



## **Content**

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Investment argument.....	4
Indian wireless market: Lot more to come .....	9
Indian mobile consumer: key traits .....	16
Vodafone buys Hutch: Pitch unchanged.....	21
Tower business: Too soon to be valued.....	23
Valuations: Visibility not factored in .....	27

### **Companies**

Bharti Airtel.....	33
Reliance Communication .....	49
Idea Cellular .....	71
Annexure .....	87

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9 April 2007

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# Telecom (wireless)

## *Connecting the Blue Billion*

Wireless subscriber base in India is soaring. Whereas 4.6m subscribers were added per month over H1CY06, 6.3m subscribers have been coming to the fold since then. Traditionally a price sensitive market, India has broken the mould with subscriber additions stepping up even *sans* tariff cuts. With infrastructure sharing facilitating rapid rollouts and thus wider coverage, increasing affordability would drive market expansion. We expect the wireless subscriber base to reach 504m by 2012. But for a tariff cut due to lower regulatory costs, we do not see any tariff wars in the offing despite Vodafone's acquisition of Hutch. Hence, profitability of operators is likely to remain intact with an estimated 40% earnings CAGR for our wireless universe over FY07-09. However, spectrum unavailability could be a dampener. We rate Bharti Airtel and Reliance Communications as Outperformers and Idea Cellular as Neutral.

**Indian wireless market – the floodgates have opened:** The government has set a stiff target of expanding the current wireless subscriber base of 159m to 584m by 2012. While regulatory costs are set to fall and make tariffs more affordable, infrastructure sharing, still at a nascent stage, would facilitate faster coverage of rural areas. We expect India to have 504m subscribers by 2012 (25% CAGR from the current base).

**Operators to see sustained profitability:** The incremental 345m subscribers would largely come from rural areas. Though ARPU in rural areas would be lower, we believe coverage would induce increased usage from existing subscribers. Thus, we expect EBITDA margins to expand by 200bp over FY07-09 for our wireless universe on the back of higher outgoing usage and cost benefits arising from infrastructure sharing.

**Buy Bharti and RCOM; Neutral on Idea:** While lower tariffs make usage more affordable, rapid population coverage would increase the addressable market. At an estimated EBITDA CAGR of 40% over FY07-09 for Bharti and RCOM, the stocks trade at 10.1x and 8.5x FY09E EBITDA respectively. While Idea trades at a 28% premium to RCOM, we find the premium unjustified given that operations are restricted to 11 circles and NLD business would be fully operational only by end-FY08. Thus, we rate Bharti and RCOM as Outperformers and Idea as Neutral.

### Valuation matrix

Companies	Price (Rs)	Mkt cap (Rs bn)	Recommendation	FY09E		Target* (Rs)	Upside (%)
				PER (x)	EV/EBITDA (x)		
Bharti Airtel	746	1,414	Outperformer	17.5	10.1	910	22.0
Reliance Comm	397	856	Outperformer	14.7	8.5	505	27.3
Idea Cellular	95	246	Neutral	28.3	10.9	93	(2.0)

\* DCF based; Prices are as on April 5, 2007

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## INVESTMENT ARGUMENT

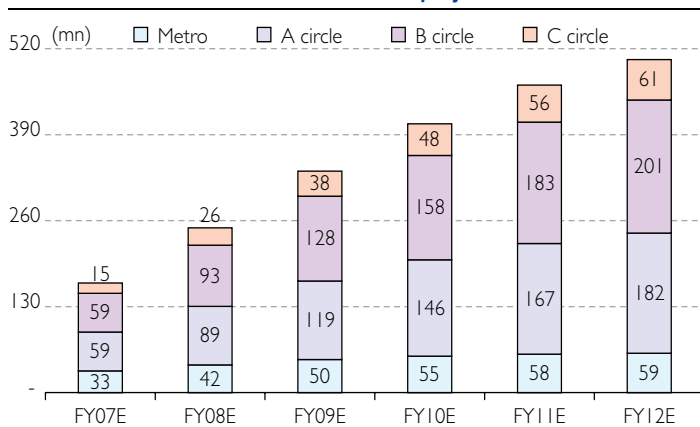
India's mobile-phone market is among the fastest growing in the world. We forecast the subscriber count to jump to 504 by 2012 (government's target of 584m users). In FY07, subscriber additions have remained strong even without significant tariff cuts. Recently, wider coverage has emerged as the new theme driving market expansion. While infrastructure sharing would facilitate rapid rollouts and thus wider coverage, we see lower regulatory costs driving affordability. The competitive scenario also would likely stay undisturbed as indicated by Vodafone's retention of stake (4.4%) in Bharti and its MoU to route at least 50% of its international incoming traffic through Bharti for the next three years. In the absence of any fresh bout of price wars, infrastructure sharing and higher usage from wider coverage would improve profitability.

### □ India among world's fastest growing mobile markets

The Indian wireless sector has added 38.7m subscribers in the last six months, taking the total subscriber base to 159m as of end-February 2007. The government is targeting to expand the subscriber base to 584m by the year 2012. For the government's targets to be met, the teledensity in the B and C circles would have to reach 45% and 30% respectively. We believe it is too early to take a call on the benefits of the expected growth in the economy reaching to far-flung rural areas. Therefore, we have taken a more conservative estimate of 504m subscribers by 2012 (CAGR of 25% over FY07-09E) based on teledensity of 80% in metros, 50% in A circles, 37% in B circles and 25% in C circles.

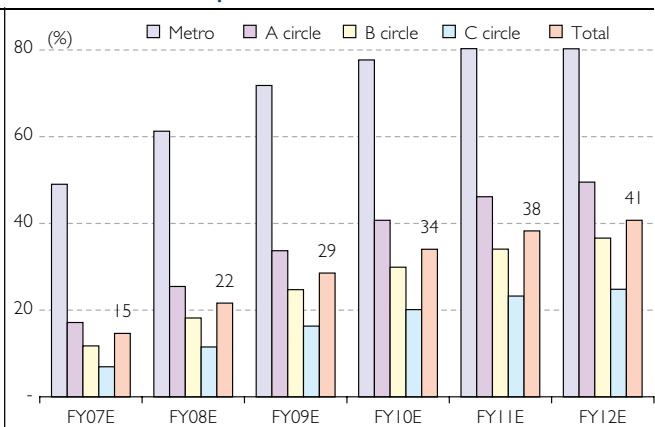
*No slowing down yet; government targets 584m wireless subs by 2012, our forecast is 504m subs*

Exhibit 1: Circlewise wireless subscriber projections



Source: COAI, AUSPI, SSKI Research

Circlewise wireless penetration



Source: COAI, AUSPI, SSKI Research

*Teledensity no longer a factor of just affordability, but also of coverage*

### □ Penetration = coverage + affordability

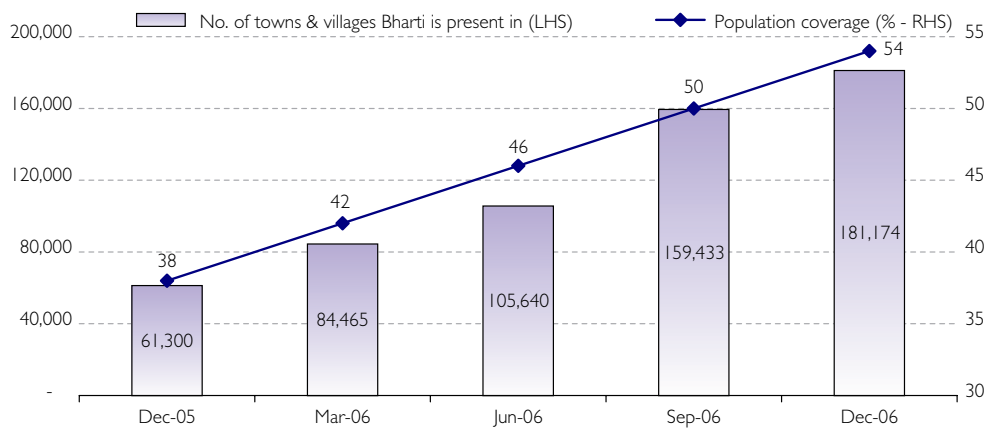
Tariff reductions, introduction of lower denomination prepaid coupons, launch of lifetime prepaid, etc (in other words, value propositions) have been the major drivers of growth until FY06. However, accelerated subscriber additions even in the absence of tariff cuts and new product schemes in the past one year indicate that teledensity is now not only a factor of affordability, but also of coverage.

Against an average 0.75m subscriber addition over QEDec'05, Bharti added 1.65m subscribers in QEDec'06

Subscriber additions have accelerated from a monthly run-rate of ~4m in H1CY06 to over 6m since then, attributable mainly to improved coverage. A case in point is Bharti. While Bharti covered ~61,000 towns and villages as on 31 December 2005 with population coverage of 38%, it had extended its reach to over 181,000 towns and villages covering 54% of India's population by 31 December 2006. That higher coverage leads to faster subscriber addition is reflected in the fact that against a monthly average of 0.75m new subscribers in the quarter ending December 2005, higher coverage enabled Bharti to add an average of 1.65m subscribers per month in the quarter ending December 2006.

Improved coverage has enabled Bharti to more than double its subscriber additions

Exhibit 2: Bharti expanding coverage rapidly



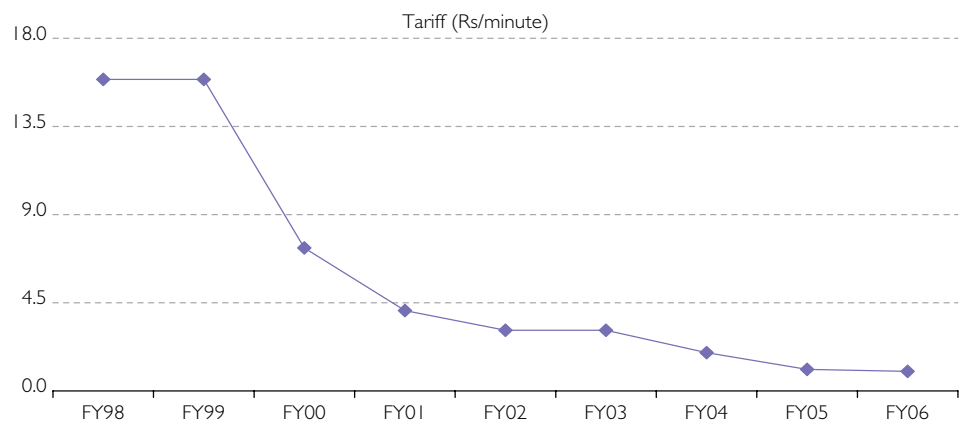
Source: Company, SSKI Research

**□ Affordability – call more, pay less**

Subscriber addition drive has now shifted to rural areas; thus, coverage and affordability are the key themes

The incremental subscriber addition over FY07-12E would come mainly from rural areas. Thus, coverage and affordability would be the key factors. While infrastructure sharing would enable wider coverage, lower tariffs, cheaper handsets and low ticket prepaid recharge would address the affordability issue. In the recent budget, the government directed the Telecom Regulatory Authority of India (TRAI) to set up a committee to recommend rationalization and unification of some of the various regulatory costs like USO fund contribution, access deficit charge (ADC), and license and spectrum fees. In fact, one round of ADC cuts has already been announced on 21 March 2007.

Exhibit 3: Tariffs have constantly fallen



Source: TRAI Annual report 2005-06

**Infrastructure sharing to facilitate rollout in a faster and more cost-effective manner**

We believe Nokia, LG, Samsung, Ericsson and other OEMs have set up manufacturing base in India with each planning to manufacture 20m+ handsets every year. This, in our opinion, would enable introduction of cheaper handsets.

#### ❑ Infrastructure sharing – partnerships among competition

A large part of the expected incremental 345m customers would be added in rural areas. Thus, coverage of villages and towns would be imperative. We believe infrastructure sharing would be the key driver for the expected improvement in coverage. While the industry has set up 90,000 towers, only 25% of these are being shared currently with most of them in rural areas. With Bharti, RCOM, Tata Teleservices and Idea (considering) announcing creation of a separate company for providing infrastructure, we believe infrastructure sharing would receive a boost. This would facilitate operators to rollout their services in a faster and more cost-effective manner. Our analysis (see pg 22 for a detailed analysis) of Bharti's current infrastructure sharing initiative suggests that Bharti's EBITDA margins have been boosted by 97-129bp. In addition, the tower sharing has resulted into an estimated capex saving of US \$400m for Bharti.

#### Exhibit 4: Bharti has benefited from tower sharing

	Scenario1	Scenario2	Scenario3
Cost of a tower (Rs)	3,500,000	3,500,000	3,500,000
Life of assets (yrs)	10	10	10
Debt/Equity (x)	1.5	1.5	1.5
Interest rate (%)	8	8	8
<b>Number of tenants (no.)</b>	<b>1 (only Bharti)</b>	<b>2</b>	<b>3</b>
<b>Expected rate of return (%)</b>	<b>8</b>	<b>12</b>	<b>15</b>
Bharti annualized Q3FY07 mobile revenues (Rs m)	150,316	150,316	150,316
Total number of towers for Bharti (no.)	34,000	34,000	34,000
Shared towers (%)	23	23	23
Barter basis (%)	80	80	80
Towers shared on barter basis (no.)	6,256	6,256	6,256
Opex / tower/ month (Rs)	30,000	30,000	30,000
Opex / tower/ month/ tenant (Rs)	-	15,000	10,000
Margin impact from cost savings barter sharing (bp)...(a)	-	+75	+100
Pure commercial terms (%)	20	20	20
Towers shared on commercial terms	1,564	1,564	1,564
Rent / tower/ month (Rs)	42,465	50,215	56,467
Rent / tower/ month/ tenant (Rs)	-	25,107	18,822
Margin impact from commercial sharing (bp)...(b)	-	+22	+30
<b>Margin impact from tower sharing (bp)...(a+b)*</b>	<b>-</b>	<b>+97</b>	<b>+129</b>

Source: SSKI Research. \*margin impact is calculated based on Q3FY07 annualized revenues

#### ❑ Spectrum unavailability – a dark lining in a silver cloud

While the government is encouraging operators to share infrastructure and expand coverage rapidly, unavailability of GSM spectrum is hampering the growth of the mobile segment. RCOM and Idea Cellular are facing delayed rollout of their GSM operations in circles where they were hitherto absent. And existing players, in the absence of additional spectrum, will have to incur higher capex to service the increasing number of subscribers with available spectrum.

**Spectrum unlikely to be available before 2H2007**

**Vodafone expects EBITDA per sub to remain stable, despite a likely decline in ARPU as it becomes a pan-India operator**

**Higher MoU owing to increased connectivity and cost saving to boost operators' bottomline**

**Bharti's infrastructure sharing initiative has boosted its EBITDA margins by 97-129bp**

**From a business point of view, we prefer Bharti and RCOM over Idea**

### □ Acquisition of Hutch by Vodafone – pitch remains attractive

Apprehensions of Hutch's acquisition by Vodafone triggering another round of price wars seem unfounded. While Vodafone is believed to have laid emphasis on addressing the affordability issue, we believe it plans to bring to the Indian market cheaper handsets (made in China). Vodafone's operational plan for the Indian market outlines its intention to garner 20-25% market share (15.9% currently). The company is also targeting EBITDA CAGR in the mid-30s, implying that EBITDA growth would move in line with subscriber additions. Thus, Vodafone expects EBITDA per subscriber to remain stable, despite a likely decline in average revenue per user (ARPU) as it becomes a pan-India operator. This puts to rest the concerns of a tariff war.

### □ The cash registers are ringing

While tariffs have been cut significantly, coverage into smaller towns and villages has improved. Though this has driven ARPU down in its wake, profitability of cellular operators has been on the rise owing to higher minutes of usage (MoU). With scale benefits coming into play, margins are expected to improve going ahead. Similarly, while the foray into rural India would fetch low overall ARPU, we believe increased connectivity will drive up MoU of existing customers. Like in the case of lifetime prepaid, which, in our opinion, boosted the outgoing MoU of postpaid customers in A circles, we believe operators' profitability would sustain.

Also, further lowering of regulatory costs is expected to bring tariffs down, which in turn would drive higher outgoing usage. That, along with cost savings arising from infrastructure sharing, is expected to increase profitability for the segment in the next few years before profits stabilize.

### □ Tower business valuations – jumping the gun

We have analysed the implication of Bharti hiving off its tower infrastructure into a separate company. Our analysis suggests that Bharti's current infrastructure sharing initiative has boosted its EBITDA margins by 97-129bp and resulted into capex saving of US \$400m so far. Thus, this value is currently embedded in Bharti's stock price. Also, the cash flows of the independent infrastructure company would depend on the number of towers shared on a barter basis and the imputed rate of return for determining the rental income. Due to lack of clarity on both, we discuss the dynamics of that business but do not assign a value to it now.

### □ We rate Bharti and RCOM as Outperformers

We like Bharti and RCOM owing to their scale of operations and presence in the entire telecom service value chain. Idea is currently present only in 11 circles and has received the Letter of Intent (LoI) for Mumbai and Bihar circles. However, the company would have to wait for spectrum to increase its presence to new circles. Though RCOM is also dependent on spectrum to roll out its GSM network in 15 additional circles, it can bank on its CDMA network till then to grow the business. Idea plans to roll out NLD services in all the circles by end-FY08. Thus, from a business point of view, we prefer Bharti and RCOM over Idea.

**While we see upside in Bharti and RCOM, Idea's stock price factors in all future growth upsides**

We have used the DCF methodology to value RCOM, Bharti and Idea cellular. We have arrived at a target price of Rs910 for Bharti, Rs505 for RCOM and Rs93 for Idea. We have not assigned any value to the tower business separately. As and when there is clarity on the modalities of infrastructure sharing business, we believe there would further upside. We rate Bharti and RCOM as Outperformer while we have put a Neutral recommendation on Idea as the stock price, in our opinion, currently factors in all the growth upsides.

#### Exhibit 5: Comparative valuations

		Bharti	RCOM	IDEA
Price (Rs)		746	397	95
No. of shares (m)		1,896	2,158	2,593
Mkt cap (USD m)		32,951	29,941	5,729
Subscriber base (m)	Mar-07E	37.1	33.5	14.3
	Mar-08E	55.4	47.5	22.1
	Mar-09E	73.4	65.5	30.5
EBITDA margin (%)	FY07E	39.9	39.3	33.1
	FY08E	41.3	40.8	33.4
	FY09E	42.7	41.2	33.0
EPS (Rs)	FY07E	21.9	13.7	1.6
	FY08E	32.8	19.5	3.0
	FY09E	42.7	27.0	3.3
EV/Sales (x)	FY08E	5.5	4.8	4.4
	FY09E	4.3	3.5	3.6
EBITDA CAGR (%)	FY07-09E	40	40	41
EV/EBITDA (x)	FY08E	13.3	11.8	13.1
	FY09E	10.1	8.5	10.9
EPS CAGR (%)	FY07-09E	40	41	45
P/E (x)	FY08E	22.7	20.3	32.0
	FY09E	17.5	14.7	28.3
P/BV (x)	FY08E	7.1	3.4	6.0
	FY09E	5.0	2.8	5.0
RoCE (%)	FY08E	30.2	13.4	13.8
	FY09E	29.8	17.4	14.0
EBITDA/Net Debt (x)	FY08E	1.3	0.9	0.5
	FY09E	2.4	1.2	0.4

Source: SSKI Research



## INDIAN WIRELESS MARKET: LOT MORE TO COME

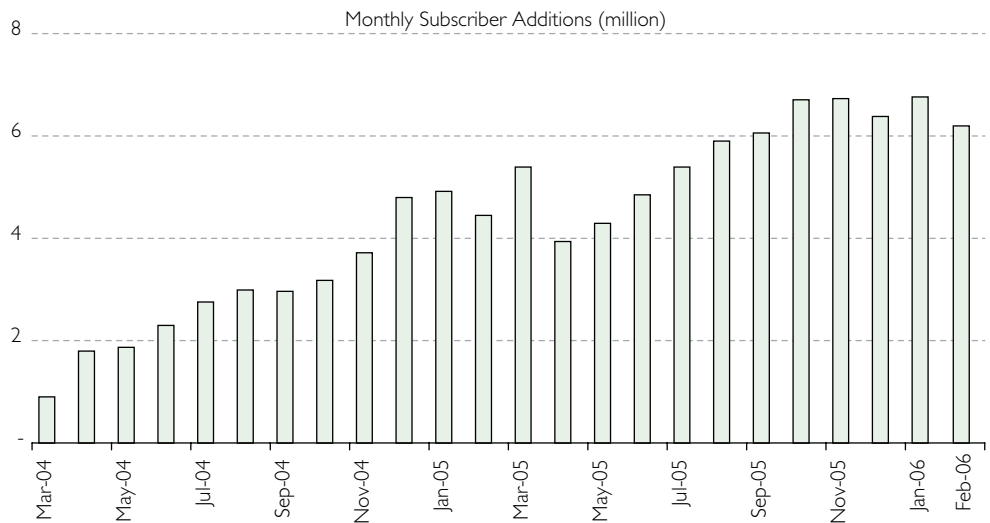
Wireless subscriber additions continue to be strong even without tariff cuts or introduction of new products. Rather, wider coverage is now driving subscriber additions. Going forward, we believe infrastructure sharing would facilitate rapid coverage of smaller towns and villages while lowering of regulatory costs, and cheaper locally manufactured equipment and handsets would further improve affordability. The government has set an aggressive target of achieving a subscriber base of 584m by 2012. We forecast India to have 504m subscribers by 2012 based on the likely teledensity in each circle.

### □ Monthly additions continue to be strong

Around 6.1m subscribers were added to India's mobile subscriber base in February 2007 and 38.7m subscribers in the last six months. The subscriber base has grown by 66% YTD FY07. This has, to some extent, been aided by the launch of 'lifetime prepaid' schemes. According to the TRAI, about 16.1m subscribers were added under the lifetime prepaid scheme in six months to June 2006. TRAI study estimates that 51% of the lifetime prepaid subscribers were new subscribers with the remaining existing prepaid subscribers.

Notably, subscriber additions in FY07 have accelerated even in the absence of any tariff cuts, which had earlier acted as a catalyst for higher subscriber additions. This indicates that India's mobile telecom market has entered the next phase of evolution.

### Exhibit 6: Monthly wireless subscriber additions have accelerated



Source: COAI, AUSPI, SSKI Research

*Subscriber additions in FY07 have accelerated even in the absence of any tariff cuts*

*Around 6.1m subscribers added to India's mobile subs base in February 2007; 38.7m new subs in the last six months*

**Teledensity in India over 2002-07 surpassed all estimates...**

**...this prompts the government to set an aggressive target of 584m wireless subs by 2012**

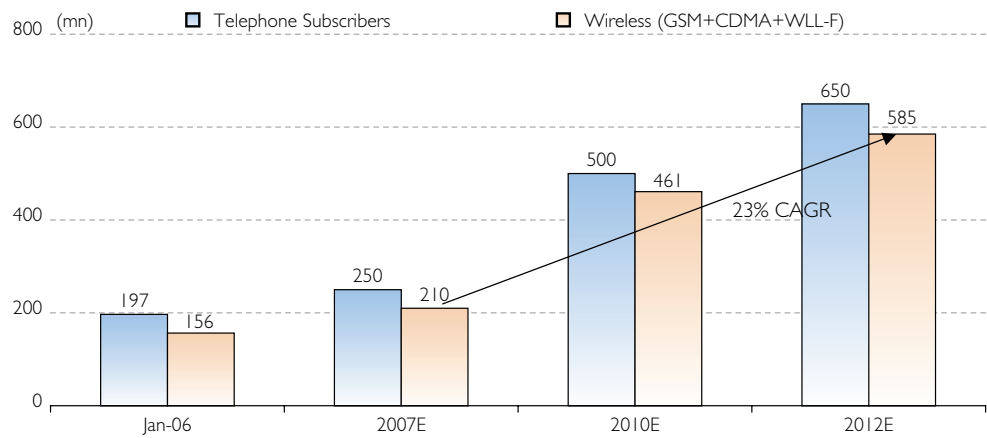
**Due to shortcomings of income demographics data we prefer to base forecast on the teledensity**

### □ Government sets aggressive target in 11<sup>th</sup> 5-year plan (2007-12)

The government had set a target of adding 23.5m GSM subscribers in the 10th 5-year plan (2002-07). However, the actual addition was at a whopping 107m subscribers. As CDMA operators had not launched their operations then, the target did not include potential customers on this platform. Also, the government had set a target of adding 9.7m fixed line subscribers between FY02-07, whereas the industry added 17m wireline subscribers.

The current pace of subscriber addition has reinstated the government's confidence of sustaining the momentum witnessed in the past. A target of 500m telephone connections (wireless + fixed line) has been set by the year 2010 and 650m telephone connections (wireless + fixed) by 2012, including 584m wireless subscribers. According to the government estimates, the current monthly run-rate of 6m+ new wireless subscriber addition is expected to be sustained.

#### Exhibit 7: Government sets an aggressive target for 2012



Source: Economic survey, TRAI, SSKI Research

### □ Income demographics have changed over the last few years

The actual subscriber growth over the last two years has compelled every related forecast to undergo revision. The markets, including us, have had used the income demographics data from various sources to forecast the potential market size. Thus, most forecasts (including that of the government) were very conservative and got surpassed. The GDP growth has exceeded expectations and income levels have risen significantly over the last three years or so. Thus, we believe there is need for an updated version of the demographic distribution data, if one were to base any forecast on it. Though we prefer to base our forecast on the teledensity in every circle, we provide below a perspective of how subscriber addition would pan out based on the income demographics over the next five years.

Exhibit 8: Cellular subscriber projection based on income demographics

Annual income (Rs '000)	FY06			FY10E		
	Households (m)	Mobile phones per household	Total phones (m)	Households (m)	Mobile phone / household	Total phones (m)
<90	132.2	-	-	114.4	1.3	152.1
91-200	53.3	1.1	58.6	75.3	2.1	158.1
201-500	13.2	2.0	26.4	22.3	2.7	60.1
501-1,000	3.2	2.1	6.7	6.2	3.2	19.8
1,001-2,000	1.1	2.5	2.8	2.4	4.0	9.5
2,001-5,000	0.5	3.0	1.4	1.0	4.0	4.1
5,001-10,000	0.1	3.0	0.3	0.3	5.0	1.3
10,001+	0.1	3.2	0.2	0.1	5.0	0.7
	<b>203.7</b>		<b>96.3</b>	<b>221.9</b>		<b>405.8</b>

Source: NCAER (Based on 2001-02 prices), SSKI Research

**We have assumed a circle-wise teledensity of 50%, 37% and 25% for A, B and C circles respectively**

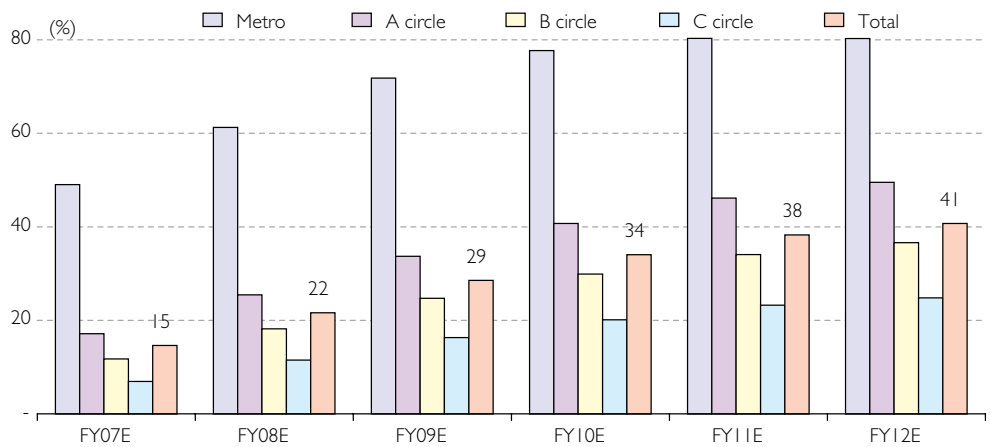
### □ We forecast 504m wireless subscribers by 2012

We believe there are enough reasons for the teledensity to improve. We have assumed a circle-wise teledensity and forecast India to have 504m subscribers by 2012. During this period, we expect the density in metros to catch up with that of other developed Asian countries. For A and B circles, we have assumed teledensity to rise to 50% and 37% while it would remain constrained at 25% for C circles. Overall, we expect India to have a teledensity of 41% by 2012. Our estimates are lower than the government's targets as we believe that constraints on spectrum and issues such as the benefits of higher GDP growth seeping through to the small villages could cap penetration.

Exhibit 9: Circle-wise wireless subscriber base projections – based on wireless teledensity

	FY07E	FY08E	FY09E	FY10E	FY11E	FY12E
<b>Subscribers (m)</b>						
Metros	33	42	50	55	58	59
A circles	59	89	119	146	167	182
B circles	59	93	128	158	183	201
C circles	15	26	38	48	56	61
<b>Total</b>	<b>166</b>	<b>249</b>	<b>335</b>	<b>406</b>	<b>465</b>	<b>504</b>
<b>Wireless teledensity (%)</b>						
Metro	49%	61%	72%	78%	80%	80%
A circle	17%	25%	34%	41%	46%	50%
B circle	12%	18%	25%	30%	34%	37%
C circle	7%	11%	16%	20%	23%	25%
<b>Total</b>	<b>15%</b>	<b>22%</b>	<b>29%</b>	<b>34%</b>	<b>38%</b>	<b>41%</b>

Source: SSKI Research

**Exhibit 10: Circle-wise wireless penetration forecast**

Source: SSKI Research

**Key drivers of higher teledensity**

Improving coverage and rising affordability are the key drivers expected to spearhead telecom penetration in India. Coverage and affordability would be driven by the following factors:

- Further cuts in regulatory costs (license fee, USO fund contribution, ADC, etc)
- Infrastructure sharing to result in speedy rollouts of networks and wider coverage
- Low cost of handsets
- Lower cost of equipment (with most of the global equipment manufacturers setting up operations in India)

*Improving coverage and rising affordability – the key drivers of teledensity*

**Exhibit 11: Regulatory cost comparisons**

Regulatory charges	Pakistan % age of revenue	Sri Lanka % age	China %age of revenue	India %age of revenue
Service tax, GST	GST	VAT	3%	8%+GST
License fee	0.5%+0.5% R&D	0.3% turnover + 1% of capital invested	Nil	5-10%
Spectrum charge	Cost recovery	1.1% of turnover	0.50%	2-6%
USO	1.50%	only on ILD	Nil	incl. in license fees
Total Regulatory charges	2.5%+ GST + Cost recovery	1.3% of turnover + 1% on investment + VAT	0.5% +3% (Tax)	15-24% + GST

Source: TRAI

*Lower one-time cost for prepaid users, low denomination coupons and slashed roaming charges have improved affordability*

*Regulatory charge as a percent of revenues has declined significantly over last four years for Bharti*

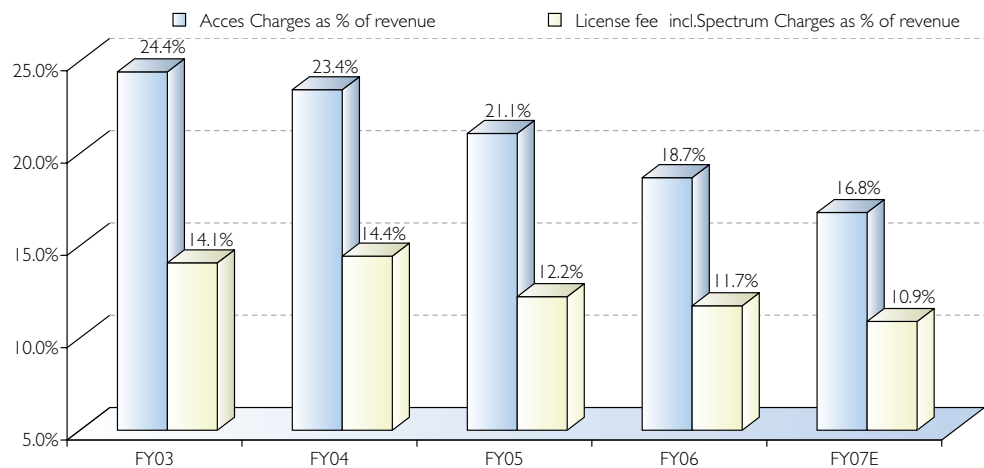
*Both local and NLD rates down significantly over the years; expect tariffs to continue coming down*

### □ Tariffs to be lowered further due to cut in regulatory costs

The Department of Telecom (DoT) has time and again focused on achieving the targeted penetration either by rationalizing regulatory costs in terms of lowering the license charges and cutting the collection of ADC for BSNL or by encouraging operators to increase affordability to customers by lowering price points. The DoT encouraged operators to lower one-time cost for prepaid customers, reduce the lowest denomination coupon for a prepaid connection and cut roaming charges. Increasing competition too led to competitive tariffs (triggered mainly by RCOM).

The following exhibit elicits that regulatory charge as a percent of revenues has declined significantly over last four years for Bharti (the sector leader) – access charge has declined from 24.4% of revenues to 16.8%, while license fee including spectrum charge has declined from 14.1% to 10.9% over FY03-07E.

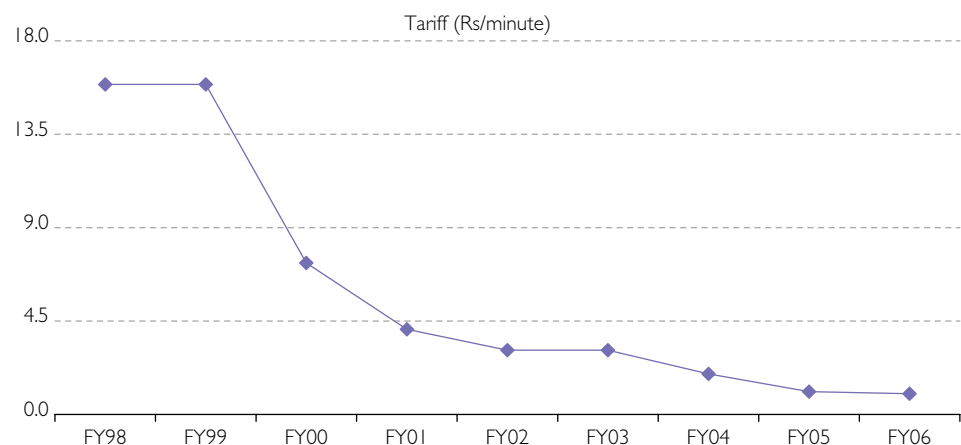
**Exhibit 12: Bharti's license fees and access charges as % of revenue have been falling**



Source: Company, SSKI Research

While India continues to enjoy the lowest tariffs seen anywhere globally, tariffs are further coming down. With both the local and national long distance (NLD) rates have falling significantly over the years, we expect tariffs to continue coming down – in line with the government's resolve to further lower regulatory costs.

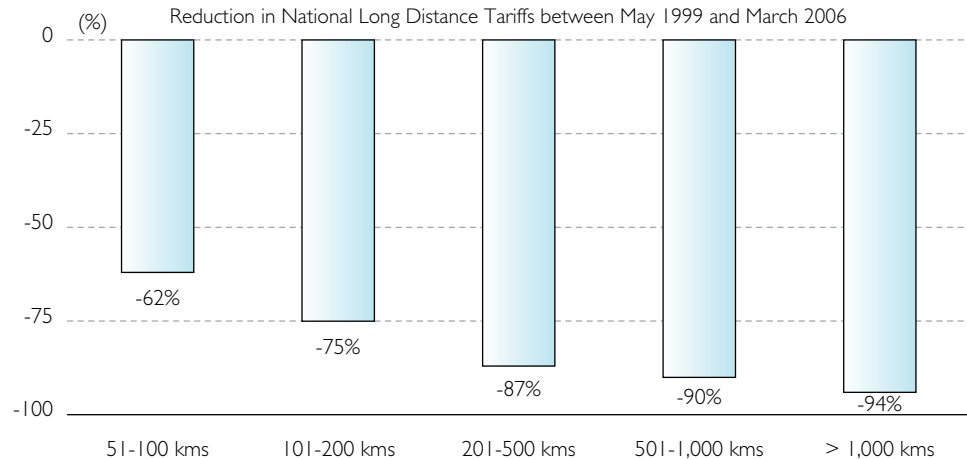
**Exhibit 13: Tariffs have constantly fallen**



Source: TRAI Annual report 2005-06

The TRAI recently mandated national long distance operators to discontinue charging a roaming rental fee (Rs45 per month) as also to cut roaming tariffs by nearly 54% in February 2007.

#### Exhibit 14: Long distance tariffs too have fallen



Source: TRAI Annual report 2005-06

**Roaming rental fee waived off, roaming tariffs cut by 54% in February 2007**

**Lower regulatory charges driving usage of mobile phones**

**With Nokia, LG, Samsung, etc setting up manufacturing plants, handset prices set to come down**

In March 2007, TRAI has cut ADC charges on ILD incoming calls to Re1/minute (from Rs1.6/min) and done away with any charge for outgoing ILD calls (Re0.8/min earlier). In addition, the revenue share has been reduced to 0.75% of AGR from 1.5% earlier, with a clear mandate of phasing out ADC regime by 2008-09. TRAI is also contemplating reduction of license fees and lowering the USO fund contribution. We also believe that roaming charges could be brought down further on both national and international long distance. This should enable higher usage and result in better margins for operators with a pan-India presence as also a strong international network.

#### Local manufacturing of equipment to lower handset costs

The government is targeting 650m telephone connections (wireless and wireline) by 2012. Given the enormous opportunity and driven by the government's resolve to promote local manufacturing of telecom equipment including handsets, global players have announced setting up operations in India. LG and Samsung expect to manufacture 20m handsets each every year by 2010 while Nokia is planning to manufacture 20m-40m mobile handsets per annum. This, in our opinion, could also drive down prices of handsets.

#### Exhibit 15: Telecom OEMs plan local manufacturing

Company	Project
LG	20m handsets p.a. by 2010
Samsung	20m handsets p.a. by 2010
Nokia	20m-40m mobile handsets p.a.
Elcoteq	6m mobile handsets p.a. and 1,500 base stations p.a.
Alcatel	14,400 base stations p.a.
Ericsson	12,000 base stations and 200 mobile switching centres p.a.

Source: Voice & Data

*Private operators aggressively improving their coverage; Bharti has overtaken BSNL*

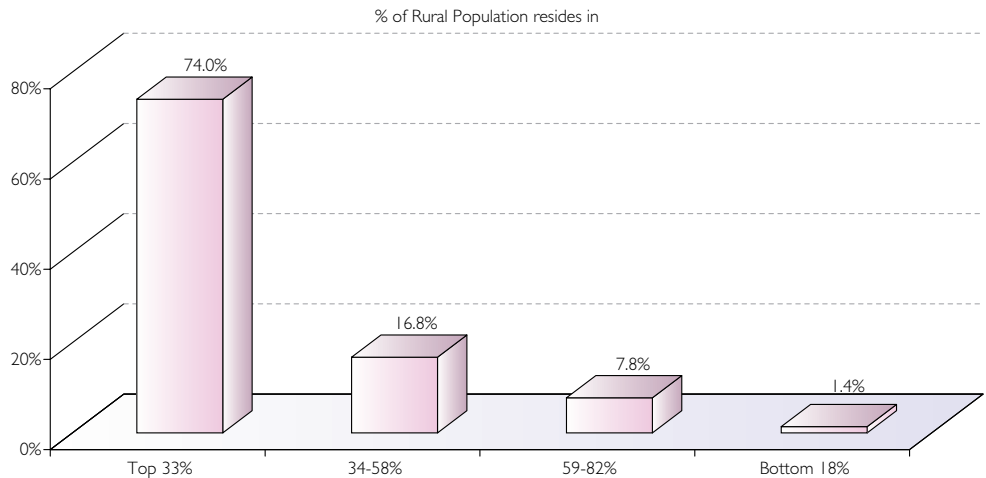
*Of the targeted 650m wireless + fixed line subscribers by 2012, 200m connections expected to be in rural areas*

*Bharti increasing its presence in towns and villages, more of the latter – thereby covering a large part of the population*

**Improving coverage to lead to higher penetration**

There are about 607,000 villages in India. While BSNL covers 182,280 of these, Bharti is present in 176,593. According to press reports in March 2007, Bharti's population coverage and network are now wider than BSNL's. Of the targeted 650m telephone subscribers (wireless + fixed line) by 2012, 200m telephone connections are expected to be in rural areas. It is estimated that about 200,000 villages account for 74% of the rural population (put at ~800m by an economic survey).

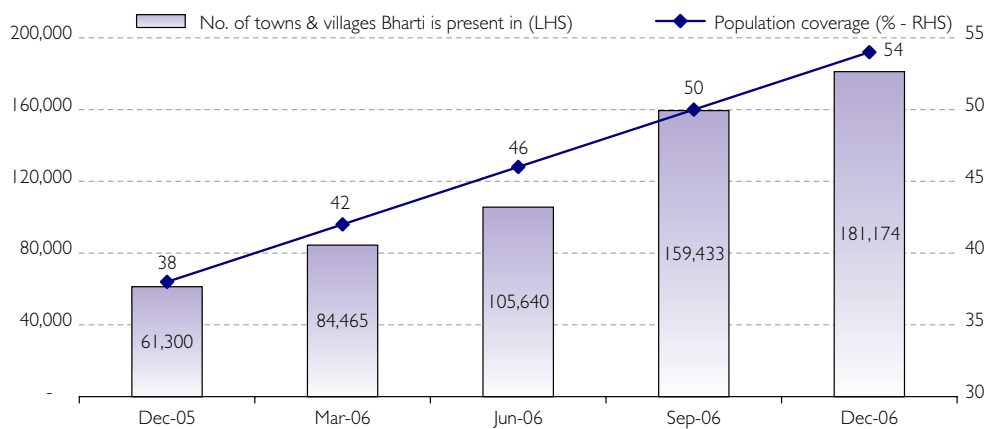
**Exhibit 16: Top 33% of the 607,000 villages account for 74% of the rural population**



Source: TRAI

Bharti, the sector leader, has been increasing its presence in towns and villages, more of the latter – thereby covering a larger part of the population (54% coverage at present).

**Exhibit 17: Bharti has rapidly expanded coverage**



Source: Company, SSKI Research

## INDIAN MOBILE CONSUMER: KEY TRAITS

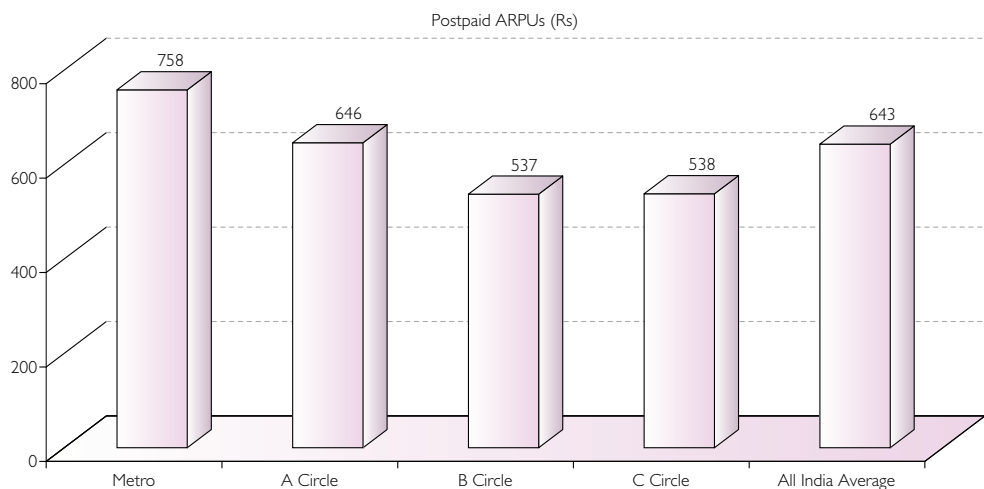
The Indian wireless sector has been adding subscribers at a frenetic pace. India is reported to soon overtake Russia to become the third largest cellular market. The government as well as various agencies and analysts forecast the market to grow at least thrice its current size in the next five years. Recent data published by TRAI throws up some interesting facts – contrary to popular perception, a prepaid customer in the C circle spends more per month in mobile bill than a counterpart in other circles (including metros). Similarly, a lifetime prepaid scheme, though generating lower ARPU for operators, has higher per minute revenue and is increasing the outgoing minute volumes for overall industry.

### ❑ Postpaid vs prepaid

Like most other markets globally, in India too, prepaid subscribers account for 87% of the total market. In this section, we discuss the various trends prevailing in the Indian mobile market.

In the case of postpaid connections, the ARPU varies significantly from circle to circle. While a user in metros (Mumbai, Delhi, Chennai and Kolkata) bills an average Rs758 (\$17) per month, that in B & C circles generates a revenue of about Rs538 (\$12) a month for the operator. The average monthly ARPU from a postpaid user in India works out to Rs643 (\$14.6).

**Exhibit 18: Postpaid ARPU in Metros is 40% higher than that in B and C circle**



Source: TRAI report on performance indicators dated Jan 17, 2007

However, it is interesting to note that unlike postpaid customers whose monthly spends vary with circles, prepaid customers spend nearly the same amount irrespective of the location. A prepaid customer spends an average Rs277 (\$6) in a month, while the prepaid customer in a metro would spend Rs284 (\$6.5). In fact, at Rs305 (\$7) per month, the prepaid customer in C circle generates the highest ARPU for an operator. This could be because the penetration in C circles is very low, and hence connections would have been typically targeted at the relatively elite class.

*Prepaid subscribers account for 87% of the total market*

*The average ARPU from a postpaid user in India works out to Rs643 (\$14.6)*

*While spends of postpaid users vary with circles, prepaid users have a largely similar spend irrespective of location*

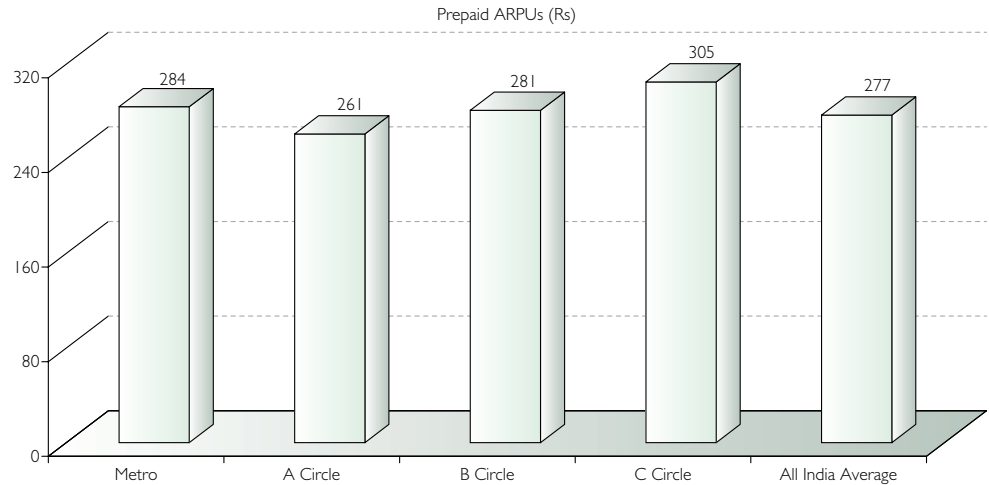


**Among prepaid customers, a user in C circle generates the highest ARPU of Rs305 (\$7) a month**

**First mover advantage allows PSU incumbents to generate higher ARPU as they are the first ones to target elite users...**

**...however, their ARPU declines with competition from private players**

**Exhibit 19: Prepaid ARPU in C circle is the highest**



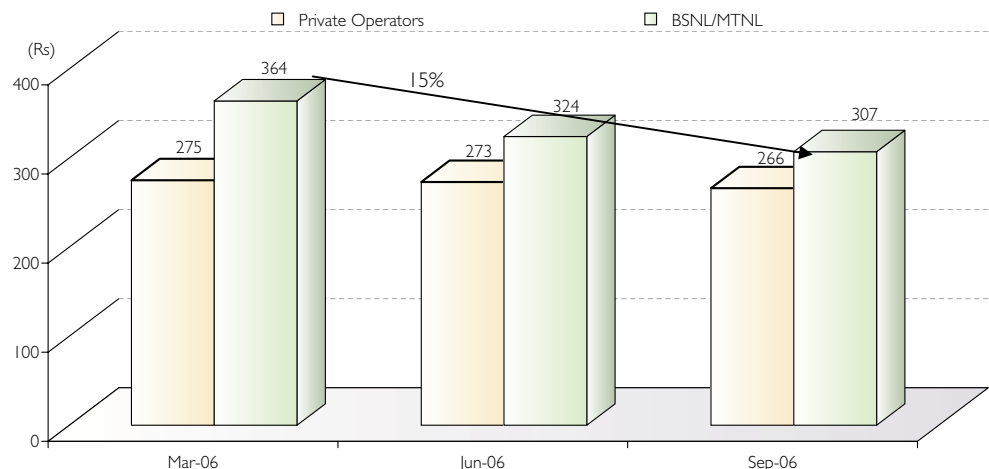
Source: TRAI report on performance indicators dated Jan 17, 2007

#### Public sector operators initially enjoyed higher prepaid ARPU

The more intriguing aspect of the prepaid category is that private cellular operators generate lower ARPU than the government-owned BSNL and MTNL. The lead enjoyed by the public sector entities is primarily due to first mover advantage. As BSNL is ahead of private operators in launching its operations in small towns, the company is virtually the only operator in those towns. This enables the incumbent to bring on board higher usage customers and, in turn, generate higher ARPU from a prepaid customer than a private operator.

However, as competition sets in and products are offered at lower price points, ARPU for BSNL slides rapidly. Prepaid ARPU for government-owned operators has declined by 15% from March 2006 to September 2006 compared to just 3% for private operators. It is evident from the following exhibit that the first mover in any area gets advantage in terms of higher ARPU, though the gap in ARPU narrows over period of time.

**Exhibit 20: Prepaid ARPU for BSNL/MTNL have declined by 15%**



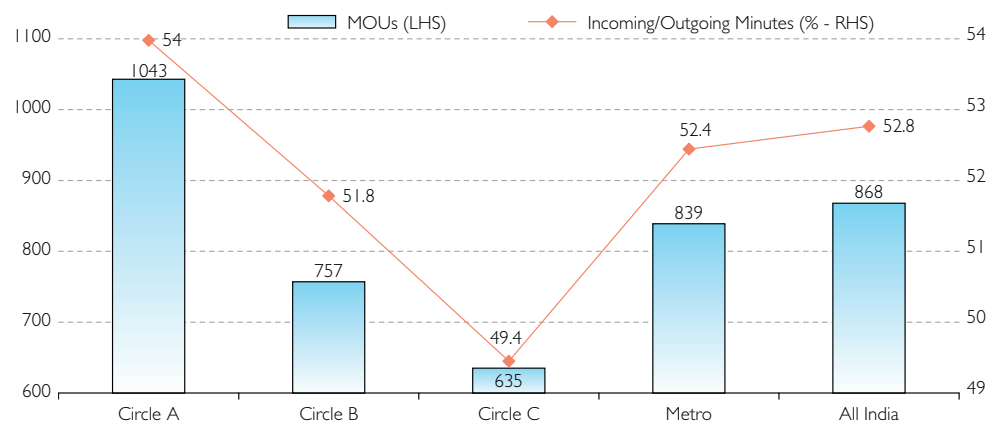
Source: TRAI report on performance indicators dated Jan 17, 2007

**The ratio of incoming to outgoing minutes for a postpaid customer is 52:48**

### □ MoU – varying trends for postpaid and prepaid customers

In terms of usage, a postpaid customer in A circles spends more time talking on a cellphone compared to a customer in the metros. In the postpaid category, the MoU of customers in A circles is about Rs1,043 while that in metros is Rs839. A postpaid customer is as much inclined to make calls than just receive calls. The ratio of incoming to outgoing minutes for a postpaid customer is 52:48.

**Exhibit 21: Postpaid user in A circle spends about 35 minutes daily on the cellphone**

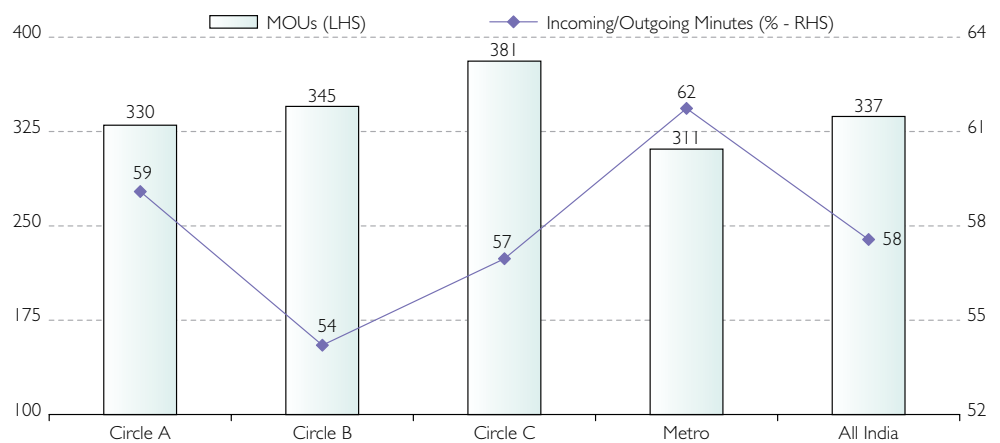


Source: TRAI report on performance indicators dated Jan 17, 2007

**The ratio of incoming minutes to outgoing minutes for prepaid customers is 58:42**

In the prepaid category, the MoU of a customer in C circles is the highest, implying that the current users see value in owning a mobile connection to remain connected. As expected, the ratio of incoming minutes to outgoing minutes for prepaid customers is 58:42.

**Exhibit 22: Remain connected – primary motive for a prepaid user in metros**



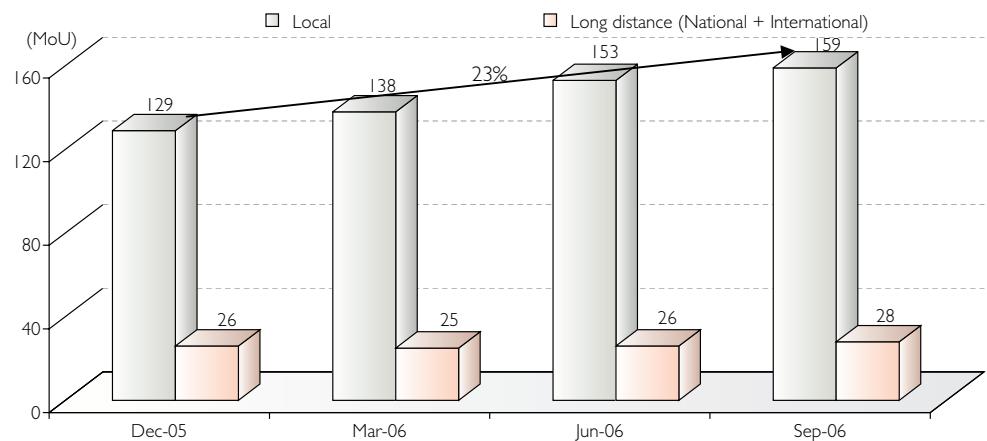
Source: TRAI report on performance indicators dated Jan 17, 2007

**Incoming blended MoU static at ~237 between December 2005 and September 2006, outgoing MoU up by ~21%**

The TRAI data on MoU for the industry throws up a very noteworthy trend. While the incoming MoU on a blended basis (prepaid + postpaid) have remained static at ~237, the outgoing MoU have increased by about 21% between December 2005 and September 2006. We note that the outgoing minutes of postpaid customers in A circles has risen by 50% during the said period. The TRAI's data on lifetime prepaid trends for the period December 2005 to June 2006 indicates that the highest number of lifetime prepaid customers additions have been witnessed in A circles. Of the 6.6m lifetime prepaid subscribers added in these circles, 3.6m were new customers while the remaining migrated from existing prepaid schemes to the lifetime prepaid scheme. We believe this would have induced higher usage for postpaid customers in that circle. More than this, we believe the overall activity in the Indian economy is the primary reason for the higher usage.

Another key trend that has emerged is that the outgoing minutes for local calls have risen, whereas long distance outgoing minutes have remained stable. Going forward, we believe the recent abolition of roaming rentals, reduction in roaming tariffs and cut in ADC would enable higher outgoing usage on national long distance traffic.

**Exhibit 23: Local and long distance MoU**



Source: TRAI report on performance indicators dated Jan 17, 2007

**Outgoing minutes for local calls have risen, whereas long distance outgoing minutes are stable**

## LIFETIME PREPAID VS PREPAID

Mobile operators launched lifetime prepaid schemes in December 2005. As per TRAI data, this brought on board about 8m new customers within six months of the launch. The data also indicates that the ARPU of the lifetime prepaid customer is about 16% lower than that of a normal prepaid user. However, the revenue per minute of Re0.8 from a lifetime prepaid customer is higher than the blended (postpaid + prepaid) revenue per minute from an average mobile customer as of June 2006.

### □ Lifetime prepaid tariff higher than normal prepaid

Operators launched lifetime prepaid schemes in December 2005 offering subscribers talk time worth Rs25 and lifetime validity (period for which they have the license to operate) for receiving calls. While the tariffs for outgoing calls were pegged higher at Rs1.95 on local calls vs a normal prepaid tariff of Re1, the subscriber could receive calls by just recharging once every six months. The scheme was primarily targeted at low usage customers.

### □ Lifetime prepaid customers generate higher revenue per minute

According to TRAI, 16.1m subscribers opted for the lifetime prepaid scheme from the launch date to June 2006, of which ~8m were new while the remaining migrated from existing prepaid schemes. The ARPU of a lifetime prepaid scheme was Rs218, while that of an ordinary prepaid scheme was Rs261 in June 2006. While an average prepaid customer talks for about 320 minutes a month, the lifetime prepaid customer's usage was 271 minutes. However, the minutes of usage (i.e. the outgoing talk time) for a lifetime prepaid customer are significantly lower at 57 minutes against 131 minutes for a normal prepaid customer.

Despite lower ARPU and MoU of lifetime prepaid subscribers, they are seemingly more beneficial to operators. TRAI estimates suggest that lifetime prepaid subscribers have a higher revenue per minute of Re0.8 – higher than the blended revenue per minute of Re0.77 for full mobility service. Also, operators derive an indirect advantage in the form of increasing overall outgoing MoU as more and more subscribers come on board through various schemes like these. For example, in A circles – which recorded the highest number of lifetime prepaid connections, 41% of the increase in GSM subscriber base between December 2005 and June 2006 was because of 'lifetime prepaid' subscribers. During that time, A circles also witnessed a 42% increase in outgoing MoU of postpaid subscribers.

**Exhibit 24: Lifetime prepaid schemes have led to higher usage of existing customers**

	Lifetime prepaid subscribers - GSM (m)		Total GSM subscriber base (m)		Incremental GSM subscribers added (m)	New enrolments under lifetime as % of total incremental subscribers	Growth in outgoing MOUs - postpaid GSM subscribers
	Dec'05 - Jun'06	New enrolments	Dec-05	Jun-06	Dec'05 - Jun'06		Dec'05 - Jun'06
	A circle	5.6	3.0	20.5	27.8	7.34	41
B Circle	4.0	2.1	19.3	26.0	6.70	31	23
C Circle	1.2	0.5	4.8	7.6	2.80	18	9
Metros	2.7	1.2	14.0	17.1	3.14	39	20
All India	13.5	6.8	58.5	78.5	19.98	34	27

Source: SSKI Research

## VODAFONE BUYS HUTCH: PITCH UNCHANGED

Vodafone's acquisition of Hutch's stake in Hutch Essar is unlikely to leave any mark on the competitive landscape of the Indian wireless market. Vodafone has set aggressive targets of increasing market share to 20-25% by 2012 from 16% currently. The company expects to register an EBITDA CAGR of mid-30s, implying EBITDA per subscriber to remain largely stable. The MoU with Bharti and continuation of a 4.4% indirect stake in Bharti sends signals of a cordial relationship between the two. Thus, we believe that while Vodafone would introduce low cost handsets, it would restrain from competing on tariffs.

### □ Vodafone aiming to raise market share

Vodafone has averred that it is aiming for a market share of 20-25% by FY12 from 16% currently. Assuming the company garners a market share of 20% and based on our forecast of 504m cellular subscribers in India by FY12, it would have about 100m subscribers. Thus, for Vodafone to achieve the targeted market share, its subscriber base needs to expand at 33% CAGR over FY07-12. Vodafone also expects its EBITDA to grow in mid-30s up to FY12, implying that EBITDA/subscriber would remain stable.

*EBITDA growth in sync with increase in subscriber base*

### Exhibit 25: Vodafone paints a rosy picture

	2005	1H2006	2006E	2012
Overall market penetration (%)			13%	40%
Hutch/Vodafone market share (%)			16%	20-25%
Hutch/Vodafone subscriber base (m)	11.4	17.5	24.4	105
EBITDA (USD m)	415	297	690	3,093
EBITDA per sub (USD)	36.4	33.9	32.9	29.5
% Chg per annum		-6.8%	-3.0%	-2.8%

*Note: For 2006E we have estimated EBITDA/sub decline of 3% over 1H2006*

*Source: Vodafone, SSKI Research*

### □ Vodafone and Bharti expected to remain on cordial terms

We believe Vodafone, unlike Hutch, would focus on having a pan-India presence and increasing its footprint to small towns and villages. While Hutch seemingly chased the 'creamy layer' of the addressable market, we expect Vodafone to expand its scope of the addressable market. Thus, while Hutch was not a potent threat to Bharti due to the former's focus limited to major cities of India, Vodafone could offer intense competition. However, the Memorandum of understanding (MoU) signed between Bharti and Vodafone to share the tower infrastructure indicates that the two companies are looking to working more collaboratively than competing intensely. While Bharti currently shares 25% of its tower infrastructure with other players, certain pointers given below indicate the direction of its future relationship with Vodafone.

- Bharti allowed Vodafone to continue holding a 10% stake in the company even as Vodafone submitted its bid for acquiring Hutch.
- Bharti was quite vocal in stating that it would provide the No Objection required by Vodafone for submitting its bid to acquire Hutch.
- Vodafone sold 5.6% of its direct stake in Bharti back to the promoters at a discount of 11% to the then market price and continues to hold a 4.4% stake in the company.

*We expect Vodafone to expand its scope of the addressable market, which would lead to intense pressure on Bharti*

*Save a natural decline in tariffs, we do not see Vodafone's entry triggering a price war*

- Vodafone has committed to route at least 50% of its international incoming traffic through Bharti for the next three years.
- Vodafone has also selected Bharti to be a preferred vendor for NLD, ILD and leased line services.

□ **Vodafone to focus on expanding coverage; tariff war unlikely**

Though India is a price-sensitive market, we believe tariffs have not proved to be a differentiator for any player. We have observed that RCOM started off by aggressively competing on tariffs. Though the strategy allowed the company to initially gain market share, it has failed to grow its market share beyond 20% since its launch. With regulatory costs likely to come down on the back of a cut in ADC and lowering of the USO fund, we believe tariffs are set to come down as operators pass on the benefits to subscribers. This would not have any impact on profitability of operators, and we do not see any tariff wars in the offing. Operators could, however, offer products at lower price points.

As already being done by some operators, we expect Vodafone to launch low priced handsets as also bundled offerings to expand its market share. Overall, we do not see the current economics of the business being disrupted.

## TOWER BUSINESS: TOO SOON TO BE VALUED

Bharti and RCOM plan to hive off their tower infrastructure into subsidiaries and the market is trying to assign a value to these. We have analyzed the impact of tower sharing (23% out of the total 34,000) on Bharti's current financials. Most of the towers are shared on a barter basis, which reduces the overall cost of owning and operating the passive infrastructure. We estimate the current tower sharing arrangement to have resulted in 97-129bp savings in operating costs and \$400m in capex savings for Bharti (value embedded in Bharti's current valuations). Also, the tower business cash flows would be dynamic to the proportion of towers shared on a barter basis and the implicit rate of return desired while arriving at the rental stream. We believe it is too early to assign a separate value to this business without clarity on the two key variables in the business.

### ❑ Cost benefit from tower sharing likely to be retained by operators

Bharti and RCOM have announced that they would transfer all their tower and electrical infrastructure into a separate company, which would be entirely held by the parent company. This is being done with a view to derive operational efficiency. Infrastructure sharing was initially suggested by the TRAI to enable wider penetration into small towns and villages in India so as to meet the 11th 5-year plan (2007-12) target of providing 584m mobile connections by 2012. The TRAI, in its study of infrastructure sharing globally, has indicated that though this may not result in lower tariffs, it certainly crashes the lead time to roll out networks in rural areas.

### ❑ Towers in rural areas being shared currently, mostly on barter basis

Bharti currently has a network of 34,000 towers, and it plans to add another 6,000 by the end of FY07. The company proposes to transfer the 40,000 towers into a separate company and lease them out to competitors in all the circles (currently, about 23% of the towers are shared with competitors). According to TRAI, tower sharing is prevalent in the rural areas – of the 90,000 towers erected so far by the industry, about 25% of them are currently being shared.

While we have attempted to give a perspective of the tower infrastructure company's P&L, we believe it is too early to assign it a value due to lack of clarity on the dynamics of the business. According to TRAI reports and based on our discussions with the larger companies, we understand that tower sharing is currently done on a barter basis. Typically, the towers are shared in rural areas, where there is no significant difference in the value of land. Thus, we believe a large portion of the tower infrastructure could be shared on a barter basis, which would not generate any revenues for the towers owned by operators. In that case, it is unclear as to how the commercial terms would be agreed upon.

As Bharti has the highest number of towers at present, it would potentially share more of its towers, and hence would generate cash flows in terms of rental income. The conventional model for such a business is an annuity rental revenue stream with high leverage on the balance sheet.

*Infrastructure sharing shrinks the rollout time for operators and renders capex and opex savings*

*Tower sharing more prevalent in rural areas; trend to be sustained*

**Main incentive of sharing tower infrastructure is to increase operational efficiency and speed of network rollouts**

**We have calculated monthly rental revenue based on return on capital expenditure and the assumed operating expenditure**

### □ Tower sharing rental linked to expected rate of return for host

Based on our discussions with the larger telecom companies, we understand that the main incentive of sharing the tower infrastructure would be to increase operational efficiency and speed of network rollouts. We expect sharing to happen on a barter basis between the larger players with smaller players creating a revenue stream for larger players.

We present below the workings of an independent infrastructure company, based on various expected rates of return related to the number of tenants for each tower. We have calculated the monthly rental revenue for the company based on the return on capital expenditure and the assumed operating expenditure.

#### Key assumptions

- Cost of a tower and other related ancillary infrastructure is Rs3.5m
- Funding primarily through debt (gearing of 1.5x)
- Life of asset assumed at 10 years
- To arrive at the rental revenue, expected rate of return set at 8% for one tenant, 12% for two tenants and 15% for three tenants
- Operating cost of a tower at Rs30,000 per month
- Cost of debt at 8%
- Minimum Alternate Tax rate of 11.3%
- The monthly rental income/tower for the owner increases with the number of tenants

#### Exhibit 26: Tower business pro-forma P&L

	Scenario 1	Scenario 2	Scenario 3
<b>Assumptions</b>			
Cost of a tower (Rs)	3,500,000	3,500,000	3,500,000
Life of asset (number of years)	10	10	10
Debt/Equity (x)	1.5	1.5	1.5
Interest rate (%)	8	8	8
Number of tenants (no)	1	2	3
Expected rate of return (%)	8	12	15
<b>P&amp;L</b>			
Rent / tower/ month (Rs) – based on exp. return	42,465	50,215	56,467
Opex / tower/ month (Rs)	30,000	30,000	30,000
Revenue / tower / month (Rs)	72,465	80,215	86,467
Annual revenues (Rs)	869,576	962,578	1,037,607
Annual opex (Rs)	360,000	360,000	360,000
EBITDA (Rs)	509,576	602,578	677,607
EBITDA margin (%)	59	63	65
Depreciation (Rs)	350,000	350,000	350,000
EBIT (Rs)	159,576	252,578	327,607
EBIT margin (%)	18.4%	26.2%	31.6%
Interest (Rs)	186,667	186,667	186,667
PBT (Rs)	(27,091)	65,911	140,940
Tax (Rs)	0	7,448	15,926
<b>PAT (Rs)</b>	<b>(27,091)</b>	<b>58,463</b>	<b>125,014</b>
PAT margin (%)	-3.1%	6.1%	12.0%

Source: SSKI Research



*For towers shared on barter, Bharti saves on operating cost, whereas for other towers, cost savings through revenues generated out of sharing*

*We estimate Bharti to be deriving 97-129bp contribution to EBITDA margin from tower sharing...*

*... and \$400m of capex saving*

### □ Tower sharing contributes 97-129bp to Bharti's margins

Using the workings for the tower company, we have tried to arrive at the extent of cost savings for a tenant. We test these workings on Bharti's financials. As most of the tower sharing in the industry is currently based on a barter basis, we have assumed that Bharti is sharing 80% of the 23% towers (total 34,000 towers) on a barter basis and the remaining towers generate some revenues for the company. We understand that Bharti reports net revenues from the current tower sharing under its mobility services segment. Thus, based on the number of tenants on its towers, the cost savings vary. For towers shared on barter basis, Bharti saves on the operating cost, whereas for the other 20% towers, the cost savings are through revenues generated out of sharing them with other tenants. We estimate that Bharti is currently realizing operating cost savings of 97-129bp through the current tower sharing arrangement.

#### Exhibit 27: Bharti has benefited from tower sharing

	Scenario1	Scenario2	Scenario3
Cost of a tower (Rs)	3,500,000	3,500,000	3,500,000
Life of assets (yrs)	10	10	10
Debt/Equity (x)	1.5	1.5	1.5
Interest rate (%)	8	8	8
<b>Number of tenants (no.)</b>	<b>1 (only Bharti)</b>	<b>2</b>	<b>3</b>
<b>Expected rate of return (%)</b>	<b>8</b>	<b>12</b>	<b>15</b>
Bharti annualized Q3FY07 mobile revenues (Rs m)	150,316	150,316	150,316
Total number of towers for Bharti (no.)	34,000	34,000	34,000
Shared towers (%)	23	23	23
Barter basis (%)	80	80	80
Towers shared on barter basis (no.)	6,256	6,256	6,256
Opex / tower/ month (Rs)	30,000	30,000	30,000
Opex / tower/ month/ tenant (Rs)	-	15,000	10,000
Margin impact from cost savings barter sharing (bp)...(a)	-	+75	+100
Pure commercial terms (%)	20	20	20
Towers shared on commercial terms	1,564	1,564	1,564
Rent / tower/ month (Rs)	42,465	50,215	56,467
Rent / tower/ month/ tenant (Rs)	-	25,107	18,822
Margin impact from commercial sharing (bp)...(b)	-	+22	+30
<b>Margin impact from tower sharing (bp)...(a+b)*</b>	<b>-</b>	<b>+97</b>	<b>+129</b>

Source: SSKI Research. \*margin impact is calculated based on Q3FY07 annualized revenues

#### Exhibit 28: Capex savings for Bharti from tower sharing

Capex impact		
Total number of towers	34,000	no.
Towers shared	23	%
Assuming barter for	80	% of shared towers
Tower cost	3,000,000	Rs/tower
Shared tower on barter basis	6,256	no.
Capex saving	18,768	Rs m
Capex saving	417	USD m

Source: SSKI Research

***As Bharti increases the number of towers it shares (barter + commercial), the benefits would be higher***

We believe the value that Bharti derives from sharing its towers with other operators either on a barter basis or on commercial terms is currently embedded in terms of better EBITDA margins (97-129bp impact) as well as capex savings (~\$400m saved so far), and hence in valuations. As Bharti increases the number of towers it shares (barter + commercial), the benefits would be higher. In our opinion, it is too early to assign a valuation to the infrastructure business due to lack of clarity on the variables driving that business and given the difficulty in separating the value of the current embedded value out of the tower sharing being done currently. Also, Bharti is reported to be separating its tower infrastructure to derive operational efficiencies rather than unlocking value at this point of time.

## VALUATIONS: VISIBILITY NOT FACTORED IN

Though growth rates for the Indian mobile industry would likely plateau from FY09, EBITDA margins are expected to continue expanding on the back of scale benefit, infrastructure sharing and lower regulatory costs. Infrastructure sharing would also lead to a significant increase in companies' cash flows. We have used the DCF methodology to value telecom operators in our universe. Strong cash flows, and exceptional management and execution capabilities prompt us to rate Bharti as Outperformer with a target price of Rs910. For RCOM, we believe current valuations factor in the loss of market share likely in the interim. We expect RCOM to gain market share after it gets spectrum for its GSM rollout and rate it Outperformer with a target price of Rs505. We rate Idea as Neutral due to its dependence on pure mobile revenues and premium valuation to RCOM as also insufficient discount to Bharti.

### □ Strong growth in cash flows to sustain valuations at current level

The wireless sector in India is experiencing strong growth rates. We expect the current pace of subscriber additions to be sustained in the coming years; however, growth is likely to taper off from FY09 as penetration increases. Nevertheless, the sector's prospects in terms of profitability would keep improving in line with subscriber additions. While ARPU in India is lower compared to other markets and probably set to fall further in the medium term before rising once the business stabilizes, we believe the growth prospects should enable valuations to sustain for the next few years. Given the strong growth in cash flows, we have used the DCF method to value the companies in our wireless universe.

*Sector's prospects in terms of profitability to keep improving in line with subscriber additions*

#### Exhibit 29: Bharti - DCF calculations

(Rs bn)	FY08E	FY09E	FY10E	FY11E	FY12E...	...FY20E
EBITDA	113	145	175	210	229	424
Tax	(11)	(15)	(19)	(24)	(28)	(96)
Capex	(112)	(91)	(96)	(86)	(68)	(51)
Working capital	(1)	(1)	(1)	(1)	(1)	(1)
FCF	(11)	39	60	98	132	276
WACC (%)	11.4%					
Terminal growth (%)	3.0%					
Terminal value	3,387					
PV of terminal value	930					
NPV	885					
EV	1,814					
Net debt (FY08E)	90					
Equity value	1,725					
Value per share (Rs)	910					
<b>Discounting rate</b>						
Risk free rate (%)						
						8.0
Beta						
						0.91
Market risk premium (%)						
						5.5
Cost of equity (%)						
						13.0
Cost of debt (post tax) (%)						
						6.5
WACC (%)						
						11.4

Source: SSKI Research

**Exhibit 30: RCOM - DCF calculations**

(Rs bn)	FY08E	FY09E	FY10E	FY11E	FY12E	FY20E														
EBITDA	80	112	137	160	177	308														
Tax	(5)	(10)	(14)	(18)	(19)	(62)														
Capex	(143)	(102)	(84)	(72)	(59)	(37)														
Working capital	(1)	(1)	(1)	(1)	(1)	(1)														
FCF	(69)	(1)	38	69	98	208														
WACC (%)	12.2	<table border="1"> <thead> <tr> <th colspan="2">Discounting rate</th> </tr> </thead> <tbody> <tr> <td>Risk free rate (%)</td> <td>8.0</td> </tr> <tr> <td>Beta</td> <td>1.1</td> </tr> <tr> <td>Market risk premium (%)</td> <td>5.5</td> </tr> <tr> <td>Cost of equity (%)</td> <td>14.1</td> </tr> <tr> <td>Cost of debt (post tax) (%)</td> <td>6.5</td> </tr> <tr> <td>WACC (%)</td> <td>12.2</td> </tr> </tbody> </table>					Discounting rate		Risk free rate (%)	8.0	Beta	1.1	Market risk premium (%)	5.5	Cost of equity (%)	14.1	Cost of debt (post tax) (%)	6.5	WACC (%)	12.2
Discounting rate																				
Risk free rate (%)	8.0																			
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Cost of equity (%)	14.1																			
Cost of debt (post tax) (%)	6.5																			
WACC (%)	12.2																			
Terminal growth (%)	3.0																			
Terminal value	2342																			
PV of terminal value	591																			
NPV	590																			
EV	1181																			
Net debt (FY08E)	92																			
Equity value	1089																			
Value per share (Rs)	505																			

Source: SSKI Research

**Exhibit 31: Idea Cellular - DCF calculations**

(Rs bn)	FY08E	FY09E	FY10E	FY11E	FY12E	FY20E														
EBITDA	22	29	36	44	49	85														
Tax	(1)	(2)	(3)	(4)	(5)	(16)														
Capex	(39)	(52)	(40)	(30)	(15)	(10)														
Working capital	(1)	(1)	(1)	(1)	(1)	(1)														
FCF	(18)	(26)	(7)	9	28	57														
WACC (%)	12.2	<table border="1"> <thead> <tr> <th colspan="2">Discounting rate</th> </tr> </thead> <tbody> <tr> <td>Risk free rate (%)</td> <td>8.0</td> </tr> <tr> <td>Beta</td> <td>1.1</td> </tr> <tr> <td>Market risk premium (%)</td> <td>6.0</td> </tr> <tr> <td>Cost of equity (%)</td> <td>14.6</td> </tr> <tr> <td>Cost of debt (post tax) (%)</td> <td>6.5</td> </tr> <tr> <td>WACC (%)</td> <td>12.2</td> </tr> </tbody> </table>					Discounting rate		Risk free rate (%)	8.0	Beta	1.1	Market risk premium (%)	6.0	Cost of equity (%)	14.6	Cost of debt (post tax) (%)	6.5	WACC (%)	12.2
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Market risk premium (%)	6.0																			
Cost of equity (%)	14.6																			
Cost of debt (post tax) (%)	6.5																			
WACC (%)	12.2																			
Terminal growth (%)	3.0																			
Terminal value	645																			
PV of terminal value	163																			
NPV	123																			
EV	286																			
Net debt (FY08E)	43																			
Equity value	242																			
Value per share (Rs)	93																			

Source: SSKI Research

**Our DCF analysis throws up an intrinsic value of Rs93 for Idea**

**Given the 11% discount in RCOM valuations to Bharti's, we do not see RCOM's listing having led to a de-rating of Bharti**

**□ Stock performance has been in line with visibility on growth prospects**

We explore the possibility of RCOM's listing and Idea's IPO being a dampener for Bharti's stock price. The market cap of RCOM has increased from \$8bn (Rs356bn) at the time of listing to about \$20bn (Rs856bn) currently. During the same period, Bharti's market cap has risen from \$17bn (Rs741bn) to \$33bn (Rs1,414bn). Thus, RCOM's market cap increased by \$12bn compared to Bharti's \$16bn while the latter added \$165m of incremental EBITDA in 9MFY07 compared to Reliance's \$110m. This implies that while EBITDA was higher by 50%, the rise in market cap was only 27% in the case of Bharti.

Tracking the upgrade in consensus FY08 earnings from March 2006 to now reveals that while RCOM's FY07E EPS has been raised from Rs10 to Rs22 (122%), the increase for Bharti has been lower from Rs23.3 to Rs31.6 (36%). In other words, RCOM – on listing – was trading at 29x FY08E earnings and Bharti at 16.3x. Currently, RCOM trades at 20.3x FY08E earnings – at a discount to Bharti's 22.7x FY08 earnings. Given the 11% discount in RCOM valuations to Bharti's, we do not see RCOM's listing having led to a de-rating of Bharti's stock.

*Comparing telcos with Indian IT sector, both with reasonable growth visibility...*

*...telecom companies are trading at a 27% discount to IT services companies*

*Our DCF based target price for Bharti, RCOM and Idea is Rs910, Rs505 and Rs93 respectively*

**Exhibit 32: RCOM and Bharti valuation changes since the former's listing**

	RCOM during		Bharti during	
	Mar-06	Mar-07	Mar-06	Mar-07
FY08E consensus EBITDA (Rs bn)	25.7	84.2	82.7	105.9
FY08E consensus EPS (Rs)	10.1	22	23.3	31.6
Price (Rs)	290	397	380	746
Market cap (Rs bn)	356	856	741	1414
FY08E EV/EBITDA (x)	15.8	11.8	9.6	13.3
FY08E P/E (x)	28.7	20.3	16.3	22.7

Source: Bloomberg, SSKI Research

### ❑ Comparison to Infosys and TCS more relevant than global peers

While we agree that global peer group comparison is relevant, we believe valuations of a sector in a high growth phase (currently, Indian telecoms is among the fastest growing in the world) tend to trade at a premium over global peers. Thus, we would rather compare Bharti (the torch bearer of Indian telecoms sector) with a few other high-growth (reasonable visibility) stocks like Infosys and TCS.

While Bharti and RCOM are expected to deliver higher EBITDA CAGR (~40%) over FY07-09 compared to Infosys and TCS (~30%), they trade at a discount of 27% on FY09E EV/EBITDA to the latter. Both Infosys and TCS generate free cash and have higher RoCE vis-à-vis Bharti and RCOM. The key risk is the overall macroeconomic scenario deteriorating. While disposable incomes would get impacted in India if the GDP growth slows down (negative for both Bharti and RCOM from a demand perspective), a slowdown in the US economy would prove beneficial to Infosys and TCS. Thus, we believe that the valuation discount would remain, but the gap could narrow down.

**Exhibit 33: Valuation comparison with IT sector peers**

	Bharti	RCOM	Infosys	TCS
Price (Rs per share)	746	397	1,992	1,194
Mkt cap (\$ bn)	33	20	26	27
PAT - FY07 (Rs bn)	41	30	37	41
RoCE - FY08E (%)	29	13	43	55
Revenue CAGR - FY07-09E (%)	35	37	33	31
EBITDA CAGR - FY07-09E (%)	40	40	32	29
EPS CAGR - FY07-09E (%)	40	41	30	29
EV/EBITDA - FY08E (x)	13.3	11.8	17.0	16.1
EV/EBITDA - FY09E (x)	10.1	8.5	12.9	12.7
P/E - FY08E (x)	22.7	20.3	22.6	21.0
P/E - FY09E (x)	17.5	14.7	18.0	17.2

Source: SSKI Research

### ❑ Outperformer rating on Bharti and RCOM; Idea – Neutral

Based on our DCF analysis, we see upside of 22% and 27% respectively for Bharti and RCOM. We rate both the stocks as Outperformer with a target price of Rs910 for Bharti and Rs505 for RCOM. At our DCF price, RCOM would trade at a discount of 13% to Bharti on FY09E EV/EBITDA basis. We believe the discount is justified due to Bharti's superior management, execution capabilities, better RoCE and loss of market share in the interim for RCOM.

Our DCF based target price for Idea is Rs93. Idea currently trades at a premium to both Bharti and RCOM, which is not justified. While unavailability of spectrum would hamper growth for both Idea and RCOM on the GSM platform, RCOM can meanwhile grow its subscriber base on the CDMA platform. While RCOM and Bharti tap the entire value chain of telecom services, Idea is currently a pure mobility operator. On our DCF price, both Idea and RCOM would trade at a similar FY09E EV/EBITDA. We believe RCOM should trade at a premium of 10% to Idea. Hence, there is a possibility of either RCOM trading at a premium to its DCF price or Idea trading at a discount to its DCF price.



# Companies

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# Bharti Airtel

Rs746  
OUTPERFORMER

## Cover (age) story

Mkt Cap: 1,414bn; US\$33bn

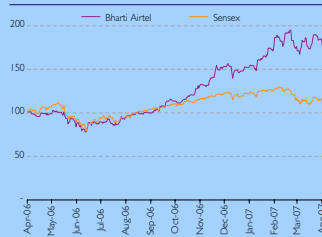
9 April 2007

BSE Sensex: 12856

### Stock data

Reuters	BRTI.BO
Bloomberg	BHARTI IN
1-yr high/low (Rs)	850 / 310
1-yr avg daily volumes (m)	0.09
Free float (%)	39.0

### Price performance



### Performance (%)

	3-mth	6-mth	1-yr	3-yr
Bharti Airtel	17.1	62.4	78.3	353.8
Sensex	(7.2)	3.8	9.4	120.2

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Bharti Airtel (Bharti) is best placed to benefit from India's burgeoning wireless subscriber base. With superior execution capability and strong brand, Bharti is expected to retain leadership in the fragmented market. While we do not foresee a tariff war, lower regulatory costs would lead to a further cut in tariffs and infrastructure sharing would facilitate wider population coverage. Bharti's MoU with Vodafone indicates the cordial relations between the two and douses concerns of stiffer competition. We estimate that Bharti derives cost savings of 97-129bp and capex saving of ~\$400m from infrastructure sharing. We rate Bharti as Outperformer with a DCF-based price target of Rs910 – an upside of 22% from here.

**Gearing up for the next phase of growth:** Bharti has spent US \$8bn as capital expenditure to build a subscriber base of 35m. The company expects to spend a similar amount to add ~65m subscribers (we expect 51m adds) over the next three years. The organization has restructured to gear itself to manage this expected massive scale of growth. If the current subscriber base of 35m is formed of the 'creamy layer' of the market, the next phase would involve targeting customers at lower price points.

**MoU with Vodafone allays concerns of a price war:** Bharti has signed an MoU with Vodafone to share its infrastructure and receive committed long distance incoming traffic. Also, Vodafone continues to hold a 4.4% stake in Bharti indirectly. This highlights the cordial relationship between the two companies and allays concerns of Vodafone fighting Bharti aggressively.

**Target price of Rs910 offers 22% upside:** We expect subscriber CAGR of 41% and EBITDA CAGR of 40% for Bharti over FY07-09. We believe valuing the infrastructure subsidiary is premature at this point due to lack of clarity on various business variables like sharing on barter basis and the expected return built into rental income. We have quantified Bharti's savings from tower sharing at 97-129bp in EBITDA margins and ~\$400m in capex, which is embedded in the present value of the stock. On our DCF price of Rs910, Bharti would trade at 12.2x FY09E EV/EBITDA. Outperformer

### Key financials

As on 31 March	FY05	FY06	FY07E	FY08E	FY09E
Net sales (Rs m)	80,028	116,634	186,579	272,775	340,316
Net profit (Rs m)	14,978	22,585	41,529	62,178	80,954
Shares in issue (m)	1,881	1,891	1,896	1,896	1,896
Adj. EPS (Rs)	8.0	11.9	21.9	32.8	42.7
% growth	188.5	50.0	83.4	49.7	30.2
PER (x)	93.7	62.5	34.1	22.7	17.5
Price/Book (x)	22.7	15.2	10.4	7.1	5.0
EV/EBITDA (x)	47.9	33.2	19.5	13.3	10.1
ROE (%)	27.8	29.2	36.3	37.2	33.8
ROCE (%)	17.0	20.3	27.7	30.2	29.8
EV/CE (x)	11.9	9.5	7.2	4.9	4.1

## INVESTMENT ARGUMENT

Bharti's strong brand and superior execution capabilities would enable it to retain the crown with its subscriber market share at 22%. While lowering of regulatory costs would enhance affordability, infrastructure sharing would facilitate speedy rollout and wider coverage. Bharti's MoU with Vodafone suggests that they would maintain cordial relationships. We estimate infrastructure sharing boosts Bharti's EBITDA margin by 97-129bp and has yielded capex saving of \$400m so far. Due to lack of clarity on proportion of towers to be shared on barter basis and the expected rate of return for charging rentals, we refrain from assigning a value to the proposed tower subsidiary. We expect revenue and earning CAGR of 35% and 40% respectively for Bharti over FY07-09. Our DCF-based target price of Rs910 implies 12.2x FY09E EV/EBITDA.

### □ Mobile business – still going strong

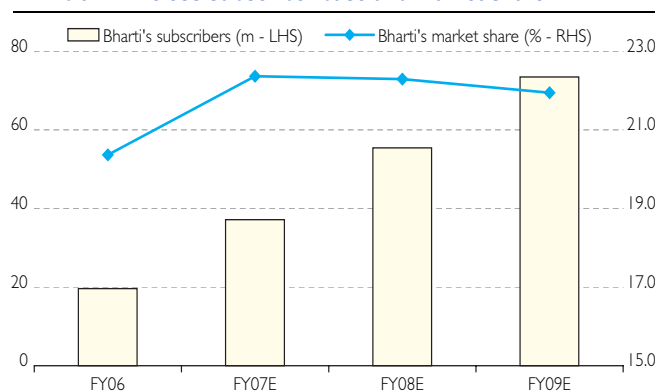
Bharti is expected to maintain its subscriber share at 22% of India's mobile market despite Vodafone aiming to increase its market share from 16% now to 20-25% and Tata Tele-services claiming to target 20% market share by 2012 from 9.7% currently. Bharti's superior execution capabilities and its ability to stay ahead of competition in terms of coverage and product offerings would enable the company to maintain its leadership. Revenues are expected to register 38.5% CAGR over FY07-09 (to Rs272bn), underpinned by 40.6% CAGR in subscriber base (to 73m).

Though ARPU would witness a compounded annual decline of 8% due to wider coverage of low-ARPU towns and villages, margins would continue to improve due to scale benefits, infrastructure sharing and higher usage from reduction in regulatory costs. We expect EBITDA margins to expand by 260bp to 39.8% by FY09.

*Superior execution skills, better coverage and product offerings vis-à-vis competition to enable Bharti maintain its lead*

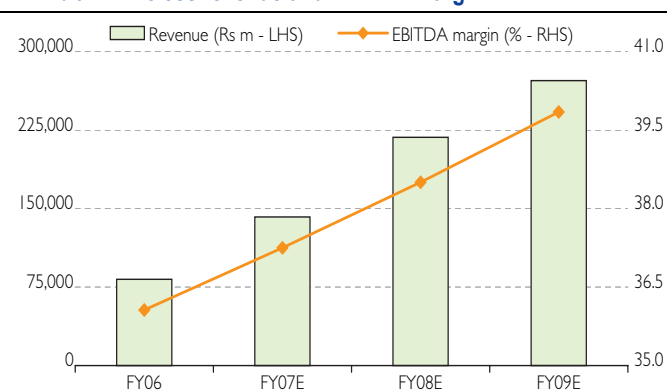
*Despite 8% ARPU decline over FY07-09E, EBITDA margins could expand by 260bp*

**Exhibit 1: Wireless subscriber base and market share**



Source: AUSPI, COAI, SSKI Research

**Exhibit 2: Wireless revenue and EBITDA margin**



**Bharti offers the full spectrum of services to high value clients**

**Revenues in non-mobile segment expected to expand at 28% CAGR over FY07-09**

**Tower sharing estimated to have resulted in 97-129bp savings in margins and \$400m savings in capex – already embedded in current valuations**

**Bharti's valuations are reasonable vis-à-vis Infosys – both having strong management, excellent execution and good transparency**

### ❑ Non-mobile business – enabling integrated offerings

Bharti's enterprise solutions, fixed line and broadband services division enables it to offer the full spectrum of services to high value clients. Bharti is steadily spreading its operations and creating infrastructure in various parts of India. The company has increased broadband coverage to 94 towns as of December 2006 from 90 towns in March 2006, while NLD optic fiber network has been increased to 39.3k rkm from 32.9k rkm during the same period.

Non-mobile business contributed 32% of total revenues and 30% of total EBITDA in Q3FY07. Bharti's revenues in this segment are expected to expand at 28% CAGR over FY07-09 to Rs109bn. We expect margins in this segment to increase by 130bp over this period. The adverse impact of lower margins in fixed line business on rollout in new towns would get offset by higher margins in long distance. EBITDA is expected to grow at 30% CAGR over FY07-09E (to Rs40bn).

### ❑ Tower subsidiary – positive from a free cash flow standpoint

Bharti's announcement of hiving off its tower infrastructure into a separate 100% subsidiary would, in our opinion, facilitate higher free cash generation. Bharti currently shares 23% of its tower infrastructure with other operators. As majority of the sharing is done on a barter basis, it would have limited revenue implication. Going forward, the tower subsidiary is expected to contribute to revenues, though we find it more favorable from a free cash flow standpoint due to capex savings. We have estimated the cost savings arising from the current tower sharing arrangement to have contributed 97-129bp to Bharti's EBITDA margin. The two variables that would drive the cash flows for the tower subsidiary would be the proportion of towers on barter basis and the implicit expected rate of return for determining the rental revenue stream. In addition, the sharing of towers would have likely yielded ~\$400m in capex savings. We would wait for more clarity to assign a value to the tower subsidiary.

### ❑ Valuations reasonable for an expected EBITDA CAGR of 40%

Bharti currently trades at 13x FY08E and 9.9x FY09E EBITDA with an expected EBITDA CAGR of 40% over FY07-09. We compare Bharti with Infosys (16.6x FY08E and 12.6x FY09E EBITDA) as the two companies share some important similarities. Both have a strong management team, excellent execution capabilities and are quite transparent. With EBITDA CAGR of 40%, Bharti is expected to grow faster than Infosys (30%) over FY07-09. While Infosys' free cash yield would likely be 4.5% in FY09, Bharti's would be 2%. Post-FY09, Bharti is likely to narrow the gap as it starts generating higher incremental free cash. Hence, we believe Bharti's valuations are reasonable.

### ❑ Leadership change – a key challenge

Bharti has recently announced a management re-organization with Mr. Sunil Mittal stepping down and handing over the responsibility of overall strategy to Mr. Manoj Kohli and the Airtel Management Board (AMB). Though Mr. Sunil Mittal had delegated the responsibility of Operations earlier, he is an inspiring leader and it remains to be seen if the management change would lead to a change in the company's strategy, which has so far been exceptionally well executed.

*We see ~22% upside from  
the current market price*

### □ Outperformer; DCF-based target price of Rs910

While earnings growth would taper off in FY09, cash flows would improve and remain healthy beyond that. Our DCF model, assuming a weighted average cost of capital at 11.4% and terminal growth of 3%, suggests a value of Rs910 per share for Bharti. At our DCF-based target price, Bharti would trade at FY09E EV/EBITDA of 12.2x, which is reasonable on expected EBITDA CAGR of 40% over FY07-09.

**Exhibit 3: DCF calculations for Bharti**

(Rs bn)	FY08E	FY09E	FY10E	FY11E	FY12E	FY20E
EBITDA	113	145	175	210	229	424
Tax	(11)	(15)	(19)	(24)	(28)	(96)
Capex	(112)	(91)	(96)	(86)	(68)	(51)
Working capital	(1)	(1)	(1)	(1)	(1)	(1)
FCF	(11)	39	60	98	132	276
WACC (%)	11.4					
Terminal growth (%)	3.0					
Terminal value	3,387					
PV of terminal value	930					
NPV	885					
EV	1,814					
Net debt (FY08E)	90					
Equity value	1,725					
Value per share (Rs)	910					
				<b>Discounting rate (%)</b>		
				Risk free rate		8.0
				Market risk premium		5.5
				Cost of equity		13.0
				Cost of debt (post tax)		6.5
				WACC		11.4

Source: SSKI Research

## MOBILE SERVICES: DEFYING COMPETITION

Bharti has maintained its leadership position in the fragmented wireless segment with 22% share of the subscriber base. Despite strong players like RCOM turning their focus on the GSM segment and global players like Vodafone aiming to increase market share, we expect Bharti to protect its market share on the back of rapid rollout to cover a wider population base and enhanced service offerings. We expect 38.5% and 43.2% revenue and EBITDA CAGR respectively for Bharti's mobile business over FY07-09, underpinned by strong subscriber growth and the underlying margin levers.

Exhibit 4: Financials of wireless business and underlying assumptions

		FY06	FY07E	FY08E	FY09E	FY07-09 CAGR (%)
All India wireless subs	m	96	166	249	335	42.0
Bharti's subscribers	m	20	37	55	73	40.6
Bharti's market share	%	20.3	22.4	22.3	21.9	
Bharti's share in net adds	%	20.9	25.1	22.1	20.9	
Revenues	Rs m	82,392	142,097	218,240	272,380	38.5
Revenue growth	%	52.5	72.5	53.6	24.8	
EBITDA	Rs m	29,712	52,932	84,034	108,535	43.2
EBITDA margin	%	36.1	37.3	38.5	39.8	
ARPU	Rs/month	446	413	390	350	(7.9)

Source: SSKI Research

*Bharti is rapidly increasing population coverage ahead of competition*

### □ Despite competition, Bharti expected to maintain its market share

Bharti, with its unparalleled execution skills, has grown in the face of stiff competition. While key competitor RCOM awaits spectrum allocation for its GSM rollout and Vodafone (erstwhile Hutch) rejuvenates itself under the new parentage, Bharti is rapidly increasing population coverage.

Vodafone has considered a higher market share in its recently announced plans to expand the acquired Hutch entity and Tata Tele-services expects to have a share of 20% of the Indian market (10% currently). We believe Bharti's wider coverage would enable it to hold its market share. According to media reports, Bharti's population coverage is now wider than that of BSNL.

*With its finger on the pulse of market and clients, introduction of attractive products has been Bharti's key strength*

### □ Decline in EBITDA/minute is unavoidable

Bharti has seldom competed on price and has typically resisted aggressive tariff cuts even in circles where it was not the first to launch mobile services. Nevertheless, the company has responded to tariff cuts initiated by competition as also lowered tariffs to pass on the benefits arising from cuts in regulatory costs. Bharti's ability to understand the market and its target segment, and accordingly introduce various products at different price points, has been its key strength.

*As incremental subs coming mainly from rural population, ARPU likely to decline*

As Bharti penetrates the lower strata of the population, where usage would be low and affordability would be the key, it would likely see a decline in revenue/minute and EBITDA/minute going forward. Notably, Bharti's revenue/minute declined 20% yoy in Q3FY07. Over FY07-09, we expect a 19%, 16% and 8% compounded annual decline in revenue/min., EBITDA/min., and ARPU respectively. The decline in ARPU is expected to be lower than the decline in revenue per minute on account of higher usage and increased contribution of value added services.

*Though revenue/minute and EBITDA/minute have declined...*

*...EBITDA margins in mobile business have expanded by 110bp over the last four quarters*

*The underlying margin levers expected to drive a 260bp expansion in margins over FY07-09*

*Bharti focusing on designing innovative tariff structure, distribution, branding and promotion*

### □ Margin levers exist

Having extended its network to additional 96k non-census towns and villages, Bharti's population coverage moved up from 42% in Q4FY06 to 54% in Q3FY07. As villages and towns typically offer lower ARPU and usage is lower than the current average, Bharti witnessed a fall in revenue/minute and EBITDA/minute.

On the other hand, Bharti's EBITDA margins in the mobile services business have expanded by 110bp over the last four quarters, primarily on the back of lower access charges and license fees as a percent of revenues. Going forward too, we believe there are various underlying margin drivers (which could lead to an estimated 260bp improvement in EBITDA margins over FY07-09) for Bharti including:

- **Tower sharing:** We have analyzed the impact of tower sharing (with other players) on Bharti's margins. Till date, we estimate Bharti has achieved 97-129bp improvement in its EBITDA margins through this initiative (the company currently shares ~23% of its existing network of 34,000 towers). As the number of towers being shared increases, there could be further contribution to margins from this stream.
- **Scale benefits:** We expect scale benefits to lower employee costs and SG&A expenses.
- **Improved coverage & lower regulatory costs:** As coverage increases, it has been observed that outgoing usage of existing subscribers rises. Also, as cuts in regulatory fees get passed on to customers, the overall usage increases, and results in overall margin improvement.

### □ Focus on core competence by way of right sourcing

Bharti has outsourced its network operations to Nokia and Ericsson (pricing linked to capacity utilization and quality), IT operations to IBM (pricing linked to revenues) and call center to IBM Daksh, Mphasis, TeleTech, Nortel and Hinduja TMT. This enables Bharti to concentrate on its core business of providing telecom services in a more effective manner through understanding customer needs, designing innovative tariff structure, distribution, branding and promotion.

In terms of product innovations, Bharti has been the first company to launch electronic recharge and micro prepaid, blackberry services, and value added services (ring back tones, music for mobile, song catcher, etc) in India.

## NON-MOBILE BUSINESS: GAINING TRACTION

Bharti's non-mobile business comprises enterprise business (corporate and carriers) and fixed line/ broadband business. Non-mobile businesses contributed 32% to topline and 30% to EBITDA in Q3FY07. Enterprise business is witnessing good growth driven by increasing volumes in long distance (LD) minutes and focus on corporate clients. In the broadband business, Bharti has adopted a conservative approach and is currently focusing on high ARPU customers.

### □ Enterprise business (corporate) – an integrated offering

This business focuses on delivering telecom services as an integrated offering including mobile, broadband and telephone, national and international long distance and data connectivity services to key corporate clients. Bharti is now expanding its operations and creating infrastructure in various parts of India. We expect 32% revenue CAGR for Bharti in this segment over FY07-09. However, margins in this business could remain under pressure due to high competition and upfront capex / opex required for ramping up operations.

**Exhibit 5: Key financials – enterprise business (corporate)**

		FY06	FY07E	FY08E	FY09E	FY07-09 CAGR (%)
Revenue	Rs m	7,184	9,155	1,2427	15,899	31.8
EBITDA	Rs m	2,701	4,034	5,219	6,678	28.7
EBITDA margin	%	37.6	44.1	42.0	42.0	

Source: SSKI Research

### □ Enterprise services (carriers) – volumes to expand on lower tariffs

Long distance volumes for Bharti have jumped by 154% yoy in NLD and 105% in ILD. The higher volumes can be attributed to a reduction in NLD tariffs underpinned by lower carriage cost and relaxation in licensing condition for NLD and ILD services, an expanding subscriber base and corporate enterprise business.

We expect Bharti's NLD volumes to further increase as the overall industry volumes rise in line with an expanding subscriber base. ILD volumes are expected to grow on the back of Bharti's recently launched retail calling card service, expanding enterprise business and recently announced reduction in ADC. Also, Vodafone plans to route 50% of its in-bound international roaming traffic through Bharti for three years. In addition, Bharti will be a preferred vendor for Vodafone for NLD and ILD services and leased line services.

We expect 30% CAGR in revenues and 31.5% CAGR in EBITDA margins in this segment.

**Exhibit 6: Key financials – enterprise business (carriers)**

Long distance		FY06	FY07E	FY08E	FY09E	FY07-09 CAGR (%)
Revenues	Rs m	24,557	34,783	46,605	58,869	30.1
EBITDA	Rs m	8,791	14,139	18,889	24,435	31.5
EBITDA margin	%	35.8	40.7	40.5	41.5	

Source: SSKI Research

*Bharti offers integrated services to key corporate clients.*

*Expect 32% revenue CAGR over FY07-09 for Bharti in enterprise (corporate) segment*

*We expect 30% CAGR in revenues and 31.5% CAGR in EBITDA margins in enterprise services segment*

**Bharti's strategy in fixed line and broadband is to cherry pick high ARPU customers**

### □ Fixed line and broadband – a conservative approach

Unlike in the mobile business, Bharti has adopted a cautious rollout strategy in this segment. Though Bharti provides broadband and fixed line services in 15 circles, it covers only 94 cities. Bharti's strategy is to cherry pick high ARPU customers. Subscribers are estimated to increase at 28% CAGR over FY07-09, whereas ARPUs are expected to decline at a compounded annual rate of 6% over this period. We expect margins to expand as it achieves scale.

#### Exhibit 7: Key financials – fixed line and broadband business

		FY06	FY07E	FY08E	FY09E	FY07-09 CAGR (%)
Revenue	Rs m	15,016	22,587	28,217	34,228	23.1
EBITDA	Rs m	3,675	5,421	7,283	8,987	28.8
EBITDA margin	%	24.5	24.0	25.8	26.3	
Customers	'000.	1,347	1,843	2,443	3,043	28.5
ARPU	Rs/month	1,136	1,180	1,097	1,040	(6.1)

Source: SSKI Research



## TOWER BUSINESS: TOO EARLY TO BE VALUED

Bharti has decided to transfer its tower infrastructure (~40,000 towers estimated as of March 2007) to a separate subsidiary, Bharti Infratel. Currently, Bharti shares 23% of its towers, of which 80% are understood to be under the barter arrangement. According to our estimates, tower sharing has so far yielded capex saving of \$400m and EBITDA margin improvement of 97-129bp. Instead of valuing the tower company separately, we propose to accrue incremental value generated from tower sharing in terms of capex and opex savings to Bharti.

### □ Transferring tower business to Bharti Infratel

Bharti has decided to transfer towers for mobile communication and the related passive infrastructure into Bharti Infratel, a 100% subsidiary. As of end-December 2006, Bharti had 34,000 towers, which it plans to augment to 38,000-40,000 by March 2007. Currently, Bharti shares 23% of its towers.

By separating the tower infrastructure, Bharti would focus on the core activity of introducing and marketing newer products to consumers while Bharti Infratel would focus on efficient and optimum management of the towers. Bharti Infratel would lease the towers to Bharti Airtel, which would be its anchor client in a majority of locations, and a few other operators. The towers would generate rental revenues that, we believe, would be based on a certain return criteria. As the number of tenants sharing the tower increases, so would the aggregate rental revenues with a reducing average rental for each tenant.

We are currently not assigning a value to Bharti Infratel due to lack of clarity on the number of towers proposed to be shared on a barter basis. Under the barter arrangement, there would be no revenue implication and return expectation based on which rentals would be charged. While tower sharing on barter basis is done through reciprocal arrangements, it does help reduce operating and capital expenditure. We estimate that Bharti has been able to boost its EBITDA margins by 97-127bp through the current tower sharing arrangements.

### □ Why we are not assigning a separate value to the tower company

- We believe the primary objective of hiving off the tower infrastructure into a separate company is to derive operational efficiencies and ensure better capital productivity. Given that the next 36m subscribers to be added (over FY07-09) would mostly be in rural areas, tower sharing would facilitate speedy rollout of networks. As Bharti enters into low population density areas, it would need to add 4,000-6,000 towers per quarter, i.e. an additional 24,000-36,000 towers in the next 18 months, against its current set up of 34,000 towers created since its inception in 1995.

In our opinion, given the steady stream of annuity revenues, the tower company would be able to use leverage more effectively. Currently, majority of the towers are shared on a barter basis for the mutual benefit of all operators sharing the tower.

*Primary objective of hiving off tower is to derive operational efficiencies and ensure better capital productivity*

*We are not assigning a value to Bharti Infratel due to lack of clarity on number of towers to be shared on a barter basis*

*Sharing on a barter basis implies cost saving without any revenue implication*

- Bharti currently owns 34,000 towers (about 40% of India's total towers installed) and we understand it is already sharing 23% of these. To arrive at the rental revenues, we have used a minimum return on capital investment + recovery of operating cost of managing the tower infrastructure. Thus, the mark up for Bharti as the owner of the tower would be the return over its capital investment. Currently, sharing is done mostly on a barter basis, which implies cost saving without any revenue implication.

We have assumed that Bharti shares 80% of its shared towers under the barter system and that it earns desired return on the remaining 20%. Our analysis suggests that Bharti has achieved an EBITDA margin expansion of 97-129bp through revenue generation from tower sharing (20% of the shared base) on a commercial basis and by cost saving through sharing on barter basis. In our opinion, the savings in capital expenditure has been to the extent of ~US \$400m.

*We estimate Bharti to be deriving 97-129bp contribution to EBITDA margin from tower sharing...*

**Exhibit 8: Impact on EBITDA margins from tower sharing**

	Scenario1	Scenario2	Scenario3
Cost of a tower (Rs)	3,500,000	3,500,000	3,500,000
Life of assets (yrs)	10	10	10
Debt/Equity (x)	1.5	1.5	1.5
Interest rate (%)	8	8	8
<b>Number of tenants (no)</b>	<b>1 (only Bharti)</b>	<b>2</b>	<b>3</b>
<b>Expected rate of return (%)</b>	<b>8</b>	<b>12</b>	<b>15</b>
Bharti annualized Q3FY07 mobile revenues (Rs m)	150,316	150,316	150,316
Total number of towers for Bharti (no)	34,000	34,000	34,000
Towers shared (%)	23	23	23
Barter basis (%)	80	80	80
Towers shared on barter basis (no)	6,256	6,256	6,256
Opex / tower/ month (Rs)	30,000	30,000	30,000
Opex / tower/ month/ tenant (Rs)	-	15,000	10,000
Margin impact from cost savings barter sharing (bp)...(a)	-	+75	+100
Pure commercial terms (%)	20	20	20
Towers shared on commercial terms	1,564	1,564	1,564
Rent / tower/ month (Rs) – based on expected return	42,465	50,215	56,467
Rent / tower/ month/ tenant (Rs)	-	25,107	18,822
Margin impact from commercial sharing (bp)...(b)	-	+22	+30
<b>Margin impact from tower sharing (bp)...(a+b)*</b>	<b>-</b>	<b>+97</b>	<b>+129</b>

Source: SSKI Research. \*margin impact is calculated based on Q3FY07 annualized revenues

**Exhibit 9: Capex savings for Bharti from tower sharing**

Capex impact	
Total number of towers	34,000 no.
Towers shared	23 %
Assuming barter for	80 % of shared towers
Tower cost	3,000,000 Rs/tower
Shared tower on barter basis	6,256 no.
Capex saving	18,768 Rs m
Capex saving	417 USD m

Source: SSKI Research

*... and \$400m of capex saving*

***Bharti would increasingly seek to share its competitors' towers***

- Going by Bharti's aggressive rollout plans and capex budget for FY08, we expect Bharti to build 16,000-20,000 towers in the next year. Any additional requirement over and above this would be met from barter arrangements. Bharti has spent US \$8bn so far on its infrastructure and has 35m subscribers. It plans to spend a similar amount over the next three years and expects to add 65m subscribers. This implies that Bharti would seek to share its competitors' towers. Vodafone and Bharti have reportedly signed an MoU to share ~ 70,000 towers in future.
- As Bharti Infratel would, according to the company, be 100% owned by Bharti Airtel, we do not expect any change in the consolidated balance sheet. However, the incremental sharing of existing towers (only 23% currently) and sharing of new towers would reduce capital and operating expenditure.
- Revenues from the tower business would be based on:
  - (a) The number of existing towers that Bharti currently owns and which it can share with other operators
  - (b) The number of new towers that Bharti would set up
  - (c) Proportion of towers it would share on barter basis, through reciprocal arrangements with competitors
  - (d) Proportion of towers it would lease on a pure commercial basis as an independent revenue model
  - (e) Expected rate of return set by the company to determine the rental revenue
  - (f) Number of tenants on each tower. We expect that as the number of tenants per tower increases, the rent per tenant would decrease but the overall rental revenue would be higher

***The subsidiary to be entirely owned by Bharti; value unlocking not the reason for creation of the separate company***

In the absence of clarity on these issues, we believe it is too early to value the tower business. Also, our analysis indicates that the current tower sharing arrangement has delivered an estimated 97-129bp expansion in Bharti's operating margins and capex saving of ~US \$400m. Hence, this embedded value in the current valuations needs to be excluded if the tower company were to be valued separately and added to Bharti's valuation. Also, Bharti has clarified that the subsidiary would be entirely owned by them and value unlocking is not the reason for creation of the separate company.

## FINANCIAL ANALYSIS

Bharti's revenues and EBITDA are expected to increase at 35% and 40% CAGR respectively over FY07-09. The strong growth in revenues is expected to accrue on the back of a burgeoning subscriber base as Bharti aggressively extends its footprint to smaller towns and villages. Margins are set to improve on scale benefits, cost savings through infrastructure sharing and higher usage with lower tariffs led by lowering of regulatory charges. We expect Bharti to witness a 280bp expansion in its EBITDA margin over FY07-09. EPS is expected to increase at 40% CAGR over the same period.

Exhibit 10: Key financial projections

	FY06	FY07E	FY08E	FY09E	CAGR FY07-09E (%)
Revenues (Rs m)	116,634	186,579	272,775	340,316	35.1
Growth (%)	45.7	60.0	46.2	24.8	
EBITDA	43,601	74,438	112,623	145,400	39.8
EBITDA margins (%)	37.4	39.9	41.3	42.7	
EPS (Rs)	11.9	21.9	32.8	42.7	39.6

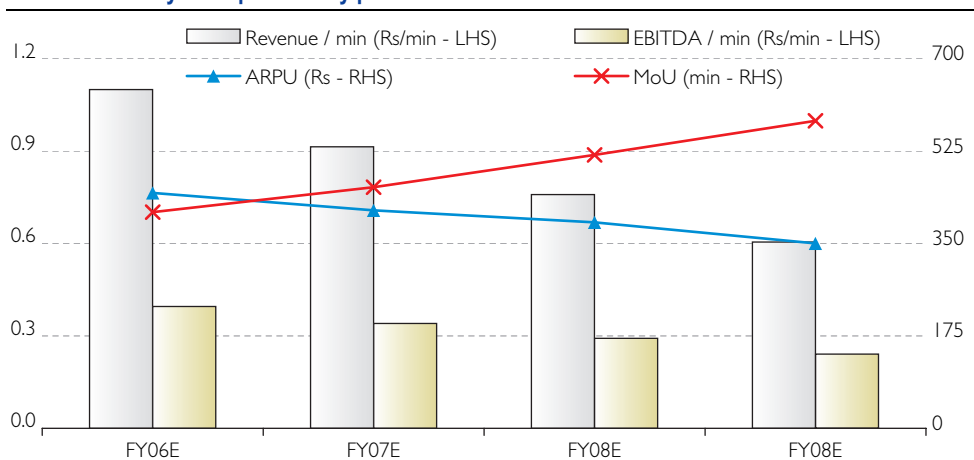
Source: SSKI Research

### □ Expect 8% decline in ARPU over FY07-09 in mobile business

As Bharti expands its coverage to smaller towns and village, ARPU would likely decline by an 8% compounded annual rate over FY07-09 while MoU are expected to see a 13% CAGR over this period. Accordingly, revenue per minute and EBITDA per minute would fall at a compounded annual rate of 19% and 16% respectively over FY07-09.

*As Bharti expands its coverage to smaller towns and village, ARPU would likely decline*

Exhibit 11: Analysis of profitability parameters in mobile business

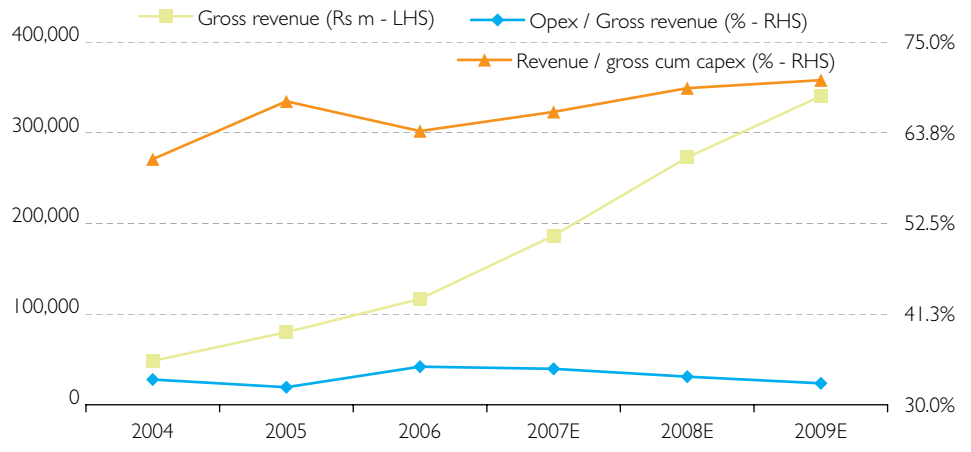


Source: SSKI Research

### □ Performance dashboard to remain attractive – the 3-line graph

Our expectations on Bharti's performance on the 3-line graph are elicited below.

**Exhibit 12: Bharti's 3-line graph**



Source: SSKI Research

**Gross revenues:** Revenue growth would likely taper off in FY09 (60% yoy in FY07, 46% yoy in FY08 and 25% yoy in FY09).

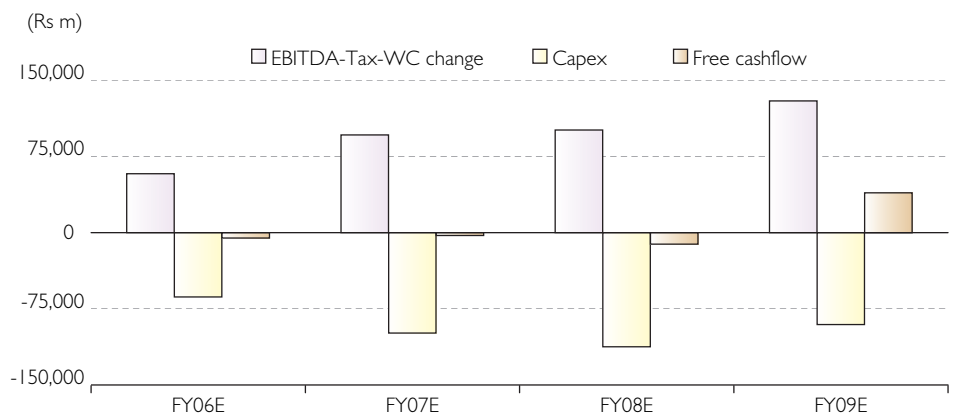
**Opex productivity:** Opex includes equipment cost, employee cost, network operations cost and SG&A expenses. SG&A expenses are expected to remain stable on rollout in new cities and high level of competition. Owing to scale benefits, all the other items are estimated to decline as a percent of revenues.

**Capital productivity (revenue/ gross cumulative capex):** Capital productivity likely to increase due to infrastructure sharing.

### □ Bharti to generate free cash flows from FY09 onwards

The management has guided for \$2.1bn-2.2bn of capex in FY07 and \$2.5bn in FY08. We expect Bharti to generate free cash flows from FY09 onwards (estimated at Rs39bn in FY09).

**Exhibit 13: Free cash flow analysis – free cash flow being generated FY09 onwards**



Source: SSKI Research

Revenue growth to likely taper off in FY09, scale benefit to yield cost savings and capital productivity expected to improve

Bharti expected to generate free cash flow of Rs39bn in FY09

## VALUATIONS AND VIEW

Bharti is expected to witness an EBITDA CAGR of 40% over FY07-09. We also expect the company to generate free cash flows from FY09 onwards as higher penetration through coverage of smaller towns and villages leads to lower capex requirement in the years beyond that. We arrive at a DCF-based target price of Rs910 for Bharti based on a weighted average cost of capital of 11.4% and terminal growth rate of 3%. At our DCF price, Bharti would trade at 12.2x FY09E EBITDA.

### □ Bharti trades at a discount to Infosys despite comparable performance

It is noteworthy that Bharti shares quite a few similarities with Infosys (12.9x FY09E EV/EBITDA). Both the companies are leaders in their respective businesses, have superior execution capabilities, have built predictable business models and are led by a strong management team.

With EBITDA CAGR of 40%, Bharti is expected to grow faster than Infosys (30%) over FY07-09. While Infosys's free cash generation is equal to the net profit it generates, Bharti is expected to generate free cash from FY09 as telecom is a highly capital intensive business (in the growth stage) as compared to the IT sector. While Infosys's free cash yield would likely be 4.5% in FY09, Bharti's would be 2%. The gap is likely to narrow down post FY09, as Bharti generates higher incremental free cash.

*The valuation gap with Infosys likely to narrow down post FY09, as Bharti generates higher incremental free cash*

#### Exhibit 14: Comparative valuations – Bharti v/s IT companies

	Bharti	Infosys	TCS
Price (Rs/ share)	746	1,992	1,194
Mkt Cap (Rs bn)	1,414	1,135	1,169
FY07 PAT (Rs bn)	41	37	41
FY08E RoCE (%)	30	43	55
FY07-09E revenue CAGR (%)	35	33	31
FY07-09E EBITDA CAGR (%)	40	32	29
FY07-09E EPS CAGR (%)	40	30	29
FY08E - EV/EBITDA (x)	13.3	17.0	16.1
FY09E - EV/EBITDA (x)	10.1	12.9	12.7
FY08E - P/E (x)	22.7	22.6	21.0
FY09E - P/E (x)	17.5	18.0	17.2

Source: SSKI Research

**Expect 22% upside in stock price from here**

### □ DCF based value of Rs910

We expect Bharti to start generating free cash flows from FY09 onwards (estimated at Rs39bn in FY09) as profitability improves and coverage of population expands on the back of infrastructure sharing. We have used the DCF methodology to arrive at Bharti's fair value. We have assumed a WACC of 11.4% and terminal growth rate of 3%. Based on these assumptions, we arrive at a target price of Rs910 for Bharti.

**Exhibit 15: DCF calculations for Bharti**

(Rs bn)	FY08E	FY09E	FY10E	FY11E	FY12E...	...FY20E
EBITDA	113	145	175	210	229	424
Tax	(11)	(15)	(19)	(24)	(28)	(96)
Capex	(112)	(91)	(96)	(86)	(68)	(51)
Working capital	(1)	(1)	(1)	(1)	(1)	(1)
FCF	(11)	39	60	98	132	276
WACC (%)	11.4%					
Terminal growth (%)	3.0%					
Terminal value	3,387					
PV of terminal value	930					
NPV	885					
EV	1,814					
Net debt (FY08E)	90					
Equity value	1,725					
Value per share (Rs)	910					

Discounting rate (%)	
Risk free rate	8.0
Market risk premium	5.5
Cost of equity	13.0
Cost of debt (post tax)	6.5
WACC	11.4

Source: SSKI Research

**Exhibit 16: Sensitivity analysis**

WACC / g (%)	2.0%	2.5%	3.0%	3.5%	4.0%
10.4	991	1028	1070	1118	1174
10.9	918	949	984	1025	1071
11.4	853	880	910	943	981
11.9	795	818	844	872	904
12.4	744	763	785	809	836

Source: SSKI Research

### □ Risks and concerns

- Change in leadership with Mr. Sunil Mittal stepping down as CEO
- Predatory competition creating pressure on margins.
- Unavailability of spectrum leading to higher capex.

**Change in leadership, stiff competition and spectrum shortage – key concerns**

## Income Statement

Year to Mar 31 (Rs m)	FY05	FY06	FY07E	FY08E	FY09E
<b>Net sales</b>	<b>80,028</b>	<b>116,634</b>	<b>186,579</b>	<b>272,775</b>	<b>340,316</b>
% growth	65.6	45.7	60.0	46.2	24.8
Operating expenses	(49,900)	(73,033)	(112,141)	(160,152)	(194,916)
<b>EBITDA</b>	<b>30,128</b>	<b>43,601</b>	<b>74,438</b>	<b>112,623</b>	<b>145,400</b>
% growth	88.7	44.7	70.7	51.3	29.1
Other income	479	592	806	806	806
Net interest	(1,996)	(2,651)	(1,602)	(4,407)	(4,756)
Depreciation	(11,405)	(15,830)	(25,443)	(36,383)	(46,916)
<b>Pre-tax profit</b>	<b>16,604</b>	<b>25,575</b>	<b>48,087</b>	<b>72,484</b>	<b>94,371</b>
Current Tax	(1,528)	(2,736)	(6,155)	(9,423)	(12,268)
Profit after tax	15,076	22,839	41,932	63,061	82,103
<b>Net profit after non-recurring items</b>	<b>14,978</b>	<b>22,585</b>	<b>41,529</b>	<b>62,178</b>	<b>80,954</b>
% growth	195.1	50.8	83.9	49.7	30.2

## Balance sheet

Year to Mar 31 (Rs m)	FY05	FY06	FY07E	FY08E	FY09E
Paid-up capital	18,534	18,939	18,957	18,957	18,957
Reserves & surplus	42,531	72,954	115,396	176,949	257,903
Total shareholders' equity	61,814	92,844	135,707	198,143	280,246
Other non-current liabilities	10,520	11,402	12,299	11,384	11,384
LT Debt	49,040	47,395	53,985	93,360	65,618
<b>Total equity &amp; liabilities</b>	<b>161,513</b>	<b>217,280</b>	<b>308,210</b>	<b>409,574</b>	<b>475,270</b>
Net fixed assets	92,597	142,397	217,384	294,890	340,090
Investments	160	190	190	190	190
Total current assets	26,565	32,732	43,576	61,246	75,092
Total current liabilities	40,139	65,639	106,219	106,687	118,023
Working capital	(32,174)	(49,497)	(78,269)	(60,652)	(58,642)
Other non-current assets	2,981	3,760	9,794	17,302	25,322
<b>Total assets</b>	<b>161,513</b>	<b>217,279</b>	<b>308,210</b>	<b>409,574</b>	<b>475,270</b>

## Cash flow statement

Year to Mar 31 (Rs m)	FY05	FY06	FY07E	FY08E	FY09E
Pre-tax profit	16,604	25,575	48,087	72,484	94,371
Depreciation	11,405	15,830	25,443	36,383	46,916
chg in Working capital	15,254	16,544	22,738	(25,125)	(10,030)
Total tax paid	(1,528)	(2,736)	(6,155)	(9,423)	(12,268)
Ext ord. Items	-	-	-	-	-
Operating cash Inflow	41,735	55,213	90,113	74,319	118,989
Capital expenditure	(40,419)	(65,630)	(100,430)	(113,889)	(92,116)
Free cash flow (a+b)	1,316	(10,417)	(10,317)	(39,570)	26,873
Chg in investments	(89)	(35)	1	10	8
Debt raised/(repaid)	3,317	(1,645)	6,590	39,375	(27,743)
Capital raised/(repaid)	(129)	8,479	471	-	-
Misc	(997)	727	1,394	685	1,362
Net chg in cash	3,417	(2,891)	(1,861)	500	500

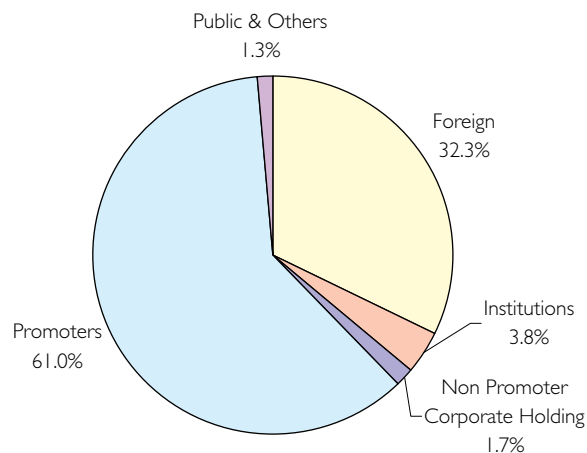
## Key ratios

Year to March 31	FY05	FY06	FY07E	FY08E	FY09E
EBITDA margin (%)	37.6	37.4	39.9	41.3	42.7
EBIT margin (%)	23.4	23.8	26.3	27.9	28.9
PAT margin (%)	18.7	19.4	22.3	22.8	23.8
ROE (%)	27.8	29.2	36.3	37.2	33.8
ROCE (%)	17.0	20.3	27.7	30.2	29.8
Gearing (x)	0.3	0.2	0.2	0.2	0.1

## Valuations

Year to March 31	FY05	FY06	FY07E	FY08E	FY09E
Reported EPS (Rs)	8.0	11.9	21.9	32.8	42.7
Adj. EPS (Rs)	8.0	11.9	21.9	32.8	42.7
PER (x)	93.7	62.5	34.1	22.7	17.5
Price/Book (x)	22.7	15.2	10.4	7.1	5.0
EV/Net sales (x)	18.1	12.4	7.8	5.5	4.3
EV/EBITDA (x)	47.9	33.2	19.5	13.3	10.1
EV/CE (x)	11.9	9.5	7.2	4.9	4.1

## Shareholding pattern



As of December 2006



# Reliance Comm.

Rs397  
OUTPERFORMER

*Rerouting...*

Mkt Cap: Rs856bn; US\$20bn

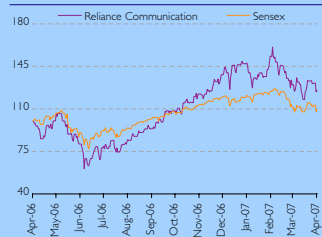
9 April 2007

BSE Sensex: 12856

## Stock data

Reuters	RLCM.BO
Bloomberg	RCOM IN
1-yr high/low (Rs)	518 / 186
1-yr avg daily volumes (m)	2.18
Free float (%)	33.3

## Price performance



## Performance (%)

	3-mth	6-mth	1-yr	3-yr
REL Com	(11.1)	14.1	27.0	-
Sensex	(7.2)	3.8	9.4	120.2

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Reliance Communications (RCOM) is a diversified telecom play. RCOM is India's #2 wireless operator and is a strong player in long distance/ enterprise segment. Uncertainties associated with GSM expansion due to spectrum unavailability and unrealized potential of international business have resulted in back ended growth expectations for RCOM, which is also reflected in its valuations (~16% discount to Bharti). We anticipate limited risks in RCOM's decision to shift to GSM technology. We have not factored in any value from the tower business due to lack of clarity on the variables driving the business. Our DCF-based target of Rs505 implies a 13% discount to our target EV/EBITDA multiple for Bharti. Out performer

**A diversified telecom play:** With 20% share of India's wireless subscriber base, strong position in long distance traffic and growing enterprise data services, RCOM is a full services telecom play. Non-wireless businesses contributed 39% to revenues and 33% to EBITDA in Q3FY07. RCOM has invested heavily, much ahead of its current requirements, which has depressed RoCE (12% against 28% for Bharti). Capital efficiencies would kick in driven by expansion of wireless subscriber base, growth of broadband and international data services.

**Limited risks in GSM foray:** In order to reduce subsidy burden required for CDMA handsets and attract high ARPU GSM customers, RCOM has decided to shift its focus to the GSM platform. We see limited capex risk in this decision to shift to GSM. Execution risk primarily involves delay in availability of GSM spectrum. GSM operations are expected to pick up pace from 2HCY07, when GSM spectrum would likely be made available.

**Target price of Rs505 implies 27% upside:** We expect 37% and 41% revenue and earnings CAGR respectively over FY07-09. Our DCF-based price target of Rs505 implies 10.6x FY09E EV/EBITDA, a 13% discount to our target multiple for Bharti. We believe uncertainty over RCOM's GSM expansion, lower RoCE and inadequate financial disclosures justify the discount. We would value the tower business once clarity emerges on the business variables. Outperformer

## Key financials

As on 31 March	FY06	FY07E	FY08E	FY09E
Net sales (Rs m)	112,884	144,914	196,263	271,938
Net profit (Rs m)	4,823	29,477	42,126	58,315
Shares in issue (m)	2,158	2,158	2,158	2,158
Adj. EPS (Rs)	2.2	13.7	19.5	27.0
% growth	-	511.2	42.9	38.4
PER (x)	177.5	29.0	20.3	14.7
Price/Book (x)	7.3	4.1	3.4	2.8
EV/EBITDA (x)	35.9	15.5	11.8	8.5
ROE (%)	8.2	18.0	18.2	20.7
ROCE (%)	7.4	11.9	13.4	17.4
EV/CE (x)	4.2	2.7	2.6	2.2

## INVESTMENT ARGUMENT

RCOM is India's second-biggest mobile operator with a 20% share. The company is switching its focus to the widely used GSM wireless technology, away from the less popular CDMA technology, which has been its mainstay so far. The strategy would enable RCOM to reduce its handset subsidy burden and attract high-ARPU customers. We see limited execution and capex risk at RCOM's end, but unavailability of spectrum in new GSM circles could delay the rollout. RCOM's non-mobile business would gain traction with better utilization of Falcon network and higher volumes in long distance. We expect 37% and 40% revenue and EBITDA CAGR respectively over FY07-09. We rate RCOM as Outperformer with a DCF-based target price of Rs505 – 10.6x FY09E EV/EBITDA.

### □ Limited risk to existing assets due to shift to GSM

RCOM is the second largest player in the Indian wireless market and has a 20% share, primarily from its CDMA based network in 21 circles. The company has 32.4m subscriber base, of which 28.3m are CDMA based and 4.1m are GSM based. RCOM is now laying emphasis on expanding its GSM network with a view to lower its handset subsidy burden and attract high-ARPU customers. In the CDMA segment, ARPUs are typically lower while the subsidies extended on handsets are quite high. RCOM has failed to bring the handset cost down as Qualcomm – the technology provider – has not agreed to reduce the royalty payable to it by RCOM.

RCOM currently has licenses to operate GSM services only in eight circles (one metro, two category B and five category C circles). Till the time the company gets licenses and spectrum in the remaining 15 circles, we believe the incumbents would have added more subscribers. Nevertheless, we derive comfort from RCOM's proven track record of speedy rollouts. Once RCOM is allotted GSM spectrum for the additional circles, we expect it to catch up fast on the back of infrastructure sharing and own rollouts. Though RCOM would also be able to leverage on its existing CDMA tower infrastructure for its GSM rollout, we believe GSM technology requires a higher number of towers than CDMA. This is evident from the fact that RCOM currently has a network of 12k towers compared to Bharti's 34k with a comparable subscriber base and coverage levels.

### □ Market share to decline in the interim

Till the time RCOM gets GSM spectrum (expected by end-CY07), the strategy would be to continue rolling out the CDMA based network. However, once RCOM goes full throttle on its GSM operations, we expect the CDMA rollout to be put on the backburner and capex to be diverted towards GSM rollout. This would initially translate into a loss of market share for RCOM. Overall, we expect RCOM's market share in wireless subscriber base to decline to 19.1% in FY08 (subscriber base of 47.5m) from 20% currently (32.4m) and bounce back to 19.6% by FY09 (66m) as it gets GSM spectrum.

*RCOM laying emphasis on expanding its GSM network with a view to lower its handset subsidy burden and attract high-ARPU customers*

*Once RCOM is allotted GSM spectrum for the additional circles, we expect it to catch up fast with incumbents*

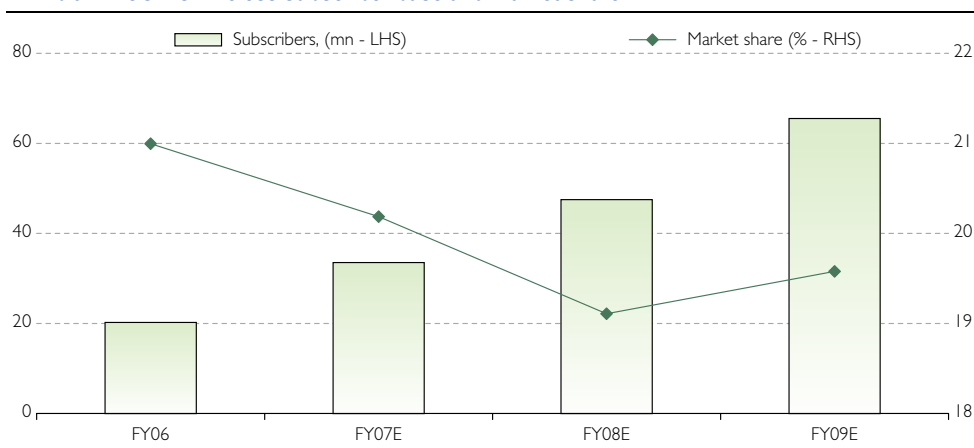
*Till spectrum for GSM is allocated, RCOM to continue rolling out CDMA network*

**Market share in wireless to decline to 19.1% in FY08 from 20% currently; to bounce back to 19.6% by FY09**

**Scale benefits and infrastructure sharing expected to lead to a 165bp margin expansion over FY07-09**

**Captive wireless subscriber base and extensive network to enable RCOM to retain lead in NLD and ILD**

**Exhibit 1: RCOM's wireless subscriber base and market share**



Source: AUSPI, COAI, SSKI Research

### □ Expect 36% CAGR in wireless business EBITDA over FY07-09

RCOM witnessed a 12.5% decline in ARPU over 9MFY07, underpinned by a 14.7% fall in MoU against an 8.4% increase in MoU for Bharti. However, as MoU see an uptick and the proportion of high ARPU GSM subscribers increases, we expect the ARPU fall to moderate. GSM ARPU is expected to be higher since RCOM currently offers free talk time for promotions. While we estimate 9% compounded annual decline in ARPU over FY07-09, we expect 33% CAGR in revenues and 36% CAGR in EBITDA over this period. Also, margin levers in terms of scale benefits and infrastructure sharing are expected to lead to a 165bp margin expansion over FY07-09.

**Exhibit 2: Assumptions and financials of wireless business**

	FY06	FY07E	FY08E	FY09E	CAGR (%) FY07-09E
Revenues (Rs m)	74,129	107,396	143,017	189,101	32.7
ARPU (Rs)	387	333	294	279	(8.5)
EBITDA (Rs m)	22,406	39,182	52,940	72,106	35.7
<b>EBITDA margins (%)</b>	<b>30.2</b>	<b>36.5</b>	<b>37.0</b>	<b>38.1</b>	

Source: SSKI Research

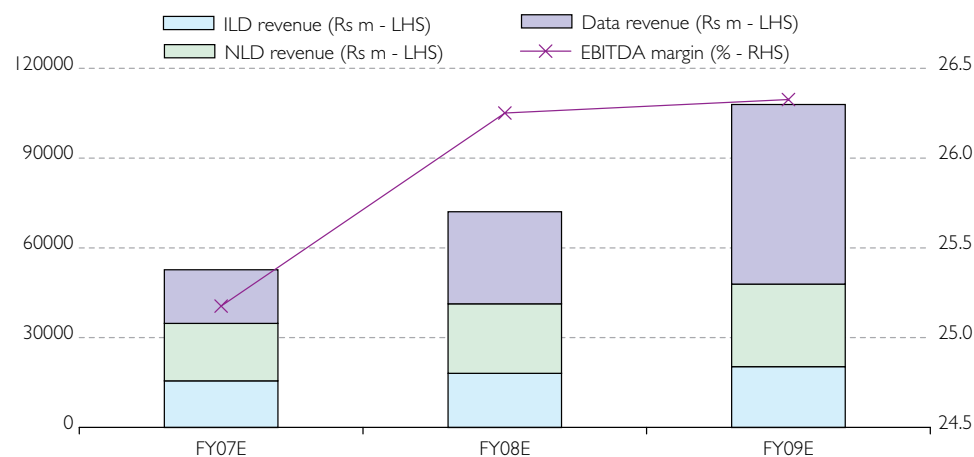
### □ Global business – international cable network to drive faster growth

RCOM has developed an unparalleled network of dark (optic) fiber in India for its NLD telephony services. Despite increasing competition in the NLD and ILD segments, we expect RCOM to maintain its strong position on the back of its captive wireless subscriber base and extensive network. We expect 14% and 20% CAGR in RCOM's ILD and NLD businesses respectively over FY07-09. Overall, we expect 43% revenue CAGR and 46% EBITDA CAGR for RCOM's global business over FY07-09, driven mainly by revenue flows from the international cable network.

**We expect 14% and 20% CAGR in RCOM's ILD and NLD businesses respectively over FY07-09**

**RCOM has an impressive clientele in the enterprise segment, though consumer broadband strategy yet to evolve**

**Exhibit 3: Revenue and EBITDA margins in global business**



Source: SSKI Research

#### ❑ Broadband business – waiting for its turn

RCOM offers enterprise services like conferencing, Centrex, data centers, etc to corporates and fixed line services (including triple play broadband) to retail consumers. In the enterprise segment, a strong core network has enabled RCOM to gain impressive clientele (700 out of top 1,000 Indian large enterprises). However, RCOM's consumer broadband strategy (including IPTV) is yet to evolve.

We expect revenue and EBITDA CAGR of 53% and 50% respectively in RCOM's broadband business over FY07-09 on the back of 62% CAGR in access lines. Margins are likely to remain in a narrow range (at ~42%).

#### ❑ Expect 41% CAGR in earnings over FY07-09

We expect RCOM to register 37% CAGR in revenues over FY07-09 on the back of strong growth in subscriber base and asset sweating in the international cable business (from recently commissioned FALCON project). Margins are expected to expand by 190bp over this period on account of scale benefits. Earnings are estimated to record 41% CAGR over FY07-09.

#### ❑ Execution of GSM rollout and competitive pressure – the key risks

Key risks are: (i) uncertainties associated with a switch to GSM technology include lower subscriber addition till the company gets spectrum; (ii) competitive pressure eroding profitability; (iii) a delay in asset sweating in the non-wireless business. Unavailability of audited financials, significant asset revaluations during FY07 and lower depreciation rate compared to Bharti are the key issues in financial reporting.

*Expect 27% upside from  
the current stock price*

□ **Our DCF based target price is Rs505 – Outperformer**

RCOM is expected to show a robust 40% CAGR in EBITDA and 41% CAGR in earnings over FY07-09. Based on DCF methodology, we have arrived at a target price of Rs505 for RCOM. The target price implies an EV/EBITDA of 10.6x FY09E, which is at a 13% discount to our target multiple for Bharti. We believe the discount is justified in view of lower return ratios for RCOM emanating from lower capital efficiency vis-à-vis Bharti and uncertainties associated with the GSM rollout.

**Exhibit 4: DCF calculations for RCOM**

(Rs bn)	FY08E	FY09E	FY10E	FY11E	FY12E	FY20E
EBITDA	80	112	137	160	177	308
Tax	(5)	(10)	(14)	(18)	(19)	(62)
Capex	(143)	(102)	(84)	(72)	(59)	(37)
Working capital	(1)	(1)	(1)	(1)	(1)	(1)
FCF	(69)	(1)	38	69	98	208
WACC (%)	12.2	<b>Discounting rate</b>				
Terminal growth (%)	3.0	Risk free rate (%)	8.0			
Terminal value	2342	Beta	1.1			
PV of terminal value	591	Market risk premium (%)	5.5			
NPV	590	Cost of equity (%)	14.1			
EV	1181	Cost of debt (post tax) (%)	6.5			
Net debt (FY08E)	92	WACC (%)	12.2			
Equity value	1089					
Value per share (Rs)	505					

Source: SSKI Research

**Exhibit 5: Sensitivity of DCF calculations w.r.t terminal growth rate and WACC**

WACC / g (%)	2.0%	2.5%	3.0%	3.5%	4.0%
11.2	551	570	592	616	643
11.7	511	528	546	566	589
12.2	476	490	<b>505</b>	522	541
12.7	443	455	469	483	500
13.2	414	425	436	449	463

Source: SSKI Research

## WIRELESS BUSINESS: CHANGING GEARS

Constrained by high handset prices and legacy of low ARPU CDMA customers, RCOM has decided to shift its attention to GSM technology. Considering its excellent execution capability and a marginal capex requirement for the shift, we believe RCOM would be able to successfully roll out its GSM network. However, unavailability of spectrum may stifle growth in the near term. We expect 33% revenue CAGR and 36% EBITDA CAGR in RCOM's wireless business on the back of 40% CAGR in subscriber base. Scale benefits and infrastructure sharing would likely drive a 160bp expansion in margins over FY07-09.

Exhibit 6: Assumptions and financials of wireless business

	FY06	FY07E	FY08E	FY09E	CAGR (%) FY07-09E
Subscribers (m)	20.2	33.5	47.5	65.5	39.8
Market share (%)	21.0	20.2	19.1	19.6	
Net adds (m)	8.5	13.3	14.0	18.0	
Share in net adds (%)	20.7	19.1	16.9	20.9	
ARPU (Rs)	387	333	294	279	(8.5)
<b>Revenues</b>	<b>74,129</b>	<b>107,396</b>	<b>143,017</b>	<b>189,101</b>	<b>32.7</b>
(growth %)	-	44.9	33.2	32.2	
EBITDA	22,406	39,182	52,940	72,106	35.7
<b>EBITDA margins (%)</b>	<b>30.2</b>	<b>36.5</b>	<b>37.0</b>	<b>38.1</b>	

Source: SSKI Research

### ❑ RCOM switching over to GSM technology

Despite its late entry in wireless (in 2003), RCOM has gained the second position with a 20.3% market share – primarily on the CDMA platform. RCOM has CDMA presence in 21 circles and GSM presence in eight circles in India. In six circles, RCOM has both CDMA and GSM based operations. Out of the 32.4m subscribers as of February 2007, 28.3m (87% of total) are CDMA based, while 4.1m are GSM based.

CDMA handsets are costlier than GSM handsets and the second hand market is also unavailable. Hence, in a bid to grow the CDMA business, RCOM has to offer direct subsidy on handsets or bundle free minutes for new subscribers (currently Rs2,000 worth talk time on Reliance network valid for six months on LG5340 and Nokia 1255 handsets). Owing to the high cost of handset (~\$15 differential between entry level GSM and CDMA handsets), Qualcomm (CDMA technology provider) refusing to reduce royalty, and absence of a secondary handset market, RCOM has decided to shift its focus away from the CDMA technology to GSM.

In addition, the GSM foray would help RCOM attract high ARPU customers, who are reluctant to opt for CDMA connections on account of lower flexibility in change in handsets and unavailability of international roaming. If mobile number portability were to be allowed in India, we believe, RCOM would benefit immensely from its GSM venture, since it has chance to attract high ARPU GSM customers from Bharti/ Hutch.

*CDMA operations demand high handset subsidy and offer low-ARPU customers*

*With full-fledged GSM operations, subsidy burden would reduce and ARPU would improve*

Hereon, we expect RCOM to commit incremental capex for rolling out its GSM network. However, till spectrum is available, CDMA network is expected to be rolled out concurrently. We have identified the following risks and respective mitigants in the GSM foray.

#### Exhibit 7: Analyzing the risks in shift from CDMA to GSM

Risks	Mitigants
Spectrum availability	<ul style="list-style-type: none"> <li>RCOM intends to roll out CDMA based network till it gets the GSM spectrum</li> <li>We believe unavailability of GSM spectrum would impact subscriber addition in the near term, as RCOM would refrain from full fledged roll out of its CDMA based network</li> </ul>
Higher capex	<ul style="list-style-type: none"> <li>In terms of physical infrastructure required for network rollout, the difference between CDMA and GSM network is the antenna, which comprises 30-35% of capex</li> <li>The network backbone can be used for both GSM and CDMA. All the incremental towers which RCOM is building will be capable of hosting both the antennae (CDMA and GSM). In fact, the towers will be capable of sharing even with other operators</li> <li>We note that with CDMA technology, RCOM has significantly lesser number of towers (12,000) compared to Bharti (34,000). Hence, incrementally it need more number of towers for GSM foray</li> <li>RCOM would benefit from infrastructure sharing for rollout of GSM based network</li> </ul>
Execution risk	<ul style="list-style-type: none"> <li>RCOM currently has GSM network in eight circles. RCOM-GSM has a good 12-18% market share in the circles it operates in</li> <li>In six circles, it has both GSM and CDMA networks and has managed the dual network successfully. Out of the six circles where RCOM has both GSM and CDMA based operations, it is #1 in terms of subscriber base in two circles (MP and Bihar) and #2 in two circles (Orissa and West Bengal)</li> <li>RCOM has demonstrated its execution skills and fast roll out of CDMA network. Despite late entry in the wireless space (in 2003), RCOM became #2 wireless operator</li> </ul>
Higher opex	<ul style="list-style-type: none"> <li>Opex is expected to increase marginally as the contact center, billing systems, network management, etc are sharable. Tower sharing will drive further saving in opex.</li> </ul>

Source: SSKI Research

**RCOM has had positioned itself as a low-cost service provider...**

#### ❑ ARPU's are lower for RCOM compared to other leading operators

Being a late entrant in the telecom market, RCOM had to position itself as a low-cost-service provider for the mass markets in order to gain quick market share. This strategy worked well in the initial phase as RCOM had set up a large capacity and thus, the marginal cost of additional minutes was lower. The lower tariffs, coupled with significant handset subsidy (compared to GSM operators), helped RCOM gain market share rapidly. Though RCOM's subscriber market share is comparable to Bharti's, its revenue market share is significantly lower than that of Bharti on account of low-ARPU subscribers. RCOM's ARPU of Rs328/month is 23% lower than that of Bharti. We attribute the lower ARPU to the following:

- Higher amount of free promotional minutes (on some of the ongoing offers, RCOM provides Rs2,000 worth of free on-net calls valid for six months);
- Unavailability of international roaming facility, which contributes significantly to ARPU from high-end customers;
- Higher proportion of on-net calls – as per TRAI reports, on-net calls are higher for CDMA operators at 58% v/s 51% for GSM operators; and
- Higher proportion of incoming / outgoing mix.

...however, it is looking to position itself on the quality proposition with GSM rollout

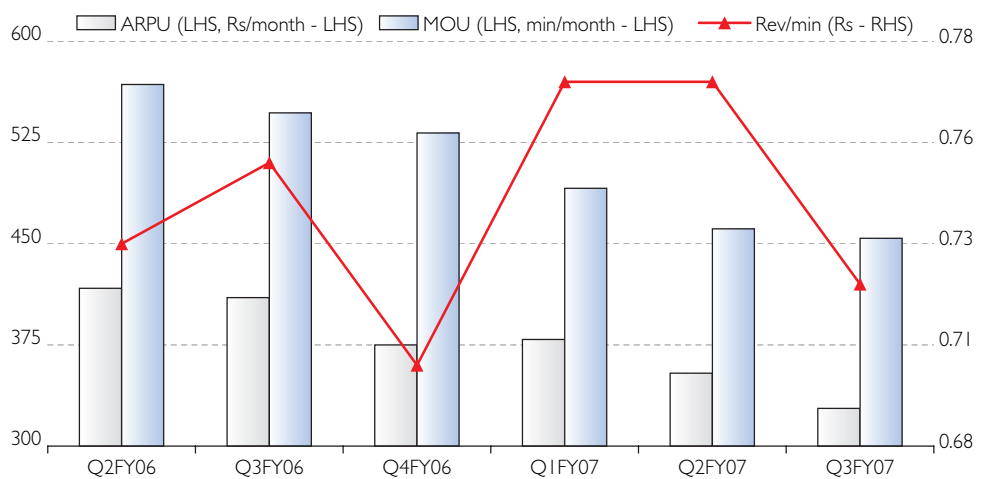
Going forward, we expect the reduction in promotional minutes (as the GSM foray takes off, where no handset subsidy is required) to result in a slower decline in ARPU. In addition, the company is focusing more on the quality proposition in its advertising instead of the low-cost proposition being marketed now.

**Expect a moderate decline in ARPU**

RCOM has reported ~20% yoy decline in ARPU over Q3FY06-Q3FY07 while MoU have declined 17% over this period. Revenue / minute has shown a 4% decline, but the quarterly volatility in the same remains unexplained. Hence, we believe the decline in ARPU was driven more by falling MoU than lower revenue/minute.

Decline in ARPU driven more by falling MoU than lower revenue/minute

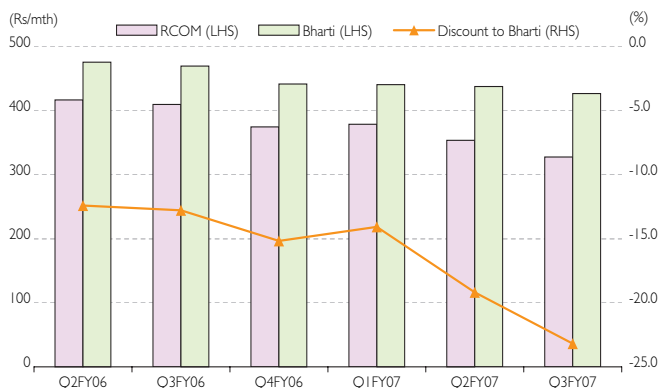
**Exhibit 8: RCOM's ARPU, MoU and rev/min trends**



Source: Company

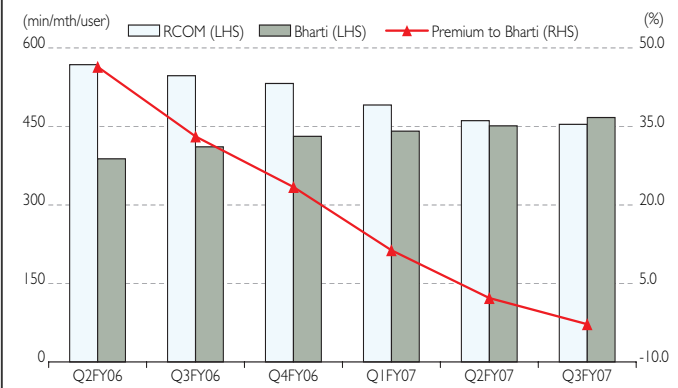
Going forward, we expect ARPU decline to be moderate as (i) after a significant fall over the last four quarters, RCOM's MoU are currently lower than Bharti's. Hence, we believe there is limited downside risk from here; (ii) the new customers added with free bundled schemes would eventually start paying; and (iii) FY09 onwards, RCOM would add a significant number of GSM subscribers having higher ARPU compared to its current CDMA ARPU (RCOM would likely refrain from bundling free minutes or subsidize handsets for these customers).

**Exhibit 9: RCOM's ARPU discount to Bharti is high at ~23%**



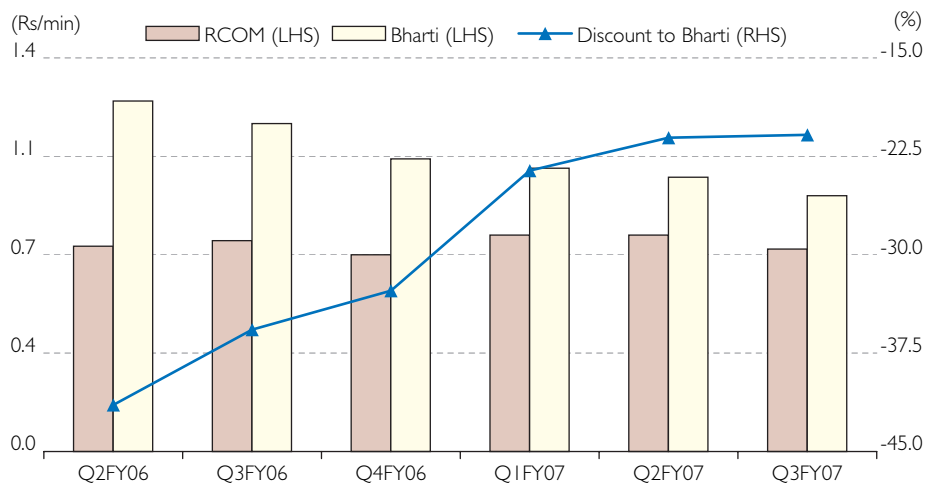
Source: Company, SSKI Research

**Exhibit 10: Limited scope of further decline in RCOM's MoU**



Source: Company, SSKI Research



**Exhibit 11: Largely stable rev/min for RCOM on a lower base**

Source: Company, SSKI Research

**We expect ARPU to register an 8.5% compounded annual decline over FY07-09**

#### □ Expect 33% revenue CAGR and 36% EBITDA CAGR over FY07-09

Revenues are expected to increase at 33% CAGR over FY07-09 to Rs189bn underpinned by a 40% increase in the subscriber base. We expect ARPU to register an 8.5% compounded annual decline over FY07-09. EBITDA margins are likely to remain in a narrow range in FY08, as any benefits will be passed on to consumers in the form of lower tariffs. In FY09, we expect margins to expand as GSM based subscribers, having better ARPU, would comprise a significant portion of the subscriber base. Overall we expect 160bp expansion in EBITDA margins over FY07-09. EBITDA is expected to increase at 36% CAGR over FY07-09E to Rs72bn.

## GLOBAL BUSINESS: ASSET SWEATING

RCOM has developed an unparalleled network of optic fiber in India. Despite increasing competition in the NLD and ILD segments, we expect RCOM to maintain its dominance on the back of its captive wireless subscriber base and strong network. We expect 14% and 20% CAGR in ILD and NLD revenues respectively over FY07-09. Overall, we expect 43% revenue CAGR and 46% EBITDA CAGR in the global business, driven mainly by revenue flows from the international cable network.

Exhibit 12: Key financials and assumptions in global business

	FY06	FY07E	FY08E	FY09E	FY07-09E CAGR (%)
Indian ILD voice market (m min.)	9,660	14,297	18,586	22,304	24.9
RCOM's share (%)	45	38	36	35	
RCOM's ILD revenue (Rs m)	-	15,553	18,061	20,284	14.2
RCOM's NLD revenue (Rs m)	-	19,185	23,227	27,622	20.0
Data revenues (Rs m)	-	17,916	30,800	60,000	83.0
Total revenues (Rs m)	-	52,654	72,088	107,906	43.2
EBITDA (Rs m)	-	13,256	18,924	28,408	46.4
EBITDA margin (%)	-	25.2	26.3	26.3	

Source: SSKI Research

### □ NLD – expect 20% revenue CAGR over FY07-09

Reduction in license fee in 2006 has lowered entry barriers in the NLD segment and led to an influx of players. We believe higher competition in the segment would trigger a tariff war. Eventually, we believe the tariff differential between local and international calls would close, which is in line with international standards. However, the price elasticity will generate higher volumes.

With its large wireless subscriber base and high capacity (which could be leased to new NLD operators), we believe RCOM would be able to protect its market share. RCOM has a network of 68,000rkm of intercity dark fiber against 39,000rkm for Bharti and 30,000rkm for VSNL. Revenues from this segment are expected to register a 20% CAGR over FY07-09.

### □ ILD – expect 14% revenue CAGR over FY07-09

RCOM has gained 40% of retail market calls from USA to India with the launch of India Call – a virtual calling card service – for NRIs in USA. The service is also available in Canada, UK and Australia. The calling cards are price competitive in these regions, and have brought in more than 1m active customers to RCOM's fold. Apart from retail services, RCOM also offers wholesale voice services on its FLAG network. Bharti too has recently launched calling card services in USA at competitive price points. In this backdrop, we believe competition will intensify in this segment, and could eat into RCOM's market share (from 40% currently to 35% by FY09E). We expect RCOM's ILD revenues to increase at 14% CAGR over FY07-09 on the back of 25% CAGR in segment volumes.

Price elasticity to generate higher volumes in NLD

NLD revenues expected to register a 20% CAGR over FY07-09

Increasing competition in ILD to eat into RCOM's market share

**RCOM has announced \$1.5bn of capex over the next three years to build the next generation network for FLAG**

**A separate global listing of FLAG Telecom planned to unlock value**

**IPO proceeds to be used to partly finance capex plans of US \$1.5bn for laying the new 50,000 rkm network**

**Higher revenues from FLAG would lead to 43% CAGR in global revenues over FY07-09**

### ❑ FLAG network – yet to be fully exploited

RCOM operates one of the largest private submarine cable systems in the world through FLAG, a wholly owned subsidiary. FLAG directly connects 28 countries from the East Coast of the US to Europe, Middle East, India, South-east Asia, through to Japan. FLAG Global Network provides connectivity between the world's largest telecommunications market in developed countries and the world's fastest growing telecommunications market in developing countries.

RCOM has 54,000rkm of international undersea cable with FLAG (acquired in 2003 for US \$200m). In addition, RCOM has recently commissioned 11,500rkm of cable system for \$150m (under FALCON project) with a capacity of 2.5tbps connecting 11 countries in the Middle East. RCOM has announced \$1.5bn of capex over the next three years to build the next generation network for FLAG (additional 50,000rkm of optic fibre). The capex would be independently financed by FLAG through pre-sales of future capacity.

#### Exhibit 13: Investment and capacity of undersea cables

Cable	Invested (\$ m)	Capacity (tbps)	Length (rkm)	Coverage
FLAG	Acquired for \$200m	5.4	54,000	28 countries - US East Coast, Europe, Middle East, India, South East Asia, and Japan
FALCON	Built for \$150m	2.5	11,500	11 countries in Middle East connected to FLAG
Planned	\$1,500m	-	50,000	Will link Mediterranean to Greece, Cyprus, Turkey, Malta, Libya and Lebanon, Trans pacific to US and Japan, Far East and Africa.

Source: Company, SSKI Research

In view of overcapacity in the undersea cable, we believe pricing will remain under pressure. RCOM's data revenues are estimated to increase at 83% CAGR over FY07-09, underpinned by better capacity utilization on the back of new orders.

RCOM plans a separate global listing of FLAG Telecom to unlock value on the London Stock Exchange. According to media reports, FLAG is being valued at US \$2bn and the company will divest 10-15% of its equity stake through the IPO. The cash raised from the IPO will be used to partly finance the capex plans of US \$1.5bn for laying the new 50,000 rkm network.

### ❑ EBITDA expected to register 46% CAGR over FY07-09

We expect a modest growth in RCOM's ILD and NLD voice revenues (as discussed earlier). However, higher revenues from FLAG would lead to 43% CAGR in global revenues over FY07-09. The favorable impact of high-margin FLAG revenues on EBITDA margins of the global business will get partly negated by falling margins in ILD and NLD voice business. Overall, we expect 100bp margin expansion and 46% EBITDA CAGR for the global business over FY07-09.

## BROADBAND BUSINESS: IN THE QUEUE

RCOM's offerings include enterprise services like conferencing, Centrex, data centers, etc to corporates, and fixed line services (including triple play broadband) to retail consumers. A strong core network has enabled RCOM to gain impressive market share in the enterprise segment. However, the consumer broadband strategy (including IPTV) is yet to evolve. We expect RCOM to register revenue and EBITDA CAGR of 53% and 50% respectively over FY07-09 on the back of a 62% CAGR in the number of access lines. Margins would likely remain flat at ~42%.

Exhibit 14: Assumptions and financials of broadband business

	FY06	FY07E	FY08E	FY09E	CAGR (%) FY07-09E
Access lines ('000)	256	630	1,070	1,650	61.8
Subscriber addition per quarter ('000)	39	94	110	145	
ARPL (Rs / month)	-	2,235	1,898	1,705	(12.7)
Revenues (Rs m)	5,128	11,883	19,356	27,830	53.0
Growth (%)		131.7	62.9	43.8	
EBITDA (Rs m)	746	5,181	8,211	11,715	50.4
EBITDA margins (%)	14.5	43.6	42.4	42.1	

Source: SSKI Research

### ❑ Leadership position in areas of enterprise segment

RCOM launched its enterprise broadband service in the first half of 2005, focusing initially on the top 30 cities of India. As of December 2006, RCOM had over 379,000 buildings (versus 58,000 in December 2005) directly connected to its network and more than 530,000 access lines (versus 217,000 in December 2005). RCOM's primary building access technology is Metro Ethernet LAN (having better delivery for high bandwidth data services compared to legacy copper network). In cities where it is not providing wireline direct building connectivity, RCOM is selectively deploying LMDS (local multipoint distribution service – wireless) to access the targeted buildings.

RCOM's consumer rollout for fixed line phone and broadband Internet access services has been predominantly in the same areas where it has activated enterprise services. RCOM has completed trials of IPTV services at more than 10,000 premises.

On the back of the largest fiber optic network with a high capacity, RCOM has successfully penetrated the enterprise customer base (750 out of top 1,000 Indian enterprises and MNCs). In IDC services (Reliance Data Center), RCOM claims to have over 50% market share. The company is also a leading provider of MPLS-VPN and Centrex solutions.

*On the back of the largest fiber optic network with a high capacity, RCOM has penetrated the enterprise customer base*

*In IDC services, RCOM claims to have over 50% market share*

**Integrated triple play service offerings, including IPTV, have been the selling proposition for retail broadband**

### ❑ Consumer broadband – strategy yet to evolve

RCOM has been a slow starter in the retail broadband business, which undermines its aggressive rollout plans. Integrated triple play service offerings, including IPTV, have been the selling proposition for retail broadband. Given that RCOM has rolled out a new and high-capacity network offering, plain vanilla broadband would not yield good return on investment. The uncertainty in the strategy is reflected in the lower number of wireline subscribers compared to Bharti. However, Bharti's ARPL at Rs1,198/month is lower compared to RCOM (Rs2,206/month).

**Exhibit 15: Comparison of RCOM broadband subscriber addition with private peers**

'000	Q2FY06	Q3FY06	Q4FY06	Q1FY07	Q2FY07	Q3FY07
RCOM (access lines)	173	217	256	322	425	530
Bharti (Broadband+wireline)	1,061	1,200	1,347	1,505	1,631	1,738
Bharti (Broadband)	182	230	315	383	473	549
Tata Tele (wireline)	398	407	416	429	446	476
'addition per month ('000 nos)						
RCOM (access lines)		15	13	22	34	35
Bharti (Broadband+telephone)		46	49	53	42	36
Bharti (Broadband)		16	28	23	30	25
Tata Tele (wireline)		3	3	4	6	10

Source: Company, AUSPI, SSKI Research.

We believe that it will take time to kick off triple play service offerings in a big way in India on account of the following factors:

- Low PC penetration (1.5%, of which large proportion is in commercial set ups),
- High cost of STBs (Rs6,000-8,000) and PCs,
- Lack of clarity on regulatory issues – it is yet to be decided whether IPTV falls under the purview of telecom regulations or broadcasting regulations,
- Last mile connectivity – fixed line incumbents have the advantage of last mile connectivity. RCOM has an optical fibre network, but the company is still awaiting evolution of a clearer revenue model to establish last mile connectivity in a big way, and
- Alternate technologies like DTH (direct to home) and digital cable are expected to grow faster in the initial phase.

### ❑ Expect 50% segmental EBITDA CAGR over FY07-09

We expect RCOM's broadband revenues to register 53% CAGR over FY07-09 on the back 62% CAGR in access lines to 1.65m. ARPU is likely to witness 13% compounded annual decline over the next two years. ARPL (average revenue per line) is currently high as it reflects a significantly higher proportion of revenues from the enterprise business. EBITDA margins are estimated to remain in a narrow range (-42%) as the scale benefit (arising from a well-entrenched optic fibre network) offsets opex related to new rollouts.

**ARPL is expected to witness 13% compounded annual decline over FY07-09E**

## FINANCIAL ANALYSIS

We expect 37% CAGR in RCOM's revenues over FY07-09, driven by rapid expansion in its subscriber base and asset sweating in the international cable business (from the recently-commissioned FALCON project). Scale benefits would likely drive a 193bp increase in margins over FY07-09, expected to lead to a 40% CAGR in earnings over this period. Though RCOM has started disclosing detailed quarterly results, numbers are still unaudited. Significant asset revaluations during FY07, lower depreciation rate compared to that of Bharti and unaudited financials are the key concerns related to financial reporting.

### □ Burgeoning subscriber addition to drive revenue growth

Revenues are expected to register 37% CAGR over FY07-09 underpinned by strong growth in all the businesses. While we expect 33% CAGR in wireless business over FY07-09 on the back of strong subscriber addition, global and broadband businesses are estimated to record 43% and 53% CAGR respectively.

*Revenues expected to register 37% CAGR over FY07-09 underpinned by strong growth in all the businesses*

Exhibit 16: Revenue forecast

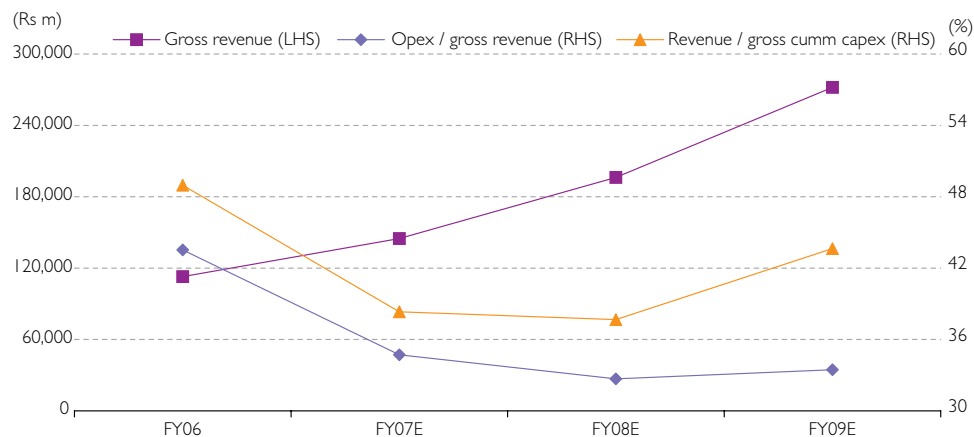
Revenue (Rs m)	FY06	FY07E	FY08E	FY09E	CAGR FY07-09E (%)
Wireless	74,129	107,396	143,017	189,101	32.7
Global	59,048	52,526	72,088	107,906	43.3
Broadband and Telephone	5,128	11,883	19,356	27,830	53.0
Others	-	3,425	2,000	2,800	(9.6)
Elimination	(26,000)	(30,315)	(40,198)	(55,698)	35.5
<b>Total</b>	<b>112,884</b>	<b>144,914</b>	<b>196,263</b>	<b>271,938</b>	<b>37.0</b>

Source: SSKI Research

### □ Performance dashboard indicates significant improvements

Our expectations on RCOM's performance on the three-line graph are elicited below.

Exhibit 17: The three-line graph – efficiency measure



Source: SSKI Research

*Expect 35%yoy revenue growth in FY08, stable opex and marginal decline in capital productivity*

**Gross revenues:** Revenue growth is expected to be sustained over FY07-09 on the back of an expanding subscriber base, revenue flow from international business and growth in broadband business on a smaller base (28% yoy in FY07, 35% yoy in FY08 and 39% yoy in FY09).

**Opex productivity:** Opex includes employee cost, network operations cost and SG&A expenses. The significant reduction (-680bp yoy) achieved in opex as a percent of revenues during 9MFY07 has come as a positive surprise. We expect that increase in opex due to GSM rollout plans will be offset by scale benefits and gains accruing from tower sharing arrangements. Overall, we expect opex to remain broadly stable.

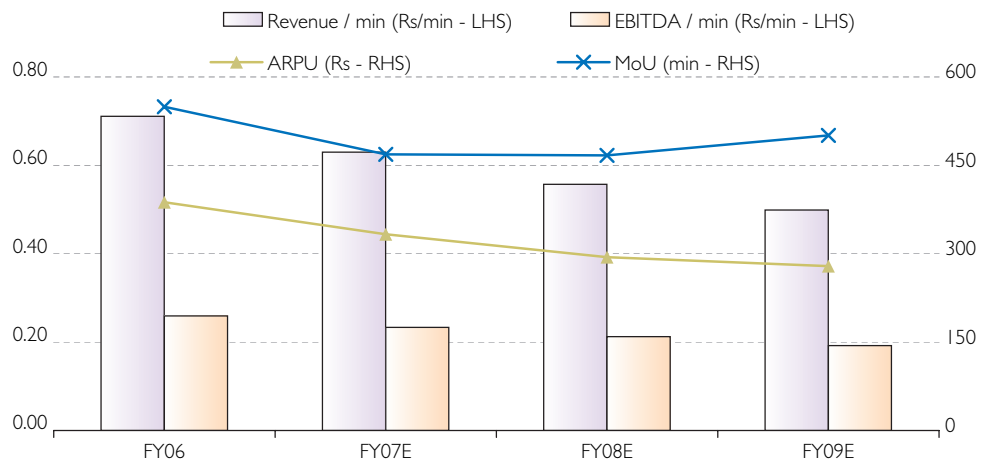
**Capital productivity (revenue / gross cumulative capex):** Asset revaluation during FY07 has led to decline in capital productivity during FY07E. With falling ARPU and increasing MoU, coupled with high capex in FY08, capital productivity at RCOM is expected to decline marginally during FY08. Capital productivity could see an improvement in FY09 as the international undersea cable operations start generating significant revenues and GSM subscriber addition picks up pace.

#### □ Expect decline in ARPU and EBITDA/min over FY07-09

Going forward, we see a 9% compounded annual decline in ARPU over FY07-09 while MoU are expected to increase at 3% CAGR. Accordingly, revenue per minute and EBITDA per minute should fall at a compounded annual rate of 11% and 9% respectively over FY07-09. RCOM has shown a ~15% yoy decline in MoU against a 15% yoy rise for Bharti.

**RCOM has shown a ~15% yoy decline in MoU against a 15% yoy rise for Bharti**

**Exhibit 18: Trends in revenue per minute revenues and EBITDA**



Source: SSKI Research

**US \$820m (Rs35bn) of capex over Q2-Q3FY07 vis-à-vis \$3bn increase in FA suggests revaluation of FA base**

### □ Lower capex vis-à-vis increase in fixed assets suggests asset revaluation

RCOM has reported US \$820m (Rs35bn) of capex over Q2-Q3FY07 while the fixed assets base (GFA+ CWIP+ investments) has increased by \$3bn (Rs127bn). This suggests that the company has revalued its fixed assets. Revaluations are ~23% of fixed assets and the company has not allocated the revaluations to any of the reported segments.

**Exhibit 19: Asset revaluations during Q2-Q3 FY07**

(Rs m)	Q1FY07	Q2FY07	Q3FY07
<b>Investments in segments*</b>			
Wireless	155,117	170,100	182,190
Global	80,155	83,820	84,310
Broadband	26,022	26,290	29,520
Others	14,169	14,708	14,729
Total (a)	275,463	294,918	310,749
Capex (b)	15,865	19,455	15,831
GFA +CWIP+investments (c)	277,900	376,189	405,328
Change in GFA, CWIP and investments (d)	15,943	98,289	29,139
Cumm revaluation since Q1FY07 (Rs m)	78	78,912	92,220
Unallocated fixed assets (f=c-a)	2,437	81,271	94,579
Unallocated FA as % of total FA (g=f/c, %)	1	22	23
<b>Shareholders' equity</b>	<b>122,255</b>	<b>180,286</b>	<b>201,615</b>
Share capital	10,223	10,223	10,223
Reserves and surplus	112,032	170,063	191,392
Change in shareholder's equity (h)	4,740	58,031	21,329
PAT during the quarter (i)	5,127	7,023	9,244
Revaluation of equity during quarter (j=h-i)	NM	51,008	12,085

Source: Company, SSKI Research \*includes GFA, intangibles, CWIP, entry fee paid

### □ Net of revaluations, RCOM's investments comparable to Bharti's

RCOM's GFAs, at US \$9bn (Rs405bn), are higher than \$7bn (Rs304bn) for Bharti. However, excluding the effect of asset revaluations during Q2-Q3FY07, RCOM's GFAs work out to \$7bn (Rs310bn).

Excluding revaluations during Q2-Q3FY07, segmental GFA of RCOM in mobile services is lower compared to that of Bharti.

**Exhibit 20: Fixed assets as of end-Q3FY07**

(Rs m)	Bharti	RCOM
<b>Mobile services</b>	<b>220,672</b>	<b>182,190</b>
Broadband and Telephone services	43,216	29,520
Long distance services	34,214	84,310
Enterprise services	5,028	-
Others	632	14,729
<b>Gross assets total</b>	<b>303,762</b>	<b>310,749</b>
Unallocated FA	0	94,579
<b>GFA total including unallocated FA</b>	<b>303,762</b>	<b>405,328</b>
Accumulated Depreciation and amortization	64,776	69,296
<b>Net FA and other project investment</b>	<b>238,986</b>	<b>336,032</b>

Source: Company

**Excluding the effect of asset revaluations during Q1-Q3FY07, RCOM's GFAs work out to \$6.9bn**



**Bharti has already depreciated 21% of its assets while RCOM has depreciated 17% of assets**

#### □ RCOM's depreciation and amortization rate lower vis-à-vis Bharti's

Bharti's depreciation rates are conservative compared to RCOM's. Bharti has already depreciated 21% of its assets while RCOM has depreciated 17% of assets. It is noteworthy that while RCOM commenced its operations in 2003, Bharti's operations started in 1996.

**Exhibit 21: Depreciation – Bharti v/s RCOM**

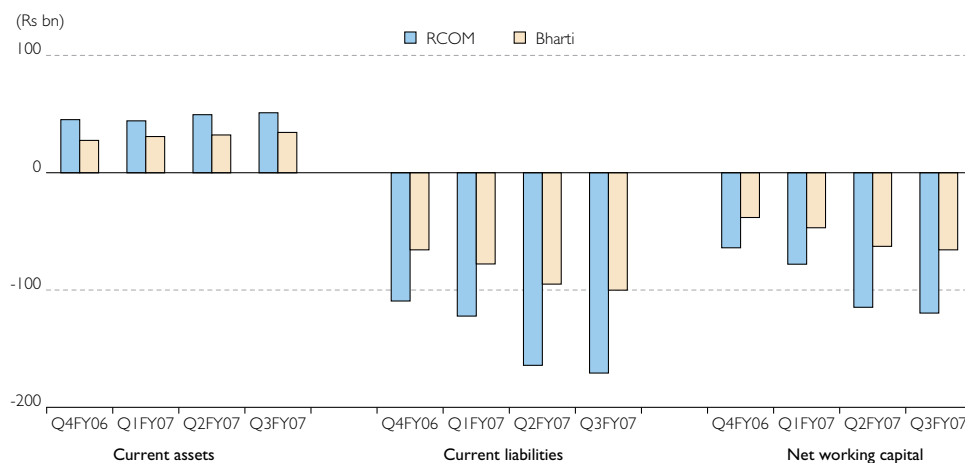
(%)	Bharti	RCOM
Accumulated depr and Amort / GFA	21.3	17.1
Q3FY07 depr and amort annualized as % of GFA	9.3	6.4

Source: SSKI Research

#### □ RCOM has significantly higher current liabilities than Bharti

RCOM's current liabilities are significantly higher compared to Bharti's despite both companies having a similar business profile. This can be attributed to higher credit terms on handset sells and a higher proportion of ILD revenues (FLAG) for RCOM. RCOM's current liabilities have increased significantly in Q2FY07, the reasons for which are unexplained.

**Exhibit 22: Analysis of working capital – RCOM v/s Bharti**



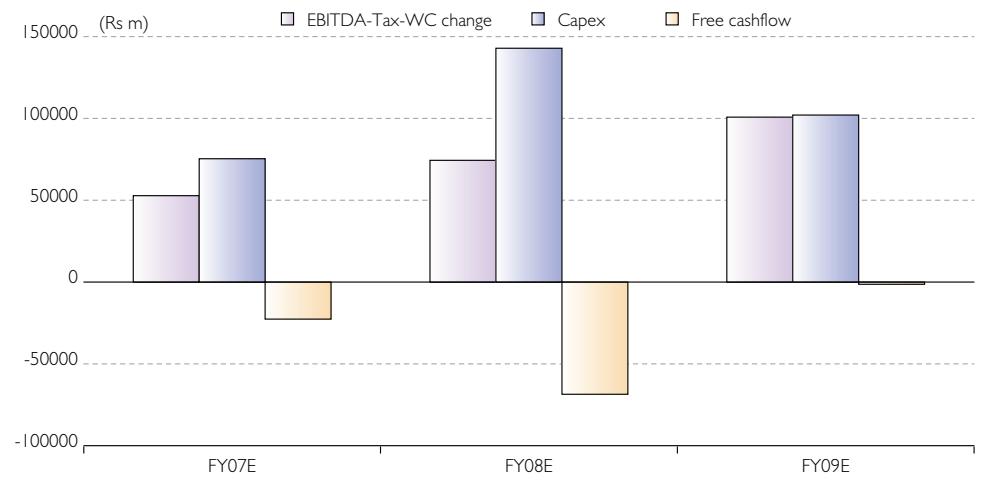
Source: Company

**RCOM's current liabilities have increased significantly in Q2FY07, the reasons for which are unexplained**

### ❑ RCOM to become free cash flow positive only after FY09

The management has guided for \$1.75bn of capex in FY07 and \$2.5bn in FY08. In addition, RCOM has earmarked a capex of \$1.5bn for FLAG over the next three years. We expect RCOM to generate free cash flows only after FY09.

**Exhibit 23: Free cash flow over the next three years**



Source: SSKI Research

*The management has guided for \$1.75bn of capex in FY07 and \$2.5bn in FY08*

## VALUATIONS AND VIEW

RCOM is expected to show a robust 40% and 41% CAGR in EBITDA and earnings respectively over FY07-09. Based on DCF methodology, we have arrived at a target price of Rs505 for RCOM (10.6x FY09E EV/EBITDA). The stock currently trades at 8.5x FY09E EBITDA, a 16% discount to Bharti. We expect the discount to be maintained on account of uncertainties related to RCOM's GSM rollout, lower RoCE and negative free cash generation. Our target price offers a 27% upside from here. We rate the stock as Outperformer.

### □ DCF based value of Rs505

Our DCF based analysis indicates an intrinsic value of Rs505 for RCOM. Our key assumptions are detailed in the table below.

Exhibit 24: DCF calculations for RCOM

(Rs bn)	FY08E	FY09E	FY10E	FY11E	FY12E	FY20E
EBITDA	80	112	137	160	177	308
Tax	(5)	(10)	(14)	(18)	(19)	(62)
Capex	(143)	(102)	(84)	(72)	(59)	(37)
Working capital	(1)	(1)	(1)	(1)	(1)	(1)
FCF	(69)	(1)	38	69	98	208
WACC (%)	12.2					
Terminal growth (%)	3.0					
Terminal value	2342					
PV of terminal value	591					
NPV	590					
EV	1181					
Net debt (FY08E)	92					
Equity value	1089					
Value per share (Rs)	505					

Discounting rate	
Risk free rate (%)	8.0
Market risk premium (%)	5.5
Beta	1.1
Cost of equity (%)	14.1
Cost of debt (post tax) (%)	6.5
WACC (%)	12.2

Source: SSKI Research

Exhibit 25: Sensitivity analysis- WACC and terminal growth rate

WACC / g (%)	2.0%	2.5%	3.0%	3.5%	4.0%
11.2	551	570	592	616	643
11.7	511	528	546	566	589
12.2	476	490	<b>505</b>	522	541
12.7	443	455	469	483	500
13.2	414	425	436	449	463

Source: SSKI Research

At our DCF price, RCOM would trade at 10.6x FY09E EV/EBITDA, at a 13% discount to our target multiple for Bharti. At the current price, RCOM trades at 8.5x FY09E EBITDA, which is a 16% discount to Bharti. We believe the discount to Bharti is justified on account of (i) uncertainties associated with availability of spectrum for RCOM's GSM rollout; (ii) lower RoCE and (iii) negative free cash generation.

Outperformer; expect 27% upside from CMP

Valuation discount to Bharti is expected to continue

*Tower base significantly lower than Bharti's*

*Its early to assign a separate value to tower business as RCOM is expected to share towers on barter basis*

*Uncertainties on switch to GSM, aggressive pricing, delayed asset sweating in non-mobile business – key concerns*

#### ❑ Tower business – lack of clarity makes it difficult to assign value

RCOM currently has 12,000 towers. The company plans to transfer the existing tower business to Reliance Telecom Infrastructure, a wholly owned subsidiary. The 20,000 additional towers planned to be put up in FY08 would be undertaken by Reliance Telecom Infrastructure. Currently, RCOM does not have any tenants on its towers. However, the company has signed co-location agreements in the last few months with Hutchison, Idea, Bharti Airtel, Spice and MTNL for sharing of towers in the Mumbai and Delhi circles.

Though RCOM's subscriber base and coverage are comparable to that of Bharti, RCOM currently has just 12,000 towers compared to Bharti's 34,000 (though gross block per subscriber is comparable). The difference can be attributed to technology, i.e. CDMA vs GSM. In that case, RCOM would need a significantly higher number of incremental towers compared to Bharti as it is planning to rollout a GSM based network.

Given RCOM's emphasis on GSM rollout, we believe the company would be amenable to sharing towers on a barter basis, more so considering that it has only 12,000 towers as of now. The barter-based sharing, while reducing the capex requirement as also operating expenditure, would also allow a speedy rollout of RCOM's GSM network. We have not assigned any separate value to the tower business. An additional value could be assigned for the tower business in case the tower subsidiary rents out a higher number of towers than RCOM takes up tower on rent from other companies. We see this scenario unlikely in near term

#### ❑ Key risks and concerns

- Uncertainties associated with switch to GSM technology include slower subscriber addition till the company gets spectrum,
- Launch of aggressive schemes to gain subscriber market share will take a toll on revenue market share and industry profitability,
- Delay in asset sweating in non-wireless business, and
- Though RCOM has started disclosing detailed quarterly numbers, absence of audited results remains a key concern.

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## Income statement

Year to Mar 31 (Rs m)	FY06	FY07E	FY08E	FY09E
Net sales	112,884	144,914	196,263	271,938
% growth	-	28.4	35.4	38.6
Operating expenses	88,098	87,966	116,244	159,813
<b>EBITDA</b>	<b>24,786</b>	<b>56,948</b>	<b>80,019</b>	<b>112,125</b>
% growth	-	129.8	40.5	40.1
Net interest	(2,649)	(486)	(1,612)	(2,533)
Depreciation	16,987	25,151	33,717	43,476
<b>Pre-tax profit</b>	<b>5,150</b>	<b>30,980</b>	<b>44,361</b>	<b>65,786</b>
Current Tax	327	1,503	2,235	7,471
Profit after tax	4,823	29,477	42,126	58,315
Minorities	-	96	96	96
<b>Net profit after non-recurring items</b>	<b>4,823</b>	<b>29,477</b>	<b>42,126</b>	<b>58,315</b>
% growth	-	511.2	42.9	38.4

## Balance sheet

Year to Mar 31 (Rs m)	FY06	FY07E	FY08E	FY09E
Paid-up capital	10,223	10,223	10,223	10,223
Reserves & surplus	107,292	199,474	241,601	299,916
Total shareholders' equity	117,515	209,793	251,920	310,235
Total current liabilities	109,247	160,001	190,348	219,786
Total Debt	92,976	114,283	114,283	114,283
Total liabilities	202,223	274,284	304,631	334,069
<b>Total equity &amp; liabilities</b>	<b>319,738</b>	<b>484,078</b>	<b>556,551</b>	<b>644,304</b>
Net fixed assets	214,263	336,674	445,878	504,472
Investments	121	250	250	250
Total current assets	105,355	147,153	110,423	139,582
Working capital	(3,892)	(12,848)	(79,925)	(80,204)
<b>Total assets</b>	<b>319,739</b>	<b>484,078</b>	<b>556,551</b>	<b>644,304</b>

## Cash flow statement

Year to Mar 31 (Rs m)	FY06	FY07E	FY08E	FY09E
Pre-tax profit	5,150	30,980	44,361	65,786
Depreciation	16,987	25,151	33,717	43,476
chg in Working capital	na	35,326	3,446	(4,357)
Total tax paid	na	(1,503)	(2,235)	(7,471)
Operating cash Inflow	na	89,955	79,288	97,434
Capital expenditure	na	(75,325)	(142,920)	(102,070)
Free cash flow (a+b)	na	14,631	(63,632)	(4,636)
Chg in investments	na	(129)	-	-
Debt raised/(repaid)	na	21,307	-	-
Capital raised/(repaid)	na	-	-	-
Misc	na	(9,438)	-	(0)
Net chg in cash	na	26,371	(63,632)	(4,636)

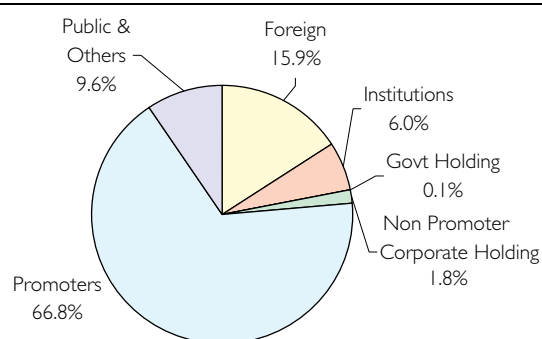
## Key ratios

Year to Mar 31	FY06	FY07E	FY08E	FY09E
EBITDA margin (%)	22.0	39.3	40.8	41.2
EBIT margin (%)	6.9	21.9	23.6	25.2
PAT margin (%)	4.3	20.3	21.5	21.4
ROE (%)	8.2	18.0	18.2	20.7
ROCE (%)	7.4	11.9	13.4	17.4
Gearing (x)	0.8	0.5	0.5	0.4

## Valuations

Year to Mar 31	FY06	FY07E	FY08E	FY09E
Reported EPS (Rs)	2.2	13.7	19.5	27.0
Adj. EPS (Rs)	2.2	13.7	19.5	27.0
PER (x)	177.5	29.0	20.3	14.7
Price/Book (x)	7.3	4.1	3.4	2.8
EV/Net sales (x)	7.9	6.1	4.8	3.5
EV/EBITDA (x)	35.9	15.5	11.8	8.5
EV/CE (x)	4.2	2.7	2.6	2.2

## Shareholding pattern



As of December 2006

# Idea Cellular

Rs95  
NEUTRAL

*Small guy with big Ideas*

Mkt Cap: Rs246bn; US\$5.7bn

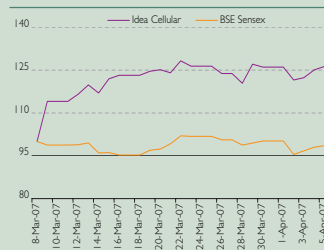
9 April 2007

BSE Sensex: 12856

## Stock data

Reuters	IDEA.BO
Bloomberg	IDEA IN
1-yr high/low (Rs)	98 / 75
1-yr avg daily volumes (m)	11.4
Free float (%)	42.3

## Price performance



## Performance (%)

	3-mth
Idea Cellular	26.3
Sensex	(1.5)

**Ganesh Duvvuri**  
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Idea Cellular (Idea), currently operating in 11 circles, has received a Letter of Intent to roll out services in Mumbai and Bihar circles subject to spectrum allocation (expected by 2HCY07). The company has also received license to offer NLD services and expects to set up its backbone infrastructure by end-FY08. These initiatives are likely to drive a 41% CAGR in Idea's revenues over FY07-09. However, EBITDA margins are unlikely to expand as scale benefit gets negated by losses in new circles. Valuations of 10.9x FY09E EV/EBITDA are at a 28% and 8% premium to that of RCOM's and Bharti's, respectively; however, we believe the premium is unjustified as Idea is a pure mobility operator. The stock price appears to be building in future upsides. **Neutral**

**A pure wireless operator restricted to 11 circles:** Idea is operational in only 11 out of the 23 circles in India. While Idea has obtained a Letter of Intent for Mumbai and Bihar circles, it is awaiting spectrum allocation. Thus, growth would be restricted to these 11 circles in the near term. Also, NLD backbone would be created by end-FY08, implying that NLD operations would fully commence only in FY09.

**Margin expansion to remain elusive:** Idea's EBITDA margins, at 32.3% in Q3FY07, are significantly lower than Bharti's 37.6%. Margins have been depressed on account of losses in three circles where it has entered recently and sharing of long distance revenues with partner networks in the absence of NLD backbone. With the expected rollout in 2HCY07 in Mumbai and Bihar, investment in NLD backbone and likely entry in other circles, we believe margins would at best be stable over the next two years.

**Valuation premium to RCOM unjustified; Neutral:** Idea, despite lack of long distance, enterprise and broadband offerings, commands a 28% premium over RCOM - a better integrated and diversified telecom play. While lack of spectrum would hit both RCOM and Idea, RCOM can in the interim grow on its CDMA platform and eight existing GSM circles. We initiate coverage on Idea with a Neutral rating and a DCF-based price target of Rs93.

## Key financials

As on 31 March	FY05	FY06	FY07E	FY08E	FY09E
Net sales (Rs m)	22,557	29,655	43,312	65,820	86,714
Net profit (Rs m)	683	2,030	4,070	7,677	8,682
Shares in issue (m)	2,260	2,260	2,593	2,593	2,593
Adj. EPS (Rs)	0.3	0.9	1.6	3.0	3.3
% growth	(132.4)	176.7	70.9	84.9	13.1
PER (x)	280.0	101.2	59.2	32.0	28.3
Price/Book (x)	23.3	19.1	6.0	6.0	5.0
EV/EBITDA (x)	30.4	23.0	18.4	13.1	10.9
ROE (%)	8.6	20.7	16.0	18.8	19.2
ROCE (%)	9.7	11.5	11.6	13.8	14.0
EV/CE (x)	5.4	5.6	3.2	3.3	2.6

## INVESTMENT ARGUMENT

Idea, the sixth largest player in the Indian wireless market with a share of 8.6%, operates in 11 circles out of the total 23 in India. The company plans to roll out services in the Mumbai and Bihar circles as soon as spectrum is allocated. Also, infrastructure is being laid out for rolling out NLD services, which it expects to commence by FY08. Over FY07-09, we expect 41% revenue CAGR, underpinned by 46% subscriber CAGR. ARPU is expected to decline at a compounded annual rate of 10% over this period. Margins would remain largely flat as the scale benefit gets offset by losses in new circles. The stock is up 26% from its IPO price of Rs75 in just over a month. We believe current valuations of 10.9x FY09E EBITDA factor in the potential upside. Initiating coverage on the stock with a Neutral rating and a DCF-based target price of Rs93 – 10.8x FY09E EBITDA.

### □ Enhancing presence from 11 to 13 circles by FY08

Idea operates GSM-based wireless services in 11 circles in India including one metro, three A category, six B category and one C category circles. While the company enjoys the advantage of being an incumbent in seven circles, it is among the top two operators in four circles. Idea has an overall 8.6% share of the Indian mobile market with 14.8% share in its circle of operations and 17.7% share in established circles. Idea has also received an LoI to operate in Mumbai (metro) and Bihar (C circle). However, services would likely be rolled out in these circles in 2HCY07, when spectrum is expected to get allocated. In addition, Idea has obtained an NLD license, and is currently laying the backbone infrastructure – expected to be completed by FY08.

Exhibit 1: Subscriber base and market share (Feb-07)

'000	Total subs	Idea subs	Mkt share (%)	Share of net adds (%)
Eight established circles	74,131	13,084	17.7	19.6 (May06-Feb07)
Three new circles	18,338	556	3.0	10.5 (Sep06-Feb07)
Overall 11 circles	92,470	13,640	14.8	

Source: COAI, AUSPI, SSKI Research

Unavailability of spectrum may delay the rollout plans in new circles. Even after services are commenced in these circles, we believe, Idea would face severe challenges to gain market share above 10% in the near term in these circles without compromising its profitability.

### □ Margins would likely remain flat in the near term

We do not expect any significant improvement in Idea's margins over the next couple of years. Margins would be impacted with the rollout of operations in new circles; albeit, scale benefits, reduction in employee base, IT outsourcing (to IBM) and cost saving from own NLD network would partly offset the adverse impact. Idea's Q3FY07 EBITDA margins, at 32.3%, are significantly lower than Bharti's 37.6% margins in the mobile business. Margins are expected to remain under pressure on account of the following:

*Idea has an overall 8.6% share of the Indian mobile market; 14.8% share in its circle of operations, 17.7% in established circles*

*Margins to be under pressure due to rollout in new circles and flat margins even in established circles*



**Withdrawal of 2% concession in license fee in seven circles in FY08 to impact margins by 100-150bp**

**Limited scope of incremental upside from tower sharing**

**While revenues are expected to increase at 41% CAGR over FY07-09, margins would largely remain flat**

**Implied discount to Bharti justified due to lower return ratios, Bharti's pan-India presence and Idea's lower financial flexibility**

- The launch of services in new circles (Bihar and Mumbai) to be a drag on margins.
- Idea gets a 2% concession in license fees for its original mobile licenses in seven circles. However, the concession is available only till FY08, after which margins would likely come down by 100-150bp. Also, with reduction in license fees anticipated for telecom operators by then, players are expected to pass on the benefit to consumers in the form of tariff cuts. Given that Idea would have to keep pace with competition by reducing the tariff to the same extent, margins would come under pressure.
- Even in established circles, Idea's margins remained flat in the last couple of years despite a significant expansion in subscriber base. Ideally, scale benefit should have led to margin improvement. This indicates that there are limited margin levers available to the company.
- Idea's SG&A expenses for 9MFY07, at 21.5% of total revenues, are much higher than Bharti's 16% (including depreciation) as the latter derives scale benefits. Going forward, we do not expect SG&A expenses to reduce substantially given Idea's subscriber base of 13.6m (38% that of Bharti's) and as Idea rolls out operations in new circles.
- Idea currently shares 50% of its tower infrastructure with competitors. We estimate that Bharti's EBITDA margins are boosted by 97-129bp as a result of sharing 23% of its tower infrastructure. Thus, there is limited potential for Idea's margins to increase significantly from further tower sharing initiatives since it already enjoys a major part of these benefits.

#### □ Expect 41% EBITDA CAGR over FY07-09E

Idea's revenues are expected to increase at 41% CAGR over FY07-09, underpinned by 46% CAGR in subscriber base. ARPU is expected to witness a compounded annual decline of 10% over the same period. Margins are expected to remain largely flat.

#### Exhibit 2: Assumptions and financials

		FY06	FY07E	FY08E	FY09E	CAGR FY07-09E (%)
Subscribers	m	7.37	14.27	22.07	30.47	46.1
Market share	%	7.7	8.6	8.9	9.1	
ARPU	Rs/month	391	315	284	253	(10.3)
Revenues	Rs m	29,655	43,312	65,820	86,714	41.5
EBITDA	Rs m	10,674	14,357	21,977	28,650	41.3
EBITDA margin	%	36.0	33.1	33.4	33.0	
EPS	Rs	0.9	1.6	3.0	3.3	44.6

Source: SSKI Research

#### □ DCF based target price of Rs93 – Neutral

Our DCF based target price of Rs93 for Idea implies EV/EBITDA multiple of 10.8x FY09E EBITDA, which is an 11% discount to our target multiple for Bharti. Despite strong growth prospects, we believe the discount is justified on account of (i) lower return ratios of Idea – FY08E RoCE of 14% vs 30% for Bharti; (ii) Bharti's pan India presence with leadership position; and (iii) lower financial flexibility of Idea – debt / EBITDA of 3.3x vs 0.7x for Bharti, for FY07E.

## A LONG ROAD AHEAD

Idea operates in 11 circles, of which it is well established in eight with an 18% market share. In the remaining three circles, the company commenced operations only recently (September-November 2006) and has a 2-3% market share with 9-10% share of net additions. Idea has received an LoI for providing services in Mumbai and Bihar circles. Also, Idea would be able to offer NLD services in its entire subscriber base once the backbone network is in place (scheduled to be completed by Q4FY08). While the company plans to be a pan-India operator, its late entry in the remaining circles poses stiff challenges.

### ❑ Established in eight circles...three new circles added

Idea is a GSM-based mobile service operator with presence in 11 circles including Delhi, Maharashtra, Gujarat, Andhra Pradesh, Madhya Pradesh, Haryana, Kerala, Uttar Pradesh (W), Himachal Pradesh, Rajasthan and Uttar Pradesh (E). Idea enjoys a market share of 17.7% in the eight “established circles”, where it was among the first ones to offer its services.

Idea launched commercial operations in three “new circles” – Himachal Pradesh, Rajasthan and Uttar Pradesh (East) during September-November 2006 and has managed to get a 3% share in these markets since then.

**Exhibit 3: Subscriber base and market share (Feb-07)**

'000	Total subs	Idea subs	Mkt share (%)	Share of net adds (%)
Eight established circles	74,131	13,084	17.7	19.6 (May06-Feb07)
Three new circles	18,338	556	3.0	10.5 (Sep06-Feb07)
Overall eleven circles	92,470	13,640	14.8	

Source: COAI, AUSPI, SSKI Research

Idea has received a Letter of Intent to launch its network in Mumbai and Bihar circles. The rollout in these circles is likely to start after allocation of spectrum, which is likely in the second half of 2007. The company has also obtained an NLD license and is currently laying the backbone network, which is expected to be completed by FY08. In addition, Idea has nine license applications pending for additional circles.

*Idea has a 17.7% market share in its established eight circles*

*In circles where it is a recent entrant, market share stands at 3%*

*Rollout in Mumbai and Bihar circles to start after is spectrum is allocated in 2H2007*

**Idea holds original licenses for seven circles, where it enjoys a strong position**

### ❑ Strong presence in established circles, though competition heating up

Idea enjoys the first mover advantage in seven circles, where it holds the original license. In the eight “established circles” – barring Delhi (11.7%) it has a strong market share of 14-23%. In seven of these eight circles, Idea operates in the 900MHz frequency band, for which capex requirement is arguably lower.

The following table summarizes the chronology of acquisition / rollout in various circles and Idea’s competitive position in each of them.

**Exhibit 4: Details of operations various circles**

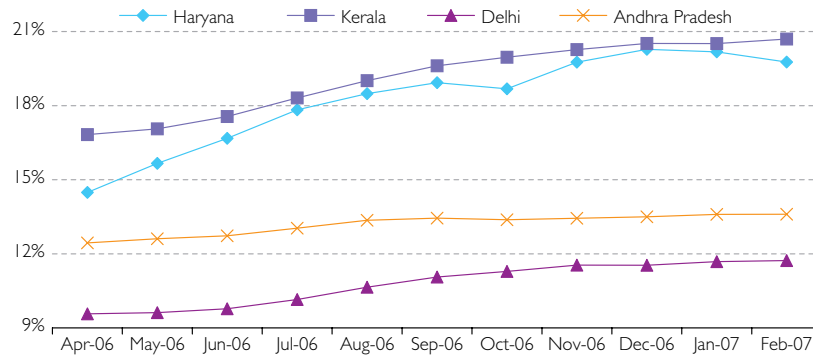
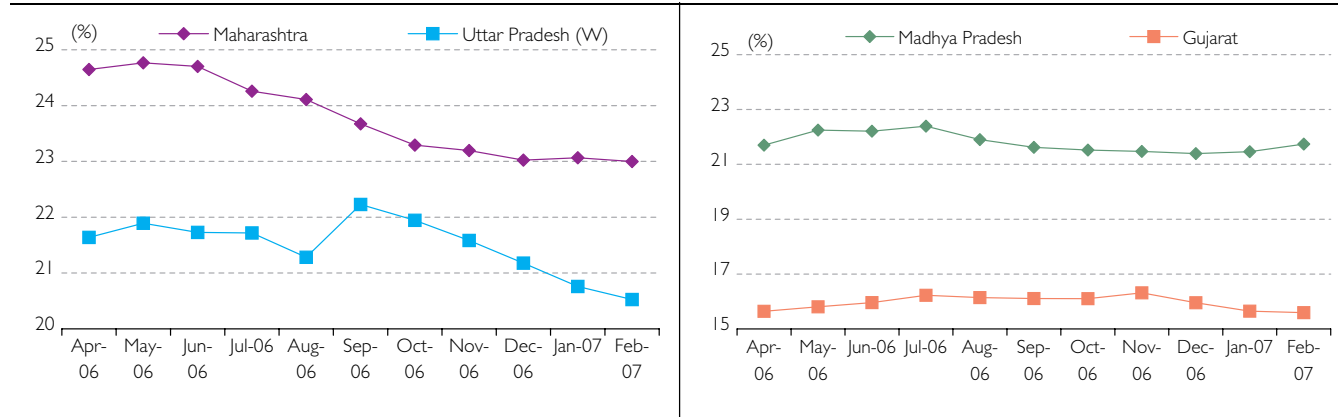
Circle - license history	Category	Penetration %		Idea subs '000	Idea's share (%)	Spectrum MHz	No. of operators	Idea's rank Feb '07
		Dec' 06	Mar' 09E					
<b>Established circles</b>								
<i>Maharashtra</i> - Original license 1995	A	14	29	2,808	23	900	6	1
<i>Gujarat</i> - Original license 1995	A	20	39	1,716	15.6	900	6	3
<i>Andhra Pradesh</i> - got original license on merger with Tata Cellular in Dec 00	A	16	32	1,737	13.6	900	6	4
<i>Madhya Pradesh</i> - got original license with acquisition of RPG cellular in Feb 01	B	8	18	1,515	21.7	900	5	2
<i>Delhi</i> - obtained fourth license services launched in Nov 02	Metro	49	79	1,427	11.7	1800	6	5
<i>Haryana</i> - got original license from acquisition of Escotel in Jan 04	B	22	61	835	19.8	900	6	2
<i>Kerala</i> - got original license from acquisition of Escotel in Jan 04	B	21	40	1,483	20.7	900	6	3
<i>Uttar Pradesh (W)</i> - got original license from acquisition of Escotel in Jan 04	B	12	23	1,564	20.5	900	6	2
<b>New circles - launched during Sept-Nov 2006 - got fourth license from acquisition of Escorts Telecom in June 2006</b>								
<i>Himachal Pradesh</i>	C	19	44	15	1.1	1,800	6	5
<i>Rajasthan</i>	B	12	29	235	3.2	1,800	7	6
<i>Uttar Pradesh (E)</i>	B	8	16	306	3.1	1,800	6	6
<b>New circles - rollout planned in CY07</b>								
<i>Mumbai</i>	Metro	53	76	na	na	1,800	6	Na
<i>Bihar</i>	C	5	12	na	na	1,800	5	Na

Source: Company, AUSPI, COAI, SSKI Research

Barring Delhi, all the other established circles offer the potential to increase penetration levels, which could translate into stable growth for Idea.

With intensifying competition, Idea has lost market share in Maharashtra (from 24.8% to 23%) and Uttar Pradesh-W (22%, 20.5%) over May 2006-February 2007. In Madhya Pradesh and Gujarat, market share remained flat at 21.7% and 15.6% respectively. In Haryana, Delhi, Andhra Pradesh and Kerala, Idea gained significant market share, though on a relatively lower base.

**Exhibit 5: Market share in established circles since April 2006**



Source: COAI, AUSPI, SSKI Research

**The Aditya Birla group is the sole promoter with a 59% stake**

**Market share up by 130bp since April 2006**

In the three new circles where Idea has recently entered, it has seen good growth traction. While market share is low at 1-3%, the share in net additions has been reasonably high at 9-10% in the last two months.

#### □ Performance improved after change in management

Idea was incorporated as Birla Communications in March 1995. Following the execution of a joint venture between AT&T and Grasim Industries, (an Aditya Birla group company), the name was changed to Birla AT&T Communications in May 1996. Subsequent to the merger with Tata Cellular (Tatas, AB Group and AT&T each holding a 33.3% stake in the merged entity), the name was changed to Birla Tata AT&T in November 2001. The company introduced the brand *Idea* in May 2002 and the name of the company was changed to Idea Cellular. Upon exit of AT&T in September 2005 and the Tata group in June 2006, the Aditya Birla group remains the sole promoter with a 59% stake.

Since April 2006, Idea has managed to gain 130bp in market share to 14.8% in its 11 circles of operation, while net additions have increased from -0.3m per month during January-April 2006 to -0.6m per month currently.

*Increasing competition from established players preventing market share gains for Idea*

*The 4.6% churn in postpaid subscribers is significantly higher than Bharti's 3.5%*

### □ Market share gains difficult to come by in new circles

Idea has received an LoI for the Mumbai and Bihar circles. The rollout in these circles is planned as and when spectrum is allocated, which is expected in 2HCY07. The company has also obtained an NLD license. Moreover, Idea has nine license applications pending for additional circles.

With increasing competitive intensity, we believe gaining market share beyond 10-12% in the circles where leaders are firmly entrenched will remain a challenge for Idea. After getting license for the Delhi circle in December 2002, currently Idea has a share of 11.7% in the market. In the "new circles", where operations were launched in November-December 2006, Idea has a 2-3% market share and 9-10% share of net additions. RCOM has garnered a market share of 20.3% to become the second largest player despite being a late entrant by resorting to providing handset subsidies and aggressive pricing. While the Tatas (Tata Tele-services), that entered a year later, have managed to garner only 10% share as they relied on brand value rather than competing aggressively on price.

As has been observed lately, pricing has not proved to be a differentiator in the mobile services business. As the top four players including Bharti, RCOM, Hutch and BSNL enjoy scale benefits, we believe it would be difficult for a smaller player like Idea to compete on price. We understand from our interactions with the company that Idea is not banking on pricing as a differentiator to gain share.

### □ Postpaid churn is higher than for Bharti

Idea's prepaid churn is marginally lower than Bharti's. However, the 4.6% churn in postpaid subscribers is significantly higher than Bharti's 3.5%. Around 88% of Idea's subscriber base is pre-paid, which is comparable to Bharti's 87% as of end-Q3FY07. But we note that Idea's provision for bad debts was only about 1.2% of revenues compared to Bharti's 4.3% for FY06. We understand that Bharti has very strict provision policies for its enterprise business, and broadband and telephone services business. In the enterprise business, since the laying of fibre has a gestation period, provisions are higher but write-offs are minimal.

**Exhibit 6: Comparison of churn**

Churn	Prepaid (%)	Postpaid (%)
Bharti Q3FY07	4.8	3.5
Idea 9MFY07	4.3	4.6
RCOM Q3FY07	1.8 (overall)	

Source: Company

## FINANCIAL ANALYSIS

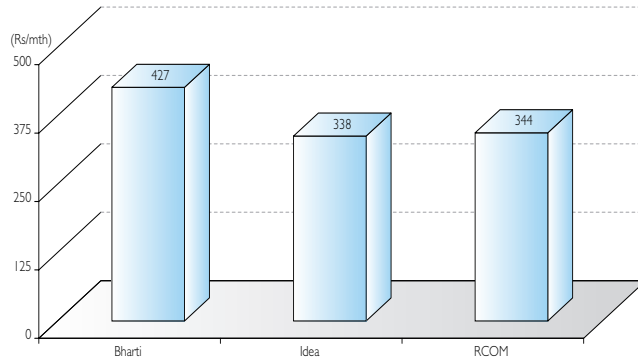
We expect 41% revenue CAGR, underpinned by 46% CAGR in subscriber base, for Idea over FY07-09. ARPU is expected to witness a 10% compounded annual decline over this period. Idea's ARPU is 21% lower than Bharti's due to a weaker presence in metros and lower roaming revenues. Margins are expected to remain largely flat as any benefit of scale, savings from tower sharing, planned reduction in employee base and margin improvement in established circles get offset by losses in new circles. Given fund requirement for new rollouts, we see limited financial flexibility for Idea. EBITDA and EPS are expected to register 41% and 45% CAGR respectively over FY07-09.

### □ ARPU at a 21% discount to Bharti's, but revenue/ min comparable

Idea had an ARPU of Rs338 for 9MFY07, 21% lower than Bharti's ARPU of Rs427 for Q3FY07. We believe Idea's ARPU is lower due to its limited presence (present only in Delhi) in metros (10% of subscribers in metros vis-à-vis Bharti's 20%) and lower roaming revenues in the absence of a pan-India presence. Also, we believe it excludes infrastructure revenues for calculating ARPU.

*Against Bharti's ARPU of Rs427 in Q3FY07, Idea has an ARPU of Rs338 for 9MFY07*

Exhibit 7: Comparison of ARPU for 9MFY07



Per minute revenue and EBITDA comparison (Rs/min) - 9MFY07



Source: Company, SSKI Research

*MoU also 21% lower than Bharti's*

For the same reasons, Idea's 9MFY07 MoU stands at 338, which is about 21% lower than that of Bharti's. But Idea's revenue/ minute is almost comparable to that of Bharti. However, EBITDA/minute is only 6% lower than Bharti's.

**EBITDA margin of 32.3% in Q3FY07 unlikely to see any expansion...**

**...due to launch of services in new circles, withdrawal of license fee concession from FY08**

**Despite higher subs base, Idea has failed to record margin expansion even in established circles**

### □ EBITDA margin expansion unlikely in the near term

In Q3FY07, Idea generated an EBITDA margin of 32.3%, which is lower than Bharti's 37.6% margin in mobile business. We believe any significant improvement in margins from here is difficult to achieve in the near term due to the following:

- As Idea launched services in three new circles in September-November 2006, margins fell by -370bp over the last three quarters. Idea Telecomm (a subsidiary under which financials of the newly launched circles are reported) dragged Idea's consolidated PAT margins by 230bp with a loss of Rs699m in 9MFY06. Most of the losses were incurred in Q3FY07 when operations were launched in new circles.
- The expected launch of services in Bihar and Mumbai circles in 2H2007 would remain a drag on margins.
- Idea gets a 2% concession (available till FY08) in license fees for holding the original mobile license in seven circles. The concession would end in FY08. Even if we assume that the government would have reduced the license fee for all operators by then, the tariff cut undertaken by operators at that time to pass on benefits of lower license fee will hit Idea's margins, as Idea would have to match its tariffs with competition. Thus, relative to larger peers, Idea's margins would remain depressed post FY08.
- Idea already shares 50% of its tower infrastructure compared to the industry average of 25%. Thus, it has limited incremental scope of cost savings through tower sharing. With tower sharing of about 23%, Bharti is estimated to be enjoying a margin benefit of 97-129bp.
- Idea plans to have a pan-India presence, and would require to roll out services in 10 other circles, which would be loss-making propositions in the initial years.
- Idea is currently creating its NLD backbone, which is expected to be completed only by end-FY08. Hence, benefits would accrue only from FY09 onwards.
- Despite a strong subscriber base, Idea has not reported improvement in EBITDA margins in established circles. Standalone EBITDA margins, which reflect profitability in four established circles – Maharashtra, Andhra Pradesh, Gujarat and Delhi – remained flat at 35-36% over FY05-9MFY07 though the subscriber base increased by 123% in these circles. Net margins in subsidiary, BTA Cellcom (which reflects profitability in Madhya Pradesh), remained stable at 25% over the period despite a 168% increase in subscriber base.

We note that net margins of subsidiaries are relatively higher than standalone margins, may be due to the fact that majority of the loan (81% of the total) is accounted for in the books of the standalone entity. This leads to a 10% erosion in net margins of the standalone entity.

## Exhibit 8: Profitability performance in various circles

(%)	FY05	FY06	9MFY07	% change in Sub base over Mar-05 to Dec06	Subscriber (m)
<b>EBITDA margin</b>					
Idea standalone (Maharashtra, AP, Gujarat, Delhi)	36.6	35.6	35.0	123	7.1
Bharti - wireless	34.3	36.1	37.0	191	31.2
<b>PAT margin</b>					
Idea standalone (Maharashtra, AP, Gujarat, Delhi)	1.6	6.3	7.4	123	7.1
Idea mobile (Haryana, Kerala, UP-W)	(6.3)	2.3	19.5	162	3.6
BTA Cellcom (MP)	23.2	25.5	24.8	168	1.3

Source: Company, SSKI Research

**The contract with IBM and outsourcing of certain back office functions could lead to marginally higher margins**

However, we believe that Idea is undertaking initiatives for cost savings.

- The company has recently announced signing a contract with IBM (valued at \$800m) to manage back office services including billing systems and IT infrastructure for 10 years. About 200 Idea employees would be transferred to IBM.
- In addition, Idea is also planning to reduce manpower, which will result in cost savings. Idea employees 4,647 people and has only 2,678 subscribers per employee compared to 4,658 for Bharti. Idea is planning to outsource some of its back office functions and reduce manpower on its rolls. Given that Idea's salary per employee is about 20% lower than Bharti's, we believe the cost savings would not be significant.

## Exhibit 9: Comparison of employee base - Idea v/s Bharti

	Idea	Bharti
Employees at end Q3FY07	4,647	6,864 (mobile)
Subscriber / employee (Dec 06)	2,678	4,658 (mobile)
Employee cost (Rs m, 9MFY07)	1,913	9,042
Employee cost as % of revenue	6.30	6.90

Source: SSKI Research

**Margin levers just sufficient to offset losses on new operations**

Overall, we believe margin levers in terms of incremental scale benefits in established circles, reduction in employee cost and incremental outsourcing will be just sufficient to offset the adverse impact of losses / lower profitability on rollouts in new circles.

### □ Infrastructure sharing benefits largely being exploited

**With tower sharing already at 50%, we expect limited upside from the initiative in the near term**

Idea had about 8,600 cell sites as of December 2006, which increased by 1,982 over the last quarter. The company plans to have 12,000 cell sites by end of March 2007 and 24,000 by end of FY08. As per the IPO document, about 50% of Idea's cell sites are already shared. In the absence of details as to the number of towers being shared on a barter basis, we refrain from estimating the impact of infrastructure sharing on margins. Nevertheless, Bharti's EBITDA margins, we estimate, have received a boost of 97-129bp with just 23% tower sharing.



**We expect average monthly subscriber addition to increase to 0.7m by FY09 owing to rollout in new circles**

### ❑ Subscriber growth to drive 41.5% revenue CAGR over FY07-09E

Idea is gaining traction in subscriber additions – it has added ~0.6m subscribers per month over the last nine months compared to subscriber additions of ~0.3m per month over December 2005-May 2006. We expect average monthly subscriber addition to increase to 0.7m by FY09 on the back of rollout in new circles. Revenues are expected to exhibit 41% CAGR over FY07-09 underpinned by 46% CAGR in subscriber base, impact of which would be partly offset by a 10% compounded annual decline in ARPU.

EBITDA margins are expected to increase marginally in FY08, as the new circles will start showing improvement in profitability. However, margins are expected to decline again in FY09, as Idea will launch operations in Mumbai and Bihar towards the fag end of FY08. EBITDA is expected to register 41.3% CAGR and earnings 44.6% CAGR over FY07-09.

#### Exhibit 10: Assumptions and financials

		FY06	FY07E	FY08E	FY09E	CAGR FY07-09E (%)
Subscribers	m	7.37	14.27	22.07	30.47	46.1
Market share	%	7.7	8.6	8.9	9.1	
ARPU	Rs/month	391	315	284	253	(10.3)
Revenue	Rs m	29,655	43,312	65,820	86,714	41.5
EBITDA	Rs m	10,674	14,357	21,977	28,650	41.3
EBITDA margin	%	36.0	33.1	33.4	33.0	
EPS	Rs	0.9	1.6	3.0	3.3	46.0

Source: SSKI Research

### ❑ Limited financial flexibility

Idea would likely have a gearing of 1.3x, while debt/EBITDA is expected to be high at 3.3x for FY07. Funds raised through the recent pre-IPO placements and IPO (Rs21.75bn) have eased leverage significantly (debt/ equity was 3x prior to the IPO). Going forward, we do not expect any significant improvement in leverage position. Due to the high capex requirement (US \$2bn over FY07-09), leverage is expected to increase to 1.4x by FY09. The company is expected to be free cash flow positive only beyond FY10, as rollout plans in new circles would require substantial investments.

As Idea has original licenses acquired through payment of huge fees, its balance sheet is saddled with intangible assets (Rs11bn of unamortized intangible assets as of December 2006, viz. 15% of the total assets).

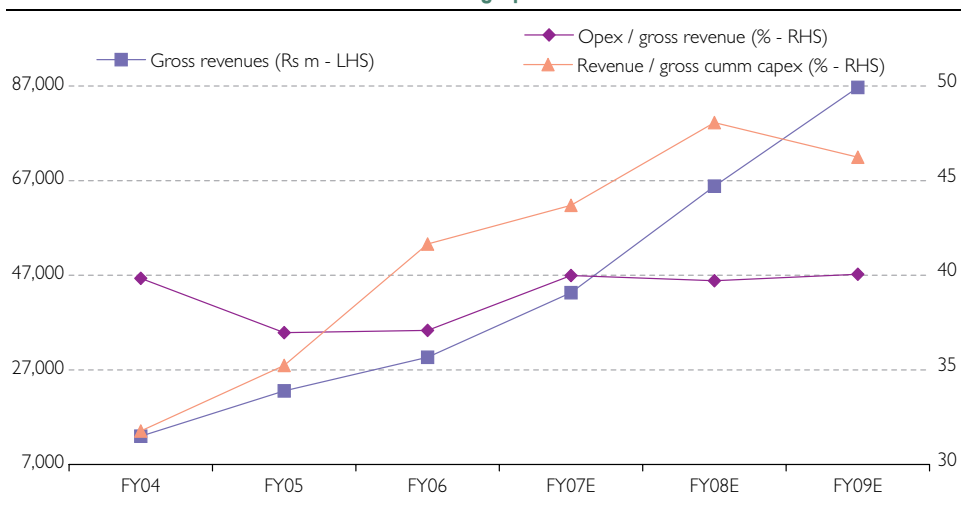
### ❑ Performance dashboard to remain attractive – the 3-line graph

Our expectations on Idea's performance on the 3-line graph are elicited below.

**With debt/EBITDA of 3.3x in FY07E and high intangible assets on books, Idea has limited leverage flexibility**

**Expect 52%yoy revenue growth in FY08, stable opex productivity and higher capital productivity in FY08**

**Exhibit 11: Performance dashboard – the 3-line graph**



Source: SSKI Research

**Gross revenues:** Revenue growth would likely accelerate in FY08 (46% yoy in FY07, 52% yoy in FY08 and 32% yoy in FY09).

**Opex productivity:** Opex includes equipment cost, employee cost, network operations cost and SG&A expenses. We expect stable opex productivity over the next two years as scale benefits and plans to reduce employee cost would get offset by losses incurred during initial stages of planned rollout in new circles.

**Capital productivity (revenues/ gross cumulative capex):** Capital productivity would likely increase on the back of infrastructure sharing in FY08. In FY09, significant capex for NLD and new circle rollout would have a temporary adverse impact on capital productivity.

## VALUATIONS: GROWTH PRICED IN

We believe Idea's growth would be constrained by limited footprint and unavailability of spectrum for further rollouts where licenses have been won. Though growth is expected to be strong (41% and 45% CAGR in EBITDA and EPS respectively) over FY07-09, we believe the upside is already priced in. Idea's stock price has risen 26% over its IPO price of Rs75 per share. At 10.9x FY09E EV/EBITDA, the stock trades at a premium to RCOM and Bharti. While RCOM's GSM strategy is also constrained due to spectrum unavailability, it is in a better position owing to its CDMA operations and the wide array of services including long distance, broadband and enterprise solutions. In our opinion, Idea deserves to trade at a minimum 11% discount to Bharti. We initiate coverage on Idea with a Neutral rating and a DCF-based target price of Rs93.

### □ DCF based value of Rs93 - Neutral

Our DCF based analysis indicates an intrinsic value of Rs93 for Idea. Our key assumptions are detailed in the table below.

Exhibit 12: DCF valuation

(Rs bn)	FY08E	FY09E	FY10E	FY11E	FY12E	FY20E
EBITDA	22	29	36	44	49	85
Tax	(1)	(2)	(3)	(4)	(5)	(16)
Capex	(39)	(52)	(40)	(30)	(15)	(10)
Working capital	(1)	(1)	(1)	(1)	(1)	(1)
FCF	(18)	(26)	(7)	9	28	57
WACC (%)	12.2					
Terminal growth (%)	3.0					
Terminal value	645					
PV of terminal value	163					
NPV	123					
EV	286					
Net debt (FY08E)	43					
Equity value	242					
Value per share (Rs)	93					

Discounting rate (%)	
Risk free rate	8.0
Market risk premium	6.0
Cost of equity	14.6
Cost of debt (post tax)	6.5
WACC	12.2

Source: SSKI Research

Exhibit 13: Sensitivity analysis w.r.t terminal growth and WACC

WACC / g (%)	2.0%	2.5%	3.0%	3.5%	4.0%
11.2	104	108	113	119	125
11.7	95	99	103	107	113
12.2	87	90	93	97	102
12.7	79	82	85	89	92
13.2	73	75	78	81	84

Source: SSKI Research

Our DCF analysis throws up an intrinsic value of Rs93 for Idea

*Being a pure play on mobility business with lower return ratios and financial flexibility, premium to peers is unjustified*

### Idea trading at a premium to RCOM, which we find unjustified

Idea completed its IPO at Rs75 per share in February 2007 and subsequently got listed on 9 March 2007. The stock currently trades at a 26% premium to the offer price. At the current price, the stock trades at 10.9x FY09E EBITDA and 28x FY09E earnings, which are at an 28% premium to RCOM and 8% premium to Bharti. However, we do not find the premium justified given Idea's limited service offering vis-à-vis RCOM's – Idea is operational in only 11 circles and is a pure play on mobility business without any offering in long distance, enterprise and broadband. Moreover, return ratios as well as financial flexibility are lower for Idea compared to Bharti as depicted in the following exhibit.

**Exhibit 14: Peer comparison – Idea, Bharti, RCOM**

	Idea	Bharti	RCOM
Circles operational	11	Pan India	Pan India
Subscriber base (end Feb 07), m	13.6	35.4	32.4
Net debt / EBITDA, FY08E	1.9	0.8	1.1
Net debt / Equity, FY08E	1.0	0.5	0.4
ROCE FY08E, %	13.8	30.2	13.4
EV/EBITDA FY09E @ current price, x	10.9	10.1	8.5

Source: SSKI Research

#### ❑ Risks to our Neutral call

- Significant cut in regulatory costs much earlier than our expectations.
- Roll out in new circles (in addition to Mumbai and Bihar) much earlier than expected.

*An earlier than expected rollout could be an upside*

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## Income statement

Year to Mar 31 (Rs m)	FY05	FY06	FY07E	FY08E	FY09E
<b>Net sales</b>	<b>22,557</b>	<b>29,655</b>	<b>43,312</b>	<b>65,820</b>	<b>86,714</b>
% growth	74.0	31.5	46.1	52.0	31.7
Operating expenses	14,347	18,981	28,954	43,843	58,064
<b>EBITDA</b>	<b>8,210</b>	<b>10,674</b>	<b>14,357</b>	<b>21,977</b>	<b>28,650</b>
% growth	118.6	30.0	34.5	53.1	30.4
Other income	171	244	150	150	200
Net interest	(3,189)	(3,225)	(3,167)	(3,700)	(4,900)
Depreciation	4,427	5,495	7,014	10,346	14,162
<b>Pre-tax profit</b>	<b>765</b>	<b>2,198</b>	<b>4,326</b>	<b>8,081</b>	<b>9,788</b>
Current Tax	-	80	173	404	1,106
Profit after tax	765	2,118	4,153	7,677	8,682
Non-recurring items	(83)	(87)	(83)	-	-
<b>Net profit after non-recurring items</b>	<b>683</b>	<b>2,030</b>	<b>4,070</b>	<b>7,677</b>	<b>8,682</b>
% growth	(134.0)	197.4	100.5	88.6	13.1

## Balance sheet

Year to Mar 31 (Rs m)	FY05	FY06	FY07E	FY08E	FY09E
Paid-up capital	22,595	22,595	25,929	25,929	25,929
Reserves & surplus	(13,393)	(11,363)	14,752	15,023	23,705
Total shareholders' equity	9,202	11,232	40,681	40,951	49,633
Total current liabilities	7,008	12,272	20,000	27,000	33,750
Total Debt	36,939	32,856	42,149	45,265	71,163
Total liabilities	43,947	45,128	62,149	72,265	104,913
<b>Total equity &amp; liabilities</b>	<b>53,149</b>	<b>56,360</b>	<b>102,830</b>	<b>113,216</b>	<b>154,546</b>
Net fixed assets	25,150	28,835	51,903	81,742	120,968
Total current assets	5,569	5,987	30,457	12,188	15,680
Deferred tax assets	-	-	14	14	14
Other non-current assets	22,430	21,539	20,456	19,271	17,884
Working capital	(1,439)	(6,285)	10,457	(14,812)	(18,070)
<b>Total assets</b>	<b>53,149</b>	<b>56,360</b>	<b>102,830</b>	<b>113,216</b>	<b>154,546</b>

## Cash flow statement

Year to Mar 31 (Rs m)	FY05	FY06	FY07E	FY08E	FY09E
Pre-tax profit	765	2,198	4,326	8,081	9,788
Depreciation	4,427	5,495	7,014	10,346	14,162
chg in Working capital	699	4,567	5,716	4,268	3,758
Total tax paid	-	(80)	(173)	(404)	(1,106)
Ext ord. Items	(83)	(87)	(83)	-	-
Operating cash Inflow	5,808	12,093	16,800	22,292	26,602
Capital expenditure	(14,911)	(8,079)	(29,000)	(39,000)	(52,000)
Free cash flow (a+b)	(9,103)	4,013	(12,200)	(16,708)	(25,398)
Chg in investments	450	-	(950)	-	-
Debt raised/(repaid)	13,223	(4,083)	9,293	3,115	25,898
Capital raised/(repaid)	-	-	25,501	(7,407)	0
Dividend (incl. tax)	-	-	-	-	-
Misc	(3,761)	(210)	(137)	(0)	(0)
<b>Net chg in cash</b>	<b>809</b>	<b>(279)</b>	<b>21,507</b>	<b>(21,000)</b>	<b>500</b>

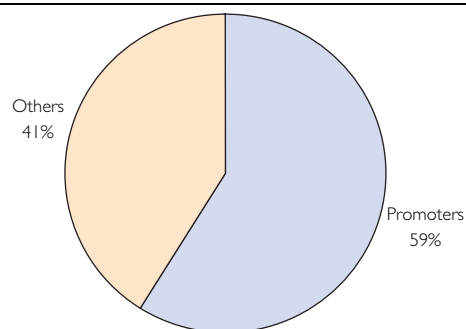
## Key ratios

Year to March 31	FY05	FY06	FY07E	FY08E	FY09E
EBITDA margin (%)	36.4	36.0	33.1	33.4	33.0
EBIT margin (%)	16.8	17.5	17.0	17.7	16.7
PAT margin (%)	3.4	7.1	9.6	11.7	10.0
ROE (%)	8.6	20.7	16.0	18.8	19.2
ROCE (%)	9.7	11.5	11.6	13.8	14.0
Gearing (x)	4.0	2.9	1.0	1.1	1.4

## Valuations

Year to March 31	FY05	FY06	FY07E	FY08E	FY09E
Reported EPS (Rs)	0.3	0.9	1.6	3.0	3.3
Adj. EPS (Rs)	0.3	0.9	1.6	3.0	3.3
PER (x)	280.0	101.2	59.2	32.0	28.3
Price/Book (x)	23.3	19.1	6.0	6.0	5.0
EV/Net sales (x)	11.1	8.3	6.1	4.4	3.6
EV/EBITDA (x)	30.4	23.0	18.4	13.1	10.9
EV/CE (x)	5.4	5.6	3.2	3.3	2.6

## Shareholding pattern



SSKI Estimates

## ANNEXURE I: REGULATORY DETAILS

### □ Taxation

Telecom service providers are eligible for deduction under section 80 IA of the Income Tax Act as follows:

- The deduction of 100% with respect to profits and gains derived from provision of telecom services for a period of first five consecutive assessment years, and
- Deduction of 30% in respect of profits and gains derived from provision of telecom services for a period of next five years, out of 15 years beginning with the assessment year relevant to the previous year in which the undertaking starts providing services on or after 1 April 1995 but before 31 March 2005.

However, companies are required to pay Minimum Alternate Tax (MAT) at an effective rate of 11.3%.

- Bharti's effective tax (MAT) rate for 9MFY07 was 13.2%, while current tax paid was 10.5%.
- RCOM's effective tax rate for Q3FY07 was 2.1%. We have assumed MAT rate going forward.
- Idea reported effective tax rate of 1.3% in 9MFY07 and current tax rate of 2.8%. We have assumed MAT rate FY09 onwards.

### □ License fee

According to NTP 1999 (National Telecom Policy), the industry migrated from fixed annual license fee regime to a revenue sharing regime. With effect from 1 April 2004, the license fee was reduced by 2%. The revenue sharing license fee payable is as follows:

Metro and category A circles - 10% of the adjusted gross revenue (AGR)

Category B circles - 8% of the AGR

Category C circles - 6% of the AGR

Further, as part of the introduction to UASL license, the government offered certain concessions to the original cellular licensees in the circles, who had to pay fixed license fees. Accordingly, the original cellular licensees were given an additional concession of 2%, subject to an overall minimum fee of 5% of the AGR for a period of four years from April 2004.

### □ The license fee under NLD and ILD license is 6% of the AGR

The average license fee for any operator depends on the proportion of AGR accruing from various categories of circles. In case of Idea and RCOM (GSM), the license fee as a percent of AGR is less at 7.5% and 5.4% respectively due to higher presence in A-B-C category circles. In addition, they have original cellular license (seven for both Idea and RCOM GSM) where they get benefit of lower license fee (by 2%). Bharti has an average license fee of 8.4%, while RCOM's average license fee stands at 8.9%.

#### Average license fee for telecom operators

Operator	License fee as % of AGR for Q2FY07
Bharti	8.4%
RCOM	9.3% for CDMA, 5.4% for GSM, 8.9% overall
Idea	7.5%

Source: TRAI

## □ Spectrum charges

GSM-based service providers are required to pay an additional charge for use of spectrum, depending upon the spectrum allotted. The royalty on the spectrum allocation is as follows:

Up to 4.4MHz - 2% of the AGR

Up to 6.2MHz - 3% of the AGR

From 6.2MHz to 10MHz (inclusive) - 4% of the AGR

From 10MHz to 12.5MHz (inclusive) - 5% of the AGR

From 12.5MHz to 15MHz (inclusive) - 6% of the AGR

### Average spectrum charges paid by operators

Operator	Spectrum as % of AGR for Q2FY07
Bharti	4.2%
RCOM	3.7% for CDMA, 1.4% for GSM and 1.6% overall
Idea	4.6%

Source: TRAI

## □ Criteria for spectrum allocation

The DoT intends to release further spectrum in 900 and 800 MHz ranges, once the Indian defence forces cease using these. The spectrum will be allocated based on an operator's subscriber base with frequency being allocated to operators with a specified minimum number of subscribers in particular circles or categories of circles. The following tables set out the threshold subscriber numbers for frequencies to be allocated to GSM operators.

### Criteria for spectrum allocation - GSM operator

Service area	4.4MHz**	Subscriber base (mn)*				
		6.2MHz	8.0MHz	10.0MHz	12.4MHz	15MHz
Metro	No criteria					
Delhi and Mumbai	No criteria	0.3	0.6	1.0	1.6	2.1
Chennai and Kolkata	No criteria	0.2	0.4	0.6	1.0	1.3
Circle A	No criteria	0.4	0.8	1.4	2.0	2.6
Circle B	No criteria	0.3	0.6	1.0	1.6	2.1
Circle C	No criteria	0.2	0.4	0.6	0.9	1.2

Source: DoT, \*Minimum subscriber base (in mn) required for allotment of different amounts of GSM spectrum \*\* Initial allotment for rollout of network

While spectrum allotment will be subject to availability of spectrum, the active subscribers and peak traffic averaged over a month for a minimum of 40m Erlangs per subscriber in the visitor locator register of a service provider would be taken into account for the purpose of allotment.

### Criteria for spectrum allocation - CDMA operators

Service area	Subscriber base (mn)*	
	5th carrier	6th carrier
Metro		
Delhi and Mumbai	0.2	0.2
Chennai and Kolkata	0.1	0.2
Circle A	0.2	0.3
Circle B	0.2	0.2
Circle C	0.1	0.3

Source: DoT, \*Minimum subscriber base (in mn) required for allotment of CDMA carriers of nominal 1.25MHz bandwidth each.



## ❑ Interconnection user charges (IUC)

Key highlights of the IUC regulation (2003) as amended in February 2006 are as follows:

**Termination charges** - Termination charges for calls to basic (fixed, WLL-F and WLL-M) and mobile networks will be at a uniform rate of Re0.3 per minute. The same termination charge will be applicable for all types of calls including local, national long distance and international long distance.

**Origination charges** - The originating service provider will retain origination charges from the residual after payment of the charge for carriage, termination and access deficit.

**Carriage charges** - Carriage charges for NLD shall be set by mutual agreement of service providers subject to a ceiling of Re0.65 per minute irrespective of the distance.

**Transit charges for intra-short distance charging area (SDCA) calls** - Direct interconnection between access providers is mandatory. For exceptional cases of intra-SDCA transit, operators may decide the charges through mutual negotiation. However, this should be lower than Re 0.2 per minute.

Carriage charges for ILD calls including international termination are as per mutual agreements.

**Access Deficit charge** - TRAI has cut ADC charges w.e.f. 1 April 2007 till 31 March 2008. ADC, according to the TRAI, is expected to be phased out eventually (proposed by 2008-2009) and will not be continued till perpetuity. TRAI has reduced the ADC burden by 38% on operators - ADC was reduced from Rs33.35bn for 2006-07 to Rs20.5bn for 2007-08. The change is summarized in the table below.

### ADC for international long distance calls

	2006-07	2007-08
Revenue share	1.5% of AGR	0.75% of AGR
International incoming	Rs1.6/min	Re1/min
International outgoing	Re0.8/min	nil
Total ADC (Rs bn)	33.4	20.5

Source: TRAI

## ❑ Universal Service Obligation (USO)

Out of the total revenue share license fees paid by the operator to the government, 5% of AGR is currently allocated by the government to the USO for development of rural and remote areas. The government proposes shared infrastructure using USO subsidy, which would expedite the rollout of mobile networks in the most cost effective manner in the rural and remote areas. USO has a corpus of about Rs75bn.

In the latest round of bidding (during March 2007) for rural clusters, in 38 of the 81 rural clusters for which bids have been invited for rural telephony services (which were to be part financed by the USO fund), 4-5 operators have bid at zero subsidy per cluster. As per bidding rules, first three operators who ask for the least subsidy would win the contract.

## ❑ Mobile number portability (MNP)

Mobile number portability helps customers to switch telecom service provider or network without changing the telephone number. In March 2006, TRAI issued recommendations to the government on mobile number portability. Following are the key recommendation on mobile number portability.

- A time frame of 12 months between the acceptance of recommendation by the government and launch of this facility was recommended. It was recommended that this facility should be available to mobile subscribers tentatively by 1 April 2007.
- Initially, MNP to be allowed within service areas only. The government may mandate all UASL/ CMSPs to implement MNP.
- Implementation of MNP in phased manner by initially introducing it in the Metros and Category A circles followed by category B and then category C circles within an interval of six months.

The government has not yet accepted these recommendations.

## ANNEXURE II: WIRELESS SUBSCRIBER DETAILS

### Analysis of wireless market (FWP+wireless)

	Sept 06	Oct 06	Nov 06	Dec 06	Jan 06	Feb 06
<b>Total Subscribers (m)</b>	<b>126.69</b>	<b>133.40</b>	<b>140.13</b>	<b>146.51</b>	<b>153.23</b>	<b>159.36</b>
GSM	91.01	95.74	100.79	105.43	110.42	115.30
CDMA	35.68	37.65	39.34	41.08	42.81	44.06
<b>MoM subscriber growth (%)</b>	<b>5.0</b>	<b>5.3</b>	<b>5.0</b>	<b>4.6</b>	<b>4.6</b>	<b>4.0</b>
GSM	5.1	5.2	5.3	4.6	4.7	4.4
CDMA	4.9	5.5	4.5	4.4	4.2	2.9
<b>Net adds (m)</b>	<b>6.06</b>	<b>6.71</b>	<b>6.73</b>	<b>6.38</b>	<b>6.73</b>	<b>6.13</b>
GSM	4.39	4.73	5.04	4.64	4.99	4.88
CDMA	1.66	1.98	1.69	1.74	1.73	1.25

Source: COAI, AUSPI, SSKI Research

Note: Latest WLL(M) figures for MTNL are estimated as data is not available. In case of MTNL, WLL(F) subscribers are not included as they are classified under wireline. BSNL CDMA numbers are not available, hence not included.

## Wireless competitive landscape (including FWP)

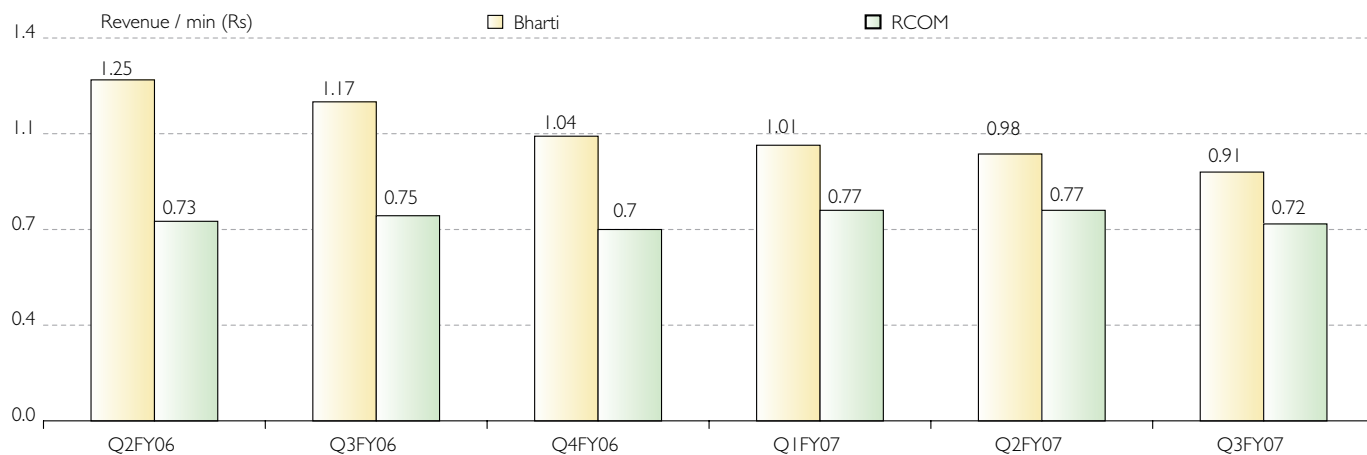
	Sept 06	Oct 06	Nov 06	Dec 06	Jan 06	Feb 06
<b>Total subscribers (m)</b>						
Bharti (GSM)	27.0	28.6	30.3	32.0	33.7	35.4
RCVL (CDMA+GSM)	26.0	27.2	28.6	30.0	31.4	32.4
(CDMA)	23.0	24.0	25.2	26.3	27.5	28.3
BSNL (GSM)	20.9	22.1	23.0	23.6	24.4	25.4
Hutch (GSM)	20.4	21.3	22.3	23.3	24.4	25.3
Idea (GSM)	10.4	11.0	11.8	12.4	13.1	13.6
Tata Tele (CDMA)	12.4	13.3	13.9	14.5	15.0	15.5
MTNL (GSM)	2.3	2.3	2.4	2.4	2.5	2.6
Others	7.3	7.6	7.9	8.3	8.7	9.0
<b>Total</b>	<b>126.7</b>	<b>133.4</b>	<b>140.1</b>	<b>146.5</b>	<b>153.2</b>	<b>159.4</b>
<b>Market share (%)</b>						
Bharti (GSM)	21.3	21.4	21.6	21.8	22.0	22.2
RCVL (CDMA+GSM)	20.5	20.4	20.4	20.5	20.5	20.3
(CDMA)	18.2	18.0	18.0	18.0	18.0	17.7
BSNL (GSM)	16.5	16.5	16.4	16.1	16.0	16.0
Hutch (GSM)	16.1	15.9	15.9	15.9	15.9	15.9
Idea (GSM)	8.2	8.2	8.5	8.5	8.5	8.6
Tata Tele (CDMA)	9.8	10.0	9.9	9.9	9.8	9.7
MTNL (GSM)	1.8	1.7	1.7	1.7	1.6	1.6
Others	5.8	5.7	5.7	5.7	5.7	5.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Net adds (m)</b>						
Bharti (GSM)	1.37	1.57	1.65	1.71	1.76	1.71
RCVL (CDMA+GSM)	1.20	1.25	1.35	1.40	1.41	1.01
(CDMA)	0.98	1.03	1.13	1.16	1.17	0.77
BSNL (GSM)	0.87	1.12	0.92	0.64	0.82	1.00
Hutch (GSM)	0.98	0.91	1.01	1.03	1.11	0.93
Idea (GSM)	0.63	0.62	0.86	0.60	0.63	0.57
Tata Tele (CDMA)	0.70	0.95	0.56	0.56	0.56	0.48
MTNL (GSM)	0.0262	0.0353	0.0495	0.0495	0.0737	0.0806
Others	0.28	0.26	0.33	0.38	0.37	0.36
<b>Total</b>	<b>6.06</b>	<b>6.71</b>	<b>6.73</b>	<b>6.38</b>	<b>6.73</b>	<b>6.13</b>
	2.7	10.7	0.4	-5.2	5.4	
<b>Market share in net adds (%)</b>						
Bharti (GSM)	22.6	23.4	24.5	26.8	26.1	27.9
RCVL (CDMA+GSM)	19.9	18.7	20.1	21.9	20.9	16.4
(CDMA)	16.2	15.3	16.7	18.3	17.4	12.6
BSNL (GSM)	14.4	16.7	13.7	10.1	12.2	16.3
Hutch (GSM)	16.1	13.6	15.0	16.2	16.5	15.2
Idea (GSM)	10.4	9.2	12.8	9.4	9.4	9.3
Tata Tele (CDMA)	11.6	14.1	8.3	8.9	8.3	7.8
MTNL (GSM)	0.4	0.5	0.7	0.8	1.1	1.3
Others	4.6	3.8	4.8	6.0	5.5	5.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: COAI, AUSPI, SSKI Research

Note: Latest WLL(M) figures for MTNL are estimated as data is not available. In case of MTNL, WLL(F) subscribers are not included as they are classified under wireline. BSNL CDMA numbers are not available, hence not included.

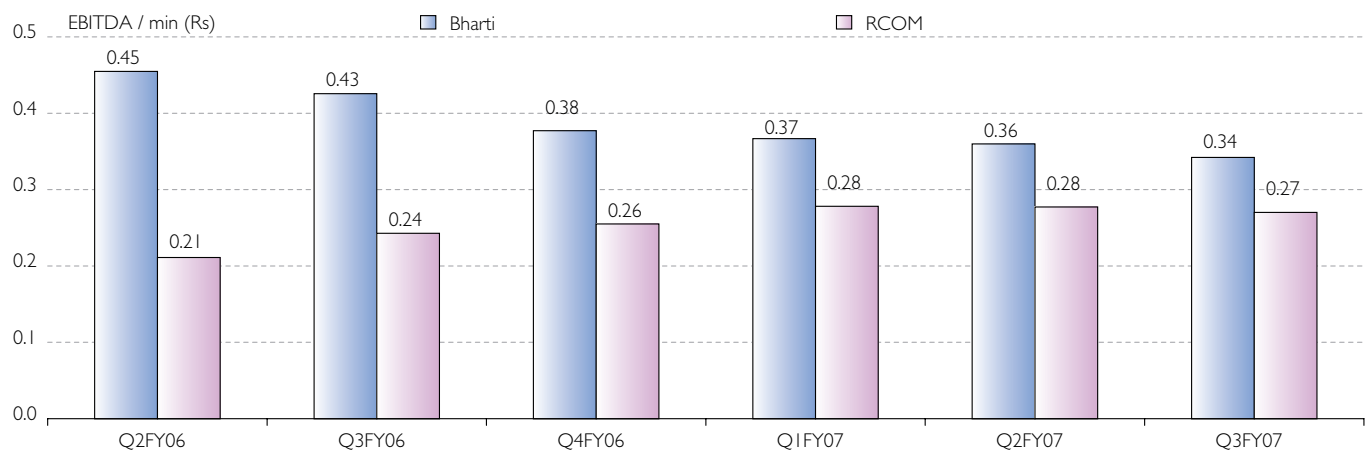
## ANNEXURE III: PER MINUTE TRENDS

### Revenue per minute trend for RCOM and Bharti



Source: Company

### EBITDA per minute trend for RCOM and Bharti



Source: Company

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2. Neutral: Within 0-10% to Index
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