billion (\$13 billion) by 2009 (exchange rates are according to average exchange rates in 2004). The share of non-voice revenues is expected to increase to 30.5% (euro3.2 billion) of the total mobile revenues, from the current 12.3%.

The slow growth of non-voice revenues is primarily attributable to the problem of language incompatibility. The growth of SMS as a data service has been limited to the urban areas. Approximately 30% of the Indian mobile customer base has been left out due to language incompatibility (source: Voice&Data, 2004). Recently, Hindi has been introduced as a second language. However, Hindi is spoken predominantly in the north of India, while the rest of India has different regional languages. Therefore, this will not completely solve the problem of language incompatibility.

## Market structure

The Indian Department of Telecommunications has divided the country into 23 service areas for the provision of mobile services, consisting of 19 'Telecom Circle Service Areas' (type 'A', 'B' and 'C'), and 4 'Metro Service Areas'. These are based on the number of potential customers. For example, the C circles are rural areas and are the least attractive sectors, with very little revenue potential.

Since 2002, the growth of customers has been higher in circles A, B and C, as compared to metros. Customer numbers in circles A, B and C have experienced a CAGR of more than 100%, compared to a 92% CAGR in metros. This trend is illustrated in *Figure 11*.

Figure 11 **Customers in different circles**

	2002* (millions)	2003* (millions)	2004** (millions)	CAGR
Metros	4.0	7.0	12.65	92.6%
Circle A	4.3	8.0	15.80	111.6%
Circle B	2.3	6.0	12.60	161.3%
Circle C	0.3	0.8	1.94	191.7%

\*Figures for 2002 and 2003 are for December

\*\*As of September 2004

Source: TRAI quarterly report, September 2004

The high customer growth in the A, B and C circles can be attributed to the following factors:

- the shift in focus of mobile operators towards small cities and towns from already congested metro markets. For example, BSNL, Reliance Infocomm and Airtel have focused on smaller towns and cities, which fall into circles A, B and C.



- mobile operators have been competing amongst themselves for nationwide coverage.

#### **Mobile virtual network operators (MVNOs)**

A new phenomenon in the Indian mobile market is the advent of MVNOs. An MVNO purchases bulk airtime and data capacity from a network-owning mobile operator, develops its own service offerings and attempts to resell these at a profit.

At present, two UK-based groups – Virgin and Primus Telecommunications (PT), are planning to enter the Indian mobile market as MVNOs. However, in spite of enthusiastic foreign investors, it is difficult for MVNOs to enter the Indian market. This is primarily due to the following reasons:

- the necessary regulatory authorisation for starting an MVNO in India has yet to be given
- Indian operators do not have excess network capacity
- Indian mobile operators perceive MVNOs as competitors rather than avenues to gaining more customers.

### **Policy and regulation**

#### **Regulatory body**

The telecoms industry in India is regulated by TRAI. It was formed in January 1997 with the following objectives:

- to provide an effective regulatory framework
- to set up adequate safeguards to ensure fair competition
- to protect consumer interests.

The authority has absolute power over areas such as tariff fixing, interconnect terms and fixing quality standards. However, on issues such as granting and revoking licences, the government is not bound by TRAI's recommendations.

#### **Regulatory issues**

The policy and regulatory changes that have taken place since 2000 have helped the Indian mobile market to grow, in terms of both customers and competition. The most important regulatory changes have been made in the following areas:

- licence fees
- calling party pays
- foreign investment
- intra-circle mergers
- introduction of UAL.



### Licence fee

The initial fixed licence fee regime imposed by the government was a financial burden on the wireless operators. In 1999, the NTP replaced this regime with an entry fee and a revenue-sharing arrangement. In 2000, TRAI recommended a revenue-sharing agreement at 17% of the adjusted gross revenues for incumbent migrating cellular operators.

This was reduced progressively:

- in January 2001 when WLL (M) was introduced
- in December 2003 when UAS licences were introduced
- the additional benefit of a two percentage points reduction in revenue share has been awarded for first and second circle (excluding Metro) cellular licensees, for a period of four years, subject to a minimum of 5% of adjusted gross revenues.

At present, the licence fees are at 6%, 8% and 10% of AGR for Circles C, B and A/Metro licensees, respectively.

The TRAI, in its recommendations on UAL which it submitted to the government, recommended a revenue share licence fee of 6% AGR (universal service obligation of 5% and 1% towards the cost of administration).

### Foreign investment

Telecoms is one of the fastest growing sectors in India. Being an infrastructure industry, it requires high capital investments. Along with this, the growth shown by this sector has made it attractive to foreign investors.

The foreign investment guidelines formulated by TRAI are as follows:

- foreign direct investment up to 100% of the total equity base of a company, is permitted for the following:

*manufacture of telecoms equipment under automatic route*

*Internet services (not providing international gateways)*

*infrastructure providers (category I)*

*email services*

*voicemail services*

*call centres*

*IT-enabled services*

- foreign direct investment up to 74% of the total equity base of a company is permitted (subject to licensing and security requirements) for the following:

*Internet services (providing international gateways)*

*infrastructure providers (category II)*

*radio paging services.*



- foreign direct investment up to 49% of the total equity base of a company, is permitted under automatic route for the following:

*international long-distance*

*national long-distance services*

*basic telephone services*

*cellular mobile services*

*global mobile personal communication*

*other value-added services.*

In February 2005, the Indian Finance Ministry recommended raising the limit on foreign investment in telecoms networks from 49% to 74% (source: [www.informationweek.com](http://www.informationweek.com)).

#### **Intra-circle mergers**

In 2005, guidelines were issued for intra-circle mergers and acquisitions, which allowed the take-over of smaller or less profitable regional players by larger players, leading to a consolidation of the market.

The guidelines also laid down the following conditions on the scope of these mergers:

- **number of mobile service providers in a circle.** A merger will not be allowed in cases where the number of operators in a circle is reduced to less than three
- **monopoly.** Any merger leading to a monopoly (market share of over 67%) will not be permitted
- **market share of the merged entity.** If the market share of the merged entity exceeds or equals 30%, the rules applicable to an operator having significant market power will also apply to the merged entity
- **spectrum allocation.** The spectrum for the merged entities will be limited to 15MHz per operator per service area in metros and category A circles, and 12.4MHz in category B and C circles.

#### **UAL**

In 2003, TRAI recommended UAL for cellular and fixed services at a benchmark entry fee that was paid by the fourth cellular licensee. Under the UAL regime, basic/fixed phone firms registered under WLL, with limited geographical coverage, could offer full mobility services.

#### **Impact of regulatory changes on the market**

The effects of these regulatory changes are as follows:

- the entry fee plus revenue-sharing arrangement with TRAI has restored viability for the existing operators

- with the government allowing increased foreign direct investments in the telecoms sector, it has become easier for cellular operators to access external funds for their network expansion and foreign players to enter the market; for example, AT&T and Hutchison
- intra-circle mergers and acquisitions will facilitate consolidation, leading to a reduction in costs due to economies of scale, which could result in lower tariffs
- UAL has increased the competition, with up to eight operators in a service area.

## Technology

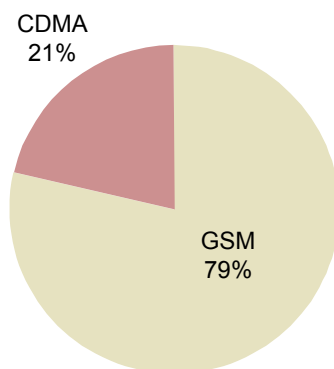
The key network technologies that are prevalent in the Indian mobile market are:

- Global System for Mobile Communications (GSM)
- Code-Division Multiple Access (CDMA)

GSM was the first mobile technology to be introduced in the Indian market. In September 1999, technology neutrality was announced and other technologies such as CDMA were introduced. GSM dominates the Indian mobile market with approximately 79% (as of December 2004) of the total market share.

The distribution of customers by network technologies in the Indian mobile market is illustrated in *Figure 12*.

Figure 12 **Customer distribution by technology in the Indian market**



*Note: as at December 2004*

*Source: TRAI*

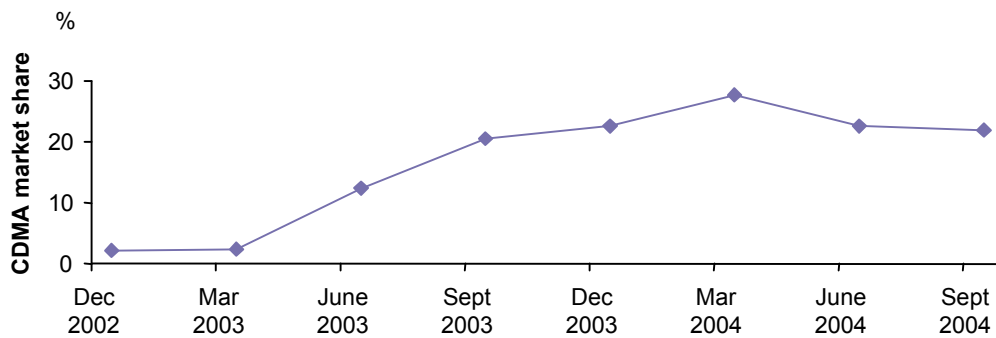
### Increase in CDMA market share

In December 2002, the CDMA operators had a 2.2% share of the overall market. This increased to 21.9% by September 2004. CDMA's market share increased after the launch of Reliance Infocomm's services in May 2003. As of December 2004, Reliance Infocomm was the leader in the CDMA segment, with an 84% market share.



This was primarily because the services offered by Reliance were cheaper than the other mobile operators. This helped to attract mobile customers looking for cheaper handsets and services. In December 2004, Reliance had 9.1 million customers, and accounted for 19.3% of the overall market and approximately 90% of the CDMA market. The CDMA market share trend is shown in *Figure 13*.

Figure 13 CDMA market share (December 2002–September 2004)



Source: TRAI

The increase in CDMA customers can be attributed to the following factors:

- **price sensitivity.** Indian customers are highly price-sensitive, and Reliance capitalised on this factor by offering cheaper mobile services and subsidised phones
- **ease of availability.** In India, very few operators sold handsets along with their subscriptions before Reliance Infocomm came into the market.
- **growth in PC and Internet penetration.** Reliance Infocomm was the first mobile operator to provide higher-speed Internet services in India.

#### Introduction of high-speed services in the Indian market

GSM and CDMA operators in India are starting to adopt high-speed mobile services.

- **GSM:** Airtel and Hutch launched EDGE services in 2004
- **CDMA:** Reliance Infocomm and Tata Teleservices entered into a contract with Lucent Technologies to deploy a CDMA2000 1XEV-DO wireless network.

There is a lot of interest from various operators in providing high-speed services for the Indian market, with operators suggesting tenders for spectrum and announcing investment plans.

## Operator summary and overviews

### Mobile operators

As of December 2004, TRAI recognised 12 mobile operators. Some of these operate on dual network technologies. The various mobile operators and their customer bases are listed in *Figure 14*.

Figure 14 **Customer base by mobile operator**

	<b>Customer base</b>	<b>Market share</b>	<b>Technology</b>
Reliance Group	10,146,496	21.3%	GSM and CDMA
Bharti Group	9,826,156	20.7%	GSM
BSNL	8,437,808	17.7%	GSM and CDMA
Hutchison Group	7,179,592	15.1%	GSM
IDEA Group	4,696,472	9.9%	GSM
BPL Group	2,468,350	5.2%	GSM
Spice Group	1,497,718	3.1%	GSM
Aircel Group	1,647,268	3.5%	GSM
Tata Teleservices	805,943	1.7%	CDMA
MTNL	776,446	1.6%	GSM and CDMA
HFCL	48,596	0.1%	CDMA
Shyam Telelink	25,665	0.1%	CDMA
<b>Total customers</b>	<b>47,556,510</b>	<b>100%</b>	<b>GSM and CDMA</b>

Source: COAI quarterly report, December 2004

### GSM network operators

There are nine mobile operators operating GSM networks in India. Bharti Tele-Ventures' Airtel is the market leader in this segment. As of December 2004, it had 9.8 million mobile customers. The mobile operators in this segment are as shown in *Figure 15*.




---

 Figure 15 **GSM customers by operator (December 2004)**

	<b>Customers</b>	<b>Market share</b>
Airtel	9,826,156	26.3%
BSNL	8,437,808	22.6%
Hutchison	7,179,592	19.2%
IDEA	4,696,472	12.6%
BPL	2,468,350	6.6%
Spice	1,497,718	4.0%
Reliance Telecom	1,030,701	2.8%
MTNL	594,742	1.6%
Aircel Group	1,647,268	4.4%
<b>Total</b>	<b>37,378,807</b>	<b>100%</b>

Source: COAI quarterly report, December 2004

---

#### **CDMA network operators**

There are six mobile operators operating CDMA networks in India. Reliance Group's RIC is the market leader in this segment. As of December 2004, Reliance had 9.1 million mobile customers. The mobile operators in this segment are shown in *Figure 16*.

---

 Figure 16 **CDMA customers by operator (December 2004)**

	<b>Customers</b>	<b>Market share</b>
RIC	9,115,795	89.6%
Tata Teleservices	805,943	7.9%
BSNL	NA	NA
MTNL	181,704	1.8%
HFCL	48,596	0.5%
Shyam Telelink	25,665	0.3%
<b>Total</b>	<b>10,177,703</b>	<b>100.0%</b>

Source: COAI quarterly report, December 2004

---

## Reliance Group

### Overview

The Reliance Group operates in GSM and CDMA mobile markets through its two subsidiaries: RIC and Reliance Telecom.

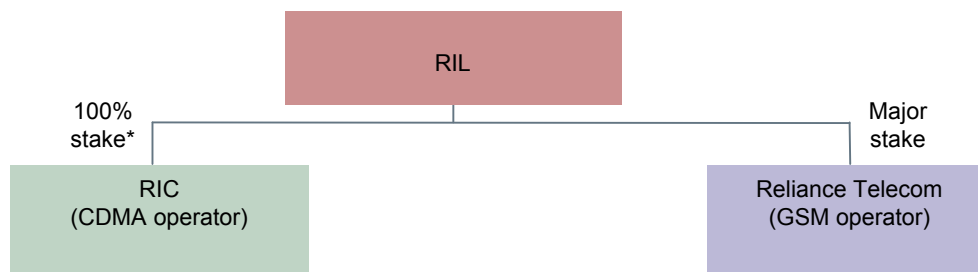
- Reliance Telecom, which operates on GSM technology, is a joint-venture company promoted by Reliance Industries Limited (RIL), with minority equity participation by Bell Atlantic Nynex Inc
- Reliance Infocomm (RIC), which operates on CDMA technology, was thought to be a wholly-owned subsidiary of the Reliance Group, although this has recently been the subject of some debate.

As of December 2004, the Reliance group had 10.1 million customers and accounted for 21.3% of the overall market. Of these, 9.1 million were CDMA customers. This accounts for 90% of CDMA customers and 19.3% of the Indian mobile market.

### Ownership structure and recent changes

The Reliance Group has a majority stake in Reliance Telecom, while RIC is a fully-owned subsidiary of RIL. This ownership structure is illustrated in *Figure 17*.

Figure 17 **Reliance Infocomm ownership structure as of March 2004**



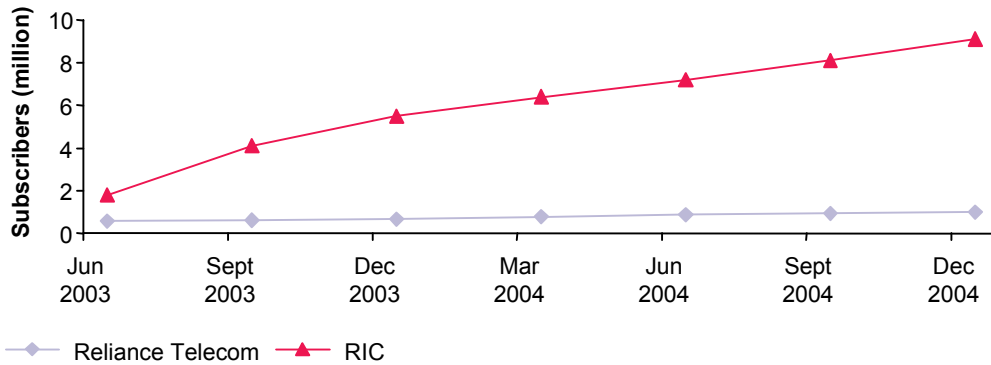
Source: RIL Annual Report 2003–2004  
\* subject to confirmation

### Performance indicators

In December 2000, Reliance Telecom had 0.1 million customers. This increased to 1 million by December 2004 at a CAGR of 77.83%. RIC had 1.8 million CDMA customers in June 2003. This increased to 9.1 million in December 2004, registering a CAGR of 233%. This trend is illustrated in *Figure 18*.



Figure 18 Reliance Group customer base (June 2003–December 2004)



Source: TRAI

### Operator-specific ventures

In January 2004, RIC acquired a 100% stake in the undersea cable company FLAG Telecom for euro166.7 million (\$211 million). This acquisition has provided RIC with a gateway to global markets.

## Airtel

### Overview

Bharti Tele-Ventures' Airtel is the leading GSM mobile operator in India. Bharti Tele-Ventures Limited was incorporated on 7 July 1995 for promoting investments in telecommunications services. Its subsidiaries operate telecoms services across India. Its businesses have been organised by services in two strategic business groups, namely:

- mobile
- Infotel services group.

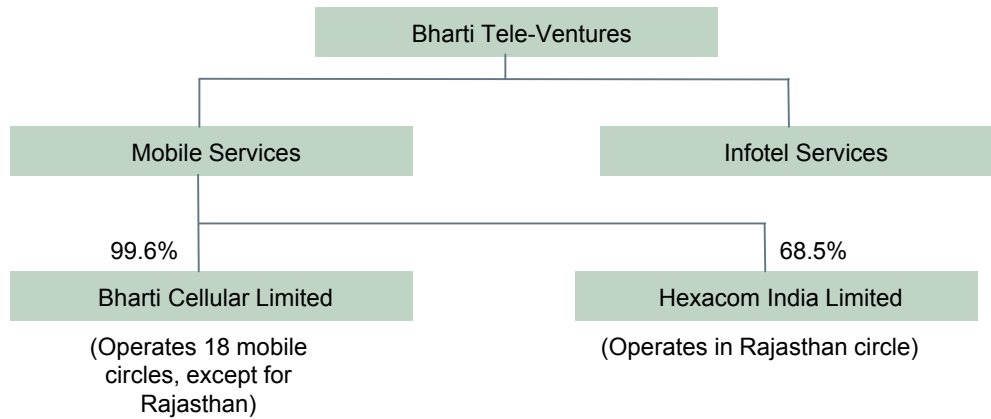
The mobile group provides GSM mobile services in 15 telecoms circles. The Infotel group provides services, which include fixed-line and long-distance telephony, as well as data and enterprise solutions.

As of December 2004, Airtel had 9.8 million mobile customers, and had a 26% share of the GSM mobile market and a 21% share of the overall mobile market.

### Ownership structure and recent changes

Bharti Tele-Ventures conducts business through its subsidiaries. A detailed ownership pattern is shown in *Figure 19*.

Figure 19 **Bharti Tele-Ventures shareholding pattern**



Note: % signifies ownership  
 Source: Bharti Tele-Ventures

Since the 1999/2000, Bharti Tele-Ventures has consolidated its different regional operations under a single entity, Bharti Cellular. Some of the consolidations are shown in Figure 20.

Figure 20 **Bharti Cellular’s consolidations (2000–2004)**

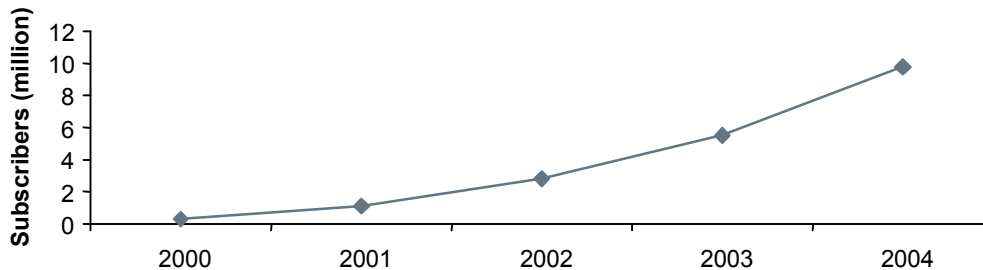
Year	Company	Region
1999/2000	Bharti Mobile	Karnataka and Andhra Pradesh
2000/2001	Bharti Telenet	Himachal Pradesh
2001/2002	Bharti Mobitel (formerly Spice Cell)	Kolkata

Source: Bharti Tele-Ventures website

**Performance indicators**

In December 2000, Airtel’s customer base stood at 0.3 million customers. This increased to 9.8 million customers by December 2004, registering a CAGR of 143.2%, as illustrated in Figure 21.

Figure 21 **Airtel customer base (2000–2004)**



Source: Airtel

Airtel's mobile revenues have increased from euro364 million in financial year 2002 to euro505 million in financial year 2003.

#### **Operator-specific ventures**

In April 2004, Bharti Tele-Ventures (Bharti Cellular), reached an agreement with the Shyam Group to acquire its 68.5% equity stake in Hexacom India Limited for a consideration of euro8.1 million (Rs430 crores).

In November 2004, Airtel cellular services signed an agreement with six other leading Asian mobile operators to form a regional alliance – Bridge Mobile Alliance. The other mobile operators that make up this alliance are: Globe Telecom (Philippines), Maxis (Malaysia), Optus (Australia), SingTel (Singapore), Taiwan Cellular Corporation (Taiwan) and Telkomsel (Indonesia). The Bridge Mobile Alliance will operate through Bridge Mobile Pte Ltd. (Singapore).

## **BSNL**

#### **Overview**

BSNL was incorporated in October 2000. It has a network of over 45 million lines covering 5000 towns in India.

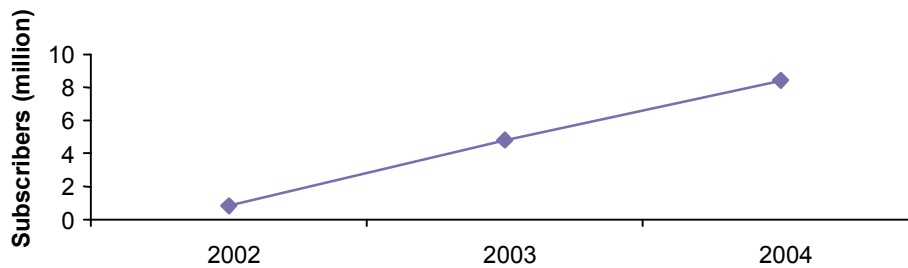
BSNL operates basic mobile (GSM and CDMA), Internet and long-distance services throughout India (except Delhi and Mumbai). It offers postpaid services under the 'Cell One' brand and prepaid services under the 'Excel' brand.

#### **Performance indicators**

In December 2002, BSNL had 0.8 million customers. This increased to 8.4 million in December 2004 at a CAGR of 224%. This trend is illustrated in *Figure 22*.



Figure 22 **BSNL customer base (2002–2004)**



Source: COAI Reports

## Hutchison Group

### Overview

Hutchison is part of the Hong Kong-based multinational conglomerate, Hutchison Whampoa. Its Indian operations began in 1994, through a joint venture with Max India. In 1995, Hutchison Max Telecom became the first operator in India to launch a mobile service.

Hutchison is one of the largest providers of mobile services in India, with a presence in all major regions – Orange in Mumbai and Hutch in Delhi, Karnataka, Andhra Pradesh, Chennai, Kolkata, Gujarat, Haryana, Rajasthan, UP (E), UP (W), Rest of Bengal and Punjab.

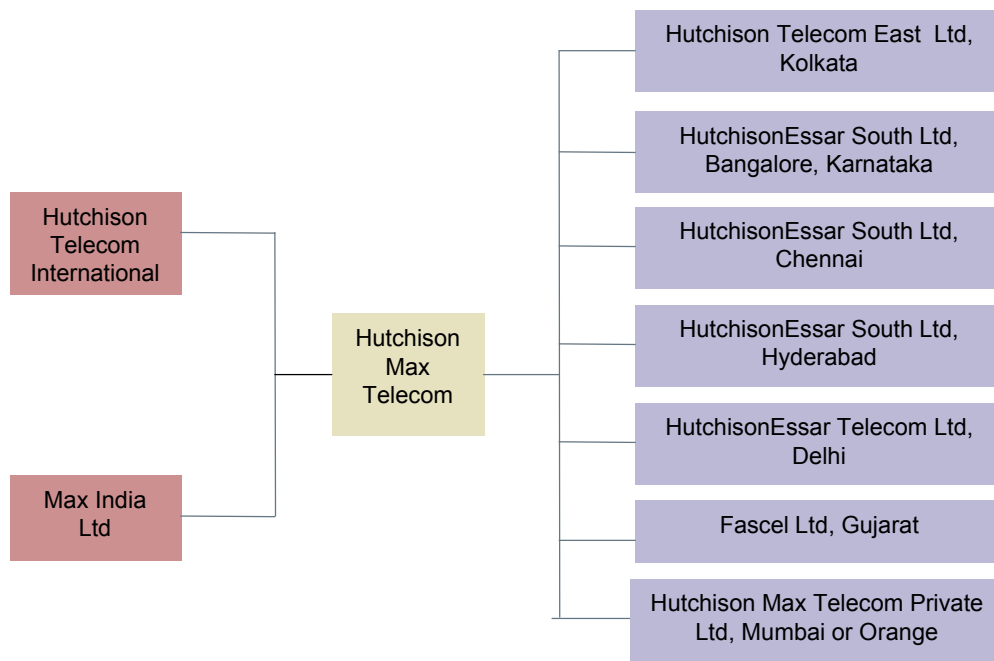
As of December 2004, Hutchison had 7.2 million mobile customers, and had a 19% share of the GSM mobile market and a 15% share of the overall mobile market.

### Ownership structure and recent changes

Hutchison Max Telecom, the joint venture between Hutchison Telecom International and Max India Limited, consists of six regional mobile operators, which operate under the brand name 'Hutch'. Although these companies have the same brand identity, they each have operational licences under their respective names.

Apart from the regional operators, Hutchison Max Telecom has a joint venture with Orange, known as Hutchison Max Telecom Private Ltd, Mumbai. This operator provides mobile services in Mumbai. The ownership structure of Hutchison Group is shown in *Figure 23*.

Figure 23 Hutchison Group ownership structure in India



Source: Hutchison

Since 2000, the Hutchison group has also acquired many small regional operators, such as:

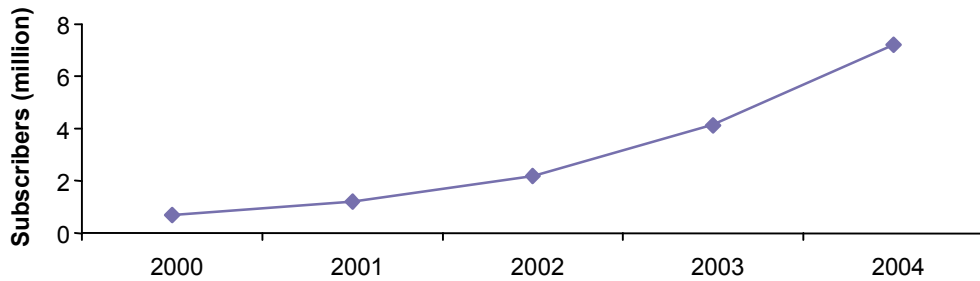
- RPG Cellular
- Sterling Cellular
- Usha Martin.

**Performance indicators**

In December 2000, Hutchison Max Telecom had 0.68 million customers. This increased to 7.2 million customers in December 2004 at a CAGR of 80.4%, as shown in *Figure 24*.



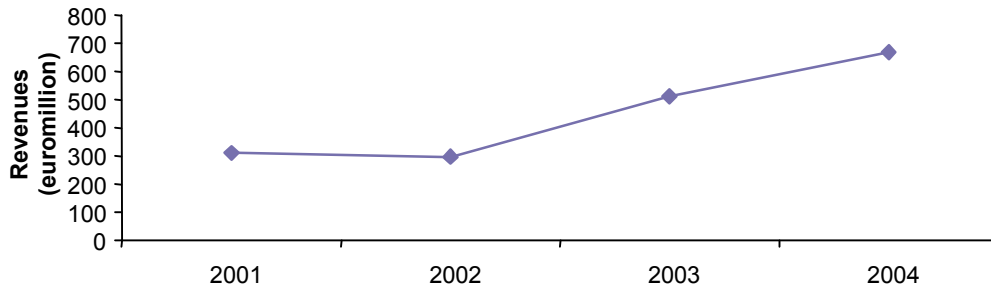
Figure 24 Hutchison customer base (2000–2004)



Source: COAI Reports

In financial year 2001, revenues stood at euro310.2 million. These have increased to euro668.8 million in financial year 2004, registering a CAGR of 29.2%. The trend is illustrated in Figure 25.

Figure 25 Hutchison Max Telecom revenues (2001–2004)



Source: Hutchison Telecom International

## IDEA Cellular

### Overview

IDEA Cellular is the merged entity of the Birla AT&T Communications and Tata Group mobile networks (Aditya Birla Group and AT&T was a mobile operator in the Maharashtra and Gujarat circle, and Tata Cellular operated in the Andhra Pradesh circle ). IDEA Cellular is the culmination of the following merger process:

- in 2000, the merger of Tata Cellular with Birla AT&T Communications and the subsequent acquisition of RPG Cellular (an operator in 2001), led to the formation of Birla Tata AT&T Limited
- in 2002, the company introduced the 'IDEA' brand and changed its name to IDEA Cellular Limited

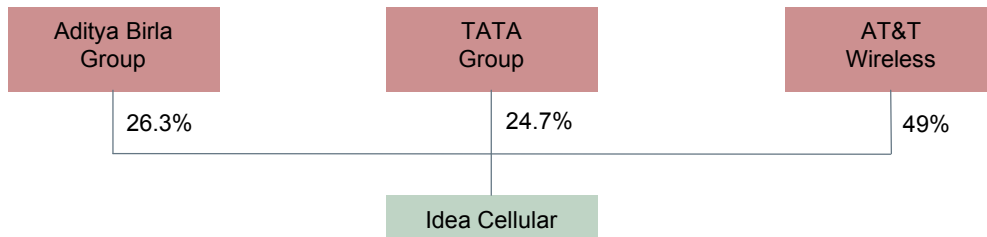


- as of December 2004, IDEA Cellular had 4.7 million mobile customers and a 13% share of the GSM mobile market. It has a 10% share of the overall mobile market.

**Ownership structure and recent changes**

Until November 2004, Birla, TATA and AT&T were the principal shareholders in IDEA Cellular. The ownership structure of IDEA Cellular is illustrated in *Figure 26*.

**Figure 26 IDEA Cellular ownership structure (November 2004)**



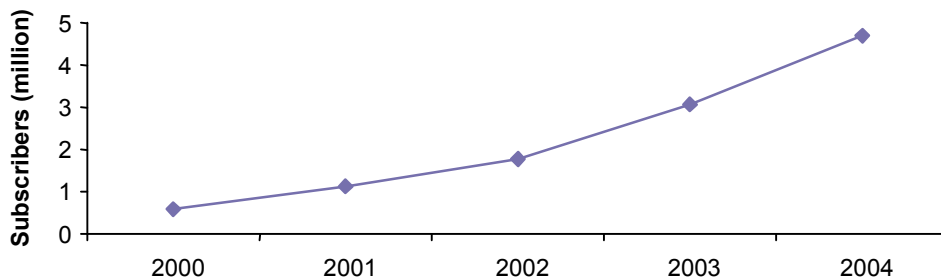
Source: Idea Cellular

However, in December 2004, IDEA Cellular entered into an agreement with Singapore Technologies Telemedia (ST Telemedia) and TM International (the international investment arm of Telekom Malaysia). According to the agreement, ST Telemedia and TM International will jointly acquire a 47.7% stake in IDEA Cellular for approximately \$390 million (euro285.9 million).

**Performance indicators**

In 2000, IDEA Cellular had 0.6 million customers. This increased to 4.7 million in 2004 at a CAGR of 67%. This trend is illustrated in *Figure 27*.

**Figure 27 IDEA Cellular customer base (2000–2004)**



Source: COAI Reports



### Operator-specific ventures

In 2004, the company acquired Escotel Mobile Communications (an existing operator in Haryana, UP (West) and Kerala) and Escorts Telecommunications (cellular licensee holder for UP (East), Himachal Pradesh and Rajasthan).

## BPL Cellular

### Overview

BPL Cellular was established in 1996. It comprises two cellular companies, BPL Mobile Communications Ltd. and BPL US West Ltd.

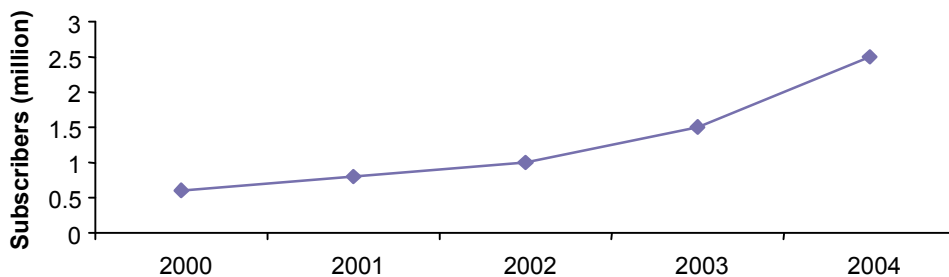
BPL Cellular operates in Maharashtra, Goa, Mumbai, Kerala, Tamil Nadu and Pondicherry.

As of December 2004, BPL Cellular had 2.4 million mobile customers. This gave it a 6.6% share of the GSM mobile market.

### Performance indicators

In December 2000, BPL Cellular had 0.6 million GSM customers. This increased to 2.5 million by December 2004 at a CAGR of 43%. This trend is illustrated in *Figure 28*.

Figure 28 **BPL Cellular customer base (2000–2004)**



Source: COAI Reports

### Operator-specific ventures

- BPL Mobile entered into strategic tie-ups with four US-based operators, namely Omnipoint, Powertel, Aerial and Voice-Stream, to offer automatic roaming in the US.
- It entered into a joint venture with France Telecom for its Mumbai operation.
- It also entered into a joint venture with MediaOne for operations in Maharashtra, Goa, Tamil Nadu, Pondicherry and Kerala.



## Spice Telecom

### Overview

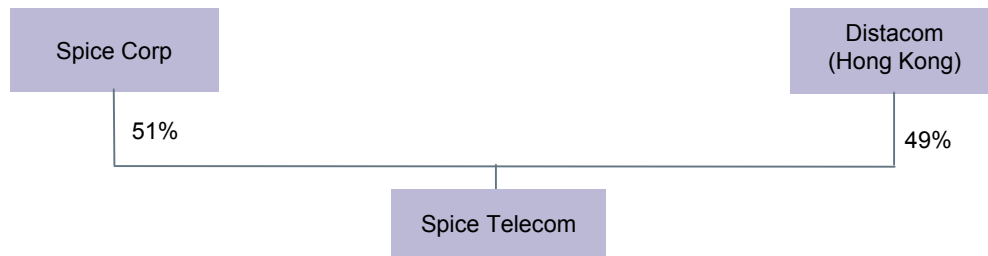
Spice Telecom is the brand name for Spice Communications Limited, which was established in 1997. It is a 51:49 joint venture between SpiceCorp (India) – the flagship company of MCorp Global group – and Distacom (Hong Kong).

Spice Telecom is presently operating in the states of Punjab and Karnataka. As of December 2004, Spice had 1.4 million mobile customers. This gave it a 4% share of the GSM mobile market.

### Ownership structure and recent changes

The ownership structure of Spice Telecom is illustrated in *Figure 29*.

Figure 29 Spice Telecom ownership structure (November 2004)

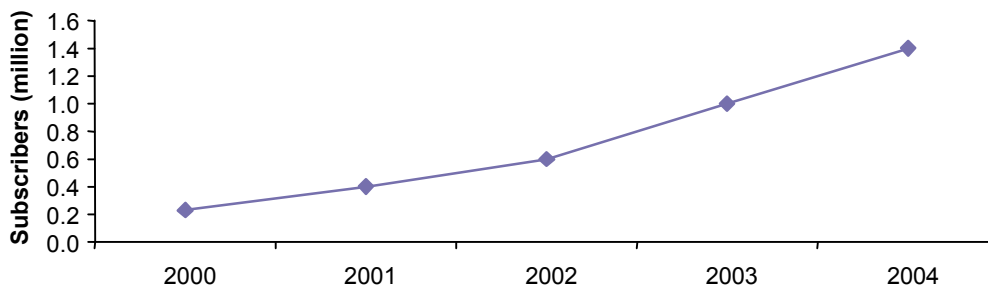


Source: Spice Telecom

### Performance indicators

In December 2000, Spice Telecom had 0.23 million GSM customers. This increased to 1.4 million customers in December 2004, registering a CAGR of 57%. This trend is illustrated in *Figure 30*.

Figure 30 Spice Telecom mobile customer base (2000–2004)



Source: COAI Reports



## TTSL

### Overview

TTSL is part of the Tata Group. It was incorporated in 1996. In December 2002, it became the first company to launch CDMA mobile services in India within the Andhra Pradesh circle.

Tata Teleservices offers services under the brand name, 'Tata Indicom' across eight states of India, namely Andhra Pradesh, Delhi, Gujarat, Karnataka, Maharashtra, Mumbai, Tamil Nadu and Chennai.

In December 2004 Tata Teleservices had 0.8 million mobile customers. This gave it an 8% share of the CDMA mobile market and a 1.7% share of the overall mobile market.

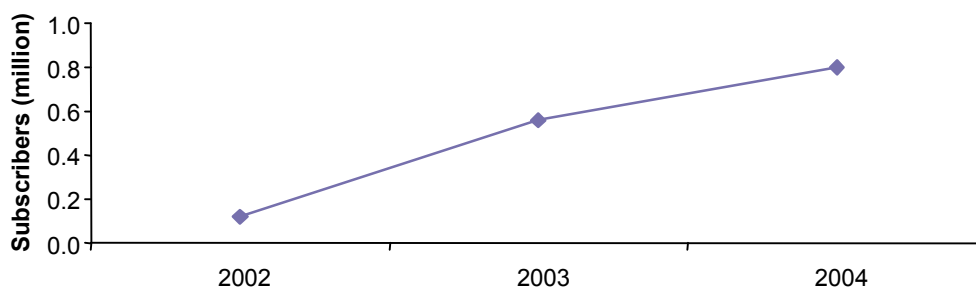
### Ownership structure and recent changes

TTSL is a wholly-owned subsidiary of the Tata Group.

### Performance Indicators

In December 2002, Tata Teleservices had 0.1 million mobile customers. This increased to 0.8 million in December 2004 at a CAGR of 183%. This trend is illustrated in *Figure 31*.

Figure 31 **Tata Teleservices mobile customer base (2002–2004)**



Source: COAI Reports

### Operator-specific ventures

In 2004, TTSL acquired a UAL for 12 new circles in Bihar, Haryana, Himachal Pradesh, Kerala, Kolkata, Orissa, Punjab, Rajasthan, Uttar Pradesh (East), Uttar Pradesh (West) and West Bengal.



## MTNL

### Overview

The Government of India established MTNL in April 1986. MTNL operates from India's key metros – Delhi and Mumbai.

The group's principal activity is to provide telecommunications services, which include fixed, mobile and telex services. The group also provides other services such as radio paging and Internet access.

MTNL launched its mobile services on 7 February 2001 in Delhi and 27 February 2001 in Mumbai.

MTNL provides its prepaid service under the brand name 'Trump', which was launched in Mumbai and Delhi on January 14, 2002.

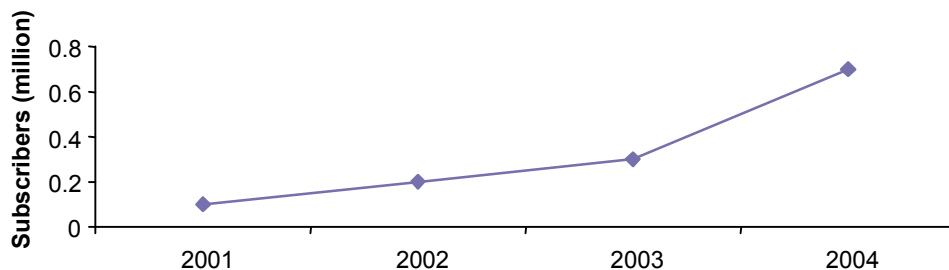
### Ownership structure and recent changes

The Indian Government currently holds a 56.25% stake in MTNL.

### Performance indicators

In December 2001, MTNL had 0.1 million customers. This increased at a CAGR of 91.2% to 0.7 million customers in December 2004. This trend is illustrated in *Figure 32*.

Figure 32 MTNL customer base (2001–2004)



Source: COAI Reports

## Himachal Futuristic Communications Limited (HFCL)

### Overview

HFCL Infotel Limited (HITL) was incorporated by HFCL to provide telecom services.

HITL started its operations on 16 October 2000. It provides telecoms services in Punjab and Haryana under the 'Connect' brand name.



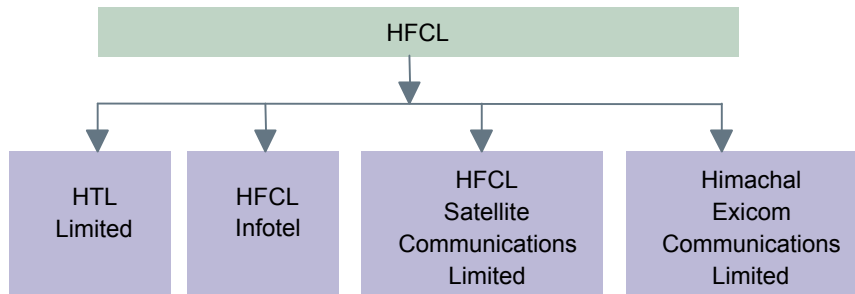
It provides, fixed line telephony, CDMA-based mobile telephony, PCOs, Centrex, intelligent network services, ISDN and leased lines.

HITL also provides WLL mobile services under the 'Connect Mobile' brand in Chandigarh, Ludhiana, Jalandhar and Amritsar.

**Ownership structure and recent changes**

HFCL conducts business through its subsidiaries. A detailed ownership pattern is shown in *Figure 33*.

Figure 33 HFCL shareholding pattern

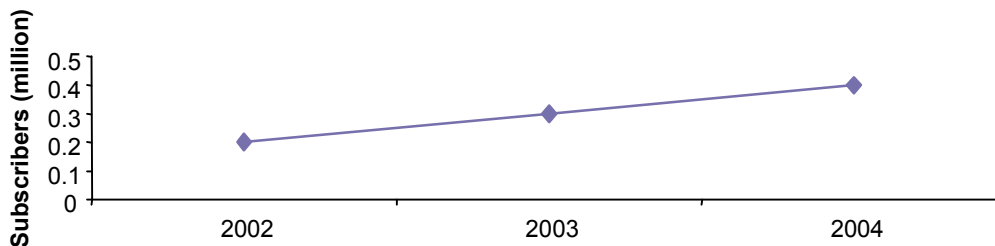


Source: HFCL

**Performance indicators**

In December 2002, HFCL had 0.2 million customers. This increased at a CAGR of 41.4% to 0.4 million customers in December 2004. This trend is illustrated in *Figure 34*.

Figure 34 HFCL customer base (2002–2004)



Source: COAI Reports



## Shyam Telelink

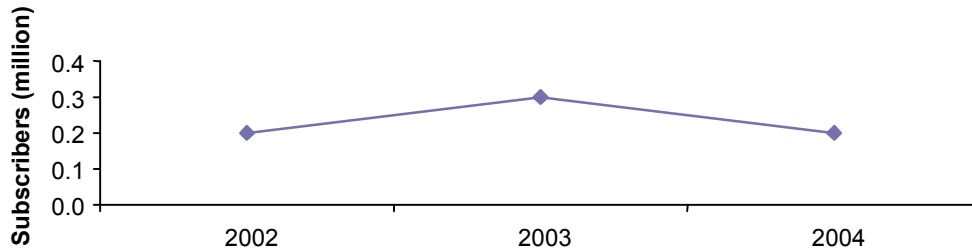
### Overview

Shyam Telelink is part of the Shyam Group. The company is the basic telecom services licensee in Rajasthan. It offers fixed and wireless services. It started its mobile services in 1996, under the brand 'City Mobile', and it started its basic telephony operations in July 2000, under the brand 'Rainbow'. As of December 2004, Shyam Telelink had 0.2 million customers, and a 0.3% share in the CDMA mobile market and 0.1% share in the overall market.

### Performance indicators

In December 2002, Shyam Telelink had 0.2 million customers. This increased to 0.25 million customers in December 2004 at a CAGR of 11.8%, as illustrated in *Figure 35*.

Figure 35 **Shyam Telelink customer base (2002–2004)**



Source: COAI Reports

---

Wireless Intelligence does not endorse companies or their products. Wireless Intelligence operates under an Independence Charter. For full details please see [www.wirelessintelligence.com/Intelligence.aspx](http://www.wirelessintelligence.com/Intelligence.aspx)

Whilst every care is taken to ensure the accuracy of the information contained in this material, the facts, estimates and opinions stated are based on information and sources which, while we believe them to be reliable, are not guaranteed. In particular, it should not be relied upon as the sole source of reference in relation to the subject matter. No liability can be accepted by Wireless Intelligence, its directors or employees for any loss occasioned to any person or entity acting or failing to act as a result of anything contained in or omitted from the content of this material, or our conclusions as stated. The findings are Wireless Intelligence's current opinions; they are subject to change without notice. Wireless Intelligence has no obligation to update or amend the research or to let anyone know if our opinions change materially.