

Mobile Number Portability - boon for subscribers

June 26, 2009

Background

The Indian telecom industry is about to launch Mobile Number Portability (MNP) in a phased manner, commencing September 2009 and to be completed by March 2010.

India is the 8th nation in Asia to launch MNP. MNP is effective in those markets which are highly competitive, with high penetration levels.

On the positive side, MNP offers flexibility to the mobile subscriber to change his/her service provider, while on the negative side, it fuels competition among service providers. In a competitive market like India, the real beneficiaries of MNP would be the subscribers, who will get better service offerings at competitive prices.

Executive Summary

- MNP allows subscribers to retain their existing mobile telephone number when they switch from one access service provider (telecom operator) to another, irrespective of mobile technology, or from one technology to another, of the same or any other access service provider.
- India will implement MNP between September 2009 and March 2010, across the country. MNP benefits telephone subscribers from the point of view of both pricing and quality and innovation in services offerings. It benefits service providers, since it necessitates introduction of new products and services in order to remain competitive. It gives a fair chance to all service providers to compete by offering innovative products, better quality and prices.
- Telecom operators generally charge porting charges, comprising of administrative fees and recurring monthly fees. Time taken to port the number from one provider to another may create obstacles for easy porting. High churn rate, price competition and product innovation and marketing costs are negatives for service providers.
- India is the 2nd largest telecom market in the world after China. The wireless segment, with 392mn subscribers, grew at a CAGR of 62% over last 5 years. The target of 500mn subscribers by end of calendar 2010 seems to be quite achievable.
- Around 60 countries have already adopted MNP. According to Frost and Sullivan report on MNP in Asian telecom markets, MNP worked well in South Korea and Hong Kong, while it has proved ineffective in Taiwan, Japan and Singapore. Of the 12mn subscribers in Hong Kong, 1.5mn apply for mobile number porting annually. Porting charges vary from \$0.38 to as high as \$42.92, while time to effect port varies from 3 hours to 7 days.
- The Indian telecom industry has been shifting focus from high income Metro circle to lower income semi urban and rural sectors, leading to consistent decline in ARPUs and increasing competition. In our view, introduction of MNP would fuel competition further and may give subscribers an upper hand to select what they perceive to be the best service provider for them.

Mobile Number Portability in India

MNP is to be launched in Delhi, Mumbai, Maharashtra and Gujarat Service Areas of Zone-I and Kolkata, Tamil Nadu including Chennai, Andhra Pradesh and Karnataka Service Areas of Zone-II within six months, i.e., by September 20, 2009, and in rest of the service areas within one year, i.e., by March 20, 2010.

Objects of the study

- Analyzing the experience of other Asian markets with MNP
- Assessing the current scenario in the Indian telecom industry and its MNP adaptability

Rohan J. Admane, Analyst (rohan@keynoteindia.net)

Keynote Capitals Research (+9122-30266043)

Nitin A. Khandkar, Head - Research (nitin@keynoteindia.net)

Keynote Capitals Research is also available on Bloomberg KNT <GO>, Thomson One Analytics / Thomson Publisher, Reuters Knowledge and ISI Emerging Markets (www.securities.com)

MNP

MNP allows subscribers to retain their existing mobile telephone numbers when switching from one access service provider (telecom operator) to another, irrespective of mobile technology or from one technology to another, of the same or any other access service provider. In other words, it enables the subscriber to retain his/her phone number, when switching subscription from one mobile service provider to another.

Benefits to phone subscribers

- Free mobility from one service provider to another, without changing the mobile number
- Price competition if the market is competitive
- Competition among force service providers will lead to improvement in quality of service and product innovation, in order to retain and expand the customer base
- Many value-added services may be offered by service providers to attract customers, either free or at low costs

Costs for phone subscribers

- Telecom operator charges porting fees in many countries. These charges comprise of administrative fees and recurring monthly fees for number porting services.
- Often, there is a waiting period for mobile subscribers to get their number successfully ported. This waiting period ranges from 1-2 working days in Hong Kong, to 4-7 working days in Taiwan and Singapore, resulting in too much inconvenience for subscribers.

Benefits to telecom operators

- It increases competition by allowing consumers to switch service providers, yet retaining their old mobile phone number, which help telecom operator to improve its product line and services.
- It provides a fair chance to all the service providers. Player with better quality of service and innovative products can sustain in the long term.
- It can be one of the major reasons for the industry to consolidate.

Costs for telecom operators

- Increase in churn rate directly affects the revenues of the service provider.
- Increases price competition.
- It may put pressure on margins, as product innovation costs and marketing costs may increase.
- Increased investments in back-end services.

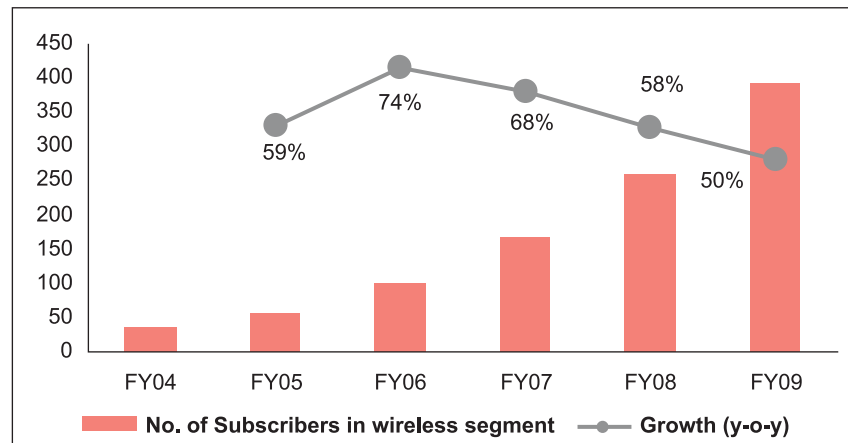
Indian telecom industry scenario

India is the 2nd largest telecom market in the world after China. The industry comprises of 429mn subscribers, which include 392mn wireless subscribers and rest wireline subscribers. Wireless segment is growing at a CAGR of 62% over last 5 years. It grew by 50% in FY09. Target of 500mn subscribers by 2010, which industry has drawn out seems easily achievable.

Key events in the history of Indian telecom industry

- Launch of cellular (mobile) services in India in 1995
- Formation of Telecom Regulatory Authority of India (TRAI) in 1997-98
- Introduction of calling party pays (CPP) format in 2003
- Launch of 3G services by BSNL and MTNL in 2008
- Proposed launch of MNP in 2009

Subscriber growth of over 50% y-o-y over last 5 years



(Source: TRAI data, Keynote Capitals Research)

MNP - Global experience

MNP in other Asia-Pacific economies

MNP has often been considered as a tool utilized by the Government to effect increased competition and improve quality of service, since the subscriber has the liberty to switch from one service provider to another. The subscriber will benefit, as he/she gets better and innovative service at a fair price. MNP works well in the backdrop of sound telecom system and infrastructure, highly penetrated market and in an environment of cut-throat competition.

Service providers are mostly apprehensive about MNP due to the fear of high churn rates. However, as per the global experience, churn rates have not necessarily moved up, after the implementation of MNP, due to issues such as porting charges, time taken to port and homogeneity of services offered by various operators. Intensity of competition, its impact on pricing and quality of service are the major drivers of MNP.

Mobile Number Portability - boon for subscribers

MNP implementation in Asia

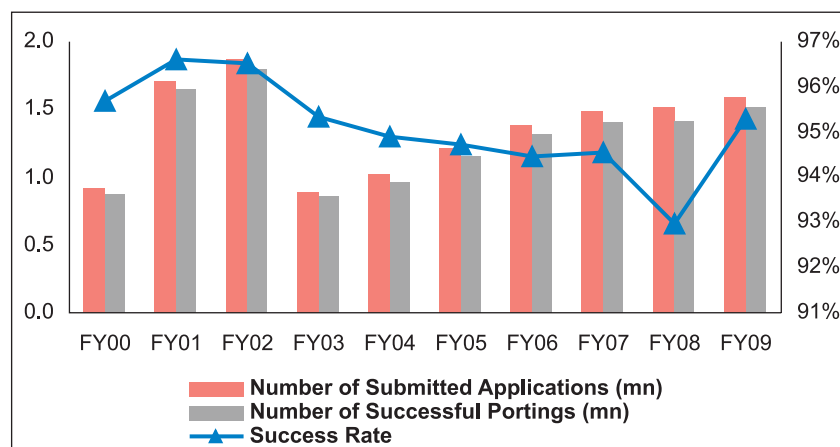
Name of Country	Date of Implementation	Mobile Penetration during implementation	Mobile Penetration (Dec-2008)	No. of players	Churn Rate
Singapore	Apr-97	15.7%	131.0%	3	0.9%
Hong Kong	Mar-99	48.1%	164.1%	6	4.8%
Australia	Sep-01	61.0%	100.8%	5	NA
South Korea	Jan-04	70.1%	90.7%	3	2.8 - 3.4%
Taiwan	Oct-05	91.7%	100.2%	9	1.2%
Japan	Oct-06	around 60%	88.1%	5	0.5%
China	Apr-09	62.2%	62.2%	3	NA
India	Oct-09	NA	37.9%	17	4.0 - 5.0%

(Source: Frost and Sullivan, Keynote Capitals research)

According to Frost and Sullivan, MNP worked well in South Korea and Hong Kong, while it was quite ineffective in Taiwan (with 9 operators), Japan (5 operators) and Singapore (3 operators).

MNP implementation has worked well in Hong Kong since its launch in March 1999. In the first year itself, almost 1mn subscribers in Hong Kong opted for MNP, which increased to over 1.8mn in FY02. Around 1.5mn of its 12mn telecom subscribers apply for mobile number porting annually.

MNP scenario in Hong Kong



The major obstacles that can limit growth of MNP are porting charges and time taken for porting. Operators in Germany and UK charge high porting charges, in the range of \$25.5 - \$43, and take 4-5 days for porting. The Netherlands takes up to 60 days for porting.

Name of Country	Customer Porting Charges (\$ PPP)	Time take to effect port
Australia	\$5.59	90% within 3 hours, 99% within 2 business days
Germany	\$25.5	4 working days + 2 further days
Hong Kong	\$0.38 plus a dipping charge of \$0.08 per call	1-2 days
Netherlands	\$0 - \$8.89	4 - 60 days
Singapore	\$0 - \$13.37	7 days
United Kingdom	\$14.31 - \$42.92	5 days

Various key issues relating to MNP implementation in India

Major dynamics of the Indian telecom industry include geographical structure, demographic profiles, revenue patterns, competition and quality of service. The impact of MNP on the telecom industry can only be understood by analyzing these dynamics.

Geographical structure of the Indian telecom industry

India’s geographical structure is not very conducive for maintaining ARPUs. India comprises of 4 telecom circles, which consist of the high income Metro circle and lower income A, B and C circles.

Metro circle first adopted mobile services, while the other three circles viz., A, B and C circles took time to catch up. Initially, Metro circle witnessed exponential growth, which has since stagnated, as teledensity has already crossed 90%. However, the remaining three circles are growing faster, as teledensity is much lower.

In addition to the consistent tariff cuts, shift in the focus of telecom operators from Metro to lower income B and C Circles is one of the major reasons for deterioration of ARPUs. In our view, A, B and C circles offer easy entry to entrants, compared to Metro circle, due to the low teledensity of the former. Entrants will have to lure the subscribers of other operators by offering better quality and / or lower tariffs.

Underperformance of Metro circle vis-à-vis rest

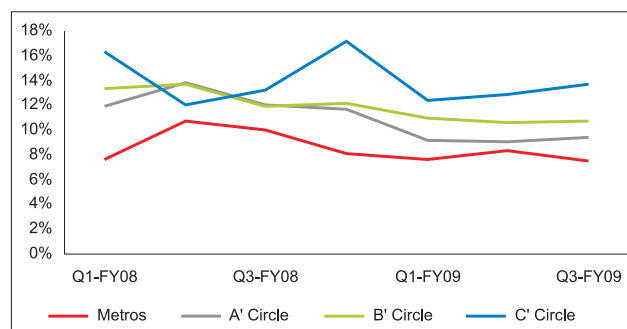
Circle wise subscriber numbers and growth in India (mn nos.)

Category	No. of Service Areas	Mar-08	June-08	Sept-08	Dec-08
Metros	4	44.81	48.21	52.25	56.16
<i>Growth (q-o-q)</i>		8.1%	7.6%	8.4%	7.5%
'A' Circle	5	93.95	102.55	111.83	122.31
<i>Growth (q-o-q)</i>		11.7%	9.2%	9.1%	9.4%
'B' Circle	8	95.09	105.51	116.72	129.18
<i>Growth (q-o-q)</i>		12.1%	11.0%	10.6%	10.7%
'C' Circle	6	27.22	30.59	34.51	39.24
<i>Growth (q-o-q)</i>		17.1%	12.4%	12.8%	13.7%

(Source: TRAI data, Keynote Capitals Research)

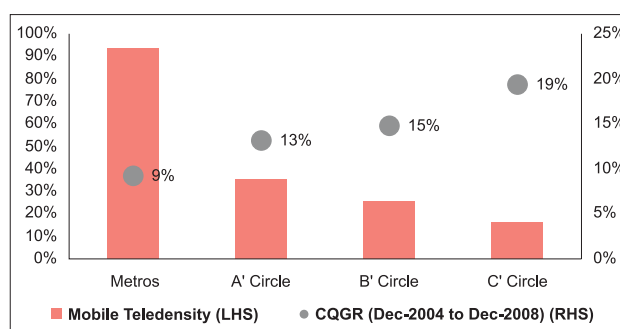
Subscriber growth in Metros deteriorating due to high penetration

Subscriber growth q-o-q

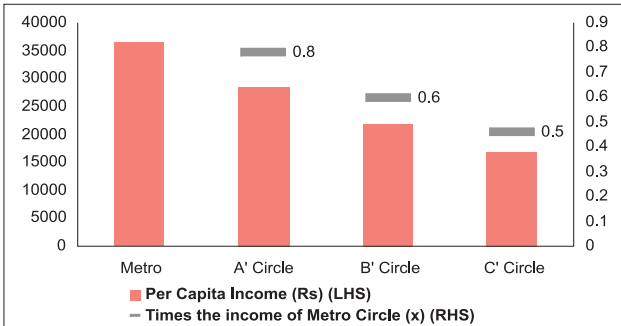


(Source: TRAI data and Keynote Capitals Research)

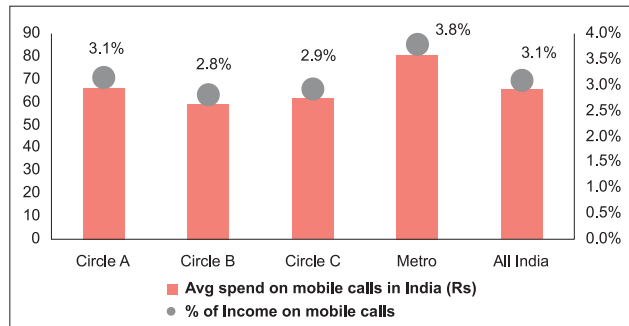
Mobile Tele-density vis-à-vis Subscriber growth



High per capita income of Metros vis-à-vis rest



Higher average spend on Mobile calls in Metros



(Source: Keynote Capitals Research)

MNP's effect on the telecom industry based on geographic structure

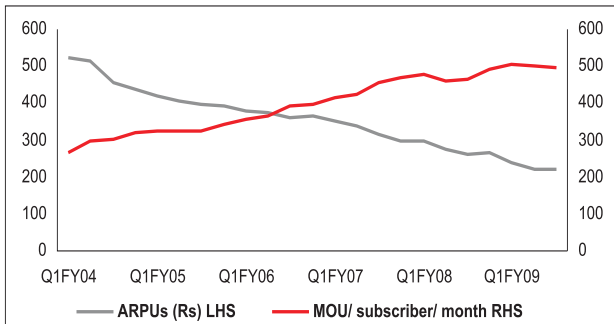
MNP is more attractive for entrants and existing operators in Metro circle than in other circles. Metro circle offers limited growth potential for new subscriber addition; entrants and existing operators will both compete for the existing customer base of the latter. MNP is a good tool for these operators. However, pricing and quality of service will play a major role in customer retention.

In other circles, existing operators will target both, new subscribers, as well as existing subscribers of other operators.

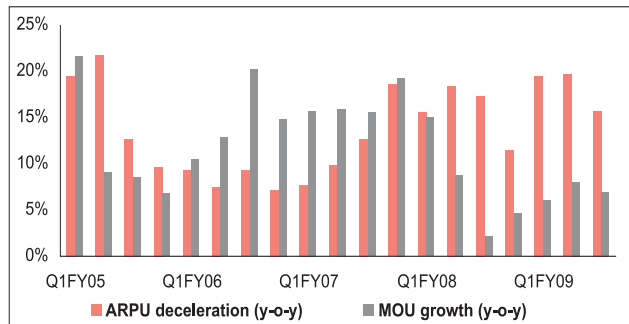
MNP implementation in India and ARPUs

Falling call tariffs has been the major driving factor for the Indian telecom industry since year 2000. Fall in call tariffs negated the rapid growth in subscriber numbers, helping operators adjust to the reducing ARPUs. Major reasons for the fall in ARPUs are competition and TRAI's consistent efforts towards reducing various duties helped reduce call tariffs.

ARPU and Minutes of Usages show inverse trend

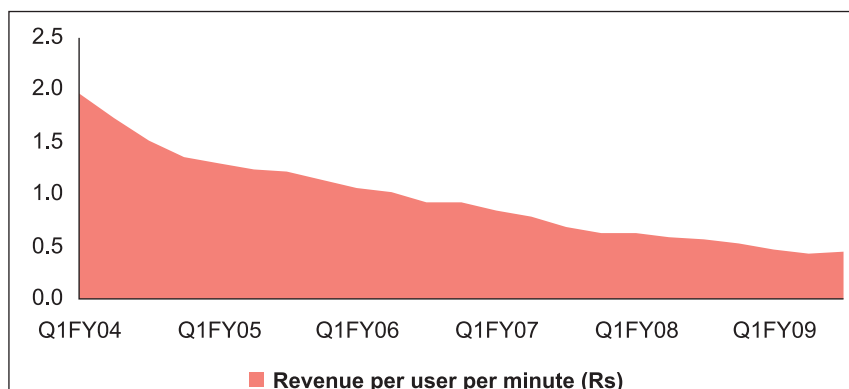


However, ARPU deceleration is faster than MOU growth



(Source: TRAI, industry data and Keynote Capitals Research)

Revenue per user per minute decelerated from Rs2 to Re0.4



(Source: TRAI data, Keynote Capitals Research)

MNP’s impact on telecom industry based on revenue structure

In our view, price competition may intensify post MNP implementation. We believe that services and the quality of services in the telecom industry are quiet homogenous, making pricing the key differentiator, and major tool to attract and retain subscribers.

In a worst-case scenario, new players or small existing players may adopt cheap pricing strategies to attract and retain subscribers.

MNP implementation in India and competitive scenario

Competition is one of the major driving factors of the Indian telecom industry. Launch of CDMA services and entry of new players are the major events, which made the industry highly competitive over a period of time. Consistent rounds of tariff cuts and improvement in the quality of services only resulted from high competition. Players upgraded themselves by making huge investments to improve the infrastructure and thereby the quality of services offerings, in view of the size of the market and the opportunities it offered.

Indian telecom industry is one of the most competitive telecom industries in the world with 12 players offering services to over 390mn subscribers. However, the top 5 players have captured significant market share of 85%, while the other 7 players account for just 15%. Considering the size of the market, the TRAI has allowed entry of new players, which would fuel competition further.

Existing players

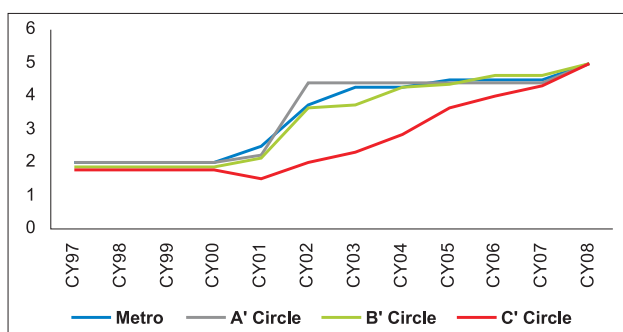
Name of Operator	Market Share	No. of Telecom Circles
Bharti Airtel	24.7%	23
Reliance Communications	18.8%	23
Vodafone Essar	17.6%	23
BSNL + MTNL	13.0%	23
IDEA + Spice Communications	11.0%	22
Tata Teleservices	9.2%	23
Aircel	4.7%	23
BPL	0.6%	22
Sistema Shyam TeleServices	0.2%	22
HFCL Infotel	0.1%	1

(Source: TRAI data, Keynote Capitals Research)

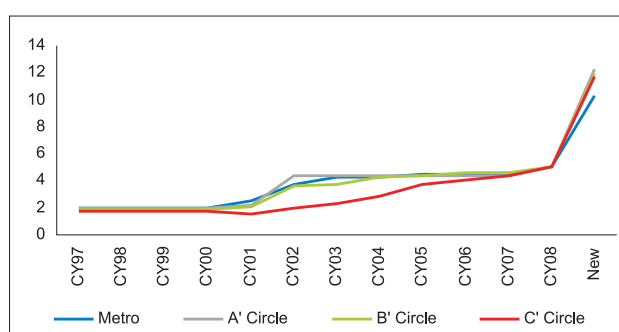
New entrants and entry of existing players in new circles to fuel competition

CDMA launch and the entry of new players helped industry grow many-fold since year 2000. The number of players increased from 2 per circle in 2000 to 5 in 2008. This number has since gone up to 12, as the TRAI has allowed entry of more players into the industry. In our view, the entry of new players would intensify competition in terms of pricing and services offerings.

Existing competition scenario



Competitive scenario after addition of new players



(Source: Industry, Keynote Capitals Research)

New players and existing players in new circles

In January 2008, the TRAI granted telecom license to 5 new players while permitting entry of 4 existing players into new circles.

	Uni-tech	Data com	Idea	S Tel	Loop (Essar)	Shyam Telelink	Spice	Swan	Tata Tele	Total
Metro Circle										
Delhi	✓	✓			✓	✓	✓	✓		6
Mumbai	✓	✓				✓		✓		4
Tamil Nadu (incl. Chennai)	✓	✓	✓		✓	✓		✓		6
Kolkata	✓	✓	✓		✓	✓				5
A' Circle										
Maharashtra	✓	✓			✓	✓	✓	✓		6
Gujarat	✓	✓			✓	✓		✓		5
Andhra Pradesh	✓	✓			✓	✓	✓	✓		6
Karnataka	✓	✓	✓		✓	✓		✓		6
B' Circle										
Kerala	✓	✓			✓	✓		✓		5
Punjab	✓	✓	✓		✓	✓		✓		6
Haryana	✓	✓			✓	✓	✓	✓		6
Uttar Pradesh (West)	✓	✓			✓	✓		✓		5
Uttar Pradesh (East)	✓	✓			✓	✓		✓		5
Rajasthan	✓	✓			✓			✓		4
Madhya Pradesh	✓	✓			✓	✓				4
West Bengal & And. Nicobar	✓	✓	✓		✓	✓				5
C' Circle										
Himachal Pradesh	✓	✓		✓	✓	✓				5
Bihar	✓	✓		✓	✓	✓				5
Orissa	✓	✓	✓	✓	✓	✓				6
Assam	✓	✓	✓	✓	✓	✓			✓	7
North East	✓	✓	✓	✓	✓	✓			✓	7
Jammu & Kashmir	✓	✓	✓	✓	✓	✓			✓	7
TOTAL	22	22	9	6	21	21	4	13	3	121

(Source: Department of Telecom)

MNP's effect on telecom industry based on competition as a factor

MNP is a good tool for new players, who would like to establish their presence in the low-growth, highly penetrated Metro and A circles. Overall, MNP can be beneficial, as it may divert investments to better product offerings and differentiation of services.

Annexure

Quality of Services

Parameters	Benchmark	Service Providers not meeting benchmarks
Accumulated down time of Community Isolation	<24 hrs	All operators meet this Benchmark
Call Set-Up Success Rate (Within Licensee's Own network)	>95%	Bharti Airtel
Service Access Delay	<15 sec.	Bharti Airtel
Blocked call rate		
(i) SDCCH/paging channel congestion	<1%	Bharti Airtel, Dishnet, BPL
(ii) TCH Congestion	<2%	BSNL, MTNL, Bharti Airtel, Dishnet, BPL
Call Drop Rate	<3%	Bharti Airtel, Dishnet
Connections with good voice quality	>95%	Bharti Airtel, Dishnet
Response time to the customer for assistance %age of calls answered (electronically) within 20 seconds	80%	All operators meet this Benchmark
% of calls answered (electronically) within 40 seconds	95%	BSNL
% of calls answered by operator (voice to voice); within 60 seconds Telecom, Spice, Idea, Dishnet, Airtel, HFCL	80%	BSNL, Bharti Airtel, RCOM, Reliance
% of calls answered by operator (voice to voice); within 90 seconds Telecom, Tata Tele, Spice, Idea, Dishnet, Airtel	95%	BSNL, Bharti Airtel, RCOM, Reliance
Complaints per 100 bills issued	<0.1%	Idea, Airtel
% Of complaints resolved within 4 weeks	100%	All operators meet this Benchmark
Period of all Refunds/Payment due to Customers from the date of resolution of complaints	<4 Weeks	All operators meet this Benchmark

(Source: TRAI data, Keynote Capitals Research)

Keynote Capitals Ltd.

Member

Stock Exchange, Mumbai (INB 230930539)
National Stock Exchange of India Ltd. (INB 010930556)
Over the Counter Exchange of India Ltd. (INB 200930535)
Central Depository Services Ltd. (IN-DP-CDSL-152-2001)

Registered Office

4th Floor, Balmer Lawrie Building,
5, J. N. Heredia Marg,
Ballard Estate, Mumbai 400 001.
Tel Nos. 022-2269 4322 / 24 / 25

Disclaimer

This report has been prepared and issued by Keynote Capitals Ltd, based solely on public information and sources believed to be reliable. Neither the information nor any opinion expressed herein, constitutes an offer, or an invitation to make an offer, to buy or sell any securities or any options, futures or other derivatives related to such securities. Directors, officers or employees of Keynote Capitals or its affiliates may have positions in securities covered in this report or in related investments. An affiliate of Keynote Capitals Ltd. may also perform or seek to perform broking, investment banking and other banking services for the company under coverage. Opinions presented herein are liable to change without notice. While due care has been taken in the preparation of this report, Keynote Capitals Ltd. or any of its directors, officers or employees shall not in any way be responsible for any loss arising from the use thereof. Investors are advised to apply their own judgment before acting on the contents of this report.