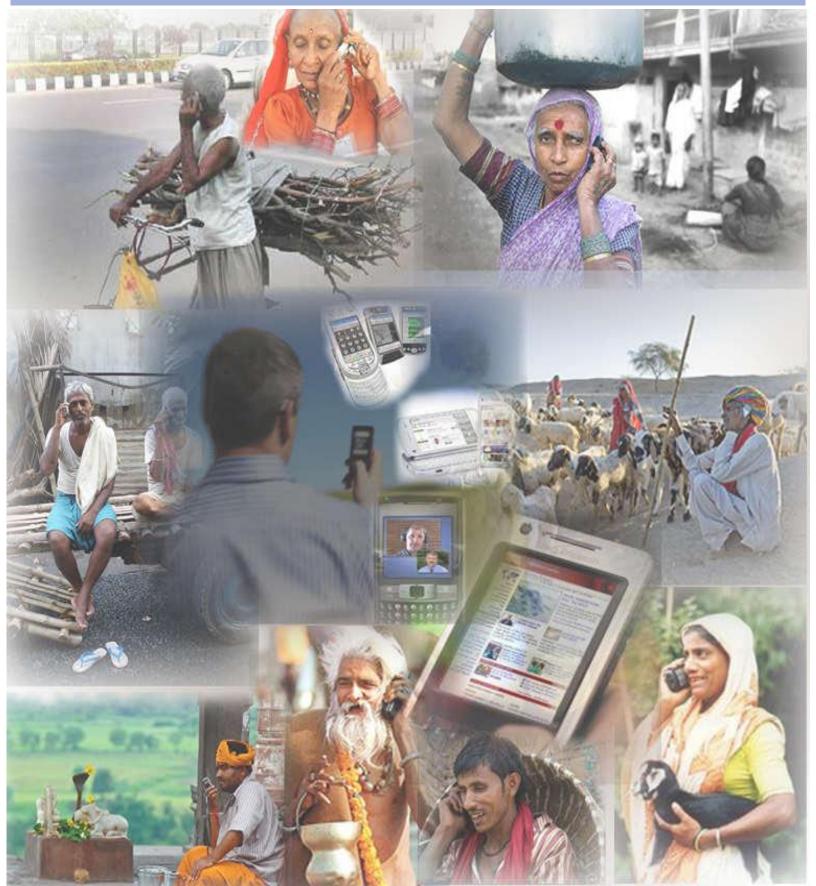


# Telecom (wireless) High decibel

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## **Telecom (wireless)**

### High decibel

Indian masses are turning to 'ether' for connectivity - and rural penetration would now generate much of the Indian wireless industry's growth to 592m subscribers (49% penetration overall, up 1200bp) by FY11E. However, the industry itself is rapidly transforming from 'highly competitive' to 'hyper competitive'. While the new entrants mean serious business, incumbents are well placed to protect their market share but not profitability given the tapering MoU elasticity. As the din around competition, and resultant concerns on profitability, looks unlikely to settle any time soon, we rule out a sharp rebound in valuations for our telecom universe. Nevertheless, we see stocks returning 16-24% (March 2010) as current valuations are attractive in view of the 14% EBITDA CAGR over FY09-11E, moderating capex and high FCF visibility. Idea, the fastest growing among peers, is our top pick.

**Telecom growth story...not over yet:** Despite a strong run in the last few years, the Indian wireless market still offers headroom for expansion driven by a favorable demographic profile, improving coverage, sharp decline in cost of ownership and low rural penetration (15%). We estimate wireless penetration to rise to 49% by FY11 with rural penetration up to 27% and subscriber base hitting 592m. Multiple-SIM ownership and potentially higher inactive subscribers in the system are a key risk to our estimates.

But profitability under siege: Regulatory stance appears to be promoting competition in the sector. Though business case for new entrants is weak with a modest 10% equity IRR likely despite strong financial/ strategic backing, we see only a marginal loss of share for incumbents (500bp for the top five players to 78% by FY11). In a highly competitive market with tapering MoU elasticity, operators' margins are notably trending down though EBITDA growth remains healthy (14% 2-year CAGR). However, impact of 3Grelated costs would cap earnings growth, except for Idea (reducing losses in new circles).

Attractive valuations; though we rule out a sharp rebound: Valuations of our telecom universe, at 7.7-8.1x FY11E EV/ EBITDA, appear attractive considering the strong EBITDA growth, moderating capex, high FCF visibility beyond FY12 and improving economics of tower business. But as there is no respite on competition (and thus profitability) concerns in the foreseeable future, we rule out a material re-rating of stocks. Based on DCF, we set a price target of Rs445 for Bharti, Rs298 from RCOM and Rs90 for Idea. We prefer Idea given its superior earnings growth trajectory, market share scaleup and pan-India presence expected soon.

#### Valuation matrix

Company	Price	Мсар	Reco	EPS CAGR		FY	11E		Target	Upside
	(Rs)	(Rs bn)		FY09-11E	PE	EV/EBIDTA	RoE	RoCE	price	
				(%)	(x)	(x)	(%)	(%)	(Rs)	(%)
Bharti Airtel	384	1,457	OP	1.4	14.7	8.1	20.4	18.2	445	16
Reliance Com	255	526	OP	(10.4)	14.3	7.9	8.5	7.8	298	17
Idea Cellular	73	226	OP	19.5	16.6	7.7	8.7	7.8	90	24
Prices are as on A	uaust 7, 20	009								

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#### **INVESTMENT ARGUMENT**

The Indian telecom (wireless) industry shows promise in terms of penetration (49% by FY11; 37% currently) driven by falling ownership costs, a favorable demographic profile and improving coverage. However, increasing clutter in the industry as also falling MoU elasticity would mean pressure on profitability of telcos. While we concede that incumbents have strong growth levers (coverage, back-end infrastructure and marketing networks) and business case for new entrants remains weak, we see consolidation some time away as the regulatory stance is in favour of promoting new competition in the sector. Meanwhile, valuations, at 7.7-8.1x FY11E adjusted EV/ EBITDA, for our universe are attractive given the 14% EBITDA CAGR over FY09-11E, moderating capex and high FCF visibility though a sharp valuation rebound is unlikely. Based on DCF, we set a price target for Bharti at Rs445, RCOM at Rs298 and Idea at Rs90. We prefer Idea on the back of its superior earnings growth trajectory, market share scale-up and pan-India presence expected soon.

#### COMPETITION CAN'T BE UNDERESTIMATED; BUT INCUMBENCY AN ADVANTAGE

#### ☐ Party isn't over yet; though net add run-rate is tapering

Despite a strong run in the last few years (64% CAGR over FY06-09), we believe India's telecom story is far from over. A rural penetration level of just 15% implies significant growth potential that is yet to be tapped. While network expansions by industry players are leading to improved population coverage, favourable demographics and rock-bottom handset ownership costs are expected to boost penetration levels. International experience too suggests adequate headroom for penetration rates to rise in India without being constrained by its lower prosperity levels. We believe that potential penetration levels are likely to be attained sooner than later, helped by the rising competitive intensity in no small measure.

We expect India's wireless penetration to increase to 49% by FY11 (~37% currently) with rural markets accounting for 63% of the net incremental additions. Rural penetration could touch 27% by FY11E from 15% currently. Even as we expect the monthly net add run-rate to decelerate from 11.3m in FY09 to 6.9m in FY11, we expect a 23% CAGR in wireless subscribers over FY09-11, implying a subscriber base of 592m by FY11. Having said this, we reckon that increasing risk of multiple-SIM ownership and higher-than-reported inactive subscribers in the system are a key risk to our estimates. We expect a rise in churn rates if telecom operators tighten their nousage criterion for reporting inactive connections.

Exhibit 1: Indian telecom - wireless subscriber forecasts

Particulars	FY08	FY09	FY10E	FY11E
Wireless subscribers (m)				
Metros	45	62	74	81
A Circle	92	137	170	189
B Circle	93	147	197	235
C Circle	26	46	69	87
Total	256	392	510	592
Penetration (%)				
Metros	68	92	106	113
A Circle	27	40	48	53
B Circle	18	28	37	44
C Circle	12	20	30	37
Total	22	34	43	49

Source: TRAI, IDFC- SSKI Research

Despite 64% CAGR in Indian wireless subs base over FY06-09...

...we expect growth to remain strong with 23% CAGR over FY09-11E

We expect 10% equity IRR for a Greenfield entrant over a 20-year license period

#### □ New entrants mean serious business; even as business case is weak

The wireless industry is set to witness a flurry of new entrants/ network expansion by existing smaller players, resulting in 12-14 players in each circle (5-6 at present). With the backing of experienced global/ regional players and ~\$6bn of initial funding committed by them, the new entrants appear well-poised for their initial roll-out plans. Also, we expect these players to have a shorter time to market and lower capex needs due to a pre-dominantly shared infrastructure model. However, ARPU (average revenue per user) of incremental subscribers – given that growth would now come from the 'lower rungs of the economic pyramid' – is likely to be at a steep discount to the industry average. As past experience suggests, the lowest ARPU is often reported by the latest entrant in any circle – e.g., Aircel's ARPU in Kolkata, launched in May 2008, Bihar and Himachal Pradesh, both launched in Jan-07, is at a discount of 73%, 56% and 64% respectively to the average ARPU in these circles. Further, competition among the new entrants for a shorter time to market would mandate upfront investments in faster network roll-outs, which we believe would depress equity returns for new entrants. We estimate a modest equity IRR of 10% for a Greenfield entrant over a 20-year license period.

Exhibit 2: Profile snapshot of new entrants in the wireless industry

Company	Targeted	Foreign	Funds infused/ to	Remarks/ Progress
	presence	partner	be infused	
Unitech Wireless	23 circles	Telenor	Rs61.2bn for a 67% stake;	Tower sharing agreement signed with WTTIL
			~Rs26bn already infused	Managed IT services agreement with Wipro
				Managed network services agreement signed with
				Alcatel-Lucent
Etisalat DB	15 circles	Etisalat	\$900m for a 45% stake	Commercial launch planned in CY09
(Swan)				Signed MSA for 30,000 towers with Reliance Infratel
Sistema Shyam	23 circles	Sistema group	\$1bn for a 73.7% stake	Already launched in 4 circles. Targets a pan-India launch
				in CY09
				Managed IT services agreement with IBM
				Equipment orders place with ZTE
				\$900m loan from China Development Bank (back to back
				arrangement for equipment purchases from ZTE)
				Received \$333m of total financing; \$150m in domestic
				financing
				Plans to invest \$7bn in networks in India
S Tel	6 circles (C Circ	cles) Batelco	\$225m for a 49% stake	37% stake already acquired
Datacom	All circles exce	pt Punjab		Owned 64% by Videocon Industries

Source: IDFC-SSKI Research

Lower termination charges, entry of MVNOs and MNP implementation – positive for new players

#### □ Regulatory environment is benign for new entrants

Recent regulatory actions like the Re0.1 cut in termination charges and proposed implementation of mobile number portability (MNP) are likely to benefit the new entrants due to lower outgo on account of interconnect charges and potential for winning unsatisfied high-ARPU subscribers from the incumbents respectively. Other regulations in favour of the new entrants are permission for infrastructure sharing (except spectrum), which will enable faster network roll-outs, and paving the way for entry of MVNOs which would mean increased competition and efficient spectrum utilization. Further, tightening of subscriber based spectrum allocation norms by 2-6x and deferral of the 2% cut in USO levy are negative for large incumbent players.

Though MNP less relevant in Indian context, it would help new entrants gain market share faster

Extensive coverage, backend infrastructure and strong distribution networks considerable levers for incumbents

#### **■** MNP – another lever for new entrants?

MNP is set to be a reality in India and is likely to be fully implemented over the next 2-3 quarters. Indian telecom is predominantly a pre-paid market and witnesses high churn anyways, and hence MNP may be less relevant in the Indian context. Importantly, the speed and cost of porting as also other regulatory nuances would decide the degree of MNP success in the country. However, while the quantum of the impact can be argued, we believe MNP churn would clearly help new entrants to get market share faster than that possible otherwise as also enable incumbents like Idea and RCOM to gain market share in new/ traditionally weak circles. It is also quite likely that incumbents would ramp-up their marketing spend ahead of MNP implementation.

#### ■ But strong incumbency advantage to prevent major market share shift

New entrants have little differentiation to offer. Price, we believe, would increasingly become a less effective tool with falling tariff elasticity to minutes of usage (MoUs) – and more so as there is little room for players to cut tariffs further. We believe that extensive coverage, back-end infrastructure and strong distribution networks are considerable levers for incumbents, which cannot be replicated so easily. Network congestion on account of scarce spectrum is a key concern for incumbents; but as additional 3G spectrum would most likely be used for voice, at least initially, the issue would be addressed before competition flares up further. While some market share loss for established operators is imminent, it is unlikely to be significant given their high population coverage, established brands and ability to match value propositions of new entrants. Overall, we believe that top five telcos would continue to command a 78% (83% currently) market share even in FY11; with new entrants/ erstwhile smaller/ regional players vying with each other for the remaining market share.

Exhibit 3: Operator-wise market share

Pvt incumbents (%)	FY09	FY10E	FY11E
Bharti	24	23	22
RCOM	19	19	18
Idea (including Spice)	11	11	11
Total private incumbents (including others)	80	79	74
Players in expansion mode/ New players	5	8	14
Total private players	86	87	88
PSU players	14	13	12
Total	100	100	100

Source: TRAI data, IDFC-SSKI Research

#### □ Consolidation imminent but regulations not conducive

While a weak long-term business case for new entrants makes consolidation in the industry imminent, regulations like a 3-year lock-in period for promoters' equity and a minimum three years' timeframe (from the effective date of the licence) before any merger approvals can be granted would delay the process. Further, a strong strategic and financial backing would also mean higher resilience on the part of new entrants. In the near term, this would result in a high-decibel and cluttered market.

A 3-year lock-in period for promoters' equity and minimum 3 years' window since date of licence before a merger approval to delay consolidation

# We estimate a 10% compounded annual drop in industry ARPU over FY09-11

#### Despite lower ARPU, RCOM generates higher EBITDA/ min compared to Bharti and Idea

#### Hardly any scope to cut costs as MoUs cease to exhibit much elasticity

#### No significant revenue accretion expected from 3G services though investments will be hefty

#### MARGIN PRESSURES NOT OVER YET; 3G TO DELAY FCF GENERATION

#### ☐ MoU elasticity tapering off; ARPU to decline over FY09-11E

We expect a spurt in competitive intensity to result in lower realizations due to higher free minutes being offered even if tariffs are not cut per se. Further, the ARPU profile of incremental subscribers, as is evident from new circle ARPU of players in expansion mode, is likely to be at a steep discount to the industry average, leading to further tailwinds on profitability. We expect a 12.2% compounded annual drop in core ARPU for the industry (rental + call charges) over FY09-11 – led by a 4.8% drop in blended MoUs, 7.8% drop in tariff and the remaining due to the impact of rising share of pre-paid as also of B and C circles in the subscriber mix. After factoring in our estimate for roaming and VAS (including SMS) income, we estimate a 10% drop in industry ARPU over FY09-11.

#### ☐ Minute-based KPIs assume higher relevance as a profitability metric

India remains pre-dominantly a voice-based market with incremental growth targeted from the price-sensitive rural/ semi-urban areas, where usage profile is considerably lower. Telecom operators typically target the cumulative minutes-usage potential for evaluating investments in a particular area, fully aware that MoUs of a particular subscriber reach full potential only after 3-5 quarters. Also, the incidence of multiple-SIM ownership is now well-established and this distorts the ARPU comparison. These factors lead us to believe that minute-based KPIs are now more important than a traditional parameter like ARPU. For example, RCOM's wireless ARPU declined at a 25% compounded annual rate over the last two years, while its EBIDTA/ min dropped at a lower pace of 13%. Also, while RCOM's Q1FY10 ARPU of Rs210 is at a steep discount to that of Bharti (Rs278) and Idea (Rs232), its EBIDTA/ min of Re0.22 is at a premium to Bharti's Re0.19/min and Idea's Re0.16/min.

#### ☐ Wireless margins will remain high but are trending down

With the wireless industry witnessing a transformation from being 'highly competitive' to 'hyper competitive' and a tapering net additions run-rate, operators may not be able to substantially cut down on their subscriber acquisition/ retention costs as well as other selling and marketing costs. While multiple-SIM ownership and lower usage of incremental subscribers are likely to pull down MoUs, realizations would decline further due to competitive pressure. With MoUs no longer exhibiting elasticity to tariffs, margin levers appears to be exhausting for telecom operators. Overall, we build a 7-8% drop in revenue/ min across our universe with limited cost benefits expected from here. Resultant, we expect EBIDTA/ min to drop 6-9% over FY09-11. The incremental drop in EBITDA/ min is likely to be the lowest for Idea owing to its declining losses in newer circles. We expect Idea to report the strongest EBIDTA CAGR of 28% among peers over FY09-11.

#### □ 3G overbidding unlikely; upfront capex to delay free cash for telcos

While international experience suggests that 3G ARPU can be 30-40% higher than 2G, large-scale migration has usually been through a sharp reduction in handset costs/handset subsidies as also development of strong platforms for both online content and applications like e-commerce. Our estimates build in the proposed pan-India reserve price of Rs40.4bn as the cost of a 3G license and incremental capex of Rs40bn in FY10 and FY11 for Bharti and RCOM. In case of Idea, we factor in that it would bid for 3G licenses in only metros and A Circles. We expect 3G investments to be frontended without significant revenue accretion in the near term and our estimates build

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in 5% migration to 3G in metros by FY11. Resultant, while we expect Bharti to generate significant FCF only in FY11, we do not see RCOM and Idea generating much free cash in the year.

Exhibit 4: Free cash flows for Bharti, RCOM and Idea

(Rs bn)	FY09	FY10E	FY11E
Bharti Airtel			
CF from operations	139	152	169
Increase in WC	(19)	10	(17)
Capex+Investments in subs	(140)	(162)	(126)
FCF	(20)	1	26
Reliance Communications			
CF from operations	88	88	99
Increase in WC	(16)	(50)	(34)
Capex+Investments in subs	(198)	(143)	(107)
FCF	(126)	(105)	(42)
Idea Cellular			
CF from operations	23	32	39
Increase in WC	1	7	(6)
Capex+Investments in subs	(99)	(82)	(61)
FCF	(75)	(43)	(28)

Source: Company data, IDFC-SSKI Research

#### ☐ Muted earnings outlook for Bharti and RCOM; Idea stands out

We estimate revenue CAGR of 12% and 17% respectively for Bharti and RCOM over FY09-11, led by 18% and 21% CAGR respectively in EOP subscribers. Though we estimate EBIDTA CAGR of 10.5% and 14.7% for Bharti and RCOM respectively, earnings are likely to remain muted for them impacted by higher depreciation and interest charges (1.4% earnings CAGR for Bharti and compounded annual decline of 10.4% for RCOM). In contrast, led by a strong 38.7% growth in average subscribers, we expect Idea to post an EBIDTA CAGR of 28% and earnings CAGR of 20%. Our estimates factor in launch of 3G services in H2FY11, and the resultant increase in depreciation and interest charges related to 3G investments.

Exhibit 5: Snapshot of key estimates – Idea to post strong performance

	•	01		
Particulars		Bharti	RCOM	Idea
Subscriber base (m)	Mar-09	94	73	43
	Mar-10E	120	95	59
	Mar-11E	131	107	68
Revenue (Rsbn)	Mar-09	370	229	101
	Mar-10E	423	269	130
	Mar-11E	464	313	158
EBITDA Margin (%)	FY09	41.0	40.5	27.9
	FY10E	40.7	39.9	28.5
	FY11E	39.9	39.1	29.4
EPS (Rs)	FY09	25.5	22.2	3.1
	FY10E	24.8	17.6	4.0
	FY11E	26.2	17.8	4.4
Revenue CAGR (%)	FY09-11E	12.0	16.7	24.8
EBITDA CAGR (%)	FY09-11E	10.5	14.7	28.0
EPS CAGR (%)	FY09-11E	1.4	(10.4)	19.5
Course, IDEC CCVI Decearch				

Source: IDFC-SSKI Research

We expect Idea to post an EBIDTA CAGR of 28% and earnings CAGR of 20% over FY09-11

RCOM has received shareholders' permission for equity raising (up to 25% dilution)

#### ☐ 3G investments may mandate equity infusion for RCOM

After factoring in potential 3G investments in the near term, we estimate RCOM's adjusted gearing (adding estimated equipment payables) to increase from 0.9x (reported net gearing of 0.6x) in FY09 to 1x in FY11. Returns from 3G investments are likely to be negligible in the near term with an adverse impact on return ratios and debt servicing ratios. Further, RCOM would also need to fund a potential \$1.6bn FCCB redemption liability in FY12. Resultant, we believe 3G investments may mandate equity infusion for RCOM. The company has already received shareholders' permission for fund raising by way of issue of equities (up to 25% dilution).

#### **TOWERS: IMPROVING ECONOMICS**

#### ☐ Tenancy rates for tower companies set to improve

We estimate utilization rate of telecom towers to increase from 48% to 69% in 3-5 years Tenancy ratios for towers owned by incumbents and independent tower companies are likely to rise on the back of roll-out plans of new entrants/ players in expansion mode as well as based on potential tenancy demand for 3G and Wimax. On the other hand, the pace of tower addition has also witnessed a considerable slowdown over the last 2-3 years. Overall, we estimate that utilization rate of telecom towers can potentially increase from 48% to 69% in 3-5 years - this implies an increase in blended tenancy rate to 2.1x over this period (1.4x currently). Economics of tower business are highly levered to tenancy rates, and we believe profitability and return ratios of tower companies are set to improve considerably with improving tenancy.

#### Though most of the tower tenancy is currently from owners, sharing has been picking up

#### ☐ Industry consolidating; but valuations at a discount to precedents

Unlike in the US where almost 2/3<sup>rd</sup> of the towers are owned by independent tower companies, Indian tower assets are largely (93%) owned by telecom operators. The spin-off of tower assets by most tower companies was largely seen as a good methodology to unlock value, but doubts persisted on whether incumbents would be willing to share them with new operators. Access to tower infrastructure would mean a faster roll-out by new players and market share loss for incumbents. Even for Indus, the largest tower company in India, most of the tenancy remains from its owners. The recent Reliance-Etisalat tower sharing agreement, however, proves that operators now believe that market share would find its own way and stresses the importance of considering telecom towers as a separate revenue stream. However, it would require a couple of more precedents to address investor concerns and infuse confidence that there could be serious independent revenue streams from these operator-owned assets.

We have valued Indus at an EV/ tower of Rs4m

The tower industry is in the midst of a consolidation wave (Quippo-Tata Teleservices merger, ATC acquiring stake in Xcel Telecom, etc). However, valuations are currently pegged at a 30-50% discount to those witnessed a couple of years ago. We believe that valuations have now reached more rational levels and are discounting visible cash flows rather than anticipated cash flow streams. We have valued Indus (tower base of 120,000 assumed in FY10) at Rs480bn, which implies an EV/ tower of Rs4m and EV/ FY11 EBIDTA of 9.4x. In comparison, ATC's valuation stands at EV/ CY09 EBIDTA of 14.6x and EV/ CY10 EBIDTA of 13.3x, and Crown Castle's at 14.6x and 13.4x respectively. Our valuation translates into a proportional equity value of Rs46 for Bharti Airtel and Rs19 for Idea Cellular.

Recent underperformance has made valuations attractive...

#### We believe DCF best captures the transition through the industry's lifecycle from a hyper-growth phase to maturity

#### VALUATIONS ATTRACTIVE, BUT SECTOR CONCERNS TO RESTRICT A REBOUND

Telecom stocks have underperformed in the recent rally, reflecting an underlying multiple correction on the back of regulatory uncertainty, increasing competitive intensity and a tapering earnings growth trajectory. We believe that valuations are now attractive at FY11E EV/EBIDTA (adjusted for estimated equipment payables) of 7.7-8.1x, particularly considering that we expect an EBITDA CAGR of 10.5-28% for our coverage universe over FY09-11. On the other hand, capex outlook for incumbents is clearly moderating (even with 3G associated cash flows) and FCF visibility appears to be strong beyond FY12. However, we also believe that the din around competition, and the associated impact on operators' profitability, is unlikely to settle down in the foreseeable future and that should keep earnings multiples from rebounding even as we recognize the strong incumbency advantage. The fact that profitability and returns (RoE) on an incremental subscriber have dropped considerably should make a strong case for incumbents and consolidation. Consolidation would be positive for industry valuations in general, but more for an acquired company as we believe the strategic premium is unlikely to narrow.

#### □ Why value on DCF? Expect 16-24% returns on March 2010E price

Earnings multiples generally also reflect growth expectations at various stages and multiples would likely trend downwards over a period of time as the industry moves from being a growth proxy to being a defensive/ utility. Traditional valuation parameters would change over the next few years, reflecting the transition phase of the industry. Even as DCF suffers from inherent issues, particularly visibility of parameters in the terminal year, we believe DCF would best capture the transition through the industry's life-cycle from a hyper-growth phase to maturity.

We re-initiate coverage on the Indian telecom space with a positive bias. Our DCF-based target prices imply 16-24% returns on stocks at a target adjusted EV/EBITDA of 8.3-9.6x. We prefer Idea over others owing to its stronger growth outlook and potential for a valuation premium being attached to the stock as it is a pure mobile play and an apt candidate for strategic M&As.

Exhibit 6: Key financials, valuations and performance indicators

Particulars (Rs bn)	FY07	FY08	FY09	FY10E	FY11E	CA	GR (%)
						FY07-09	FY09-11E
Revenues							
Bharti	185	270	370	423	464	41.3	12.0
RCOM	145	191	229	269	313	25.9	16.7
Idea	44	67	101	130	158	52.5	24.8
EBITDA							
Bharti	75	114	152	172	185	42.7	10.5
RCOM	57	82	93	107	122	27.4	14.7
Idea	15	23	28	37	46	39.2	28.0
PAT	44.0	67.0	06.6	04.2	00.2	EO 4	1 1
Bharti	41.8	67.2	96.6	94.3	99.3	52.1	1.4
RCOM	32.0	49.8	45.9	36.4	36.8	19.8	(10.4)
Idea	5.0	10.4	9.0	12.3	13.6	33.9	23.0
EPS (Rs) Bharti	11.0	17.7	25.5	24.8	26.2	51.9	1.4
RCOM	15.7	24.2	25.5 22.2	24.8 17.6	26.2 17.8	19.2	
Idea	2.2	24.2 4.0	3.1	4.0	4.4	19.2	(10.4) 19.5
Shares o/s (In m)	2.2	4.0	3.1	4.0	4.4	10.0	19.0
Bharti	3,792	3,796	3,796	3,797	3,797		
RCOM	2,044	2,064	2,064	2,064	2,064		
Idea	2,593	2,635	3,100	3,100	3,100		
EBITDA margins (%)	2,000	2,000	0,100	0,100	0,100		
Bharti	40.2	42.1	41.0	40.7	39.9		
RCOM	39.5	43.0	40.5	39.9	39.1		
Idea	33.5	33.7	27.9	28.5	29.4		
EBITDA growth (%)							
Bharti	69.3	52.6	33.4	13.5	7.5		
RCOM	133.4	43.3	13.3	15.6	13.7		
Idea	37.1	55.0	24.9	30.5	25.6		
EPS growth (%)							
Bharti	75.7	60.6	43.7	(2.4)	5.3		
RCOM	622.5	54.8	(8.3)	(20.7)	1.2		
Idea	132.9	81.6	(22.3)	28.8	10.9		
Net debt-to equity (x)*							
Bharti	0.6	0.5	0.4	0.2	0.1		
RCOM	0.3	0.7	0.9	1.0	1.1		
Idea	1.3	2.2	0.4	0.7	8.0		
RoE (%)							
Bharti	36.3	37.0	35.8	25.0	20.4		
RCOM	31.4	20.5	13.9	9.2	8.5		
Idea	28.6	32.5	10.4	8.5	8.7		
RoCE (%)	<b>6</b> - 6	00.0	00 (	<b>.</b>	40.0		
Bharti	27.9	28.3	26.4	21.8	18.2		
RCOM	18.1	12.6	8.8	8.0	7.8		
Idea	13.2	15.7	8.7	7.1	7.8		
Capex	04	140	1.40	4.45	405		
Bharti	91	142	140	145	105		
RCOM	153	197	198	145	107		
Idea Capex / sales (%)	48	52	77	81	60		
Bharti	34	20	22	31	21		
RCOM	34 80	38 86	33 73	46	31		
NOOM	71	51	73 59	51	36		

<sup>\* -</sup> Net Debt adjusted for estimated equipment payables

Key financials, valuations and performance indicators

Key financials, valuations and peri							
Particulars (Rs bn)	FY07	FY08	FY09	FY10E	FY11E	CAC	SR (%)
						FY07-09	FY09-11E
Market capitalization							
Bharti	1,457	1,457	1,457	1,457	1,457		
RCOM	526	526	526	526	526		
Idea	226	226	226	226	226		
Cash & marketable securities	0		40	0.5	444		
Bharti	9	55	49	85	141		
RCOM	137	116	110	35	31		
Idea Enterprise value*	17	5	51	15	16		
Bharti	1,543	1,560	1,589	1,546	1,503		
RCOM	586	725	857	952	1,044		
Idea	268	304	283	332	359		
P/e (x)	200	004	200	002	000		
Bharti	34.8	21.7	15.1	15.4	14.7		
RCOM	16.3	10.5	11.5	14.4	14.3		
Idea	33.4	18.4	23.7	18.4	16.6		
EV/ EBITDA (x)*	30.1		_0		. 0.0		
Bharti	20.7	13.7	10.5	9.0	8.1		
RCOM	10.2	8.8	9.2	8.9	8.5		
Idea	18.3	13.4	10.0	9.0	7.7		
Book Value (Rs/ share)							
Bharti	36	59	83	116	141		
RCOM	100	137	183	201	219		
Idea	12	13	47	49	53		
Price / Book (x)							
Bharti	10.6	6.5	4.6	3.3	2.7		
RCOM	2.6	1.9	1.4	1.3	1.2		
Idea	5.8	5.4	1.5	1.5	1.4		
EV/ Sales (x)*							
Bharti	8.3	5.8	4.3	3.7	3.2		
RCOM	4.0	3.8	3.7	3.5	3.3		
Idea	6.1	4.5	2.8	2.6	2.3		
Key KPIs							
Subscribers (end of period) (m)							
Bharti	37	62	94	120	131	59.0	18.0
RCOM	28	46	73	95	107	61.1	21.4
Idea	14	24	43	59	68	75.2	25.4
Reported ARPU (Rs/month)	446	200	225	272	240	(44.6)	(40.4)
Bharti RCOM	416 371	366 347	325	273	249	(11.6) (17.1)	(12.4)
			255	204	192	` ,	(13.2)
Idea MoU (min/month)	326	287	265	226	215	(9.7)	(9.9)
Bharti	448	478	508	479	461	6.5	(4.7)
RCOM	503	469	406	360	352	(10.2)	(6.9)
Idea	363	383	423	401	399	7.9	(2.8)
Realization (Rs/min)	000	300	720	701	300	7.5	(2.0)
Bharti	0.93	0.77	0.64	0.57	0.54	(17.0)	(8.1)
RCOM	0.74	0.74	0.63	0.57	0.54	(7.7)	(6.8)
Idea	0.91	0.76	0.63	0.57	0.54	(16.9)	(7.2)
EBIDTA/min (Rs)						. ,	, ,
Bharti	0.35	0.30	0.20	0.18	0.17	(24.7)	(6.4)
RCOM	0.27	0.30	0.24	0.21	0.20	(6.1)	(9.0)
Idea	0.32	0.26	0.17	0.15	0.15	(26.9)	(6.0)
* - Net Debt adjusted for estimated equipme	nt navablac						

<sup>\* -</sup> Net Debt adjusted for estimated equipment payables

#### **VALUATIONS & VIEW: LIMITED DOWNSIDE RISK**

We believe valuations of Indian telecom stocks, at 7.7-8.1x FY11E EV/ EBITDA, are attractive considering a strong 14% EBITDA CAGR over FY09-11E, moderating capex, high FCF visibility beyond FY12 and improving economics of tower business. Having said this, we believe noise around competition and resultant concerns on profitability are unlikely to dissipate in the foreseeable future and that should prevent any sharp rebound in earnings multiples. We have used the DCF methodology to arrive at a fair value for our telecom universe and set a price target of Rs445 for Bharti, Rs298 for RCOM and Rs90 for Idea. We prefer Idea on the back of superior earnings growth trajectory, market share scale-up and pan-India presence expected soon. Our target price implies a 24% stock upside for Idea, the highest in our universe.

#### □ Change in valuation multiples reflect underlying fundamentals

**Bharti:** With easing liquidity and expectations of an economic recovery gaining ground, there has also been a reversal in valuation premium gained by Bharti post October 2008 – a phase that coincided with a severe liquidity crunch and focus on balance sheet health. Bharti's current rolling 12-month forward valuations of 16.2x earnings and 9.2x adjusted EV/EBIDTA are at a discount to its historic valuation range. We believe that Bharti's diversified business model, strong and experienced management team and high visibility on FCF restrict valuation downside for the stock. Having said this, a sharp deceleration in earnings growth (CAGR of 1.4% over FY09-11 vis-à-vis 52% CAGR over FY07-09), along with escalating competitive intensity, would cap a rebound in valuations to their historic peaks. We, however, expect the stock to continue trading at a premium to peers.

**RCOM:** The stock currently trades at rolling 12-month forward valuations of 15.6x earnings and 9.1x adjusted EV/EBIDTA, and these valuations are at the lower end of its historical valuation range. Valuations, however, have recovered from the October-08 to March-09 trough levels and the discount to Bharti since October 2008 has also narrowed significantly (2-10% at present). We believe this partial recovery has been led first by easing of the post-October-08 liquidity crunch and then by lower-thanestimated capex incurred in FY09 as well as lower capex guidance for FY10 (thus partially alleviating concerns on rising balance sheet stress).

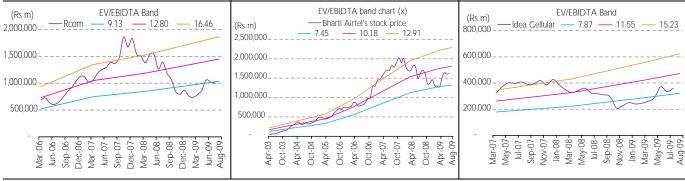
**Idea:** Based on our estimates, Idea currently trades at FY10E EV/EBIDTA of 9x. Notably, the discount to Bharti's valuations witnessed in CY08 has narrowed significantly in the last few months (from ~20% to ~3%). Similarly, Idea's valuation discount to RCOM has also narrowed and Idea currently trades on par with RCOM on a rolling 12-month forward basis. We believe impressive market share scale-up in Mumbai and Bihar circles, steady progress towards becoming a pan-India mobile operator and equity infusions (which have significantly lowered its leverage) have been the key catalysts for Idea's valuation recovery. Idea offers the fastest EBITDA CAGR of 28% over FY09-11E, and hence we believe the multiple re-rating is justified.

Bharti's current rolling 12month forward valuations at a discount to its historic valuation range

RCOM's valuation discount with Bharti has narrowed to 2-10% since October 2008

Idea offers the fastest EBITDA CAGR of 28% over FY09-11E

Exhibit 7: EV/EBIDTA Band chart for Bharti, RCOM and Idea



Source: IDFC-SSKI Research

Valuations of FY11E 7.7-8.1x adjusted EV/ EBITDA are attractive given the strong EBITDA CAGR

#### ■ Valuations attractive on FY11E numbers though a re-rating is unlikely

Overall, telecom stocks have underperformed in the recent rally – reflecting an underlying multiple de-rating in general on the back of regulatory uncertainty, increasing competitive intensity and tapering earnings growth trajectory. Noise around competition and the associated impact on profitability is unlikely to dissipate in the foreseeable future, and that should keep earnings multiples from rebounding even as we argue that incumbency advantage is very strong.

Having said that, stocks are now available at attractive valuations of FY11E 7.7-8.1x adjusted EV/ EBITDA, particularly in the backdrop of 14% EBITDA CAGR expected over FY09-11E (our coverage universe), moderating capex outlook (even with 3G associated cash flows) and high FCF visibility. Consolidation is imminent (though regulations are not conducive) and would be positive for valuations in general and for the acquisition target in particular as the strategic premium is expected to remain high.

**Exhibit 8: Valuations based on DCF** 

Company	CMP	Core	Tower business	Target	Upside		FY10E		FY11E	Target
		DCF value	value	price	(%)	PE (x)	EV/ EBITDA (x)	PE (x) E	V/ EBITDA (x)	multiple on
	Rs/share	Rs/share	Rs/share	Rs/share						FY11E
									E'	V/ EBITDA (x)
Bharti	384	399	46	445	15.9	15.4	9.0	14.7	8.1	9.6
RCoM	255	279	19	298	17.0	14.4	8.9	14.3	7.9	8.6
Idea	73	71	19	90	24.0	18.4	9.0	16.6	7.7	8.3

Higher tenancy rates present a viable business case for planned tower additions by the industry

#### ☐ Tower tenancy looking up; valuing Indus at Rs480bn

Though capacity utilization rates are currently sub-optimal, service roll-outs by new entrants could potentially drive them up from ~48% at present to ~69% in 3-5 years. While this translates into higher tenancy rates in the near term, it also presents a viable business case for planned tower additions by the industry. With profitability highly levered to tenancy rates, return profile of tower companies too is set to improve. Valuations of tower companies, at EV/ tower of Rs4.8m-7.2m as suggested by the recent M&A transactions, however, have been at a 30-50% discount to their precedents (Rs10m-12m). We value Indus at EV of Rs480bn with proportional value accretion of Rs46/share for Bharti and Rs19/share for Idea. We value Reliance Infratel at EV of Rs186bn with contribution from external tenancies valued at Rs19/share of RCOM.

Exhibit 9: Network roll-out plans by operators to drive capacity utilization for tower companies

	<u> </u>
Particulars	
Total tower base at present	289,323
Total tenancy capacity	795,308
Current tenancy	399,359
Capacity utilization (%)	50.2
Blended tenancy (x)	1.4
Expanded tower base (based on announced/estimates tower additions)	412,812
Expanded tenancy capacity	1,289,264
Potential demand for 2G expansions over 3-5 years (based on roll-out plans)	396,000
Implied market for 2G tenancy slots in 3 years	795,359
Potential demand for 3G expansions over 3 years	90,000
Implied total market for tenancy slots	885,359
Implied utilization on the current base (%)	69
Blended tenancy (x)	2.1

Source: GTL Infrastructure Q4FY09 presentation, company reports, IDFC-SSKI Research

Company	Entity valued	DCF based EV of	Contribution per share
		the entity (Rs bn)	(Rs/ share) to SOTP
Bharti Airtel	Indus	480	Rs46
RCOM	Reliance Infratel	186	Rs19*
Idea	Indus	480	Rs19

Source: IDFC-SSKI Research \* - proportionate value for external tenancies only

#### □ Prefer DCF method over the traditional valuation methodology

Earnings multiples generally reflect growth expectations at various stages and telecom multiples could likely trend downwards over time as the industry moves from being a growth proxy to being a defensive/ utility. Traditional valuation parameters would therefore change over the next few years, reflecting the transition phase of the industry. Even as DCF suffers from inherent issues, particularly visibility of parameters in the terminal year, we believe DCF best captures the transition of telecom companies through the industry life-cycle from a hyper-growth phase to moving towards maturity.

#### ☐ We see 16-24% upside based on our DCF-based price targets

We re-initiate coverage on the Indian telecom space with a positive bias and DCF-based price target on Bharti, RCOM and Idea Cellular. Our DCF valuation assumes 3G licenses fee and roll-out related capex to be executed by Q3FY11. We have valued Bharti and Idea's share in Indus based on DCF value of Indus. Similarly, we separately value the cash flows from third-party tenancy in Reliance Infratel. Our DCF price target offers the highest return for Idea at 24% followed by RCOM (17%) and Bharti (16%) from CMP.

#### ☐ Bharti – 12-month price target of Rs445

Our 12-month price target of Rs445 per share for Bharti reflects core business value of Rs399/share and Rs46/share for the 42% stake in Indus held by its 89% subsidiary Bharti Infratel. Our DCF calculation assumes a WACC of 11.4% and terminal growth rate of 3.5%. Our target EV/EBIDTA of 9.6x FY11E roughly compares with the mid-to-lower range of historic one-year forward valuations. With the stock offering 16% upside from current levels, we initiate coverage on Bharti with Outperformer.

Our DCF valuation assumes 3G licenses fee and roll-out related capex to be executed by Q3FY11

Bharti offers 16% upside on CMP

Exhibit 10: Bharti - core business DCF value of Rs399/share

(D. )	E)/40E	EVAAE	EVACE	E)/40E	EVALE	EVOOF
(Rs m)	FY10E	FY11E	FY12E	FY13E	FY14E	FY20E
EBITDA	172,222	185,103	199,016	216,927	236,451	365,596
Current tax	(18,041)	(19,954)	(23,270)	(29,369)	(34,922)	(73,687)
Capex	(145,012)	(105,000)	(85,000)	(78,817)	(78,574)	(76,968)
Change in WC	10,071	(16,917)	3,425	(26,136)	2,503	3,563
FCF	19,241	43,232	94,171	82,606	125,457	218,505
WACC (%)	11.4					
PV of projection period	713,207					
Terminal growth rate (%)	3.5					
Terminal value	2,859,075					
Terminal EV/E	7.8					
PV of terminal value	871,083					
TV as % of EV	54%					
Total Enterprise value	1,603,531					
Net debt	88,875					
Equity value	1,514,656					
Value per share (Rs)	399					

Source: IDFC-SSKI Research

**Exhibit 11: Sensitivity analysis** 

WACC / g (x)	2.5%	3.0%	3.5%	4.0%	4.5%
10.4%	430	449	470	494	522
10.9%	399	414	432	452	475
11.4%	371	384	399	416	435
11.9%	347	358	370	384	400
12.4%	325	334	345	357	370

Source: IDFC-SSKI Research

#### □ RCOM – a 12-month price target of Rs298

RCOM offers 17% upside from CMP

Our 12-month price target on RCOM is based on Rs279/share value for its core business and Rs19/share from our estimate of Reliance Infratel's external tenancies going forward. Our target FY11E EV/EBIDTA of 8.6x compares with the mid-to-lower band of the stock's historic one-year forward valuation range. This is also at  $\sim\!7\%$  discount to Bharti's current 12-month forward EV/ EBIDTA of 9.2x. We reinitiate coverage on RCOM with an Outperformer rating and a DCF-based price target of Rs298 – an upside of 17% from the current levels.

Exhibit 12: RCOM - core business DCF value of Rs279/share

(Rs m)	FY10	FY11	FY12	FY13	FY14	FY20
EBITDA	107,392	122,086	134,774	150,947	163,885	250,436
Current tax	(1,788)	(6,984)	(8,191)	(12,056)	(16,302)	(50,021)
Capex	(143,461)	(107,000)	(80,000)	(77,630)	(71,161)	(50,087)
Change in WC	(49,540)	(33,738)	42,634	(9,102)	(13,722)	2,238
FCF	(87,397)	(25,635)	89,216	52,159	62,700	152,566
WACC (%)	11.5					
PV of projection period	420,876					
Terminal growth rate (%)	3.5					
Terminal value	1,973,821					
Terminal EV/E	7.9					
PV of terminal value	596,052					
TV as % of EV	59%					
Total Enterprise value	1,002,047					
Net debt	426,112					
Equity value	575,936					
Value per share (Rs)	279					
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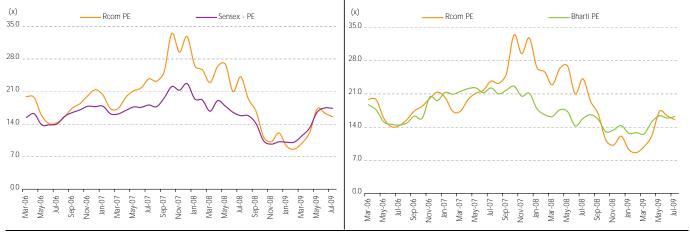
Source: IDFC-SSKI Research

Exhibit 13: Sensitivity of DCF calculations w.r.t. terminal growth rate and WACC

WACC / g(x)	2.5%	3.0%	3.5%	4.0%	4.5%
10.5%	318	340	366	396	431
11.0%	279	298	320	344	373
11.5%	244	261	279	300	323
12.0%	214	228	243	261	281
12.5%	187	199	212	227	244

Source: SSKI Research

Exhibit 14:RCOM trades at only a marginal discount to Bharti; also trades at a discount to the Sensex



Source: Company data, IDFC-SSKI Research

#### Idea offers the highest 24% upside from CMP

#### ☐ Idea – 12-month price target of Rs90

Our 12-month price target of Rs90 per share for Idea reflects core business value of Rs71/share and Rs19/share for its 16% stake in Indus held through its 80% subsidiary ABTL (effective stake of 12.8%). Our DCF calculation assumes a WACC of 11.5% and terminal growth rate of 3.5%. Our target price implies an FY11E EV/EBIDTA of 8.3x, which is at ~10% discount to Bharti's 12-month forward valuation. We initiate coverage on Idea with an Outperformer rating with potential upside of 24% in the stock price; highest in our coverage universe.

Exhibit 15: Idea Cellular - core business DCF value of Rs71/share

EXTIDIT 13: Idea Celiulai – Core pusitiess DCF Value of RS7 (/Stiale						
(Rs m)	FY10	FY11	FY12	FY13	FY14	FY20
EBITDA	36,996	46,463	51,799	58,014	64,976	99,291
Current tax	(1,019)	(1,458)	(1,672)	(2,486)	(4,223)	(16,383)
Capex	(81,000)	(60,000)	(45,000)	(41,770)	(38,289)	(28,369)
Change in WC	7,014	(6,300)	(7,095)	(545)	1,243	1,004
FCF	(38,009)	(21,295)	(1,969)	13,212	23,706	55,543
WACC (%)	11.5					
PV of projection period	109,626					
Terminal growth rate (%)	3.5					
Terminal value	718,587					
Terminal EV/E	7.2					
PV of terminal value	216,998					
TV as % of EV	66%					
Total Enterprise value	326,624					
Net debt	105,778					
Equity value	220,846					
Value per share (Rs)	71					
Source: IDEC-SSKI Research						

Source: IDFC-SSKI Research

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Exhibit 16: Sensitivity of DCF calculations w.r.t. terminal growth rate and WACC

WACC / g(x)	2.5%	3.0%	3.5%	4.0%	4.5%
10.5%	80	86	92	99	108
11.0%	71	76	81	87	94
11.5%	63	67	71	76	82
12.0%	56	59	63	67	72
12.5%	49	52	55	59	63

Source: IDFC-SSKI Research

Exhibit 17: Idea's re-rating is sustainable - valuation (EV/EBIDTA) discount to Bharti and RCOM has narrowed



Source: IDFC-SSKI Research

**Exhibit 18: Global comparative valuations** 

Company (%)	EBIDTA margin**	RoE	RoCE	PE* (x)	EV/EBIDTA* (x)
Bharti Airtel	41	35.8	26.4	16.2	9.2
RCOM	40	13.9	8.8	15.6	8.9
Idea	28	10.4	8.7	19.2	9.0
China Mobile	53	27.6	25.7	13.5	6.0
China Unicom	46	17.6	14.9	25.7	3.8
Hutchison Telecom	34	N/A	35.4	12.1	3.7
Mobile one	39	70.6	32.5	10.3	5.6
SingTel	30	16.6	13.5	12.7	11.0
Telkomsel	59	31.2	25.6	13.6	5.2
Telenor	31	17.4	12.8	9.4	5.1

Source: IDFC-SSKI Research, Bloomberg estimates; \*1-yr forward \*\* - most recent year ended

#### INDIAN WIRELESS MARKET: MORE STEAM LEFT

Despite a strong run in the last few years, we believe the Indian wireless market still offers headroom for expansion driven by a favorable demographic profile, improving coverage, sharp decline in cost of ownership and low rural penetration of just 15%. Going forward, faster penetration, led by network expansions, would be a positive fall-out of competition. Also, falling cost of handset ownership would address the issue of lower prosperity levels. We estimate wireless penetration to increase to 49% by FY11 with rural penetration increasing to 27% and subscriber base hitting 592m. Having said this, we recognize that increasing multiple-SIM ownership and potentially higher inactive subscribers in the system are a key risk to our subscriber estimates. We expect a rise in churn rates as operators tighten their norms for recognizing inactive connections.

#### STRONG GROWTH POTENTIAL BUT ESCALATING COMPETITIVE INTENSITY

Despite a 55% CAGR over the last two years, the Indian wireless industry offers headroom for further growth on the back of a favorable demographic profile, improving network coverage as also lower regulatory and ownership costs. Competitive intensity, however, is headed for a spurt post the issue of new telecom licenses. Over the next 12-18 months, we expect the number of players in each circle to increase from 5-6 at present to 12-14.

☐ Contours of the Indian wireless telecom market

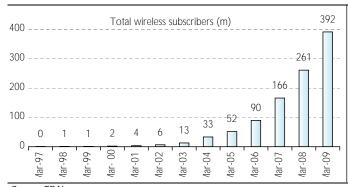
GSM subs account for ~74% of India's total wireless subscribers; prepaid form ~92% of total subscribers The mobile wireless industry has shown 64% CAGR in subscriber additions over the last three years. As of June 2009, India's total wireless subscriber base stood at 427m with a total telecom subscriber base (including fixed wire-line subscribers) of 465m. GSM subscribers account for ~74% of the total wireless subscribers and pre-paid customers form ~92% of total subscribers between both the technologies (GSM and CDMA) on a pan-India basis. Based on this subscriber base, India's wireless penetration stands at ~37% with total telecom penetration of 37% (against just 12% in 2006).

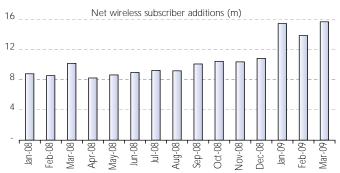
Exhibit 19: Indian wireless market - key performance indicators

Performance indicators		GSM			CDMA		GSM+CDMA
(Mar 09)	Pre-paid	Post-paid	Blended	Pre-paid	Post-paid	Blended	Blended
Share of subscribers (%)			76			24	100
MoUs (min/month)	440	1078	484	314	902	357	453
Share of outgoing min (%)	47	56	49	43	59	46	48
Tariff - (call charges+rental) per outgoing min (Rs/min)	0.8	0.8	0.8	0.5	0.8	0.6	0.7
Core ARPU (call charges+rental) (Rs/month)	181	543	205	77	381	99	179
Share of subs (%)	94	6	100	93	7	100	NA
Outgoing SMS/month/sub (Rs)	27	68	30	10	14	10	25

Source: TRAI, IDFC-SSKI Research

Exhibit 20: Wireless subscriber base – a CAGR of 64% over FY06-09

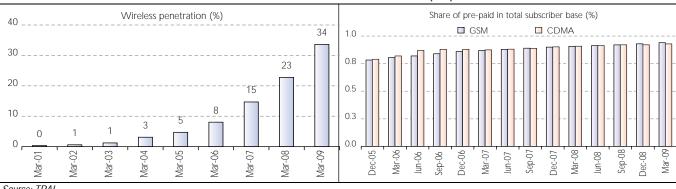




Source: TRAI

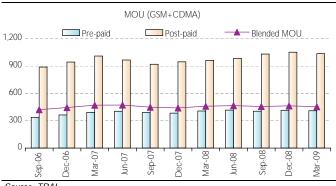
Exhibit 21: Penetration levels now at 34%...

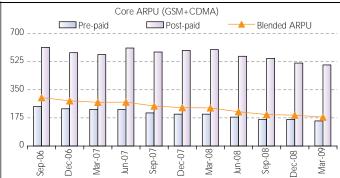




Source: TRAI

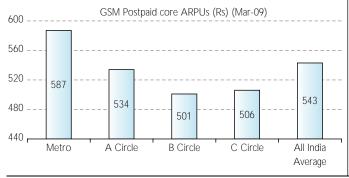
Exhibit 22: Pre-paid MoUs and ARPU are significantly lower than in post-paid segment....

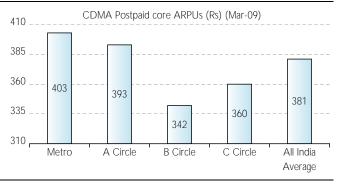




Source: TRAI

Exhibit 23: ...however, post-paid ARPU does not vary much with circle; all India average only 5-7% lower than in metros



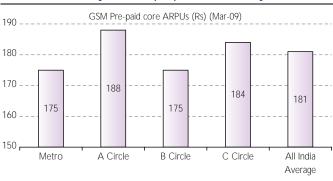


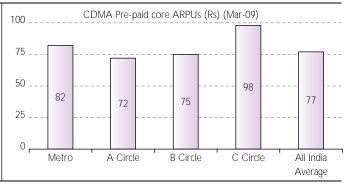
Source: TRAI

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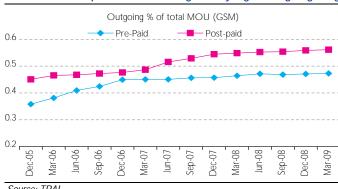
Exhibit 24: Similarly, All-India pre-paid ARPU is in sync with circle-wise numbers

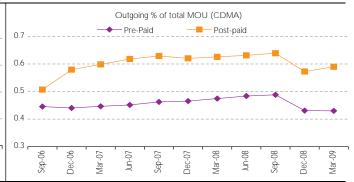




Source: TRAI

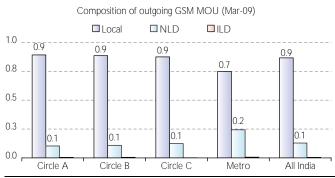
Exhibit 25: Post-paid subscribers – generally higher outgoing usage

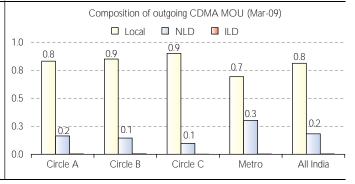




Source: TRAI

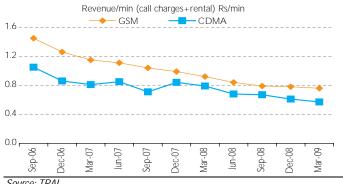
Exhibit 26: Composition of NLD and ILD - considerably lower in B and C circles

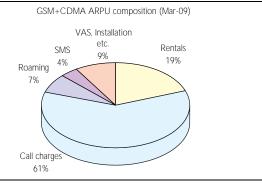




Source: TRAI

Exhibit 27: Revenue/ min has dropped 20-24% CAGR over FY06-09 due to competition and lower regulatory costs





Source: TRAI

21 AUGUST 2009

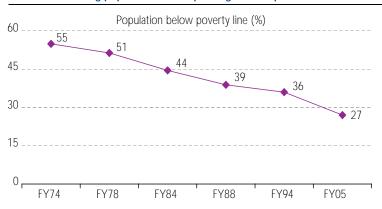
Favorable demographic profile, improving network coverage as also lower regulatory and ownership costs to drive penetration

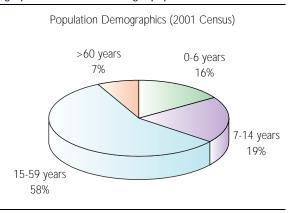
#### **□** Demand drivers in place...

The Indian telecom industry has witnessed a sharp 64% CAGR in subscriber base over FY06-09. Given the mix of favorable demographic profile, improving network coverage as also lower regulatory and ownership costs, we believe subscriber growth story has more steam left.

• **Favorable demographics:** Poverty levels have witnessed a steady decline over the last few decades – BPL population has decreased from 55% in 1973-74 to 26% in 2000. This, coupled with a favourable age profile (~65% of population in the age group >15 years as of 2000), has expanded the target population for cellular operators.

Exhibit 28: Young population and improving income profiles – favourable demographics lead to a vast target population

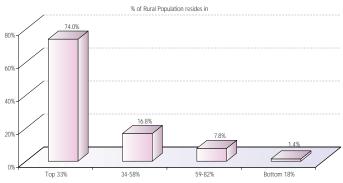




Source: Census 2001 data, CSO, IDFC-SSKI Research

Latent potential in rural India to be tapped by increasing coverage Improving coverage=higher penetration: Incumbent wireless telecom operators are expanding their rural coverage, which is expected to lead to higher telecom penetration. There are about 607,000 villages in India and the top 200,000 account for 74% of the rural population. Bharti has already expanded its network and currently boasts of 81% population coverage (presence in 414,906 noncensus towns and villages). On the other hand, BSNL has achieved coverage of 290,975 villages and 60-92% of the national/ state highways and railways network (as of February 2009), and is further expanding its rural footprint. Overall, a latent potential is yet to be tapped in rural India and increasing coverage would likely boost penetration levels.

Exhibit 29: Top 33% of Indian villages account for 74% of rural population... ....Bharti has rapidly expanded coverage





Source: TRAI Source: Company, IDFC-SSKI Research

Exhibit 30: BSNL – covering the hinterlands

Coverage areas	Cellular coverage as on Feb-09 (%)
District headquarters (nos)	618 (100%)
Total villages (nos)	290,975 (~48%)
Total town/ cities (nos)	19,971
National highways (km)	55,896 (92%)
State highways (km)	74,930 (60%)
Railway route covered (km)	42,454 (78%)

Source: Company data

#### □ ...but new telecom licenses to lead to overcrowding

Number of players in each circle likely to increase from 5-6 currently...

The Indian wireless industry currently has 5-6 players in each circle with Bharti Airtel, (Bharti) Reliance Communications (RCOM), Vodafone, Idea Cellular (Idea) and Tata Teleservices (TTSL) being the large incumbent private players and BSNL the incumbent PSU player. While most players have presence across all 23 telecom circles (geographic zones created for regulatory purposes), players like Idea are currently in the expansion phase. RCOM and TTSL, erstwhile CDMA players, recently launched their GSM services (RCOM in January and TTSL in July 2009).

Exhibit 31: Key players in the Indian wireless industry and their market share

(%)	Technology	Network presence	Subscr	iber share	Revenue share
Operator		No of circles	Jun-09	Mar-09	Mar-09
Bharti	GSM	23	24.0	24.0	29.7
RCOM*	GSM+CDMA	23	18.6	18.5	16.3
Vodafone	GSM	23	17.9	17.6	19.9
BSNL	GSM+CDMA	21	12.9	13.3	10.6
Idea (incl Spice)	GSM	17	11.0	11.0	11.4
TTSL**	GSM+CDMA	23	8.7	9.0	7.2
Aircel	GSM	18	5.1	4.7	3.2
MTNL	GSM+CDMA	2	1.1	1.1	0.8
Loop	GSM	1	0.5	0.6	0.6
Others		NA	0.4	0.2	0.3
Total			100	100	100

Source: TRAI data, IDFC-SSKI Research \* - including Reliance Telecom \*\* - phase wise GSM launch since July-09

...to 12-14 in the next 12-18 months as 121 new licenses granted to nine new players Further, the DoT has allotted a total of 121 licenses to nine players in Jan'08, taking the total number of UAS/ CMTS license holders in each circle up to 12-14. The new licensees include both erstwhile smaller/ regional players like Idea, Aircel and Loop Telecom as well as new entrants to the wireless industry like Unitech Wireless, Swan Telecom (renamed Batelco DB Realty), Sistema Shyam and S Tel. Expansion into new circles by existing players and entry of new players is likely to sharply increase the competitive intensity of the telecom industry in India going forward.

Exhibit 32: New UAS licenses awarded by DoT in January 2008

Licenses awarded	Total entry fees paid (Rs m)
22	16,685
22	16,685
9	6,846
6	251
21	14,549
21	16,263
4	4,842
13	15,370
3	90
121	91,580
	22 22 9 6 21 21 4 13

Source: DOT

Exhibit 33: Players in expansion mode

Player	Current presence	Planned expansion	Comments
Idea Cellular	GSM: 5 circles	GSM: 5 circles	Remaining launches planned by end-CY09
Aircel	GSM: 18 circles	GSM: 5 circles	Maxis (Malaysia) holds 74% equity stake
TTSL	CDMA: 23 circles	GSM: 23 circles	NTT DoCoMo infused \$2.7bn for 27.3% stake in TTSL and 20.3% stake
			in TTSL (Maharashtra). GSM service launch under Tata DoCoMo brand
Loop	GSM: 1 circle	GSM: 22 circles	Network management contract signed with ZTE

Source: Company reports, IDFC-SSKI Research

#### 592M SUBSCRIBERS BY FY11E; RURAL PENETRATION TO RISE FASTER

Led by favourable demand drivers and low rural penetration, we expect India's wireless penetration to increase to 49% by FY11. We believe the new entrants, while leading a spurt in competitive intensity, will also expand the market and accelerate growth in penetration. Our estimates imply a wireless subscriber base of 592m by FY11 (CAGR of 23% over FY09-11) with rural penetration increasing to 27% from 15% at present.

# Telcos rapidly increasing their population coverage...

...aided by sharing of active and passive infrastructure

Telcos also incentivizing marginal customers to improve penetration

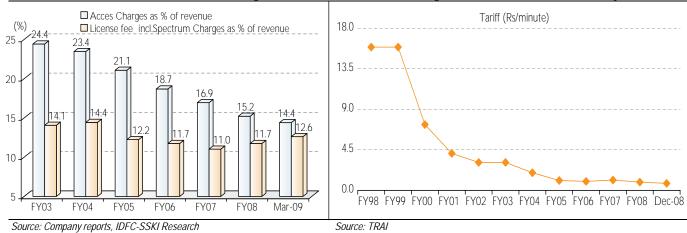
#### □ Acceleration in penetration level – a positive fallout of competition

We believe the entry of new telecom players and expansion by existing players would expand the target market. These players are likely to expand their population coverage in a manner so as to leverage the untapped potential in the country. Further, they are also likely to introduce innovative schemes to incentivize the marginal subscribers.

- Infrastructure sharing = speedier roll-outs and wider coverage: In order to reduce input cost of telecom service providers, thereby facilitating further reduction in tariff, and to enhance the tele-density including in rural areas, the DoT permitted sharing of active and passive infrastructure between service providers. The new entrants that were granted UAS licenses in 2008 are likely to roll-out their services primarily on the shared infrastructure platform, which would ensure speedy roll-outs of networks and wider coverage for these players. For example, Unitech Wireless has signed a tower sharing agreement with Tata-Quippo, which will give it access to 40,000 towers by mid-2010.
- Lower regulatory charges, increased competition = improved affordability: The government has set a target of 500m telephone connections (wireless and wireline) by 2010 and 650m by 2012. Over the years, the DoT has lowered various regulatory costs for service providers (2% reduction in license fees, abolition of ADC and reduction in interconnection charges). The DoT also 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 has led to competitive tariffs (triggered mainly by RCOM's aggressive roll-out plans).

Exhibit 34: Bharti's license fees and access charges as % of revenue have been falling Tariffs have fallen consistently



- Global experience suggests that the penetration curve is usually steep before it flattens: We have studied the wireless penetration experience and usage characteristic of two sets of economies developed countries and emerging economies (mostly Asian countries). After some initial hiccups, related mainly to high cost of handsets, high tariffs and regulatory issues, wireless penetration has risen rapidly to reach 80-120% levels in developed markets and 50-90% levels in emerging Asian economies (excluding India). The penetration curve has generally tended to be steep with flattening out only at very high penetration levels.
- Penetration rates among India's peer markets also do not appear to be constrained by their lower prosperity levels vis-à-vis the developed countries. For example, Thailand, with per capita GDP less than 1/10<sup>th</sup> of the developed countries in the sample list, has a higher telecom penetration rate. In the last two years, India has fallen behind countries like Pakistan and Vietnam with comparable per capita GDPs. We see a sustained rise in penetration levels in India in the near term with potential tele-density rates to be attained sooner than later.

Exhibit 35: Wireless penetration curves have generally tended to be steep

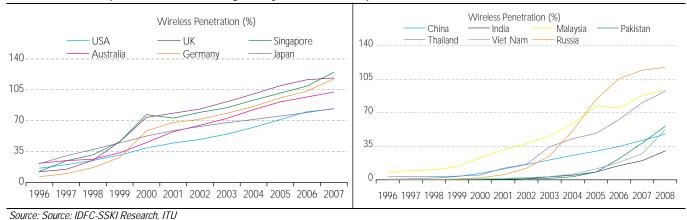
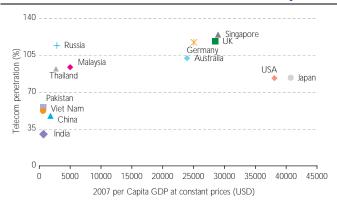
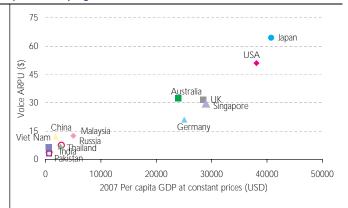


Exhibit 36: Penetration rates have not been constrained by the developed-developing chasm





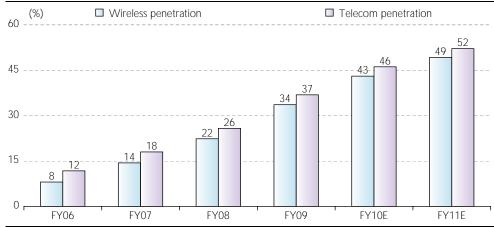
Source: Source: IDFC-SSKI Research, ITU

We estimate penetration in metro circles at 100-110% and that in A, B and C circles at 37-53% by FY11

#### **☐** We expect wireless penetration to rise to 49%...

Based on the wireless subscriber base of 415m in May 2009, we estimate India's wireless penetration at ~35% against 48-94% for Asian peers like China, Vietnam, Pakistan, Thailand and Malaysia. We estimate penetration in metro circles at 75-110% and that in A, B and C circles at 20-40%. Based on demographic considerations like population above poverty line and population in target age group, we estimate penetration potential of 37-53% in A, B and C circles by FY11. In metro circles, we arrive at a penetration potential of 100-110% by FY11 led by increasing urbanization, multiple-SIM ownership and high incidence of mobile ownership in the low income groups. Overall, we estimate wireless penetration of 49% by FY11.

Exhibit 37: Estimate 49% wireless penetration by FY11



Source: TRAI, IDFC-SSKI Research

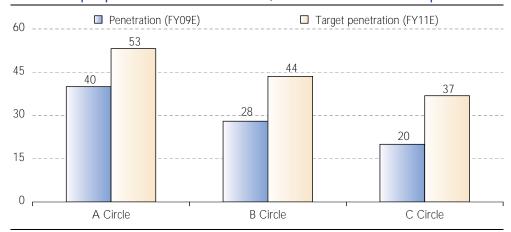
Exhibit 38: Wireless penetration rates for emerging peers

	on on an on rates for one ging	P	
	2007 per capita GDP at	BPL population	2008 wireless
	constant prices (USD)	(%)	penetration (%)
Russia	2858	18	118
Malaysia	5009	8	94
Thailand	2713	10	93
Pakistan	654	24	56
Vietnam	617	20	52
China	1811	10	48
India	686	27	30

Source: Bloomberg estimates, TRAI, IDFC-SSKI Research

We exclude the BPL population and consider only the proportion of population >15 years age as per the 2001 census Our estimate on penetration potential of each circle is based on its demographic profile (income and age profile). For our target population in each circle, we exclude the below poverty line population (2005 planning commission estimates) and consider only the proportion of population >15 years age as per the 2001 census. We use the penetration potential so computed only on an indicative basis given its limitations, i.e. inability to factor in multiple-SIM ownership and increasing migration to metros leading to a shift in demographic profile from that assumed.

Exhibit 39: Expect penetration to rise to 37-53% in A, B and C circles from 20-40% at present



Source: TRAI, Planning commission data, IDFC-SSKI Research

#### □ ...with 592m total wireless subscribers by FY11

Based on a target wireless penetration of 49%, we estimate India's wireless subscriber base at 592m by FY11. We expect increasing penetration in B and C circles to contribute significantly to subscriber additions with their share in the subscriber base increasing to 54.3% in FY11 from 49.2% in FY09. Our estimates also factor in that potential penetration rates would be reached sooner than later, which is based on our observations of the wireless penetration experience of comparable markets. During this period, we expect wireless penetration in metro circles to reach 100-115% (from 75-100% currently) and that in A, B and C circles to reach 37-53% (20-40%).

Exhibit 40: Wireless subscriber forecasts

	FY08	FY09	FY10E	FY11E		
Wireless subscribers (m)						
Metros	45	62	74	81		
A Circle	92	137	170	189		
B Circle	93	147	197	235		
C Circle	26	46	69	87		
Total	256	392	510	592		
Penetration (%)						
Metros	68	92	106	113		
A Circle	27	40	48	53		
B Circle	18	28	37	44		
C Circle	12	20	30	37		
Total	22	34	43	49		

Source: TRAI, IDFC- SSKI Research

We expect penetration in B and C circles to increase to 54.3% in FY11 from 49.2% in FY09

**Exhibit 41: Wireless subscriber distribution** 

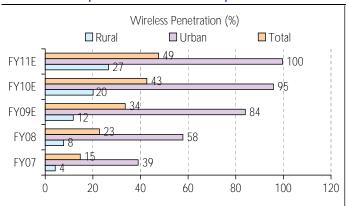
Circles (%)	FY08	FY09	FY10E	FY11E
Metros	17.4	15.8	14.7	14.1
A Circle	36.0	35.0	32.9	31.7
B Circle	36.2	37.5	39.0	39.8
C Circle	10.3	11.7	13.5	14.5
Total	100.0	100.0	100.0	100.0

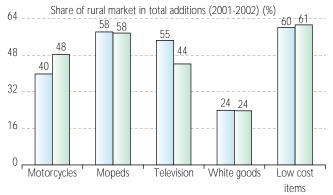
Source: TRAI, IDFC-SSKI Research

#### □ Our estimates imply rural penetration of 27% by FY11

We expect a 63% share of the rural market in cumulative net additions from FY09 to FY12 Urban wireless penetration grew from  $\sim 58\%$  in FY08 to 84% in FY09. Assuming urban penetration reaches 100% by FY11, the implied rural penetration would be  $\sim 27\%$  based on our subscriber estimates. This would also translate into a 63% share of the rural market in cumulative net additions from FY09 to FY12. This compares with NCAER's estimate for the rural market's share of additions at 48% in motorcycles, 58% in mopeds, 44% in television and 61% in low cost items by 2010. Given that mobile handset costs have declined sharply over the years (a basic handset costs less than \$30 currently) and ownership costs are at rock-bottom levels, our estimates appear reasonable.

Exhibit 42: Rural penetration at 27% if urban penetration hits 100% in FY11; rural market share of 63% in cumulative net additions





Source: TRAI performance indicators, NCAER, IDFC-SSKI Research

#### □ Net additions run rate to, however, decelerate

We expect average monthly net addition to fall from 11.3m in FY09 to 9.8m in FY10 and 6.9m in FY11 Our estimate of wireless subscriber base of 592m by FY11 implies a sharp slowdown in monthly net addition run rate – especially in metro and A category circles. We expect a strong monthly net addition trend in B and C category circles in the near term. Overall, we expect average monthly net addition to decline from 11.3m in FY09 to 9.8m in FY10 and 6.9m in FY11.

Exhibit 43: Estimates imply a sharp slowdown in monthly net addition run rate

Monthly addition (m)	FY08	FY09	FY10E	FY11E
Metros	1.1	1.4	1.0	0.6
A Circle	2.9	3.7	2.7	1.6
B Circle	2.9	4.5	4.2	3.2
C Circle	0.9	1.6	2.0	1.5
Total	7.8	11.3	9.8	6.9

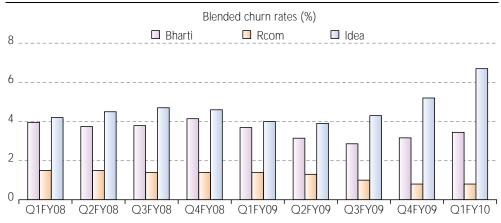
Source: TRAI, IDFC-SSKI Research

Churn rates may rise in the near term if operators were to tighten their no-usage criterion for reporting inactive numbers

#### ☐ Inactive connections a key risk to our estimates

There has been increasing incidences of multiple-SIM ownership with the share of prepaid connections in incremental additions at ~100%. According to industry players, while this results in lower usage, and hence lower ARPU, we believe it could also lead to more connections with no usage over prolonged periods of time. The DoT recently ordered a special audit to verify active connections reported by service operators as it forms the basis for allotting additional spectrum. In this backdrop, churn rates may rise in the near term if operators were to tighten their no-usage criterion for reporting inactive numbers (3-6 months at present).

Exhibit 44: Churn rates have been on the rise again in the last few quarters



Source: Company data

#### **COMPETITION APLENTY; BUT INCUMBENTS SCORE**

The threat of new entrants cannot be wished away. Most of these start-ups have the backing of global partners and are unlikely to face funding constraints, at least in the roll-out phase. More importantly, the recent regulatory changes with respect to spectrum allocation, delay in USO levy cut and drop in termination charges are positive for them. Also, though we believe MNP is less relevant in the Indian market's context and the quantum of loss for incumbents could be argued, new entrants would again be at an advantage. Having said that, we believe the incumbency benefit remains strong as coverage, back-end infrastructure and distribution prowess take time to replicate. Plus, there is little differentiation that new entrants can target for and price may increasingly become a less effective tool. In this backdrop, though new entrants appear well-poised, market share scale-up is unlikely to be rapid (we estimate combined market share of new/erstwhile regional players at 14% by FY11). Overall, we believe the business case for a new entrant is weak in an over-crowded market – and that consolidation is imminent though current regulations may delay the same.

#### **NEW ENTRANTS MEAN SERIOUS BUSINESS**

Even as we subsequently argue that business case for a new entrant is weak, we believe it would be imprudent to completely write them off, particularly considering that they have the backing of established global players and roll-out funding appears to be in place. Telenor, for example, has operations in 13 countries with significant expertise in emerging markets, particularly in Asia – Thailand, Malaysia and Bangladesh. The company also has experience with rural telephony (Grameen Mobile in Bangladesh).

Most new entrants have the backing of strong global/ regional telecom players,

Most new entrants have backing of strong global/regional telecom players

which in turn are looking at emerging markets like India to enhance their footprint and returns. These players would also provide the necessary management bandwidth and experience.

Well-funded for the initial roll-out phase

• Funding is unlikely to pose a material constraint, at least in the initial roll-out phase (first 2-3 years). Players like Telenor (Norway), Emirates Telecom – UAE (Etisalat), Bahrain Telecom (Batelco), Sistema (Russia) and NTT DoCoMo (Japan) are entering the Indian market through strategic stakes in the new licensees and have committed investments of ~S6bn so far.

Shared infrastructure model to lower capex needs, crunch time-tomarket • New entrants are likely to adopt a pre-dominantly shared infrastructure model and this would significantly lower their capex requirement as well as crunch the time to market. Key functions like network planning and management, IT services, back office, billing, etc are likely to be outsourced. Unitech Wireless and Sistema Shyam have already signed contracts with vendors for outsourcing their IT, network management and passive infrastructure requirement (on shared basis). Resultant, the new entrants are likely to have lean structures with costs rising in proportion to scale-up of business.

Exhibit 45: Profile snapshot of new entrants in the wireless industry

Company	Targeted	Foreign	Funds infused/ to	Remarks/ Progress
	presence	partner	be infused	
Unitech Wireless  Etisalat DB	23 circles	Telenor  Etisalat	Rs61.2bn for a 67% stake; ~Rs26bn already infused \$900m for a 45% stake	Tower sharing agreement signed with WTTIL  Managed IT services agreement with Wipro  Managed network services agreement signed with  Alcatel-Lucent  Commercial launch planned in CY09
(Swan)	15 circles	Elisalat	\$900111101 a 45% stake	Signed MSA for 30,000 towers with Reliance Infratel
Sistema Shyam	23 circles	Sistema group	\$1bn for a 73.7% stake	Already launched in 4 circles. Targets a pan-India launch in CY09  Managed IT services agreement with IBM  Equipment orders place with ZTE  \$900m loan from China Development Bank (back to back arrangement for equipment purchases from ZTE)  Received \$333m of total financing; \$150m in domestic financing  Plans to invest \$7bn in networks in India
S Tel	6 circles (C Circl	es) Batelco	\$225m for a 49% stake	37% stake already acquired
Datacom	All circles excep	t Punjab		Owned 64% by Videocon Industries

Source: IDFC-SSKI Research

#### REGULATORY ENVIORNMENT IS BENIGN FOR NEW ENTRANTS

Some of the recent developments on the regulatory front – tightening of subscriber base criteria for spectrum allocation, the proposed hike in spectrum fees and deferral of the 2% cut in USO levy – are negative for the incumbents. TDSAT's judgment refuting service providers' claims of a vested right to spectrum beyond 6.2MHz could also potentially translate into a one-time charge for spectrum beyond 6.2MHz held by service providers (read incumbents). Further, a Re0.1 cut in termination charges and permission for infrastructure sharing are likely to yield cost benefits for the new entrants while the proposed MNP implementation could potentially bring some high ARPU subscribers of incumbents to their fold.

The DoT has significantly tightened the norms by raising the subscriber base criterion for allocation of spectrum beyond 6.2MHz

#### **□** Spectrum – it keeps getting more elusive

The DoT, in January 2008, introduced additional spectrum allocation norms for GSM and CDMA operators based on the subscriber base in each service area. The DoT has significantly tightened the norms by raising the subscriber base criterion for allocation of spectrum beyond 6.2MHz. For instance, for GSM spectrum beyond 6.2MHz, the subscriber base criterion has been raised by 2-6x depending upon the slab and service area. The DoT has also proposed an increase in spectrum usage charges by 1-2% of AGR across various levels of spectrum possessed by operators in each service area.

Exhibit 46: New GSM spectrum allocation norms

Service area	Subsci	riber base*	(In m) sup	ported by	y GSM sp	ectrum in	MHz. (eliç	gibility for	allotmen	t of next s	step)
	2 X 4.4	2X 6.2	2X 7.2	2X 8.2	2X 9.2	2X10.2	2X11.2	2X12.2	2X13.2	2X 14.2	2x 15 @
Metro Service Areas		0.5	1.5	1.8	2.1	2.6	3.2	4	4.8	5.7	6.5
Telecom Circles as											
Service Area Category 'A' & B		8.0	3	4.1	5.3	6.8	8.2	9	9.8	10.7	11.6
Category 'C' Circles		0.6	2	3.1	4.2	5.2	6.2	7	7.8	8.7	9.6

Source: DOT

Exhibit 47:New CDMA spectrum allocation norms

Service area	Subscriber base	e * (In m) supported b	y CDMA spectrum in	MHz. (eligibility for allo	tment of next step)
	2X2.5 MHz	2X3.75 MHz	2X5 MHz	2X6.25 MHz	2X7.5 MHz
	(2 carriers)	(3 Carriers)	(4 carriers)	(5 Carriers)	(6 carriers) @
Metro Service Areas		0.5	2	3	5
Telecom Circles as					
Service Area					
Category 'A' and		0.8	5	8	10
'B' circles					
Category 'C' circles		0.6	4	6	8

Source: DOT

Exhibit 48: DoT's proposed changes in spectrum usage fee

Amount of 2G spectrum (GSM/CDMA)	Current rate	Amount of 2G spectrum (GSM/CDMA)	DOT proposal
Up to 4.4MHz/2.5MHz	2	Up to 4.4MHz/2.5MHz	3
Up to 6.2MHz/5MHz	3	Up to 6.2MHz/5MHz	4
Up to 10MHz	4	Up to 8.2MHz	5
		Up to 10.2MHz	6
Up to 12.5MHz	5	Up to 12.5MHz	7
Up to 15MHz	6	Up to 15MHz	8

Source: DOT, \* - for spectrum in the 800MHZ band

TDSAT states that operators have no vested right to receive spectrum beyond 6.2MHz

#### Issue of spectrum allocation beyond 6.2MHz

TDSAT, in its judgment dated 31 March 2009, stated that operators have no vested right to receive spectrum beyond 6.2MHz. In response to an opinion sought in this matter by the DoT, the Solicitor General of India stipulated that no further allotment of spectrum beyond 6.2MHz be made until the report of a committee, which was constituted in June 2008 for this purpose, is approved by the competent authority. In view of the pending decision, incumbent operators face the potential risk of either having to return the allotted spectrum beyond 6.2MHz or pay a one-time charge for the additional spectrum (a more practical solution).

An excerpt from the TDSAT judgment dated 31 March 2009:

"We hold that there is thus nothing either in the NTP-99 document or the licence conditions or the correspondence/ orders to support the contention of the Petitioners that they have a vested right beyond 6.2 MHz."

Rs262bn collected under USO levy since FY03, of which only Rs79.7bn has been disbursed till FY09

#### □ Deferral of USO levy cut – a setback to incumbents

The government collects 5% of AGR of service operators (this is part of the overall license fees of 6-10% of AGR) as Universal Service Levy (USL) towards the USOF. These funds are spent to meet the net deficit of operations in rural/ remote areas of the basic service providers and for setting up shared infrastructure (towers) in these areas. The government has cumulatively collected Rs262bn under the USO levy since FY03, of which only Rs79.7bn has been cumulatively disbursed till FY09 (excluding Rs69.5bn reimbursement of license and spectrum fees to BSNL). The DoT, in October 2008, announced a 2% reduction in USOF levy in all non-metro service areas subject to the licensee attaining coverage of more than 95% development blocks in such service areas. While this reduction was originally proposed to be effective from 1 April 2009, it has been deferred till further notice.

Exhibit 49: Under-utilization of funds collected under the USO Fund

Year	Funds collected under USL (Rs m)	Funds disbursed (Rs m)*
2002-03	16,536	3,000
2003-04	21,432	2,000
2004-05	34,577	13,146
2005-06	35,333	17,669
2006-07	42,111	15,000
2007-08	54,055	12,900
2008-09	57,595	16,000
Total	261,640	79,714*

Source: DOT\* -excluding license fees and spectrum charge re-imbursement of Rs69.5bn for 2002-03 to 2005-06

Exhibit 50: Proposed reduction in USOF levy in non-metro areas

% coverage of total number of	Applicable USOF	Applicable annual li	cense fee inclusive of l	JSOF levy
development blocks in a service area	levy (as % of AGR)	(as % of AGR) in respect of eligible licensee		
covered by the licensee				
		Category of service	area (except in Metro s	service areas)
		Α	В	С
Up to 95%	5 (no change)	10	8	6
More than 95%	3	8	6	4

Source: DOT

Lower domestic termination charges to have a net adverse impact on ARPU of established players with wide coverage

#### ■ Lower termination charges likely to benefit new entrants

With effect from 1 April 2009, termination charge for all types of domestic calls has been reduced to Re0.2/ min from Re0.3/ min. Further, termination charge for incoming international calls has been increased from Re0.3/ min to Re0.4/ min and ceiling on LDCA and SDCA carriage charges has been lowered from Re0.2/ min to Re0.15/ min. The reduction in domestic termination charges is likely to have a net adverse impact on ARPU of large/ established players with wide network coverage while benefiting newer/ smaller players in the process of ramping up their coverage. The increase in termination charge on incoming international calls would have a neutral to positive impact depending on whether operators choose to pass on the benefit to subscribers or not.

#### MNP: Another Lever for New Entrants?

MNP is set to be a reality in India and is likely to be fully implemented over the next 2-3 quarters. Indian telecom is predominantly a pre-paid market and witnesses high churn anyways, and hence MNP may be less relevant in the Indian context. Importantly, the speed and cost of porting as also other regulatory nuances would decide the degree of MNP success in the country. However, while the quantum of the impact can be argued, we believe MNP churn would clearly help new entrants to get market share faster than that possible otherwise as also enable incumbents like Idea and RCOM to gain market share in new/ traditionally weak circles. It is also quite likely that incumbents would ramp-up marketing spend ahead of MNP implementation.

Operator portability is the most commonly implemented across developed countries

#### ■ MNP – a quick primer

Number Portability, in its simplest sense, allows subscribers to change the service provider while retaining their existing telephone number.

There are three main types of number portability services:

- **Operator Portability:** Ability to retain the telephone number while changing the operator in the same service area for the same type of service, i.e. fixed to fixed (fixed number portability) or wireless to wireless (Mobile Number Portability).
- **Location Portability:** Ability to retain the telephone number when shifting from one location or service area to another location or service area.
- **Service Portability:** Ability to retain the telephone number when shifting from one service to another service, e.g. from fixed to mobile services.

Of the above types of portability, operator portability has been widely implemented across most developed countries.

#### ☐ MNP implementation schedule laid out in India

The DoT has initially proposed only operator portability for wireless to wireless services (Mobile Number Portability – MNP) within the same circle (Annexure 1 for details). It has set a timeline of 20 September 2009 for MNP implementation in metros and A Circles and 20 March 2010 for implementation in the remaining parts of the country. It has specified maximum porting time of three working days with a maximum downtime of two hours.

According to MNP norms in India, the country has been divided into two MNP zones with one license per zone. The licensees are expected to handle MNP implementation in metros and category 'A' circles in the allocated zone within a sixmonth time frame. Full implementation for the awarded zone is to be completed in a year's time. The DoT recently awarded license to Telecordia for the South and East zone and to Syniverse for the North and West zone. MNP in key cities could, therefore, be available as early as in August 2009.

Timeline of 20 Sep 2009 for MNP implementation in metros and A Circles, 20 Mar 2010 for remaining parts of the country

In India, QoS the only relevant differentiator of services; could potentially lead to a churn among unsatisfied subscribers

#### ☐ MNP success – global experience provides no straight answers

The global experience with MNP implementation has been mixed and suggests no straight answer to the probability of success or otherwise of MNP implementation in India. In India, where there is a miniscule portion of subscribers tied to long-term contracts (against handset subsidy), churn rates are already high. India is predominantly a prepaid market (92% of subscriber base), and therefore porting charges (cost of transfer to another operator) would be an important factor determining the success of MNP. We also believe that porting charges cannot be considerably higher than the cost of a new connection. The current TRAI guidelines do not specify pricing guidelines for MNP, though it has recommended that the recipient operator should charge for porting. In a fiercely competitive market, where a host of new entrants would be gunning for high ARPU subscriber base of incumbents, subsidization of porting charges by the recipient operator is quite likely. Speed of porting would also be an important criterion for the success of MNP. TRAI recommendations stipulate not more than three days of time required for porting. We have analyzed the international experience for MNP as also that of an emerging country like Pakistan.

In the Indian context, we believe Quality of Service (QoS) appears to be the only relevant differentiator of services offered by various operators and could potentially lead to a churn among unsatisfied subscribers. Overall, we believe that MNP is less relevant in the Indian market compared to developed ones.

#### Exhibit 51:

#### Factors in favour of MNP

- Fiercely competitive market with a host of new entrants targeting the high ARPU subscriber base of the incumbents.
   We do not rule out these players subsidizing porting fees through special packages for high ARPU customers.
- · Network congestion/call drop problems in metros.
- Absence of handset subsidies tied to long term contracts
- Pre-dominantly single technology (GSM) user base minimizing any technical hiccups

#### Factors not in favour of MNP

- Rock bottom costs of new pre-paid connections leading to resistance to pay porting fees. As per TRAI's paper on MNP dated March 2006 the porting cost is expected to be around Rs200-300 per ported customer (i.e. roughly one months' ARPU) and porting time of 2-4 days
- -92% of the subscriber base has pre-paid connections (generally presumed to have less stickiness with their numbers)
- Potential delays, bottle necks in the porting process leading to subscriber aversion

Source: IDFC-SSKI Research

#### IDFC - SSKI INDIA

Exhibit 52: TRAI's QoS parameters (March-09)

QoS parameter Pr	rescribed criterion	Operators not meeting	in no of circles
		the prescribed criterion	
Call set up success rate (%)	>95%	Bharti Airtel	1
		Aircel	4
TCH Congestion rate (%)	<2%	MTNL - GSM	1
		Bharti Airtel	4
		Aircel	5
		Vodafone	1
% connections with good voice qual	ity (%) >95%	Bharti Airtel	2
		Aircel	6
Calls answered by operators	>95%	Bharti Airtel	9
(voice to voice) within 90 seconds		Idea	4
		RCOM	19
		Vodafone	2
		BSNL	5
		Spice	1
		Aircel	2
		TTSL	1
		Idea	1

Source: TRAI performance indicators – September 2008

#### INTERNATIONAL MNP EXPERIENCE: KEY TAKEAWAYS

In general, MNP implementation was phased in most countries with some initial hurdles (technical as well as procedural) witnessed in the process. Willingness to port numbers has been high in countries where bundled services and long-term contracts are less prevalent. Following are the key takeaways:

- Most countries as given in the list below, after some initial hiccups, have implemented both fixed and mobile number portability, and in some cases both geographic and non-geographic portability i.e. portability not restricted to just a particular service area/ circle. Singapore was the first country to implement MNP in 1997, followed by Hong Kong in 1999 and Australia in 2001.
- Number portability has been a great success in countries like Finland and Hong Kong, where there are no subsidies on mobile handsets clubbed with long-term service contracts. In case of countries like Taiwan and Japan, MNP has had little success due to factors like long-term service contracts with very low tariffs, stickiness with value-added services provided by the existing operator, incompatibility of handsets between operators, etc. The subscribers typically have to forego any outstanding benefits/ credits from the existing service provider while porting services.
- Operators in countries like UK, Netherlands and Belgium charge subscribers a porting fee while permitting number portability. In Denmark and Switzerland, operators do not charge any porting fees.
- Countries like Hong Kong and Netherlands have adopted a centralized database system for implementing number
  portability, wherein the data base in created and managed by an independent entity (no commercial interests with
  the telecom service providers) which reports directly to the telecom regulator. The independent service provider
  charges the telecom service providers in lieu of these services, which may or may not recover these costs from the
  subscriber.
- The time required across countries for porting varies from a few hours to a few days. Instances of delays in providing number porting have been generally seen where wire-line connections were involved in one leg of the porting process.

MNP - the phenomenon has been catching up



Country	Fixed Number	Mobile Number	Wireless
	Portability	Portability	penetration (%)
Hong Kong, SAR	1996	1999	48.1
United Kingdom	1996	1999	
Australia	1997	2001	61
United States	1997	2003	
Germany	1998	2002	
France	1998	2003	
Netherlands	1999	1999	
Singapore	2001	1997	15.7
Japan	Not available	2006	71.8
Pakistan	Not available	2007	33
New Zealand	2007	2007	
Canada	2007	2007	
Israel	2007	2007	

Source: IDFC-SSKI Research

Source: TRAI consultation paper on Number Portability, IDFC-SSKI Research

#### Porting fees charged in some countries

Country	Porting fee charged to users
Pakistan	Not regulated. Mostly waived off by the recipient service provider
Belgium	Maximum €15
Denmark	NIL
Netherlands	€9.08
Norway	~NOK85
Switzerland	No fee
UK	Up to £30

Source: TRAI consultation paper on Number Portability

#### MNP IMPLEMENTATION IN PAKISTAN: A CASE STUDY

#### □ Regulatory guidelines

1) All subscribers, pre-paid as well as post paid, from any cellular network can opt for porting to any other network as many times as desired.

#### 2) Porting fees

- a) Inter-operator charges: PKR500 (~\$6.2) to be charged by the donor operator from the recipient operator for every ported out subscriber, being an amount equal to the prevalent government activation tax.
- b) Porting fees charged to the subscriber: Charging of porting fee to be left to the discretion of the recipient operator, to be regulated by market forces.
- 3) Minimum subscription period: A subscriber once ported will have to remain on the recipient network for at least 60 days before he/ she is allowed to port again.

#### Company: Pakistan Telecommunciation Mobile (Ufone) - market share of 21%, total subs 19.4m

- Numbers starting with 0300 or 0345 can port to Ufone.
- Documentation required: a) Port request form; and b) CSAF form which is normally used while applying for a new connection.
- The company waives off porting fees.
- Four working days time specified for completing the porting process with a downtime of about 2-4 hours.
- Post-paid users first need to convert their connections to pre-paid after honoring the outstanding dues. This prepaid connection would be temporary and would need to be charged for usage during the intermediate time period when the porting process is underway. The subscriber would lose any outstanding balance upon completion of the porting process.
- The porting-in subscriber is given a new SIM card.

# ☐ Impact of MNP on Pakistan's telecom sector

According to media reports, in the first month of MNP, around 10,000 subscribers ported their numbers to new operators. This number currently stands at 15,000-20,000 subscribers every month. Overall, MNP has met with limited success so far due to Pakistan being a predominantly pre-paid user market (~91m subscribers with 95% of them being pre-paid), poor customer service and time consuming process for porting (source: Voice and Data May 2009).

# New entrants can generate revenues from surplus spectrum

#### MVNOs and spectrum sharing

# ☐ Entry of MVNOs to enhance competition/ spectrum utilization

Mobile Virtual Network Operators (MVNOs) are service providers that do not have spectrum of their own but purchase bulk minutes of use from mobile operators and provide mobile services to their own customers through an agreement (market-driven) with the licensed service provider. The objectives sought to be achieved are market expansion, improvement of network utilization rate and increased competition. In India, with large operators already facing a paucity of spectrum, MVNOs are likely to approach the new entrants for their spectrum needs. For new entrants, this could translate into additional revenue streams.

TRAI recommendations on regulations pertaining to MVNOs:

- No limit on number of MVNOs attached to a service provider but an MVNO cannot get attached to more than one service provider within the same service area.
- An MVNO should be issued a license under the Indian Telegraph Act. Entry fees should be pegged at 10% of that paid by service providers subject to a maximum of Rs50m/ metro and A Circle, Rs30m for B Circles and Rs10m for C Circles.
- MVNOs should pay the same annual license fees as paid by the service provider in that service area.

# □ Spectrum sharing – can it be a reality?

Currently, no country in the world allows operators to share spectrum. However, regulators in India are considering facilitating spectrum sharing given that a fragmented spectrum ownership is leading to huge in-efficiencies in the system. A committee set up to resolve the controversy over allocation of spectrum has recently asked the government to allow telecom operators to share and transfer spectrum, though in exchange for a fee.

...though implementation remains an uncertainty

The proposal has even suggested that the spectrum recipient should pay the government Rs5.5bn to share one MHz of spectrum on a pan-India basis with another operator. Similarly, in the event of M&A in the space, the seller would pay Rs5.5bn to the government for one MHz of airwave that is transferred to the buyer on a pan-India basis. The panel report has also suggested that these fees to the government will apply only for transfer/ sharing of existing spectrum. Whereas all spectrum allocated in the future through auctions can be shared, or transferred, without paying any levy to government and a discount be given on the transfer/ merger fee for a period of 12 months from the date of announcing the new policy to stimulate consolidation in the industry. Importantly, the sharing fee has been specified on circle basis. This will enable telcos to share airwaves in select regions. We believe that it would be a win-win situation as incumbents are currently spectrum-starved, whereas it would mean a strong revenue stream for new players. Whether the proposal is finally implemented remains to be seen.

Regulators in India are considering facilitating spectrum sharing...

#### BUT INCUMBENCY BENEFITS STRONG; CONSOLIDATION IMMINENT

While we reckon that competition cannot be understated and that the regulatory environment is benign for new entrants, we believe that the incumbency benefit remains very strong – as coverage, back-end infrastructure and distribution prowess take time to replicate. Plus, there is little differentiation that new entrants can target for as price may increasingly become a less effective tool. In this backdrop, though new entrants appear well poised, market share scale-up is unlikely to be easy for them. Overall, we believe the business case for a new entrant remains weak in an overcrowded market – and that consolidation is imminent though current regulations may delay the same.

#### ■ New entrants have little differentiation to offer

Given that tariffs have dropped sharply, it is likely that customers would increasingly be tariff-agnostic. Price may increasingly become a less effective tool with falling tariff elasticity to MoUs, and anyways there is little room for tariffs to drop further. We believe that new entrants would suffer due to limited ability to differentiate its product offering. They would require to considerably invest in building a respectable brand – even players like Idea, RCOM and Aircel have considerably increased their marketing spend to help smoothen their roll-out plans.

#### □ Business case for new entrants remains weak

We find the new entrants well-prepared for their foray into the Indian telecom market given the backing and funding support of experienced global telecom players as well as a shorter time to market and lower capex needs due to a pre-dominantly shared infrastructure model. However, ARPU of incremental subscribers is likely to be at a steep discount to industry average, resulting in lower ARPU for new entrants. Further, competition among the new entrants would mandate upfront investments in network roll-out and expansion so as to crunch the time to market. Resultant, we expect equity returns for new entrants to remain modest.

Key assumptions factored in for estimating the economics of a new entrant:

- **Medium-term market share of 5%:** For our model case new entrant, we see a best case 12-14% share of net additions in the medium term (4-6 years) and 10% share in the long term, translating into a medium-term market share potential of ~5%. The proposed MNP implementation can benefit new entrants, especially in metros, due to underutilization of spectrum and hence good voice quality and coverage.
- **ARPU at a steep discount vis-à-vis incumbents:** Given the lower usage pattern of incremental subscribers and lack of material differentiation in product offerings in the market, we expect ARPU of new entrants to be at a steep discount to that of incumbents. Further, we factor in a 6-7% compounded annual decline in ARPU for the first four years with subsequent bottoming out and rise in ARPUs.
- Investments to be front-ended: A new entrant, while rolling out its network, would typically be competing with at least 4-5 other players (other new entrants + erstwhile regional players) that would also be simultaneously expanding their coverage. This is besides competition from large and well-entrenched players like Bharti, RCOM, BSNL and Idea. Given this scenario, speed of roll-out is likely to be a key success factor. This, we believe, would necessitate huge upfront

Price may increasingly become a less effective tool with falling tariff elasticity to MoUs

ARPU of incremental subscribers likely to be at a steep discount to industry average

investments (factored in ~\$3bn) in network roll-out (over and above the ~Rs17bn paid for a pan-India access license) within the first three years of roll-out.

 Predominantly shared infrastructure: We assume a predominantly shared infrastructure model along with outsourcing of IT, ITES and network planning and maintenance functions.

#### Expect 10% IRR for a Greenfield entrant over a 20-year license period

We estimate EBIDTA break-even in year-6 and long-term EBIDTA margin of 29% for our model case new entrant For our model case new entrant, we arrive at equity IRR of 10% over the 20-year license period. We factor in total investment of  $\sim$ Rs160bn by year-5 ( $\sim$ 45,000 cell sites) and total equity infusion of Rs100bn for covering capex requirement as well as operating losses. We estimate EBIDTA break-even in year-6 and long-term EBIDTA margin of 29%.

Exhibit 53: Estimate a modest 10% IRR for new entrants

Cash Flow		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7Year 20
EBIDTA		(2,945)	(10,776)	(16,314)	(13,182)	(6,480)	(27)	5,562 70,429
Less: Net Interest		733	1,859	4,685	7,599	9,621	11,069	12,008 (7,151)
Cash flow from operations		(3,679)	(12,635)	(20,999)	(20,782)	(16,102)	(11,096)	(6,446) 77,580
Capex		32,000	61,300	32,506	18,136	17,479	5,828	5,945 11,383
Increase in net current assets		(11,492)	(10,665)	9,243	4,178	(607)	3,392	(607) (1,030)
Free cash flow from operations		(24,187)	(63,269)	(62,748)	(43,096)	(32,973)	(20,316)	(11,784) 67,227
Increase in Debt		9,687	26,489	39,993	28,587	18,990	15,071	7,028 -
Equity cash flow		(14,500)	(36,780)	(22,754)	(14,509)	(13,983)	(5,246)	(4,756)501,022
Equity IRR	10%							

Source: IDFC-SSKI Research

Incumbents have high population coverage, established brands and ability to match value propositions of new entrants

# ■ Market share loss for incumbents unlikely to be significant

We believe new entrants and players in the expansion mode will primarily expand the addressable market while also partially eating into market share of incumbents. Over the next two years, market share loss for large incumbents like Bharti Airtel, Vodafone and RCOM is likely to be marginal (100-200bp) given their high population coverage, established brands and ability to match value propositions of new entrants. Resultant, we estimate only a gradual scale-up in market share for new entrants like Unitech Wireless, Sistema Shyam, Swan Telecom and Datacom by FY11. Overall, we estimate the combined market share of new entrants as well as erstwhile smaller/regional players like Loop and Aircel at 14% in FY11.

Exhibit 54: Operator-wise market share (%)

Pvt incumbents (%)	FY09	FY10E	FY11E
Bharti	24	23	22
RCOM	19	19	18
Idea (including Spice)	11	11	11
Total private incumbents (including others)	80	79	74
Players in expansion mode/ New players	5	8	14
Total private players	86	87	88
PSU players	14	13	12
Total	100	100	100

Source: TRAI data, IDFC-SSKI Research

At 82%, Bharti leads the other incumbents in terms of coverage

# Besides lock-in period for promoters' equity and license transfer, spectrum transfer fee could also discourage acquisitions at high valuations

# ☐ Incumbency – a strong advantage; Bharti stands out!

We believe that strong coverage and backend infrastructure backbone remain the key differentiators for incumbents. This, along with extremely well-penetrated distribution networks, offers a considerable advantage to incumbents, which cannot be undermined. Incumbents have an extensive footprint, especially Bharti which leads the other incumbents in terms of coverage. While rivals are catching on, Bharti's mobile network now spans across 400,000 towns and villages across India, giving it population coverage of ~82%. Further, Bharti has made strong investments in the rural areas which should offer the company continued headroom for growth before competition catches on. With the highest coverage, a strong backend infrastructure and high penetration in rural markets, Bharti scores over others Indian telcos. The company has maintained its market share of ~24% despite competition from players like Idea, Vodafone, RCOM and Aircel that have been in an expansion mode during this period.

# □ Consolidation imminent; but regulations not conducive

While a weak long-term business case for new entrants makes consolidation in the industry imminent, regulations like a 3-year lock-in period for promoters' equity and a minimum three years' timeframe (from the effective date of the license) before any merger approvals can be granted would delay the process. Further, a strong strategic and financial backing would also mean higher resilience on the part of new entrants. This, we believe, would result in a high-decibel and cluttered market in the near term.

The DoT, in its M&A (merger & acquisition) guidelines in April 2008, highlighted the possibility of a spectrum transfer fee every time an M&A happens in the wireless segment. The exact quantum of the fee will be determined in consultation with the TRAI. The government is of the view that it allocates spectrum at subsidized charges instead of market-driven value and private operators benefit by selling the companies at higher valuations. The introduction of spectrum transfer fee, if significant, could discourage acquisitions at high valuations.

# **COMPETITIVE PRESSURE: NOT OVER YET**

With MoUs no longer exhibiting elasticity to tariffs and net additions run-rate tapering off, margin levers appear to be exhausting for telecom operators. Notwithstanding the current wireless ARPU, which are among the lowest in the world, we expect a combination of lower usage profile of incremental subscribers and increasing competition to drive a further 10% compounded annual drop in industry ARPU over FY09-11. Given a pre-dominant voice market and rising incidence of multiple SIM ownership, we believe that minute-based performance indicators serve a more accurate profitability measure vis-à-vis subscriber based indicators. We estimate a 6-9% drop in EBIDTA/ min for Bharti, RCOM and Idea. With a 28% 2-year CAGR, we expect Idea to post the strongest EBIDTA growth among these companies.

MoUs have fallen despite a steep fall in effective realizations

# ☐ Margin levers for operators are exhausting; MoU elasticity tapering off

Increasing competition as well as falling regulatory costs have led to a sharp  $\sim\!20\%$  compounded annual drop in tariffs over FY06-09. Telecom operators, however, were able to contain the impact on their profitability on the back of a sustained surge in net additions – economies of scale as well as high MoU elasticity resulted in lower realizations being offset by increased usage. Further, telecom operators over the last few years have increasingly been outsourcing functions like network management and planning, IT, back office, billing, call centres, etc on a 'pay per use' model. This led to costs rising largely in proportion to expansion in subscriber base. Going forward, however, incremental economies to scale may be difficult to come by because of a likely tapering off of subscriber additions. Also, an incremental drop in realizations due to competitive pressures may not be fully offset by higher usage, as is evident from the recent KPIs wherein MoUs have fallen despite a steep fall in effective realizations. Thus, elasticity of MoUs to tariffs has been trending down over the last few quarters.

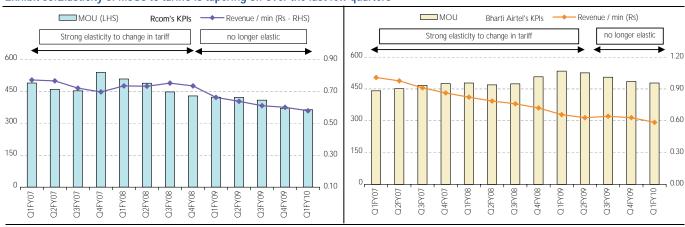


Exhibit 55:Elasticity of MoUs to tariffs is tapering off over the last few quarters

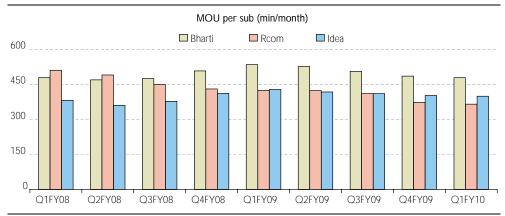
We expect industry MoUs to decline at a 4.8% compounded annual rate over FY09-11

# ☐ Lower usage by incremental subs, multiple-SIMs to hit MoUs

Blended MoUs across operators have been trending down since the last 4-5 quarters despite falling tariffs and free minutes being offered by operators. We attribute this primarily to lower usage by incremental subscribers as well as the rising incidence of multiple-SIM ownership among mobile users. Going forward, we expect  $\sim 63\%$  of net subscriber addition from rural areas as also an increase in penetration in the low

income groups. Resultant, we expect industry MoUs to decline at a compounded annual rate of 4.8% over FY09-11. We note that Indian MoUs are among the highest globally and there is little room for average MoU to go up.

#### Exhibit 56:



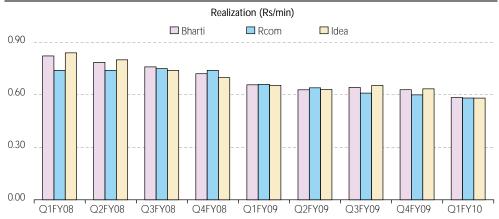
Source: Company data

# ☐ Regulations, spurt in competition to lead to lower effective realization

Average realization of operators in our universe has declined by 11-17% CAGR over the last two years, led by a combination of declining regulatory charges and increasing competition. With tariffs having now dropped sharply, we expect customers to be increasingly tariff agnostic. Price, we believe, would become a less effective tool with falling tariff elasticity to MoUs and anyways there is little room for tariffs to drop further. However, incremental pressure on tariffs is likely to be driven by free-minutes plans, which would continue to float in the market for the next 1-2 years given that it is the most convenient entry-strategy adopted by new entrants of late. Overall, we expect a 7.8% compounded annual drop in core realizations (rentals + usage) for the industry over FY09-11.

We expect a 7.8% compounded annual drop in core realizations for the industry over FY09-11

#### Exhibit 57:



Source: Company data, IDFC-SSKI Research

The discount to average of the lowest ARPU in each circle is quite steep and is often reported by the most recent entrant in the circle

# ☐ ARPU of incremental subscribers at a steep discount

Wireless ARPUs have been on a steady declining trend with core GSM ARPU (only rentals and usage) dropping to Rs205 in the quarter ended March 2009 from Rs220 in the quarter ended December 2008. Further, the discount to average of the lowest ARPU in each circle is quite steep and is often reported by the most recent entrant in the circle. Hence, we believe ARPU of incremental subscribers going forward is likely to be at a steep discount to the prevailing average ARPU.

Exhibit 58: Lowest GSM ARPU in each circle - reasonable indicator of what to expect initially

Circle-wise lowest pvt-player ARPU	Average	Lowest ARPU of pvt	Discount to
(Rs)		player (Dec-08 data)	average (%)
Metros			
Chennai	194	157	(19.0)
Delhi	331	235	(29.0)
Kolkata	209	48	(77.2)
Mumbai	337	233	(30.8)
A Circles			
AP	259	223	(14.0)
Gujarat	211	191	(9.6)
Karnataka	261	217	(16.8)
Maharashtra	234	230	(1.7)
TN	198	138	(30.4)
B Circles			
Haryana	201	176	(12.3)
Kerala	234	221	(5.6)
MP	181	103	(43.1)
Punjab	264	207	(21.5)
Rajasthan	203	154	(24.2)
UP (E)	208	167	(19.5)
UP (W)	210	187	(10.9)
WB	158	70	(55.8)
C Circles			
Assam	195	146	(25.1)
Bihar	176	78	(55.6)
HP	202	73	(63.8)
J&K	308	193	(37.3)
NE	225	128	(43.1)
Orissa	183	102	(44.2)

Source: COAI, IDFC-SSKI Research

Blended ARPU of Aircel, which has been expanding its operations, stands at a 38% discount to the pan-India ARPU of private GSM players (source: COAI data on ARPU of private GSM players – Dec-08). Aircel's ARPU in Kolkata (services launched in May 2008), Bihar and Himachal Pradesh (both launched in Jan-07) are at a discount of 73%, 56% and 64% respectively to the average. In this backdrop, we believe ARPU profile of the incremental subscribers is likely to be at a steep discount to ruling average ARPU.

Aircel's ARPU - steep discount to the average ARPU

Circles (Rs)	Average of pvt GSM players	Aircel	Discount to average (%)
Chennai	194	157	(19.0)
Kolkata	209	57	(72.8)
TN	198	138	(30.4)
WB	158	70	(55.8)
Assam	195	171	(12.3)
Bihar	176	78	(55.6)
HP	202	73	(63.8)
J&K	308	193	(37.3)
NE	225	202	(10.2)
Orissa	183	102	(44.2)
Blended ARPU	222	137	(38.1)

Source: COAI, IDFC-SSKI Research

We estimate 10% compounded annual decline in industry ARPU over FY09-11

#### **■** Expect industry ARPU to decline over FY09-11

Based on our assumptions (given below) for MoU and tariff by (a) category of service area – metros, A, B and C circles; (b) by technology - GSM/CDMA; and (c) type of connection – pre-paid/post-paid, we estimate 10% compounded annual decline in industry ARPU over FY09-11, including the impact of the recent cut in termination charges.

We expect 12.2% CAGR drop in core ARPU (rental + call charges) from FY09 to FY11 – led by a 4.8% drop in blended MoU, 7.8% drop in tariff and the remaining due to impact of rising share of pre-paid as also of B and C circles in the subscriber mix. After factoring in our estimate for roaming and VAS (including SMS) income, we estimate a 10% drop in overall ARPU over FY09-11.

Exhibit 59: Estimate blended ARPU to decline at 10% CAGR from FY09-11E

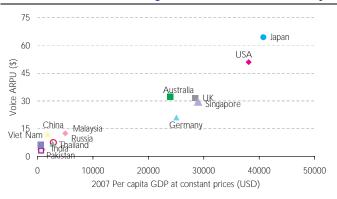
	FY09	FY10E	FY11E	CAGR FY09-11E (%)
MoU	462	433	418	(4.8)
Core ARPU	200	170	154	(12.2)
Roaming	20	19	18	(5.0)
SMS+VAS	32	32	32	(0.6)
Total ARPU	252	220	204	(10.1)

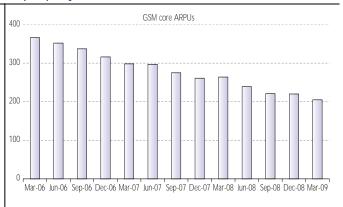
Source: TRAI performance indicators, IDFC-SSKI Research

#### Indian ARPU low but not out of sync

Adjusted for per capita GDP, Indian ARPU in sync with emerging market peers International experience suggests that ARPU, in general, has a high correlation to the per capita GDP. While India's wireless ARPU of ~\$6 appears to be on the lower side vis-à-vis international ARPUs, it is in sync with the country's emerging markets peer set when adjusted for the per capita GDP. We believe ARPU could decline further due to increased competition, lower usage by incremental subscribers as also due to further cut in regulatory costs (read termination charges).

Exhibit 60: Indian ARPU among the lowest in the world; but in sync with prosperity levels





Source: IDFC-SSKI Research, ITU

Source: TRAL IDEC-SSKI Research

We expect lower regulatory charges to be passed on to

# subscribers

# ■ Reduction in regulatory costs would lead to further drop in ARPU

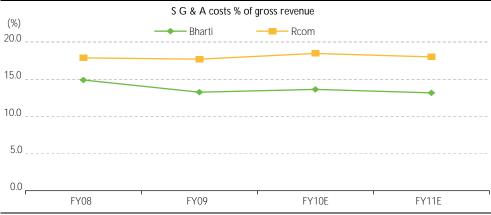
Regulatory stance has historically been in favour of enabling more competition in the industry, and thereby lowering tariff to subscribers. Going forward, we believe industry players would pass on the benefit of drop in regulatory costs, e.g. termination charges and license fees, and hence a further reduction in regulatory charges would result in a higher-than-expected drop in ARPU; though the same is likely to be largely EBITDA-neutral.

# □ Cost pressures are unlikely to ease in the near term

The Indian wireless industry is about to witness a transformation from being 'highly competitive' to 'hyper competitive'. We believe incumbent operators may not be able to significantly bring down their subscriber acquisition and retention costs as also other SG&A costs (like promotion and advertising costs) in an environment of hyper competition and a tapering net additions run-rate. MNP is also likely to add to the cost of retaining high-ARPU subscribers.

Little scope for further cuts in subscriber acquisition and retention costs as also other SG&A costs

Exhibit 61: Costs pressure unlikely to ease in the near term



Company data, IDFC-SSKI Research

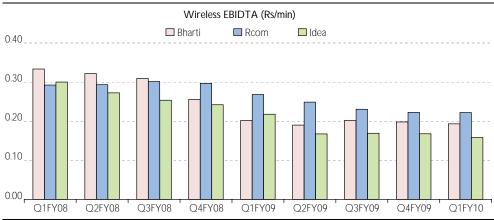
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Incremental growth likely from the price-sensitive rural/ semi-urban areas, where usage profile is considerably lower

#### ☐ Minute-based KPIs more relevant going forward

India remains pre-dominantly a voice based market with incremental growth targeted from the price-sensitive rural/ semi-urban areas, where usage profile is considerably lower. Telecom operators target cumulative minutes usage potential for evaluating investment in a particular area, fully aware that MoUs of a particular subscriber reaches the full potential only after 3-5 quarters. Also, the incidence of multiple SIM ownership in India is now well-established and this distorts the ARPU comparison. These factors lead us to believe that minute-based KPIs are now a more important criterion than traditional parameters like ARPU. For example, RCOM's wireless ARPU declined at a 25% compounded annual rate over the last two years, while its EBIDTA/ min dropped at a lower pace of 13%. Also, while RCOM's Q1FY10 ARPU of Rs210 is at a steep discount to that of Bharti (Rs278) and Idea (Rs232), its EBIDTA/min of Re0.22 is at a premium to Bharti's Re0.19/min and Idea's Re0.16/min.

#### Exhibit 62:



Source: Company reports

# ☐ Wireless margins will remain high but are trending down

Overall, we build in a 7-8% drop in revenue/ min over FY09-11 across our universe with limited cost benefits expected from here. Resultant, we expect EBIDTA/ min to drop 6-9% over FY09-11. The incremental drop in EBITDA/ minute is likely to be the lowest for Idea owing to declining losses in newer circles. We expect Idea to report the strongest EBIDTA CAGR of 28% among peers over FY09-11.

**Bharti Airtel:** We expect 12.4% compounded annual decline in Bharti's ARPU over FY09-11 (16% in FY10 and 8.6% in FY11). We also expect EBIDTA/min to decline by 6.4% (compounded annual rate) over the period. Overall, we expect only a marginal decline (110bp) in Bharti's EBIDTA margins over FY09-11 and expect a 10.5% CAGR in Bharti's EBIDTA over the period.

RCOM: We expect 9% compounded annual drop in EBIDTA/min (180bp drop in EBIDTA margins) for the wireless segment. We, however, expect rising contribution from the broadband business and improving margin profile of the global business to partly offset this drop for RCOM, restricting the decline in consolidated margins to 140bp over FY09-11. Resultant, we expect 14.7% CAGR in EBIDTA over FY09-11. A stronger-than-expected growth in the global business could provide upside to our margin estimates.

The incremental drop in EBITDA/ minute likely to be the lowest for Idea owing to declining losses in newer circles

We expect 12.4% compounded annual decline in Bharti's ARPU over FY09-11...

...9% compounded annual drop in RCOM's EBIDTA/min...

...and Idea's consolidated EBIDTA/min to decline by 6% over FY09-11 Idea: We expect Idea's consolidated EBIDTA/min to decline by 6% over FY09-11 led by a 4% drop in EBIDTA/min in its 13 established circles. However, we expect EBIDTA margin to inch up 150bp due to peaking of new circle losses in FY10 as also the combined impact of lower ARPU and lower costs on EBIDTA margins. Resultant, we expect a robust 28% CAGR in EBIDTA over FY09-11.

Exhibit 63: Estimates of KPIs for Bharti, RCOM and Idea

Wireless KPIs	Year	Bharti	RCOM	Idea
ARPU	FY09	273	255	265
	FY10E	249	204	226
	FY11E	245	192	215
MoU	FY09	508	406	423
	FY10E	479	360	401
	FY11E	461	352	399
Rs/min	FY09	0.64	0.63	0.63
	FY10E	0.57	0.57	0.57
	FY11E	0.54	0.54	0.54
EBIDTA/min	FY09	0.20	0.24	0.17
	FY10E	0.18	0.21	0.15
	FY11E	0.17	0.20	0.15
EBITDA CAGR (%)	FY09-11	10.5	14.7	28.7

Source: Company data, IDFC-SSKI Research

# **3G: ALL EYES ON SPECTRUM**

The government has finally put the much-delayed 3G license auctions on the fast track while doubling the proposed reserve price to Rs40.4bn. 3G has been successful in countries where service providers have offered 3G users strong platforms for both online content and applications like e-commerce. While 3G ARPUs can be 30-40% higher than 2G ARPUs, viability of 3G investments on a standalone basis remains uncertain due to huge incremental costs involved. Resultant, we believe that large 2G operators – potential bidders for 3G licenses – are unlikely to go overboard in their bids. Further, given that additional 2G spectrum is proving to be difficult to come by, large operators are likely to use the additional 3G spectrum more for de-congesting their 2G spectrum, while simultaneously creating room for subscriber additions.

3G technology delivers significantly higher data rates and increased capacity vis-à-vis 2G

#### □ What is 3G?

3G refers to the third generation of development in wireless technology and is based on technologies approved in the IMT-2000 programme of the International Telecommunication Union (ITU). 3G technology delivers significantly higher data rates and increased capacity compared to 2G networks. 3G systems support data transfer rates of up to 2mbps (Mega bits per second; at least 144kbps). This compares with data transfer rate of 9.6-14.4kbps for 2G and 32-344kbps for 2.5G networks (GPRS/EDGE). Resultant, 3G supports data-intensive services like video telephony, mobile broadband, entertainment and triple play converged communications services. Globally 3G services have been deployed in many developed as well as developing countries with varying degree of acceptance.

Exhibit 64: Global 3G subscriber base (as of December 2007)

Country	3G subscribers (m)	3G penetration (%)
UK	13.1	19.9
France	8	12.6
Germany	11.7	23.9
Italy	18	38.3
Spain	12.6	37.2
Indonesia	0.6	0.7
Malaysia	1.4	6.1
Japan	72.7	69.1
Philippines	0.3	0.6
South Korea	19.9	45.8
Australia	6.7	31.3
USA	64.2	25
World	286	8.6

Source: CRISIL Research, IDFC-SSKI Research

# Technology for 3G

WCDMA and CDMA 2000 are the principal technologies for 3G Globally, 3G has mainly been deployed using either the Wideband Code Division Multiple Access (WCDMA) platform by GSM operators and the CDMA 2000 family of standards by CDMA operators. CDMA 2000 EV-DO requires a minimum of 2x1.25MHz spectrum and WCDMA a minimum of 2x5MHz spectrum. Both these technologies are based on the CDMA platform but are not interoperable – i.e. W-CDMA handsets will not work with CDMA 2000 handsets and vice versa.

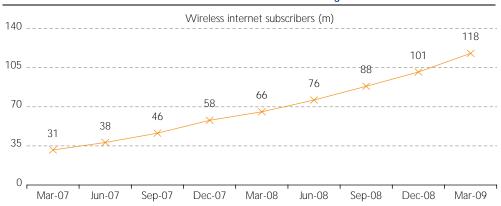
□ 3G auctions finally on the fast track

The DoT has recently proposed a revised reserve price of Rs40.4bn for a pan-India 3G license After a prolonged delay due to unavailability of spectrum and disagreement on the reserve price between the DoT and the Ministry of Finance, the GoI has now put 3G auctions on the fast track. 3G spectrum is proposed to be allocated in the 2.1GHz band and the DoT has recently proposed a revised reserve price of Rs40.4bn for a pan-India 3G license. The proposal currently involves allocation of 3G spectrum to six players in each circle, pegging the implied minimum proceeds from the auctions at ~Rs240bn. Within these allocations, one block in each circle would be reserved for MTNL and BSNL. This proposal is currently being evaluated by an EGoM committee headed by the Union Finance Minister.

#### ■ 118m wireless internet users as on March-09 = target population?

As of March 2009, India had about 118m wireless subscribers (~30% of the wireless subscriber base) that are capable of accessing wireless internet services based on GSM/CDMA technologies. These subscribers accessed internet either through their handsets or through data cards on their personal computers/ laptops. We believe these subscribers are the potential broadband subscribers with the deployment of advanced wireless technologies such as 3G and WiMAX.

Exhibit 65: Current base of 118m wireless internet users can be target for 3G services



Source: TRAI performance indicators

# □ 3G services roll-out – key challenges

#### Huge costs involved

The proposed introduction of 3G services will involve a significant cost consideration for the bidding operators, both in terms of the final price of the 3G licenses and the capex involved in rolling out a 3G network. NTT DoCoMo has cumulatively invested \$36bn in 3G networks since it launched 3G services in Japan in 2001.

#### Globally 3G services have mandated handset subsidies

Globally, high cost of 3G handsets has been a key deterrent in mass-scale migration to 3G. Telecom operators, in order to incentivize migration to 3G, have historically resorted to handset subsidies bundled with attractive tariff packages. While handset subsidies are not widely prevalent in India, bundling of 3G services may add to customer acquisition costs for telecom operators. MTNL recently invited EoIs from handset makers for bundling its 3G services. Besides, it has also floated tenders to franchise its 3G services on a revenue-share basis.

NTT DoCoMo has invested \$36bn in 3G networks since launch of these services in Japan in 2001

Bundling of 3G services may add to customer acquisition costs for Indian telcos

We estimate modest returns of 4-6% from standalone 3G operations in the medium term

# ☐ Uncertain business case for 3G operations – to prevent overbidding

Based on the 3G experience of global players, we estimate that 3G ARPU can be at  $\sim 30\%$  premium to 2G ARPU with  $\sim 15\%$  migration from 2G to 3G in the medium term. Assuming the cost of pan-India 3G license at Rs40.4bn (on par with the proposed reserve price) and incremental roll-out capex of Rs40bn (BSNL has invested Rs27bn and MTNL Rs5bn in the run-up to the 3G launch), we estimate modest returns of 4-6% from standalone 3G operations. Given such an outlook, we believe the prospective bidders for 3G licenses are unlikely to go overboard in the auction process.

Exhibit 66: BSNL's 3G tariff plans (refer Appendix for detailed BSNL 3G tariff plan)

BSNL		MTNL (3G plan Jadoo)	
Q4FY09 Mobile ARPU	Rs198	Q4FY09 Mobile ARPU	Rs180
Cost of SIM/ new connection		Cost of SIM/new connection	
Pre-paid/ Post-paid	Rs300	Pre-paid & post-paid	Rs300/Rs500+tax
Migration charges (from 2G to 3G)	~Rs125-151	Migration charges (from 2G to 3G)	Rs300
Minimum 3G activation voucher -	Rs350	Minimum 3G activation voucher -	
pre-paid (30 days validity)		pre-paid (30 days validity)	Rs300
Minimum 3G voice plan – post-paid	Rs500	Minimum 3G voice plan – post-paid	d Rs599
Minimum data plan – prepaid (30 days		Rs250 Minimum	data plan – prepaid (30 days
validity) & post paid		validity) & post paid	Rs250
Tariff for 3G services:		Tariff for 3G services	
Video call:	Rs2/min (on net and off net)	Video call:	Rs1.8/min (on net),
			Rs3/min (off-net)
	Rs3/min		Rs3.75/min
STD Video call	Rs3/MB	STD Video call	Rs5/MB
Data Rate		Data Rate	

Source: BSNL, MTNL

Large operators are likely to use the additional 3G spectrum initially for decongesting their 2G spectrum

# $\square$ 2G+3G = more spectrum

Given that India's internet habits are yet to evolve (penetration of 16% among population in the 15-59 years age group), scalability of 3G in India would take some time. Thus, while 3G may not present a viable business case on standalone basis as of now, large operators are likely to use the additional 3G spectrum initially for decongesting their 2G spectrum while simultaneously creating room for new subscribers. This assumes significance in the prevailing environment, wherein additional 2G spectrum is difficult to come by due to a freeze imposed by the DoT on issue of fresh spectrum.

#### International experience with 3G

According to February 2009 statistics (source: GSM World), global 3G penetration currently stands at 18% of the global wireless subscriber base with 42% subs on WCDMA, 57% on CDMA 2000 and 1% on others. TRAI, in its consultation paper on implementing 3G services in India, considered WCDMA and CDMA 2000 1x EVDO (Evolution Data only) platforms only; globally, 3G penetration based on these two platforms is just 11% out of the total penetration rate of 18% (73% on WCDMA, 27% on CDMA 2000 EVDO and 1% on others). Of the countries where 3G has been introduced, Japan and South Korea are among the most penetrated while Indonesia and Philippines are the least penetrated markets.

Exhibit 67: Wireless connections by Bearer Technology (September 2008 data)

	Number	(%)
Total	3,804,064,939	
cdmaOne	6,953,459	0.18
CDMA2000 1X	292,839,706	7.70
CDMA2000 1xEV-DO	106,348,820	2.80
CDMA2000 1xEV-DO Rev. A	3,229,839	0.08
GSM	3,059,133,102	80.42
WCDMA	24,035,2034	6.32
WCDMA HSPA	57,965,067	1.52
TDMA	2,198,457	0.06
PDC	6,669,884	0.18
iDEN	28,065,549	0.74
Analog	309,621	0.01

Source: GSM World

#### □ 3G in Japan – why it worked

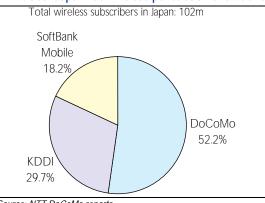
3G penetration in Japan, at ~70%, is among the highest in the world. As a case study, we draw upon the 3G implementation experience of NTT DoCoMo. Following are the key takeaways:

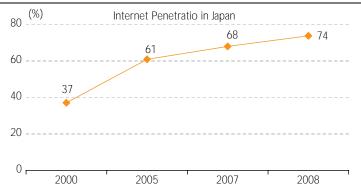
- Cellular penetration in Japan was 54% at the time of 3G launch, indicating a reasonably well-penetrated wireless market. DoCoMo at that time had 41m 2G subscribers with a market share of 59%.
- Internet penetration in Japan was ~40% at the time of the 3G launch, indicating a high potential user base with developed internet habits.
- NTT DoCoMo launched the first full scale 3G services in the world in October 2001 on the 800MHz band. DoCoMo invested US \$16bn in the first five years of its 3G launch towards setting up the infrastructure. Cumulative 3G-related capex is likely to reach \$36bn by end-FY09 for the company as per its projections in the year-ended March 2008 annual report.
- 3G acceptance remained sluggish during the first two years post launch. During this period, 3G was essentially an experimental service for early adopters mainly communication industry professionals. 3G picked pace only from year-3 once issues relating to high cost, low battery life of handsets and network coverage were resolved. Share of 3G subscribers increased from 7% in year-3 (FY04) of launch to 82% in year-7 (FY08) of launch.
- 3G acceptance was aided by the fact that companies, even before its launch, had invested in developing innovative web-based applications on the mobile internet platform. DoCoMo's i-mode was a runaway success among users since inception.
- Premium of 3G ARPU over 2G services has increased from 31% in year-3 (FY04) to 61% in year-7 (FY08). Data accounted for ~38% of 3G ARPU in FY08 vis-à-vis 18% of overall ARPU in year-1 of launch (FY02).
- DoCoMo has recently announced that it would phase out its 2G voice and packet data services by 2012.

3G penetration in Japan, at ~70%, is among the highest in the world

For 3G acceptance, companies had invested in innovative web-based applications on the mobile internet platform even before launch

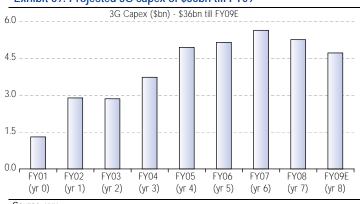
Exhibit 68: Japan had wireless penetration of 54% and internet penetration of ~40% at the time of 3G launch

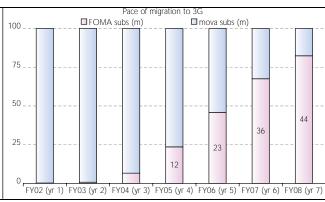




Source: NTT DoCoMo reports

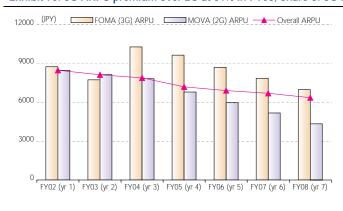
Exhibit 69: Projected 3G capex of \$36bn till FY09

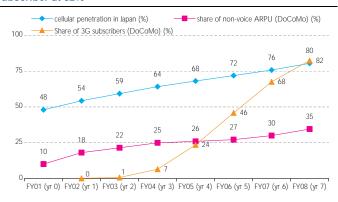




Source: xxx

Exhibit 70: 3G ARPU premium over 2G at 61% in FY08; share of 3G subscriber at 82%





Source: Source: NTT DoCoMo investor releases

Despite a high 94% wireless penetration, 3G penetration stands at just 12% almost six years after launch in Malaysia

### □ 3G in Malaysia – why it didn't work?

Though Malaysia's cellular market is among the most penetrated in the region (94% penetration; 26m subscribers as of December 2008), penetration of 3G services – launched in 2003 – remains poor. Currently, 3G penetration stands at ~12% despite a high household broadband penetration rate of 21%. Following are the key issues that have hindered widespread acceptability of 3G in Malaysia:

 Absence of close collaboration between service providers and global handset manufacturers leads to limited availability and high cost of 3G handsets.

 Lack of good mobile internet platforms and specialized content for mobile internet. This too has been the outcome of absence of collaborations between service providers and content developers.

# □ 3G in China – huge investments underway

Players have initially launched trial services in some service areas China, in January 2009, awarded 3G licenses to three telecom operators. According to media reports, total 3G-related investments over 2009-10 are likely to be RMB 280bn (~US \$41bn) towards network up-gradation and expansion. While one license is linked to WCDMA, the second one is linked to CDMA 2000 platforms, and the third to China's indigenously developed TD-SCDMA technology platform. Players have initially launched trial services in some service areas.

Exhibit 71: Likely 3G-related investments in China

3G Licensee	Technology linked	Likely investment in 3G networks
	with the license	over 2009 and 2010 (\$bn)
China Mobile	TD-CDMA	14.6
China Unicom	WCDMA	14.6
China Telecom	CDMA 2000	11.8
Total		41

Source: IDFC-SSKI Research

Exhibit 72: China Mobile's capex plans

(USD bn)	2008	2009E	2010E	2011E
Total capex	20	19.5	19	16
2G	20	4.7	NA	NA
2G/3G Integration	-	14.8	NA	NA

Source: China Mobile's 2008 Annual Results presentation

#### Exhibit 73: China Unicom's capex plans

(USD bn)	2008	2009E
Total capex	10	16
3G Cellular	-	5.7
GSM Cellular (including partly for 3G development in 2009)	4.8	3.5

Source: China Unicom's 2008 Annual Report

#### Exhibit 74: China Telecom's capex plans

(USD bn)	2008	2009E
CDMA 1x upgrade and coverage expansion of		
CDMA 2000 EVDO (3G technology) to 300 cities	3.5	6.9
(5)		

Source: China Telecom's 2008 Annual Results presentation

# **TELECOM TOWERS: IMPROVING ECONOMICS**

The telecom tower business is capital-intensive but generates high margins and predictable cash flows as tenancy improves. While capacity utilization rates are currently sub-optimal, they can potentially shoot up from 48% currently to 69% in 3-5 years on the back of service roll-outs by new entrants. While this translates into higher tenancy rates in the near term, it also presents a viable business case for planned tower additions by the industry. With profitability highly levered to tenancy rates, return profile of tower companies too is set to improve. Valuations of tower companies, at EV/ tower of Rs4.8m-Rs7.2m (as suggested by the recent M&A transactions), have been at a 30-50% discount to precedents (Rs10m-12m). We value Indus at an EV of Rs480bn by March 2010, implying EV /tower of Rs4m.

#### INDIAN TOWER INDUSTRY LANDSCAPE

India currently has a total tower base of ~0.3m towers; this implies a subscriber/ tower ratio of 1,478. The formation of Indus as a JV by three leading GSM operators – Bharti, Vodafone-Essar and Idea Cellular – in FY08 changed the dynamics of the tower industry. Indus today is the distinct leader in terms of scale and reach with a base of ~98,000 towers. BSNL has ~40,000 towers and has recently floated them into a separate subsidiary. The fact that the concept of tower sharing is gaining momentum is reflected in increasing industry-wide tenancy levels. Currently, tenancy level for the industry stands at 1.4x. Reliance Infratel's tenancy currently stands at 1.6x which is entirely captive (GSM+CDMA). Logically, Indus should have a tenancy of near 3x, but we believe it would take time as some of its towers need to be upgraded.

Exhibit 75: The industry has a base of ~0.3m telecom towers with tenancy capacity of ~0.4m

Industry tower tenancy stands at 1.4x

	Towers	Tenancy ratio*	Tenancy
ATC (earlier Xcel)	1,700	1.4	2,380
Bharti Infratel	28,078	1.4	40,152
Indus	97,925	1.6	151,784
Reliance Infratel	48,000	1.6	76,800
Tata-Quippo	25,000	1.6	40,000
GTL Infra	9,411	1.0	9,035
BSNL	40,000	1.0	40,000
MTNL	1450	1.0	1,450
Others	37,759	1.0	37,759
Total	289,323	1.4	399,359

Source: GTL Infrastructure Q4FY09 presentation, company reports, IDFC-SSKI Research \* -also include estimates

Operators increasingly considering telecom towers as a separate revenue stream

# ☐ Tower ownership in India – needs to be more independent

Unlike in the US where almost 2/3<sup>rd</sup> of the towers are owned by independent tower companies, Indian tower assets are largely owned by telecom operators. As can be seen from the above exhibit, 93% of the telecom towers in India are either operated or owned by operators. The spin-off of tower assets by most tower companies was largely seen as a good methodology to unlock value, but doubts persisted on whether incumbents would be willing to share them with new operators. Access to tower infrastructure would mean a faster roll-out by new players and market share loss for incumbents. Even for Indus, most of the tenancy remains from its owners. The recent Reliance-Etisalat tower sharing agreement, however, proves that operators now believe that market shares would find their own way and stresses the importance of

Telecom operator-owned tower companies enjoy assured tenancies; better positioned to compete with third-party tower owners considering telecom towers as a separate revenue stream. However, it would require a couple of more precedents to address investor concerns and infuse confidence that there could be serious independent revenue streams from these operator-owned assets.

# ☐ Tower base expanding; 3rd-party operators to lose further market share

The pace of telecom tower addition has witnessed a considerable slowdown over the last 2-3 quarters as: (a) operators are increasingly adopting measured capex plans; and (b) new entrants have been slow in their roll-outs compared to earlier expectations. In this backdrop, the pick-up in tower demand has been slower-than-expected. Further, as telecom operator-owned tower (TOOT) companies enjoy assured tenancies, they are better positioned to compete with third-party tower owners, which are then more cautious in their approach to add new assets.

The trend is expected to continue and third-party tower companies are expected to lose further market share to TOOT companies. We expect roll-out plans of TOOT companies to be more demand-driven compared to historical addition, which was led by coverage expansion needs. Even the monthly rental stream or tenancy ratios have not yet seen the levels that were initially expected. Recent tenancy ratios for most operators remain well below 2x. Incremental demand would be driven by new entrants but it remains to be seen how open TOOT companies would be to sharing towers and infrastructure with new entrants. Assuming the new entrants complete their roll-out plans as targeted, the demand for tenancy slots can potentially double to ~0.8m in the next 3-5 years (~0.4m currently).

#### **NEW TELECOM PLAYERS TO DRIVE TENANCY RATES**

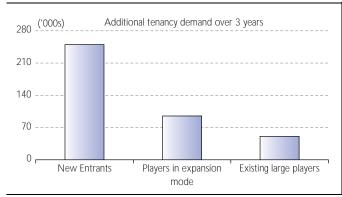
# ☐ New operators/ 3G to drive demand for telecom towers

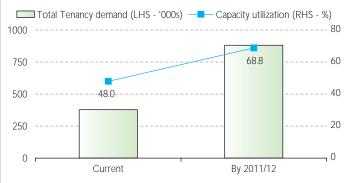
Tenancy ratios for towers owned by incumbents and independent tower companies are likely to rise, led by the following:

- Entry of new private players as well as expansion by erstwhile regional/ smaller private players.
- BSNL's aggressive nationwide capacity expansion programme, wherein it will add 93m GSM lines (equipment order worth \$6.5bn). For this expansion phase, BSNL is looking to occupy towers from independent tower companies. BSNL is currently evaluating the bids received from the interested tower companies.
- Deployment of 3G and WiMax network post the proposed spectrum allocation.

Tenancy ratios for towers owned by incumbents and independent tower companies likely to rise

Exhibit 76: Additional 2G tenancy demand over three years (based on announced roll-out plans)





Source: IDFC-SSKI Research

We estimate utilization rates of telecom towers to increase from 48% to 69% in the next 3-5 years

# ☐ Estimate capacity utilization to increase to 69% from 48%

Factoring in the roll-out plans of new entrants/players in expansion mode as well as potential tenancy demand for 3G and Wimax in the near term, we estimate the utilization rates of telecom towers (tenancy/total tenancy possible) to increase from 48% to 69% in the next 3-5 years. Our estimates imply the blended tenancy rates to increase from 1.4x at present to 2.1x over this period. Our estimates factor in the announced tower addition plans of tower companies (estimated where addition plans are not announced by the company).

Exhibit 77: Network roll-out plans by operators to drive up capacity utilization for tower companies

Particulars	
Total tower base at present	289,323
Total tenancy capacity	795,308
Current tenancy	399,359
Capacity utilization (%)	50.2
Blended tenancy (x)	1.4
Expanded tower base (based on announced/estimates tower additions)	412,812
Expanded tenancy capacity	1,289,264
Potential demand for 2G expansions over 3-5 years (based on roll-out plans)	396,000
Implied market for 2G tenancy slots in 3 years	795,359
Potential demand for 3G expansions over 3 years	90,000
Implied total market for tenancy slots	885,359
Implied utilization on the current base (%)	69
Blended tenancy (x)	2.1
Source, CTI Infractructure OAEVOO precentation, company reports, IDEC SSVI Decearch	

Source: GTL Infrastructure Q4FY09 presentation, company reports, IDFC-SSKI Research

Exhibit 78: Potential new 2G tenancy demand by FY11 (based on subscriber additions)

	FY08	FY09	FY10E	FY11E
Subscribers projected (m)				
GSM	193	296	401	478
CDMA	68	95	109	114
Total	261	392	510	592
Subscribers per BTS (no.)				
GSM	1000	900	850	800
CDMA	1600	1500	1400	1400
BTS installed base projected (no.)				
GSM	192986	329322	473,475	601,190
CDMA	42558	63581	76,619	79,349
Total	235,544	392,902	550,094	680,539
Potential new tenancy demand by FY11				287,636

Source: TRAI, IDFC-SSKI Research

# VALUING TOWER ASSETS; EV of Rs480bn for Indus by 2010E

#### **□** Economics of tower business

- An RTT (roof top towers) costs Rs1.5m-1.8m. GBTs (ground based towers) capable of hosting two BTSs cost Rs2.5m-3m, those with hosting capacity of three BTSs cost Rs3.0-3.4m and with capacity of four BTSs cost Rs3.5m. A GBT with capacity to host six BTSs costs Rs5.7m.
- GBTs typically fetch a rent of ~Rs35,000/ tenant/ month and RTTs Rs19,000-Rs23,000/ tenant/ month. Rentals are arrived at by using a yield of 12-13% on the cost of tower plus pass-through of direct operating expenses. There could be some models in which a sole tenant is charged a higher rental of Rs40,000, which reduces to Rs30,000 for a tenancy of three.
- Operating expenses include annual maintenance charges (Rs6,000-Rs8,000/tower/ month), land lease cost of Rs4,000-5,000/tower/ month for GBT and Rs12,000/tower/ month for RTTs, and other operating expenses (transportation, security, telecommunication, circles charges, etc) of ~Rs4,000/tower/ month.
- Operating expenses like power and fuel, linked directly to operation of the cell site, are a pass-through to the tenants.
- Typical Debt: Equity ratio is 2-3:1.
- GBTs are 40-60 metres tall.
- A tower base is typically 12x9 ft in size, while the total area required for a tower shelter and DG set is 200 sq. ft.
- RTTs can typically host two BTSs, whereas GBTs can host up to seven BTSs but typically host about four.
- Master Service Agreements are signed for 10-15 years while the tower asset is depreciated over a period of 15 years on an average.

GBTs typically fetch a rent of ~Rs35,000/ tenant/ month and RTTs Rs19,000-Rs23,000/ tenant/ month

RTTs can typically host two BTSs, whereas GBTs can host up to seven BTSs but typically host four

Exhibit 79: Economics of tower business (indicative)

Total expenses	Rs/ tower/ month	19,000	23,000
Salary expenses	Rs/ tower/ month	2,000	2,000
Other operating expenses	Rs/ tower/ month	5,000	2,000
Land lease cost	Rs/ tower/ month	5,000	12,000
Maintenance charges	Rs/ tower/ month	7,000	7,000
Rental revenue	Rs/ tenant/ month	35,000	23,000
Cost of tower	Rs m	2.5-3.5	1.5-1.8
Particulars	Units	GBT	RTT

Source: IDFC-SSKI Research

Exhibit 80: Composition of tower capex

% of capex
44-46
14-16
15-16
14-16
6-8
3-5
2-3
2-3

Source: GTL Infrastructure Q4FY09 investor presentation

# Excerpts from American Tower Company's May 2009 presentation

- Typical cost of a tower is \$180,000-190,000. Typical rentals are \$1,700-\$2,000 per month per tenant implying a rental yield of ~12% per annum.
- Typical contract terms include an initial term of 5-10 years with multiple 5year automatic renewals and extensions.
- Average escalation of 3.5% per year in lease rental revenue and 3% for land rentals to be paid by ATC.
- Depreciable life of long lived assets is 20 years; some of the older towers is 21 years on an average.
- Annual maintenance capex of \$1,500 per tower historically.

The tower business model resembles an annuity model

# ☐ High operating leverage, strong free cash flows in the long term

Drawing parallels from the businesses of two US-based independent tower companies – American Tower Corp (ATC; 97% of revenues from tower rentals in CY08) and Crown Castle (90%), we observe that the tower business model – given its frontended investments and long-term lease contracts with customers – resembles an annuity model. Tenancy is the key driver of profitability in the tower business. Given that it is a high fixed cost business, margins rise significantly with improving utilization or higher tenancy. Industry players generally peg the break-even tenancy at ~2x. The business also typically generates strong free cash flows in the long term.

Exhibit 81: Sensitivity of margins to tenancy

Particulars	Case 1	Case 2	Case 3
Number of towers (no.)	1,000	1,000	1,000
Tenancy (no.)	1	2	3
Tenancy slots occupied (no.)	1,000	2,000	3,000
Rent/ Tenant/ Month (Rs)	33,000	30,000	29,000
Rental revenues (Rs m)	396	720	1,044
Pass-through of site operating expenditure (??)	240	240	240
Total revenues (Rs m)	636	960	1,284
Site operating expenditure (pass through)	240	240	240
AMC charges	78	84	90
Salary expenses - own employees	24	24	24
Land lease expenses	84	88	90
Other operating expenses	48	54	60
EBITDA (Rs m)	162	470	780
Margin (%)	25	49	61
Depreciation (Rs m)	200	200	200
EBIT (Rs m)	(38)	270	580
Margin (%)	NA	28	45
Interest cost (Rs m)	170	170	170
PBT (Rs m)	(208)	100	410
Tax @35% (Rs m)	-	35	144
PAT (Rs m)	(208)	65	267
Margin (%)	NA	6.8	20.8
RoE (%)	(26.3)	6.1	21.0
RoCE (%)	(1.4)	8.8	17.8

Source: IDFC SSKI Research \* -Assuming 90% of total towers are GBT

Exhibit 82: American Tower Corp – key financials

Year ended Dec (USD m)	Dec 04	Dec 05	Dec 06	Dec 07	Dec 08
Revenues	707	945	1317	1457	1594
EBIDTA	423	626	824	918	1033
EBIDTA margin (%)	59.9	66.2	62.6	63.0	64.8
EBIT	94	169	286	388	618
EBIT margin (%)	13	18	22	27	39
PAT (pre-exceptionals)	(237)	(143)	29	93	236
Tenancy (x)	1.7	1.9	2.1	2.3	2.5
RoE (%)	(16.1)	(6.0)	0.6	1.5	11.5
Free cash flow	175	309	494	538	530
Net Debt/ Equity (x)	2.1	0.8	0.7	1.4	1.4

Source: Bloomberg

Exhibit 83: Crown Castle – key financials

Year ended Dec (In \$m)	Dec 04	Dec 05	Dec 06	Dec 07	Dec 08
Revenues	604	677	788	1385	1527
EBIDTA	274	315	409	708	836
EBIDTA margin (%)	45.4	46.6	51.9	51.1	54.8
EBIT	(11)	34	124	168	309
EBIT margin (%)	(1.8)	5.0	15.7	12.1	20.3
PAT (pre-exceptionals)	(302)	(397)	(49)	(223)	(49)
Tenancy					
RoE (%)	10.7	(29.8)	(6.5)	(12.4)	(2.4)
Free cash flow	84	143	157	50	62
Net Debt/ Equity (x)	0.5	1.5	2.7	1.7	2.0
Course, Plaambara					

Source: Bloomberg

ATC recently acquired a 100% stake in Xcel Telecom while Quippo Telecom and Tata Tele merged passive infrastructure assets

# ☐ Industry in consolidation mode...

The tower industry has seen a spate of consolidation recently, as explained below:

- In March 2009, American Tower Company (ATC) acquired a 100% stake in Xcel Telecom from a private equity player (Q investments). According to media reports, EV of the deal has been pegged at ~Rs8bn which, for XCEL Telecom's tower base of 1,730 towers in 15 circles (with average tenancy of 1.4x), implies an EV/tower of Rs4.8m.
- In January 2009, Quippo Telecom and Tata Teleservices merged their passive infrastructure assets with the merged entity having an asset base of 18,000 towers. The EV of the transaction was pegged at Rs130bn (\$2.6bn) implying an EV/tower of Rs7.2m. The combined entity plans to have a base of 50,000 towers (organic growth) by 2012.

# RCOM divested a part stake at EV/tower of

# □ ...valuations, however, have been at a 30-50% discount to precedents

In August 2007, RCOM divested a 5% equity stake in Reliance Infratel for Rs14bn (\$337m at the prevailing exchange rate) and the implied EV of the transaction was Rs280bn. On a base of 23,434 towers (as of December 2007), this implies EV/ tower of Rs12m. In December 2007, Bharti divested an 11% stake in Bharti Infratel for \$1.35bn, implying EV/tower of  $\sim$ Rs10m. Thus, valuations implied by the recent M&A transactions in tower companies have been at a 30-50% discount to their precedents.

# □ Valuing Indus at EV of Rs480bn (EV/ tower of Rs4m)

### Brief profile

Indus an independent tower JV formed by Bharti, Vodafone-Essar and Idea Cellular

Rs12m; Bharti Infratel has implied EV/ of Rs10m

Indus is an independent tower company formed as a JV by three leading GSM operators – Bharti, Vodafone-Essar and Idea Cellular. Indus operates in 16 circles and Bharti, Vodafone-Essar and Idea have each transferred 35,066, 34,510 and 11,094 towers respectively to Indus. Indus further constructed 14,484 towers in FY09, translating into a total tower portfolio of 95,154 towers as of March 2009. Bharti Infratel (owned ~89% by Bharti Airtel) and Vodafone-Essar have a 42% equity stake each in the company while Idea Cellular holds the remaining 16% through ABTL (Aditya Birla Telecom) – its 80% subsidiary.

#### Estimated EV of Rs480bn for Indus

Our EV for Indus works out to Rs480bn by March 2010

Based primarily on the economics of tower business as highlighted in the previous section, our EV for Indus works out to Rs480bn by March 2010 – which implies an EV/ tower of Rs4m (tower base of 120,000 assumed in FY10) and EV/ FY11 EBIDTA of 9.4x. In comparison, ATC's valuation stands at EV/ CY09 EBIDTA of 14.6x and EV/ CY10 EBIDTA of 13.3x and Crown Castle's at 14.6x and 13.4x respectively. Our valuation translates into a proportional equity value of Rs46 for Bharti Airtel and Rs19 for Idea Cellular.

Exhibit 84: Key assumptions used for valuing Indus

YE 31 March	FY09	FY10	FY11	FY12	FY19	FY20
Average number of towers	87,912	107,654	130,154	147,654	173,154	175,154
Tenancy (x)	1.48	1.65	2.00	2.32	2.92	2.95
Tenancy (no.)	130,110	177,629	260,308	342,557	505,610	516,704
Rent/ Tenant/ Month (Rs)	28,865	28,314	27,446	26,612	30,450	31,327

Source: Company reports, IDFC-SSKI Research

Exhibit 85: Indus – free cash flow

YE 31 March (Rs m)	FY10	FY11	FY12	FY18	FY19	FY20
EBITDA	33,001	50,949	67,869	116,041	122,481	129,240
Depreciation	21,788	26,506	30,271	37,000	37,770	38,548
EBIT	11,213	24,443	37,598	79,041	84,711	90,692
Tax on EBIT	(3,546)	(7,781)	(12,613)	(41,091)	(46,804)	(53,039)
Chg in net working capital	344	1,233	(785)	181	188	195
Capex	(77,879)	(63,658)	(49,294)	(11,493)	(11,607)	(11,724)
FCF	(48,079)	(19,256)	5,177	63,639	64,258	64,672

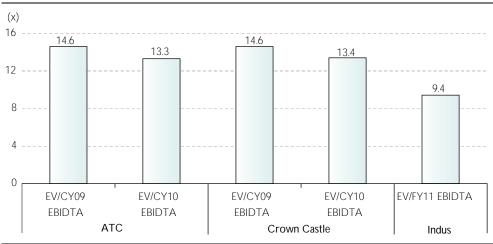
Source: IDFC-SSKI Research

#### Exhibit 86: DCF-based EV value of Rs480bn in March 2010 (EV/ tower of 4x)

	<u> </u>
(Rs m)	
WACC (%)	11.5
PV of FCF till FY20 as of March 2010	209,352
Terminal growth (%)	4
Terminal value	896,784
PV of terminal value as of March 2010	270,810
Target enterprise value as of March 2010	480,162
Target EV/ FY11 EBIDTA (x)	9.4
Net debt FY10	15,670
Equity value	464,492
Terminal EV	896,784
Terminal EV/ EBITDA (FY20)	6.9
EV/ Tower	4.0
Bharti Infratel's share of equity value (42%)	195,087
Bharti Airtel's share of equity value (89% stake in Bharti Infratel)	173,627
Per share value of Bharti Airtel (Rs)	46
Idea group's share of equity value (16%) (Indus stake held by ABTL)	74,319
Idea Cellular's share of equity value (Idea holds 80% in ABTL)	59,455
Per share value of Idea Cellular (Rs)	19
Source: IDFC-SSKI Research	

Per share value for Idea in Indus works out to Rs19

#### **Exhibit 87: Comparative valuations for Indus**



Source: Bloomberg consensus estimates, IDFC-SSKI Research

# INTERNET: HUGE UNTAPPED POTENTIAL

Wireline internet connections in India, at 12.2m (user base of ~100m), translate into a penetration rate of just 16% in the target age group of 15-59 years. The Gol's proposed auction of BWA spectrum is aimed at oveRCOMing the last mile physical infrastructure constraints and ensuring speedy roll-out of broadband services in rural markets. Incumbent telecom operators with extensive rural presence are likely to leverage this growth opportunity to scale up their broadband business. While this business is likely to be ARPU-accretive, it also offers significant cost synergies with the existing wireless business.

India has 16% internet penetration among population in the 15-59 years age group

# ☐ Estimates internet penetration of 16% in India in target age group

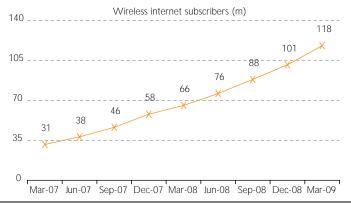
India has 13.5m wire-line internet connections (excluding leased line connections used by large corporates, banks, IT/ ITES, etc) as of March 2009 – implying a 5-year CAGR of 25%. Total broadband connections (data speeds of >256kbps) stand at 6.62m and have registered a 5-year CAGR of 222%. With an internet users/connection ratio of ~8, total internet users in the country work out to ~100m (penetration of 16% among population in the 15-59 years age group). In addition, 118m wireless subscribers access internet through GSM-/ CDMA-based technologies.

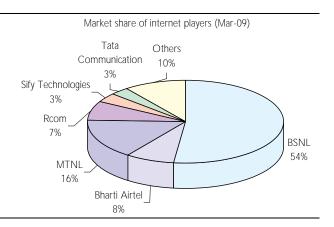
Exhibit 88: Internet user base in India (excluding leased line connections)

Internet subscribers (m)	Mar-07	Jun-07	Sep-07	Dec-07	Mar-08	Jun-08	Sep-08	Dec-08	Mar-09
Wireline internet subscribers (including broadband)	9.27	9.22	9.63	10.36	11.09	11.66	12.24	12.85	13.54
Broadband subscribers	2.34	2.42	2.67	3.13	3.87	4.38	4.9	5.5	6.22
Wireless subscribers capable of accessing									
data services/internet through GSM/CDMA services (m)	31	38	46	58	66	76	88	101	118

Source: Internet Service Providers Association of India, IDFC-SSKI Research Note data for individual subscriptions only:

Exhibit 89: Strong growth in wireless internet subscriber base





Source: Source: Internet Service Providers Association of India, TRAI

Internet penetration constrained by absence of last mile connectivity and relevant content and applications

# ☐ Wireless technologies aimed at improving internet penetration

Internet penetration in India, especially in rural areas, remains constrained mainly due to the absence of last mile connectivity and aggravated in the absence of relevant content and applications. The GoI has identified wireless broadband technologies as a means to oveRCOMe the current last mile physical infrastructure constraints and ensure speedy roll-out of broadband services in rural India. To enhance internet penetration in rural areas, TRAI has identified a combination of wireless broadband technologies like WiMAX and Wi-Fi.

WiMAX and Wi-Fi offer advantages vis-à-vis wireline technologies These technologies offer the following advantages vis-à-vis wire-line technologies:

- Faster roll-out with minimal disruption of existing public infrastructure like roads.
- Option to scale up roll-out plans in a phased manner, depending on the market response and potential.
- Independent of geography and landscape enabling remote connectivity.
- Uninterrupted connectivity even when moving at high speeds (not restricted to specific coverage areas).

#### Details of the proposed BWA auction

The GoI plans to allocate spectrum for Broadband and Wireless Access (BWA) services to four players in each service area – two blocks of unpaired 20MHz spectrum in the 2.3GHz band and two blocks of unpaired 20MHz spectrum in the 2.5GHz band, subject to availability of spectrum. Overall, 66 blocks (3x22 circles) are up for auction excluding one block in the 2.5GHz band in each service area (to be reserved for MTNL/ BSNL).

Exhibit 90: GOI's proposed BWA spectrum auction (originally proposed)

Service area	BWA (Rs bn)
Mumbai, Delhi and Category A	0.8
Kolkata & Category B	0.4
Category C	0.15
All India equivalent reserve price	10.1
Source: DOT, IDFC-SSKI Research	

# ☐ Strong growth opportunity for incumbent telecom operators

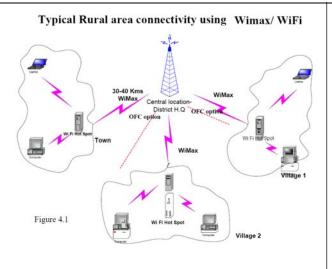
DoT's auction norms permit existing UAS/ CMTS/ ISP (Category A or B) license-holders to bid for BWA spectrum. The incumbent telecom operators with strong rural penetration are likely to leverage this growth opportunity to scale up their broadband business. While this business is likely to be ARPU-accretive for these players, it also offers significant cost synergies with the existing wireless business.

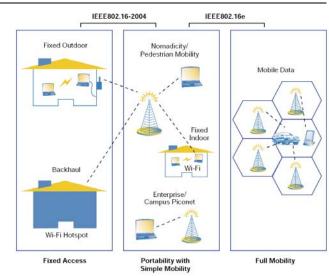
WiMax a new standardsbased wireless technology capable of delivering broadband internet over vast expanses of areas

# Primer on WiMax (Worldwide Interoperability for Microwave Access)

WiMax is a new standards-based wireless technology capable of delivering broadband internet over vast expanses of areas. WiMax offers additional advantages to developing economies such as India, which do not have a widespread broadband infrastructure already in place. As WiMax is standards-based, it can enable economies of scale and thus bring down the cost of broadband access as also ensure interoperability while increasing ease of implementation. Peak data transfer rates for WiMAX vary from 18Mbps (5MHz channel) to 75Mbps (20MHz channel) with an average outdoor range of 2-10km. The evolution of WiMAX consists of three phases – Phase I based on IEEE 802.16-2004 provides fixed wireless connections via outdoor antennas, Phase II based on IEEE 802.16-2005 provides indoor installations with smaller antennas similar to Wi-Fi access points and Phase III based on IEEE 802.16e provides full mobility, i.e. seamless broadband internet connection through a network of towers even when moving at high speeds.

Exhibit 91: Wimax technologies – providing faster internet penetration in rural areas





Source: TRAI Source: Intel

# **COMPANIES**

# **Bharti Airtel**

Rs384 OUTPERFORMER

# Advantage incumbency

Mkt Cap: Rs1,457bn; US\$30.5bn

11 August 2009

BSE Sensex: 15075

Reuters BRTI.BO
Bloomberg BHARTI IN
1-yr high/low (Rs) 518/241
1-yr avg daily volumes (m) 10.48
Free float (%) 32.6

# 

Performance (%)								
:	3-mth	6-mth	1-yr	3-yr				
Bharti Airtel	(1.9)	18.7	(9.6)	95.7				
Sensex	25.1	63.0	0.3	40.21				

Bharti Airtel (Bharti) is the best placed among peers to withstand the competitive blitz. While we expect strong EBITDA in wireless business (13% CAGR over FY09-11), earnings growth – at 1.4% CAGR – would be muted as we build in 3G roll-out and license fee costs. We reinitiate coverage on the stock with a DCF-based price target of Rs445 per share, implying a target FY11E EV/ EBITDA multiple of 9.6x – a discount to the stock's historic valuation range. Though we believe muted earnings growth, escalating competitive intensity and the MTN-merger deal hangover would restrict a rebound in the stock to historic peak valuations, our DCF-based price target of Rs445 per share offers 16% returns by March 2010. Outperformer

**Proven ability to withstand competitive pressure...:** Bharti enjoys a strong incumbency advantage – even as rival incumbents catch on in terms of coverage and services, Bharti's wireless subscriber base would likely see a CAGR of 18% over FY09-11 to 131m. We believe Bharti is unlikely to concede a significant market share to new competition. We expect Bharti to maintain its lead in the Indian telecom market with a 22% market share in FY11E (24% currently).

...but 3G-related capex to hit earnings growth: Despite competition heating up, we expect Bharti to report EBITDA CAGR of 13% over FY09-11. However, the impact of 3G-related capex (including license fees) of Rs80bn by Q3FY11 would restrict earnings CAGR to a meager 1.4% over the period (6.6% CAGR excluding 3G impact).

**DCF-based target price of Rs445/share:** Our March 2010 price target of Rs445 per share for Bharti reflects core business value of Rs399/share and Rs46/share for its stake in Indus. We reckon that industry concerns, a sharp earnings deceleration and overhang on account of MTN deal would restrict a re-rating in the stock. However, Bharti's inherent business strengths and high visibility on FCF also restrict downside risk to the stock. Our target price implies an FY11E EV/EBITDA multiple of 9.6x – in line with its current FY10E multiple. Re-initiating coverage with Outperformer.

# Key financials

As on 31 March	FY07	FY08	FY09	FY10E	FY11E
Net sales (Rs m)	185,195	270,250	369,615	422,719	463,906
Adj. net profit (Rs m)	41,779	67,184	96,622	94,313	99,321
Shares in issue (m)	3,792	3,796	3,796	3,797	3,797
Adj. EPS (Rs)	11.0	17.7	25.5	24.8	26.2
% change	75.7	60.6	43.7	(2.4)	5.3
PE (x)	34.8	21.7	15.1	15.4	14.7
Price/ Book (x)	10.6	6.5	4.6	3.3	2.7
EV/ EBITDA (x)*	20.7	13.7	10.5	9.0	8.1
RoE (%)	36.3	37.0	35.8	25.0	20.4
RoCE (%)	27.9	28.3	26.4	21.8	18.2

Prices as on August 7, 2009; \*- net debt adjusted for estimated equipment payables

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# **INVESTMENT ARGUMENT**

Bharti, given its incumbency advantage and ability to compete effectively, is best placed to weather competitive headwinds and defend its turf (only 200bp market share loss over FY09-11E). While we expect an EBIDTA CAGR of 10.5% for Bharti (6.4% CAGR drop in wireless EBIDTA/ min), earnings growth is likely to remain capped at 1.4% (6.4% ex-3G costs) due to higher depreciation and interest charges. Though we believe a likely deceleration in earnings and rising competition cap a valuation rebound to historic peaks (currently in mid-range), Bharti's inherent business strengths and high visibility on FCF also restrict downside to the stock. We initiate coverage on the stock with Outperformer and a DCF-based price target of Rs445, which implies a 16% upside from here. Key risks include predatory competition exerting further pressure on margins and a sharp increase in MTN's valuations for the proposed Bharti-MTN deal.

☐ Bharti – proven ability to withstand competitive pressure

Bharti, over the last 18 months, has maintained its market share at ~24% despite competition from strong players like Idea, Vodafone, RCOM and Aircel. Going forward, while we expect a spurt in competitive intensity due to near-simultaneous service roll-out by 5-6 new players, we see Bharti well-placed to defend its market share (200bp loss over next two years). The company has an extensive network coverage (82% population coverage), a strong brand, experienced management team with proven track record and high cash flows.

# ☐ Incumbency – a strong advantage; Bharti stands out

We believe that extensive coverage and a backend infrastructure remain key differentiators for incumbents. This, along with an extremely well-penetrated distribution network, offers a considerable advantage to them. We believe the incumbency advantage cannot be undermined and even as rival incumbents catch on, we expect Bharti to maintain its lead with a network coverage spanning 423,149 non-census towns and villages across India. Further, Bharti has invested heavily into rural areas, which offer huge untapped potential. Thus, we believe the company has a lead over peers and we see continued headroom for growth.

#### **☐** Mobile business – market share loss unlikely to be steep

We estimate Bharti's wireless subscriber base to touch 131m by FY11 – a 2-year CAGR of 18%. Our estimates imply an average monthly net addition of 2.1m subs in FY10 and 0.9m, and wireless market share at 22% in FY11 – down from 24% in March 2009. This implies an 18% share of net industry additions over FY09-11. Our market share estimates for Bharti factor in a sharp rise in competitive intensity over the next 12-18 months due to entry of new players and pan-India expansion by regional/ smaller players. Most of these players are funded for their initial capex needs and have the backing of experienced global/ regional telecom players. Further, infrastructure sharing is likely to shorten their time to market.

82% population coverage, strong brand, experienced management team and high cash flows – Bharti's key strengths

Bharti has a lead over peers; we see headroom for further growth

New players to give tough competition; but incumbency advantage to stand Bharti in good stead

Lower usage profile of new subscribers and lower realizations to hit ARPU

# **□** Expect wireless ARPU to decline over FY09-11

We expect 12.4% compounded annual decline in Bharti's ARPU over FY09-11, with a drop of 16% in FY10 and 8.6% in FY11. Our estimates factor in lower usage profile of incremental subscribers as well as lower realizations due to increased competition leading to higher free minutes being offered, even if there is no drop in tariff per se. Resultant, we expect revenue CAGR of 11% and EBIDTA CAGR of 13% for the wireless business over FY09-11. Though we factor in a 6.4% drop in EBIDTA/min for this business, our estimated EBIDTA margins for FY10 and FY11 are higher than FY09 due to the twin impact (lower revenue as well as lower costs, and thereby an apparent margin expansion) of the Re0.1 cut in termination charges with effect from 1 April 2009. Further, we estimate ~120bp downside in wireless margins from the proposed 1-2% hike in spectrum charges and potential margin upsides from the proposed 2% cut in USO levy.

# **□** Continued strength in non-mobile business

With sustained growth momentum, we expect contribution from Bharti's non-mobile segments to increase to 19% to its revenues by FY11 from 18% in FY09. With resumption in corporate spending, the enterprise (corporate) business – which has slowed down since H2FY09 – is likely to recover. The long distance (NLD+ILD) business remains levered to the company's wireless business and is likely to get competitive due to capacity expansion by peers. We expect 10% revenue CAGR in the tele-media business with lower EBIDTA growth of 7% due to rising competition in the broadband business. Bharti has recently launched its DTH and IPTV offerings in select cities and is working on attaining a nationwide presence going forward.

# ☐ But 3G capex, higher depreciation to dampen earnings growth

Despite a 10.5% EBIDTA CAGR over FY09-11, Bharti's earnings are likely to register a meager 1.4% earnings CAGR over the period due to the impact of higher depreciation charges and interest expenses (net) resulting from ongoing capex as well as likely outlay on 3G. Our estimates factor in 3G license fees of Rs40.4bn and capex of Rs40bn by FY11 towards rolling out 3G services with commercial launch assumed in Q3FY11. Excluding the impact of 3G outlay, we estimate 6.6% CAGR in Bharti's earnings over FY09-11. Accordingly, we estimate an adjusted EPS of Rs24.8 in FY10 and Rs26.2 in FY11 (Rs25.4 and Rs28.9 respectively without considering 3G capex).

Exhibit 1: Earnings growth to be impacted by 3G capex

	FY09	FY10E	FY11E	CAGR (%)
Base case: Including 3G capex				
Adjusted net profit (Rs bn)	96.6	94.3	99.3	1.4
EPS (Rs)	25.5	24.8	26.2	1.4
Sensitivity: excluding 3G capex				
Adjusted Net profit (Rs bn)	96.6	96.3	109.7	6.6
EPS (Rs)	25.5	25.4	28.9	6.6

Source: IDFC-SSKI Research

Likely recovery in enterprise business; competition rising in other businesses but they will remain stable

Impact of 3G costs to cap earnings over FY09-11

We expect Bharti to generate free cash only in FY11

#### Current 12-month forward valuations of 16.2x earnings and 9.2x EV/EBIDTA at a discount to historic valuation range

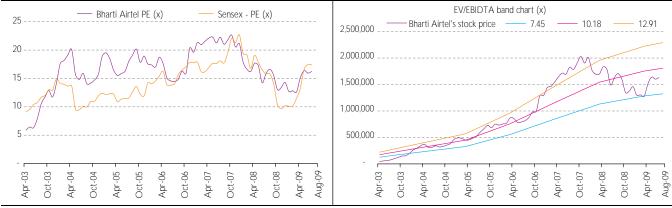
# □ 3G capex to delay positive FCF

Bharti's management has guided for \$2.0bn-2.2bn of capex in FY10 with additional capex of \$2bn in the tower business (Infratel + Indus). Based on these capex plans and our estimates on 3G roll-out (Rs80bn by FY11 including license fees), we expect Bharti to generate positive FCF only in FY11 (very marginal FCF in FY10). With peak capex behind, we expect the company to generate strong cash flows beyond FY11. Reducing capex intensity is likely to lead to capex/ sales decline from 33% in FY09 to 21% in FY11. However, any steep premium paid for the 3G license and higher-than-estimated capex commitment for 3G are key risks to these estimates.

# ☐ A sharp valuation rebound unlikely; but downside is also capped

With easing liquidity and expectations of an economic recovery gaining ground, there has also been a reversal of the valuation premium gained by Bharti post October 2008 – a phase that coincided with a severe liquidity crunch which shifted focus to balance sheet health. Bharti's current 12-month forward valuations of 16.2x earnings and 9.2x EV/EBIDTA are at a discount to its historic valuation range. We believe that Bharti's diversified business model, its strong and experienced management team and high visibility on FCF restrict valuation downside for the stock. However, a sharp deceleration in earnings growth (CAGR of 1.4% over FY09-11 vis-à-vis 52% CAGR over FY07-09), along with escalating competitive intensity, would also cap a rebound in valuations to their historic peaks. Further, the risk of upward revision in MTN's valuations for the proposed Bharti-MTN deal is a near-term overhang on the stock (we expect the deal to be earnings-neutral for Bharti in FY10).

Exhibit 2: Bharti's valuation band charts – trading at a discount to the Sensex and its own historic levels



Source: IDFC-SSKI Research

Core business valued at Rs399/ share and stake in Indus at Rs46/ share

# □ DCF-based price target of Rs445; Outperformer

We have used the DCF methodology to arrive at Bharti's fair value. We estimate a WACC of 11.4% for Bharti and assume a terminal growth rate of 3.5%. Based on these assumptions, we arrive at a March 2010 target price of Rs399 for the stock. We value Bharti's 42% stake in Indus (through Bharti Infratel) at Rs46/ share, which takes the target price up to Rs445/ share. Our target EV/EBIDTA of 9.6x compares with the mid-range of historic one-year forward valuations. With the stock offering 16% upside from here, we initiate coverage with Outperformer.

# IDFC - SSKI INDIA

Exhibit 3: Bharti - core business DCF value of Rs399/share

(Rs bn)	FY10E	FY11E	FY12E	FY13E	FY14E	FY20E
,						
EBITDA	172,222	185,103	199,016	216,927	236,451	365,596
Current tax	(18,041)	(19,954)	(23,270)	(29,369)	(34,922)	(73,687)
Capex	(145,012)	(105,000)	(85,000)	(78,817)	(78,574)	(76,968)
Change in WC	10,071	(16,917)	3,425	(26, 136)	2,503	3,563
FCF	19,241	43,232	94,171	82,606	125,457	218,505
WACC	11.4%					
PV of projection period	713,207					
Terminal growth rate	3.5%					
Terminal value	2,859,075					
Terminal EV/E	7.8					
PV of terminal value	871,083					
TV as % of EV	54%					
Total Enterprise value	1,603,531					
Net debt	88,875					
Equity value	1,514,656					
Value per share (Rs)	399					

Source: IDFC-SSKI Research

Exhibit 4: Sensitivity analysis

WACC / g (x)	2.5%	3.0%	3.5%	4.0%	4.5%
10.4%	430	449	470	494	522
10.9%	399	414	432	452	475
11.4%	371	384	399	416	435
11.9%	347	358	370	384	400
12.4%	325	334	345	357	370

Source: IDFC-SSKI Research

### **WIRELESS BUSINESS: MACRO HEADWINDS**

With established execution capabilities, superior coverage and management bandwidth, we expect Bharti to maintain its lead in the fragmented wireless market even as its market share declines from 24% to 22% in FY11. While we estimate a wireless subscriber base of 131m for Bharti by FY11, competitive intensity is bound to increase with service roll-outs by new entrants, expansion by existing regional players and marginally due to MNP implementation (especially in metro circles). We estimate Bharti's ARPU to decline 12.4% over FY09-11, which would restrict revenue CAGR to 11% while rising competition would lead to a 6.4% drop in EBIDTA/ minute. Further, we also expect a 120bp hit on wireless EBIDTA margins due to the proposed hike in spectrum charges.

Exhibit 5: Wireless business - key financials and underlying assumptions

		FY08	FY09	FY10E	FY11E	FY09-11 CAGR %
All India wireless subs	m	256	392	510	592	22.9
Bharti's subscribers	m	62	94	120	131	18.0
Bharti's market share	%	24.2	24.0	23.5	22.1	
Bharti's share in net adds	%	26.4	23.6	21.8	13.6	
Revenue	Rs bn	218	304	349	375	11.1
Revenue growth	%	54.0	39.4	15.1	7.2	
EBITDA margin	%	39.2	31.0	32.5	32.1	
ARPU	Rs	366	325	273	249	(12.4)
Revenue / min	Rs	0.77	0.64	0.57	0.54	(8.1)
EBITDA / min	Rs	0.30	0.20	0.18	0.17	(6.4)

Source: IDFC-SSKI Research

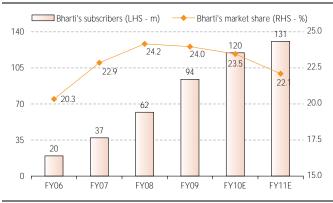
### ☐ Expect some market share loss; 131m wireless subscribers by FY11

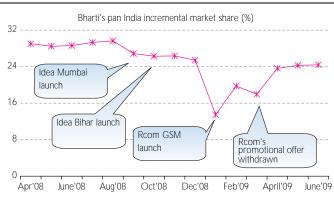
We estimate Bharti's wireless subscriber base to touch 131m by FY11 - a CAGR of 18% over FY09-11. Our estimates imply an average monthly net addition of 2.1m subs in FY10 and 0.9m in FY11. We estimate the share of B and C circles in Bharti's subscriber base to increase from 49% in FY09 to 54% by FY11. The share of metro circles is likely to decline from 13% to 11%.

We estimate Bharti's wireless market share at 22% in FY11, down from 24% in March 2009. This implies an 18% share of net industry additions over FY09-11. Our market share estimates for Bharti factor in a sharp rise in competitive intensity due to entry of new players and expansion by regional players. We have also assumed a marginal loss in market share (especially in metro circles) due to MNP implementation. Incumbent players like Bharti face network congestion issues due to the paucity of spectrum, which could potentially lead to some subscriber churn – especially in metros.

Rising competitive intensity with service rollouts by new entrants, expansion by existing regional players and MNP implementation

Exhibit 6: Expect 131m subscribers by FY11 – implying a 200bp loss in Bharti's market share





Source: TRAI, IDFC-SSKI Research

Exhibit 7: TRAI's QoS parameters (March-09)

QoS parameter Pre	scribed criterion	Operators not meeting	in no of circles
		the prescribed criterion	
Call set up success rate (%)	>95%	Bharti Airtel	1
		Aircel	4
TCH Congestion rate (%)	<2%	MTNL - GSM	1
		Bharti Airtel	4
		Aircel	5
		Vodafone	1
% connections with good voice quality	/ (%) >95%	Bharti Airtel	2
		Aircel	6
Calls answered by operators	>95%	Bharti Airtel	9
(voice to voice) within 90 seconds		Idea	4
		Rcom	19
		Vodafone	2
		BSNL	5
		Spice	1
		Aircel	2
		TTSL	1
		Idea	1

Source: TRAI performance indicators - September 2008

#### **□ Decline in EBITDA/ minute unavoidable**

We see 8% compounded annual fall in rev/ min and 6.4% decline in EBIDTA/ min over FY09-11... 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. Further, 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. In Q1FY10, Bharti's revenue/min declined to Re0.58 from Re0.63 in Q4FY09, with ~60 of the decline due to cut in MTC charges. Over FY09-11, we expect 8% compounded annual decline in revenue/minute with EBIDTA/minute (wireless) declining by 6.4% over the period.

## ...to lead to a 12.4% decline in ARPU

#### ☐ ARPU to decline due to competition, termination charges

We expect a 12.4% compounded annual drop in Bharti's ARPU over FY09-11 (16% in FY10 and 8.6% in FY11). The ARPU decline is more pronounced in FY10 on the back of a 10.9% drop in average realization and 5.7% drop in MoU. The lower realization is partly due to the recent cut in termination charges (an impact of Re0.026) as well as higher free minutes being offered in the wake of competitive pressures. The drop in MoU is mainly on account of low usage by incremental subscribers as well as rising incidence of multiple SIM ownership.

Exhibit 8: Expect 12.4% drop in ARPU over FY09-11

Bharti's Wireless business	FY08	FY09	FY10E	FY11E	FY09-11 CAGR, %
MoU (min)	478	508	479	461	(4.7)
Growth (%)	6.7	6.3	(5.7)	(3.7)	
ARPU (Rs)	366	325	273	249	(12.4)
Growth (%)	(11.9)	(11.4)	(16.0)	(8.6)	
Realization (Rs/min)	0.77	0.64	0.57	0.54	(8.1)
Growth (%)	(17.4)	(16.6)	(10.9)	(5.2)	

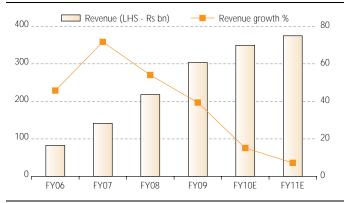
Source: Company data, IDFC-SSKI Research

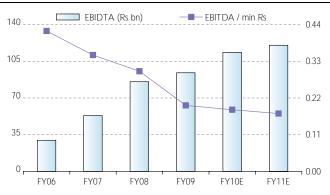
# Rising competitive intensity taking a toll on profitability

### □ Revenue CAGR of 11%, 6.4% drop in EBIDTA/min over FY09-11E

We expect 11% CAGR in Bharti's wireless revenues over FY09-11, based on our estimate of 18% CAGR in subscriber base and 12.4% decline in ARPU. The expansion in EBIDTA margins over this period is primarily due to the twin impact of the cut in termination charges – lower termination charges lead to lower revenues as well as lower costs, and thereby an apparent margin expansion. We believe EBIDTA/min would be a more accurate measure of profitability and expect it to decline by 6.4% (compounded annual rate) over the period. This reflects our view that rising competitive intensity would adversely impact margins. Notably, the proposed 1-2% increase in spectrum fees could be a potential margin downside while the proposed 2% cut in USO charges could support margins. Both the changes have been proposed but there is lack of clarity on implementation status as of now.

Exhibit 9: Expect 11.1% revenue CAGR over FY09-11; EBIDTA/min to decline 6.4%





Source: Company data, IDFC-SSKI Research

We estimate Bharti's wireless spectrum charges to increase from 2.9% of

gross revenues to 4.1%

#### Estimate 120bp impact (as % of gross revenues) of higher spectrum charges

Based on TRAI's data of circle-wise gross revenues and spectrum held by Bharti in each circle as on 20 March 2009, we estimate Bharti's wireless spectrum charges to increase from 2.9% of gross revenues to 4.1% (from 3.8% to 5.4% as % of AGR) due to the proposed hike in spectrum charges.

Exhibit 10: Expect 120bp rise in spectrum charges due to likely hike in spectrum fees

Wireless segment (Rs bn)	3mths ended March-09	
Gross revenues	89.0	
AGR	68.4	
Spectrum charges by circle @ current ra	ates 2.62	2.9% of GR, 3.8% of AGR
Spectrum charges by circle @ proposed	rates 3.66	4.1% of GR, 5.4% of AGR

Source: TRAI, IDFC-SSKI Research

Exhibit 11: GSM spectrum allotted to Bharti in each circle (as on 20 March 2009)

Service area	Spectrum allotted	Spectrum allotted	Total spectrum
	in 900MHz band	in 1800MHz band	allotment (MHz)
Delhi	8	2	10
Mumbai	0	9.2	9.2
Kolkata	6.2	1.8	8
Maharashtra	0	8.2	8.2
Gujarat		6.2	6.2
A.P	7.8	2.2	10
Karnataka	7.8	2.2	10
Tamilnadu (incl. of Chennai)	0	9.2	9.2
Kerala		6.2	6.2
Punjab	7.8	0	7.8
Haryana	0	6.2	6.2
UP(West)	0	6.2	6.2
UP(E)	6.2	1	7.2
Rajasthan	6.2	2	8.2
M.P	0	8	8
West Bengal	4.4	1.8	6.2
HP	6.2	0	6.2
Bihar	6.2	3	9.2
Orissa	6.2	1.8	8
Assam	1.8	4.4	6.2
NE	4.4	1.8	6.2
J & K	6.2	0	6.2
Total	85.4	83.4	168.8

Source: DOT

### ☐ Bharti Infratel's investment needs to moderate going forward

We expect Bharti Infratel's tenancy to increase to 1.65x in FY11 from 1.34x in FY09 Bharti Infratel provides infrastructure services in 11 circles (overlap of four circles with Indus). Bharti Infratel had 28,078 towers as of June 2009 with average tenancy of 1.43x after netting off 35,066 towers transferred to Indus. Going forward, we expect Bharti Infratel's investment needs to taper given Bharti's already high population coverage of 82%, increasing focus on infrastructure sharing and utilizing the leveraging ability of its 42% JV Indus. We also expect Bharti Infratel's tenancy to increase to 1.65x in FY11 from 1.34x in FY09, which provides scope for margin expansion.

Exhibit 12: Increase in tenancy to lead to higher margins

	•	, ,		
(Rs bn)	FY08	FY09	FY10E	FY11E
Total towers	53,083	27,548	32,792	36,221
EOP tenancy	1.22	1.34	1.50	1.65
Revenues	6.0	42.5	34.8	43.8
EBITDA	2.2	15.0	15.0	19.1
EBITDA margin (%)	37.1	35.4	43.2	43.7

Source: Company data, IDFC-SSKI Research

Bharti launched its 2.5G and 3.5G mobile services in Sri Lanka under 'Airtel' brand in January 2009

### ☐ International foray – calling Sri Lanka

Bharti launched its 2.5G and 3.5G mobile services in Sri Lanka under the 'Airtel' brand in January 2009 through its 100% subsidiary Bharti Airtel Lanka Pvt Ltd. Bharti plans to cumulatively invest \$200m for setting up its mobile network in the country. It launched its services with uniform call charges and free incoming calls, at variance to the prevailing tariff structures. The company has entered into a 3-year managed network deal with Huawei, partnered with IBM to manage its IT infrastructure and application requirement, and selected iSmart Timex as its customer care partner. Bharti does not yet report the performance of Sri Lankan operations.

### Non-mobile Business: Going strong

With sustained growth momentum, we expect marginally higher contribution from Bharti's non-mobile business (19% of revenues by FY11; 18% in FY09). With resumption in corporate spending, the enterprise (corporate) business – which has slowed down since H2FY09 – is likely to recover. The long distance (NLD+ILD) business remains levered to the company's wireless business and is likely to get competitive due to capacity expansion by peers. We expect 10% revenue CAGR in the tele-media business with a lower 7% EBIDTA growth due to rising competition in the broadband business. Bharti has recently launched its DTH and IPTV offerings in select cities, and is working on attaining a nationwide presence going forward.

### ☐ 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. A tough economic environment since H2FY09 has, however, led to enterprises squeezing spends on integration telecommunication solutions, and thus to sluggishness in Bharti's Enterprise business (corporate). With an improving economic outlook, we expect recovery in this segment from H2FY10 and estimate 8.2% revenue CAGR and 8.6% EBIDTA CAGR over FY09-11.

Exhibit 13: Key financials - enterprise business (corporate)

		FY08	FY09	FY10E	FY11E	FY09-11 CAGR, %
Revenues	Rs bn	13.2	16.9	15.9	19.8	8.2
EBITDA	Rs bn	6.1	7.6	8.4	8.9	8.6
EBITDA margin	%	46.3	44.7	53.2	45.0	

Source: Company data, IDFC-SSKI Research

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

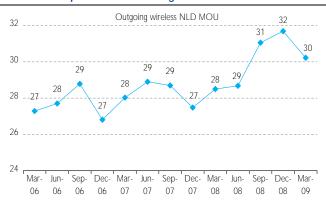
#### NLD market – expect 15% CAGR over FY09-11

India's NLD market is Rs150bn in size in terms of gross revenues (FY09) with high competitive intensity among 14 players. Bharti, with a share of 30%, is the leader and the top five players account for 87% of the market. We estimate 15% CAGR in India's NLD market over FY09-11 based on our subscriber projections and usage assumptions. With capacity expansion planned by large players, the industry is likely to get more competitive going forward.

With improving economic outlook, we expect 8.2% revenue CAGR and 8.6% EBIDTA CAGR over FY09-11 in the segment

Bharti, with a share of 30%, is the leader and the top five players account for 87% of the NLD market

Exhibit 14: Expect NLD market to grow at 15% CAGR over FY09-11





Source: TRAI, IDFC-SSKI Research

## Rising competitive

intensity in the business

Calling card products, volumes in enterprise business and call routing arrangements with other service providers are key drivers of ILD business

> Going forward, Bharti plans to invest in new cable systems

We estimate 16% CAGR in total long distance minutes and ~2% decline in realizations

#### Bharti's NLD volumes - 15% CAGR over FY09-11E

As of June 2009, Bharti owned 104,540 route km of NLD optic fibre network and carried 45bn NLD minutes on its network in FY09 (2-year CAGR of 68%). Going forward, we estimate Bharti's NLD volumes, which are levered primarily to its own telecom business, to register 15% CAGR over FY09-11. While Bharti continues to be the market leader in the NLD segment, competitive intensity is likely to increase due to capacity expansion by players like RCOM and BSNL.

#### Expect 19% CAGR in ILD volumes over FY09-11

Bharti's ILD volumes have witnessed a 2-year CAGR of 58% to 9.7bn minutes in FY09. Key growth drivers in this segment are Bharti's calling card products in international markets, volumes generated by its enterprise business and call routing arrangements with other service providers – e.g., Vodafone has an arrangement to route 50% of its in-bound international roaming traffic through Bharti Airtel for three years. In addition, Bharti will be a preferred vendor for Vodafone for NLD and ILD services and leased line services. Overall, we expect Bharti's ILD volumes to register 19% CAGR over FY09-11.

#### Bharti - expanding its ILD footprint

Bharti's ILD infrastructure includes ownership of the i2i submarine cable system, connecting Chennai to Singapore, through its 100% equity stake in i2i, Mauritius. Apart from this, Bharti also has consortium ownership of the SMW4 submarine cable system with investments in capacities across various submarine cable systems on transatlantic and transpacific routes. The company plans to invest in new cable systems such as Asia America Gateway (AAG), India-Middle East and Western Europe (IMEWE), Unity North, EIG (Europe India Gateway) and Eastern Africa Submarine Cable System (EASS).

## ■ Expect long distance revenue CAGR of 13%, 2.8% drop in EBIDTA/min

On the back of our estimate of 16% CAGR in total long distance minutes and  $\sim 2\%$  decline in realizations, we expect 13% revenue CAGR for Bharti's long distance business over FY09-11. We have factored in a marginal decline in margins due to increasing competition in the segment, and thereby expect 2.8% CAGR drop in EBIDTA/min.

Exhibit 15: Key financials – enterprise business (carriers)

Particulars	units	FY08	FY09	FY10E	FY11E	FY09-11 CAGR, %
NLD minutes	bn m	29.9	45.0	50.6	59.7	15.2
ILD minutes	bn m	6.0	9.7	12.4	13.8	19.4
Revenues	Rs m	43.2	67.9	75.4	87.2	13.3
EBITDA	Rs m	14.3	30.2	34.2	38.4	12.8
EBITDA margin	%	33.1	44.4	45.4	44.0	
EBIDTA/ min	Rs	0.40	0.55	0.54	0.52	-2.8

Source: IDEC-SSKI Research

#### ☐ Fixed line and broadband – declining ARPU, stable margins

We estimate 32% CAGR in Bharti's broadband subscriber base and 17% CAGR in total fixed line subscribers over FY09-11 Bharti provides broadband and fixed line services in 15 circles, but covers only 95 cities as it intends to focus on select high ARPU retail and SME customers. The proportion of broadband customers in the segment has risen to 40.3% in June 2009 from 34.8% in March 2008. We estimate 32% CAGR in Bharti's broadband subscriber base over FY09-11 (17% CAGR in total fixed line subscribers) backed by very low household internet penetration levels (13.5m wireline internet connections as of March 2009, translating into household penetration of just 5%). However, given the competitive intensity prevalent in the segment, we expect ARPU to decline (6% compounded annual rate) – leading to a revenue CAGR of 10% and EBIDTA CAGR of 7% over this period.

Exhibit 16: Fixed line & broadband - key financials

Particulars	units	FY08	FY09	FY10E	FY11E	FY09-11 CAGR, %
Total subscribers	m	2.3	2.7	3.2	3.7	17
Broadband subscribers	m	0.8	1.1	1.4	1.9	32
Share of broadband subscribers	(%)	34.8	39.3	44.6	50.3	
ARPU	Rs	1,143	1,115	1,010	984	-6
Revenues	Rs bn	28	34	36	41	10
EBITDA	Rs bn	11	14	15	16	7
EBITDA margin	%	40.0	42.4	40.7	40.0	

Source: Company data, IDFC-SSKI Research

Exhibit 17: Internet - strong growth potential led by low household penetration

(Rs m)	Mar-07	Jun-07	Sep-07	Dec-07	Mar-08	Jun-08	Sep-08	Dec-08	Mar-09
Wireline Internet subscribers	9.3	9.2	9.6	10.4	11.1	11.7	12.2	12.9	13.5
Broadband subscribers (included above)	2.3	2.4	2.7	3.1	3.9	4.4	4.9	5.5	6.2
Wireless subscribers capable of accessing									
data services/internet through GSM/CDMA services (m)	31	38	46	58	66	76	88	101	118

Source: TRAI

While the IPTV offering is targeted mainly at metros, DTH is proposed to be a pan-India offering

#### ☐ Airtel Digital TV – Bharti's DTH venture

Airtel Direct to Home (DTH) and IPTV business is part of Bharti's tele-media business. Bharti Tele-media is the company's DTH venture and Bharti Airtel owns a 40% stake in it with the remaining 60% held by Bharti Enterprises. Airtel Digital TV is the flagship brand of the DTH venture which offers DTH television and IPTV. While the IPTV offering is targeted mainly at metros, DTH is proposed to be a pan-India offering. The DTH service is based on MPEG 4 compression platform which cuts bandwidth requirement by almost half, thus lowering leasing costs. Bharti Tele-media is consolidated with Bharti Airtel due to its management control, but currently does not separately report its performance.

#### **Economics of DTH business**

We present below our profitability estimates for a new DTH entrant. Our estimates are based on the following key assumptions:

- Subscribers pay an upfront charge of Rs1,800 while buying a new connection. This revenue is deferred and recognized as rental over five years.
- Six months subscription fees waived off for all new connections.
- Upfront subsidies on STB and Dish are treated as capital assets and depreciated over a period of five years.

Exhibit 18: Cost economics of a new DTH entrant

		Υe	ar 1		Υ	ear 2		Υ	ear 3	
	Units	Continuing	New	Total	Continuing	New	Total	Continuing	New	Total
Subscribers (year end)		0	1	1	1	1.5	2.5	2.5	2.0	4.5
Average subscribers		0	0.5	0.5	1	0.75	1.75	2.5	1.0	3.5
Number of rev months		12	6		12	6		12	6	
Number of cost months		12	12		12	12		12	12	
Basic ARPU	Rs/montl	n 200	200		210	210		221	221	
Rental Income	Rs/montl	n 30	30		30	30		30	30	
Total ARPU	Rs/mont	th 230	230	115	240	240	189	251	251	215
Content Cost	Rs/montl	n 125	125		128.8	128.8		132.6	132.6	
Subscriber management cost	Rs/montl	n 20	20		20.6	20.6		21.2	21.2	
License Fee	Rs/montl	n 13.8	13.8		14.2	14.2		14.6	14.6	
Marketing spends	Rs/montl	n	125			128.8			132.6	
Installation cost	Rs/montl	n	33.3			34.3			35.4	
dealer margin	Rs/montl	n	25.0			25.8			26.5	
Direct cost/sub	Rs/mont	th 159	342	342	164	352	244	168	363	224
Gross profit/sub	Rs/mont	th 71.2	(112)	(227)	76	(112.4)	(36.9)	82	(112)	-9

**Exhibit 19: Summary financials** 

Particulars (Rs m)	Year 1	Year 2	Year 3
Subscribers (EOP) (m)	1.0	2.5	4.5
Revenues	690	3,960	9,018
Direct cost	2,053	5,134	9,410
Gross profit	(1,363)	(1,174)	(392)
Transponder cost	480	600	720
EBIDTA	(1,843)	(1,774)	(1,112)
EBIDTA margin (%)	-267%	-45%	-12%

Source: IDFC-SSKI Research

### **VALUATIONS AND VIEW**

We estimate revenue CAGR of 12% and EBIDTA CAGR of 10.5% for Bharti, factoring in a 6.4% drop in wireless EBIDTA/ min over FY09-11. After considering higher fixed charges due to Bharti's ongoing capex plans as well as incremental outlay for 3G (Rs80bn by FY11E), we expect earnings CAGR of just 1.4% for Bharti over FY09-11 (6.6% excluding 3G). Bharti currently trades at valuations close to its historic average. Though a sharp deceleration in earnings growth due to high competitive intensity caps valuation upside, we believe valuation downside is also restricted given its inherent strengths and high FCF visibility. Further, risk of upward revision in MTN's valuations for the proposed Bharti-MTN deal is a near-term overhang on the stock. We have set a DCF-based price target of Rs445 for Bharti, which implies 16% upside from here. Reinitiating coverage on the stock with an Outperformer rating.

#### **EARNINGS GROWTH TO TAPER OFF**

We expect a meagre 1.4% CAGR in Bharti's earnings over FY09-11

We estimate revenue CAGR of 12% and EBIDTA CAGR of 10.5% for Bharti led mainly by 11% revenue CAGR and 13% EBIDTA CAGR in the wireless segment. We believe minute-based metrics have assumed higher relevance as a performance profitability indicator and estimate 6.4% CAGR drop in wireless EBIDTA/min and 2.8% drop in long distance EBIDTA/min. Impacted by higher depreciation and interest charges from ongoing capex plans as also outlay for 3G services, we expect limited 1.4% CAGR in earnings over FY09-11 (EPS of Rs24.8 in FY10 and Rs26.2 in FY11). 3G capex is also likely to delay FCF generation with significant FCF likely only in FY11.

Exhibit 20: Key financial projections

Year ending March 31 (Rsbn)	2007	2008	2009	2010E	2011E
Revenue	185	270	370	423	464
% yoy growth	58.8	45.9	36.8	14.4	9.7
EBITDA	75	114	152	172	185
EBIDTA Margin (%)	40.2	42.1	41.0	40.7	39.9
% yoy growth	69.3	52.6	33.4	13.5	7.5
Net profit	42	67	97	94	99
Shares in issue (mn)	3,791	3,796	3,796	3,797	3,797
EPS (Rs)	11.0	17.7	25.5	24.8	26.2
EPS growth (%)	77.7	60.6	43.8	(2.4)	5.3
ROE (%)	37	38	37	26	21
ROCE (%)	30	30	28	23	19
Net gearing*	0.6	0.5	0.4	0.2	0.1
Book Value (Rs/share)	36.2	59.5	82.9	115.8	141.2

Source: Company data, IDFC-SSKI Research \* - net debt adjusted for estimated equipment payables

#### **■ Expect 12% revenue CAGR over FY09-11**

While we expect 18%
CAGR in wireless
subscriber base, wireless
ARPU is likely to decline
by 12.4% over FY09-11

We estimate 12% CAGR in Bharti's revenues over FY09-11, a significant slowdown from its historic growth trajectory (2-year CAGR of 41% and 5-year CAGR of 50%). The slowdown is led mainly by the wireless segment, which we estimate will show 11% CAGR over the period. While we expect 18% CAGR in wireless subscriber base, wireless ARPU is likely to decline by 12.4% over the period.

Cost efficiencies to support EBITDA margins for Bharti

Higher depreciation and interest expenses (net) due to ongoing capex and likely outlay on 3G to hit earnings growth

#### ☐ Margins to dip slightly (110bp); estimate EBIDTA CAGR at 10.5%

We believe Bharti's scale and its strategy to leverage the 'Airtel' brand for offerings across platforms like Mobile, VAS, Broadband and DTH give it greater flexibility to manage its advertising/ promotion budgets while also providing cost efficiencies. Resultant, we expect only a marginal decline (110bp) in Bharti's EBIDTA margins over FY09-11, led mainly by lower margins in the tele-media business as well as losses in the DTH business. Our estimates factor in a 6.4% CAGR drop in wireless EBIDTA/min and 2.8% drop in long distance EBIDTA/min. Overall, we expect 10.5% CAGR in Bharti's EBIDTA over the period.

### □ 3G capex, higher depreciation charges to pull down earnings growth

Despite a 10.5% EBIDTA CAGR over FY09-11, Bharti's earnings are likely to show a nominal 1.4% CAGR over the period due to the impact of higher depreciation charges and interest expenses (net) resulting from ongoing capex plans as well as likely outlay on 3G. Our estimates factor in 3G license fees of Rs40.4bn and capex of Rs40bn by FY11 towards rolling out 3G services with commercial launch assumed in Q3FY11. Excluding 3G, we estimate 6.6% CAGR in Bharti's earnings over FY09-11. Accordingly, we estimate an adjusted EPS of Rs24.8 in FY10 and Rs26.2 in FY11 (Rs25.4 and Rs28.9 without considering 3G capex). In our earnings computation, we account for the reported currency translation gains/ losses on forex borrowings/ cash balances as below the line item and do not factor in any translation gains/ losses going forward.

Exhibit 21: Earnings growth to be impacted by 3G capex

	FY09	FY10E	FY11E	CAGR (%)
Base case: Including 3G capex				
Adjusted Net profit (Rsbn)	96.6	94.3	99.3	1.4
EPS (Rs)	25.5	24.8	26.2	1.4
Sensitivity: Excluding 3G capex				
Adjusted Net profit (Rsbn)	96.6	96.3	109.7	6.6
EPS (Rs)	25.5	25.4	28.9	6.6

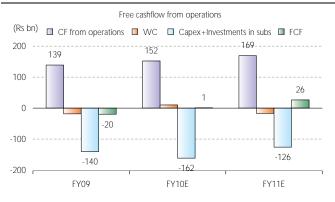
Source: IDFC-SSKI Research

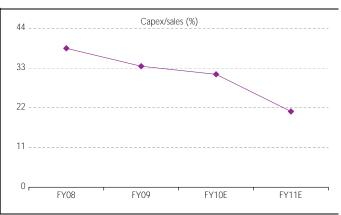
### ☐ 3G capex to delay positive FCF

Bharti's management has guided for \$2.0bn-2.2bn of capex in FY10 with additional capex of \$2bn in the tower businesses (Infratel + Indus). Based on these capex plans and our estimate for 3G roll-out (Rs80bn by FY11 including license fees), we expect Bharti to generate material FCF only from FY11 (very marginal FCF in FY10). With peak capex behind, we expect the company to generate strong cash flows beyond FY11. Reducing capex intensity is likely to result in capex/ sales declining from 33% in FY09 to 21% in FY11. We note that apart from cash outgo towards fresh capex, reduction in equipment supply payables too would lead to net cash outflow for the company. A steep premium paid for the 3G license and higher-than-estimated capex commitment for 3G would be the key risk to our cash flow estimates.

Bharti to generate material FCF only from FY11

Exhibit 22: 3G to delay FCF generation





Source: Company data, IDFC-SSKI Research

The potential merger through a US \$23bn twoway deal would involve both stock and cash consideration

### BHARTI-MTN DEAL (PROPOSED): GROWTH THROUGH DIVERSIFICATION

Bharti Airtel and MTN (South Africa) are in talks for a potential merger through a US \$23bn two-way deal involving both stock and cash consideration. The deal proposes a cross-holding structure with Bharti holding ~49% stake in MTN, and MTN and its shareholders holding 36% stake in Bharti. We estimate the deal to be marginally earnings-dilutive for Bharti in FY10. Key positives for Bharti include access to high growth and relatively under-penetrated markets through MTN's strong position in these markets. Further, MTN's profitability, returns, gearing, etc are comparable to that of Bharti and the company was also FCF-positive in 2008. Potential risks are exposure to multiple geographies, regulations and currencies as also possibility of higher earnings dilution for Bharti in case of a revision in MTN's valuations.

Exhibit 23: Contours of the proposed transaction (%)

Dilution in Bharti's outstanding equity capital	57%
Dilution in MTN's outstanding equity capital	25
Bharti's post transaction stake in MTN	49
Post transaction stake held by MTN in Bharti	25
Stake held by MTN shareholders in Bharti through GDRs	11
Total MTN+MTN's shareholders	36
Cash paid by Bharti to MTN's shareholders (\$ bn)	7.0
Less: Cash received by Bharti from MTN (\$ bn)	2.9
Net cash outflow for Bharti (\$ bn)	4.1
Source: Company release, IDFC-SSKI Research	

#### □ Bharti to own ~49% in MTN, MTN to own 25% in Bharti

For clarity of presentation and understanding, we have disaggregated the deal proposed by the Bharti and MTN in the following two steps:

#### Step 1: Bharti to buy 36% stake in MTN from its shareholders

Bharti would acquire  $\sim 36\%$  of the currently issued share capital of MTN from MTN shareholders for a consideration comprising 86ZAR (US \$10.4) in cash (aggregating \$7bn) and 0.5 newly issued Bharti shares in the form of GDRs for every MTN share acquired. Each GDR would be equivalent to one share of Bharti and would be listed on the JSE, South Africa.

Exhibit 24: Bharti buys 36% stake in MTN for \$12.9bn

1		
MTN's total outstanding shares (m)	1,869	
Shares being acquired (m)	673	36% of the outstanding shares
@ 86ZAR/share (1USD=8.3ZAR)	10.4	\$/share
Total cash consideration	7.0	\$bn
Plus:		
GDRs to be issued (m)	336*	one GDR corresponds to one equity
share of Bharti on conversion		
Bharti's CMP (Rs850* @ 1USD=Rs48)	17.7	\$/share
Value based on Bharti's CMP	6.0	\$bn
Total value paid by Bharti for 36% stake	12.9	\$bn
Bharti's diluted shares after the GDR issue (m	) 2,233	18% equity dilution
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Source: Company release, IDFC-SSKI Research \* - based in pre-split (1:2) prices in order to preserve the original text of the deal contours

#### Step 2: MTN to buy 25% stake in Bharti's post transaction equity

MTN would buy a 25% post transaction economic interest in Bharti through a fresh issue of shares by Bharti. The consideration for this purchase would be  $\sim$ \$2.9bn in cash and newly issued shares of MTN equal to  $\sim$ 25% of the pre-transaction equity capital of MTN. By virtue of these new shares issued by MTN, Bharti's economic interest in MTN would rise from 36% to  $\sim$ 49%. Net cash outflow for Bharti as a result would come down to \$4.1bn.

#### Exhibit 25: MTN to hold 25% in Bharti

MTN's total outstanding shares (m)	1897	
Bharti's diluted shares after GDR issue (m)	2233*	18% equity dilution of step 1
Shares issued to MTN for 25% post transaction sta	ke 744	MTN to hold 25% post
		transaction equity in Bharti
Bharti's post transaction diluted equity capital	2978*	Cumulative dilution of ~57% in
		Bharti's equity capital
Consideration by MTN		
Cash paid by MTN in lieu of 25% stake in Bharti	2.9	\$bn
Fresh shares issued by MTN to Bharti	467	25% of MTN's pre-transaction
		equity base
Total shares of MTN post dilution (m)	2336	25% equity dilution in MTN's equity
		base
Post transaction shares held by Bharti in MTN (m)	1140	Bharti to hold ~49% post
		transaction in MTN

Source: Company release, IDFC-SSKI Research \* - based in pre-split (1:2) prices in order to preserve the original text of the deal contours

#### ■ MTN valued at EV of \$35bn, 6.6x CY08 EBIDTA

Based on MTN's profitability metrics, the proposed deal appears to be reasonably valued MTN has been valued at \$33bn (\$16.2bn for  $\sim$ 49% stake), implying a premium of 24% based on pre-announcement closing price. MTN's implied EV works out to \$35bn, 6.6x 2008 EBIDTA. This compares with Bharti's pre-deal valuation of 11x EV/FY09 EBIDTA. MTN's profitability metrics (EBIDTA margin of 41% and RoCE of 27% in 2008) are comparable to that of Bharti. MTN had a net gearing of 0.2x as of December 2008 and generated FCF of \$1.2bn in 2008. Based on these, the proposed deal appears to be reasonably valued.

Exhibit 26: MTN's equity valued at \$33bn

Particulars	\$bn
Cash paid to MTN's shareholders	7.0
Value of 36% stake issued to MTN and its shareholders	12.1
Less: cash received	2.9
Net Value paid for 49% stake	16.2
Equity valuation of the deal (for 100%)	33
Net Debt (2008)	1.6
EV	35
EBIDTA (2008)	5.2
EV/EBIDTA	6.6

Source: IDFC-SSKI Research, Bloomberg estimates

#### ☐ Deal likely to be earnings-neutral for Bharti in FY10

We have factored in an increase of \$7bn in net debt for the merged entity

Based on our estimates for Bharti Airtel and consensus estimates for MTN for FY10 and FY11 (source: Bloomberg), we estimate the proposed deal to be marginally earnings-dilutive to earnings-neutral for Bharti in FY10. We have factored in an increase of \$7bn in net debt for the merged entity (Bharti – \$4.1bn and MTN – \$2.9bn). Further, we have considered the consolidation impact of MTN from H2FY10 onwards only. We estimate EPS of \$1.04 for FY10 and \$1.15 for FY11 for the merged entity (based on weighted average number of shares).

Exhibit 27: Estimate the deal to be earnings neutral in FY10 (only H2 consolidation)

Year ended (In \$m, 1USD=INR48)	Mar-09	Mar-10	Mar-11
Revenue			
Bharti	7,700	8,807	9,665
MTN	12400	7099	16111
Bharti+MTN	20100	15906	25776
EBIDTA			
Bharti	3160	3588	3856
MTN	5200	2959	6706
Bharti+MTN	8360	6547	10562
PAT			
Bharti	2013	1965	2069
Less: Additional Interest expense on Bharti	0	144	287
Add: PAT of MTN (49% stake)	0	709	1636
Bharti+MTN	2013	2530	3419
EPS			
Bharti's EPS (\$)	0.5	0.52	0.55
MTN's EPS (\$)	1.0	0.6	1.4
Bharti+MTN EPS		0.52	0.57
Change from current estimates		0.2%	5.3%
Bharti's current no of shares	3,794	3,794	3,794
Bharti's post deal no of shares	5,956	5,956	5,956
Weighted average shares		4,875	5,956
Course, IDEC CCVI Decearch Bloomborg concensus act	t t		

Source: IDFC-SSKI Research, Bloomberg consensus estimates

Bharti to gain through diversification into MTN's markets, which are relatively under-penetrated and less competitive

An upward revision in MTN's valuations and higher deal consideration in case of an open offer by Bharti or MTN are key risks

Bharti's current 12-month forward valuations of 16.2x earnings and EV/ EBIDTA of 9.2x close to the average of its historic valuations

### □ Potential for strong footprint in under-penetrated markets

On account of the proposed deal with MTN, Bharti stands to gain through diversification into some relatively under-penetrated and less competitive markets as MTN has a strong market position in these markets. MTN's markets typically have 3-5 players and MTN is one of the top two players in all its markets. MTN management has guided for a subscriber base of 113m in December 2009, implying growth of 25%. With the Indian market set to turn fiercely competitive as several new players join the fray, Bharti's proposed diversification strategy appears well-timed. Further, valuations too appear reasonable considering MTN's high profitability levels and cash flows, and that Bharti will have management control of the merged entity.

### □ Key risks

- Exposure to multiple-country, regulatory and currency risks.
- Any sweeteners offered by Bharti could raise MTN's valuation for the proposed deal and increase equity dilution/ cash outgo on Bharti's part.
- The proposed transaction does not factor in an open offer by either Bharti or MTN. Deal consideration may increase in case of such an event.

#### INHERENT STRENGTHS RESTRICT VALUATION DOWNSIDE; OUTPERFORMER

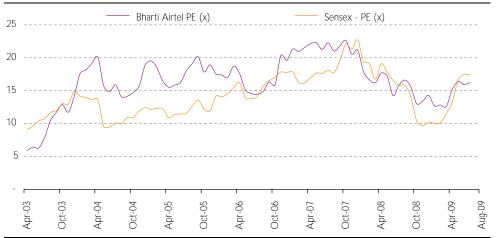
Bharti's current 12-month forward valuations of 16.2x earnings and EV/EBIDTA of 9.2x are close to the average of its historic valuations. While we believe that Bharti's diversified business model, its strong and experienced management team and high visibility on FCF generation restricts valuation downside for the stock, a sharp deceleration in earnings growth (CAGR of 1.4% over FY09-11 vis-à-vis 52% earnings CAGR over FY07-09) due to high competitive intensity would also cap rebound in valuations. Further, risk of upward revision in MTN's valuations for the proposed Bharti-MTN deal could be a near-term overhang on the stock. We have a DCF-based price target of Rs445 for Bharti, which implies a 16% upside in the stock from current levels. Initiate with Outperformer rating.

### □ Valuation discount returns in an easing macro-environment

Bharti's valuation trend vis-à-vis the Sensex reveals the following:

- Bharti's historic valuation premium over the Sensex narrowed significantly in CY07 through a re-rating of the Sensex.
- The de-rating in Bharti's valuations from end-2007 to October 2008 was steeper than for the Sensex, and the stock traded at a marginal discount to the Sensex during this period.
- With a sudden tightening in global liquidity post October 2008, Bharti got rerated vis-à-vis the Sensex in recognition of its strong balance sheet, superior management bandwidth and unabated subscriber additions.
- With the Sensex returning ~90% over the last two months on easing liquidity and expectations of an economic recovery, Bharti's valuations are once again trading at a discount (albeit marginal) to the Sensex.

Exhibit 28: Bharti currently trades at a discount to Sensex



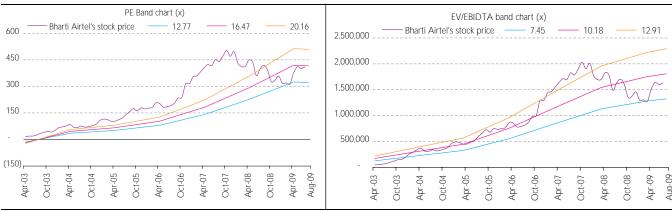
Source: IDFC-SSKI Research

A sharp deceleration in earnings growth and high competitive intensity would restrict rebound in Bharti's in valuations

### □ Valuation upside capped despite strong FCF potential

Bharti's 12-month forward valuations of 16.2x earnings and EV/ EBIDTA of 9.2x are close to the average historic multiples. A diversified business model, strong and experienced management team and high visibility on FCF generation restrict valuation downside for the stock. However, a sharp deceleration in earnings growth (CAGR of 1.4% over FY09-11 vis-à-vis 52% CAGR over FY07-09) and high competitive intensity would restrict rebound in Bharti in valuations to their historic peaks. Further, risk of upward revision in MTN's valuations for the proposed Bharti-MTN deal could be a near-term overhang on the stock. Resultant, we expect the discount to historic peak valuations to persist in the near term.

Exhibit 29: Valuation band charts for Bharti



Source: IDFC-SSKI Research

Exhibit 30: Regional valuation comparison

Company (%)	EBIDTA margin**	RoE	RoCE	PE* (x)	EV/EBIDTA* (x)
Bharti Airtel	41	36.7	28.0	16.2	9.2
China Mobile	53	27.6	25.7	13.5	6.0
China Unicom	46	17.6	14.9	25.7	3.8
Hutchison Telecom	n 34	N/A	35.4	12.1	3.7
Mobile one	39	70.6	32.5	10.3	5.6
SingTel	30	16.6	13.5	12.7	11.0
Telkomsel	59	31.2	25.6	13.6	5.2
Telenor	31	17.4	12.8	9.4	5.1
0 1050 001/10		, +4 6	1 ++		

Source: IDFC-SSKI Research, Bloomberg estimates; \*1-yr forward \*\* - most recent year ended

### □ DCF-based price target of Rs445; Outperformer

Our target EV/EBIDTA of 9.6x FY11E within the midrange of historic one-year forward valuations We have used the DCF methodology to arrive at Bharti's fair value. We estimate a WACC of 11.4% for Bharti and assume a terminal growth rate of 3.5%. Based on these assumptions, we arrive at a March 2010 target price of Rs399 for the stock. We value Bharti's 42% stake in Indus (through Bharti Infratel) at Rs46/ share, which takes the target price up to Rs445/ share. Our target EV/EBIDTA of 9.6x FY11E compares with the mid-range of historic one-year forward valuations. With the stock offering 16% upside from current levels, we initiate coverage on Bharti with Outperformer.

Exhibit 31: DCF calculation for Bharti (without Indus stake)

(Rs bn)	FY10E	FY11E	FY12E	FY13E	FY14E	FY20E
EBITDA	172,222	185,103	199,016	216,927	236,451	365,596
Current tax	(18,041)	(19,954)	(23,270)	(29,369)	(34,922)	(73,687)
Capex	(145,012)	(105,000)	(85,000)	(78,817)	(78,574)	(76,968)
Change in WC	10,071	(16,917)	3,425	(26,136)	2,503	3,563
FCF	19,241	43,232	94,171	82,606	125,457	218,505
WACC	11.4%					
PV of projection period	713,207					
Terminal growth rate	3.5%					
Terminal value	2,859,075					
Terminal EV/E	7.8					
PV of terminal value	871,083					
TV as % of EV	54%					
Total Enterprise value	1,603,531					
Net debt	88,875					
Equity value	1,514,656					
Value per share (Rs)	399					

Source: IDFC-SSKI Research

Exhibit 32: Sensitivity analysis

WACC / g (x)	2.5%	3.0%	3.5%	4.0%	4.5%
10.4%	430	449	470	494	522
10.9%	399	414	432	452	475
11.4%	371	384	399	416	435
11.9%	347	358	370	384	400
12.4%	325	334	345	357	370

Source: IDFC-SSKI Research

Change in leadership, higher valuations for MTN, and unavailability of further spectrum – key risks for Bharti

#### □ Risks and concerns

- Change in leadership with Mr Sunil Mittal stepping down as CEO.
- Risk of sharp increase in MTN's valuations for the proposed Bharti-MTN deal.
- Predatory competition creating further pressure on margins.
- Unavailability of spectrum leading to higher capex.

#### BHARTI AIRTEL: COMPANY OVERVIEW

#### ☐ Bharti Group – a diversified business portfolio

The Bharti Group has interests in diverse business areas including telecommunications, retail (cash & carry) and life insurance. Bharti Group's other businesses include communication and media devices and a JV with Del Monte to export fresh and processed fruits & vegetables. Bharti Enterprises is the main holding company for the Group's various businesses.

### ☐ Bharti Airtel – India's largest telecom player

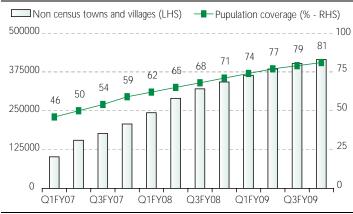
Bharti the first in India to launch electronic recharge and micro prepaid, blackberry, and valueadded services Bharti Airtel is the flagship company of the Bharti Group. As on 31 March 2009, total promoter holding stood at 67.2% with Bharti Telecom (subsidiary of Bharti Enterprises) owning 45.3%, Pastel Ltd (Singapore Telecom) 15.6% and Indian Continental Investment Ltd a 6.3% stake in Bharti Airtel. Total foreign holding in Bharti Airtel was 43.1%. Bharti was the first company in India to launch electronic recharge and micro prepaid, blackberry, and value-added services (ringback tones, music for mobile, song catcher, etc). As of April 2009, it had 96.7m wireless subscribers and 2.8m fixed line subscribers. The company posted gross revenues of Rs370bn and PAT of Rs84.7bn in FY09. As on 31 March, its network covered 5,060 census towns and 414,906 non-census towns with total population coverage of 81%.

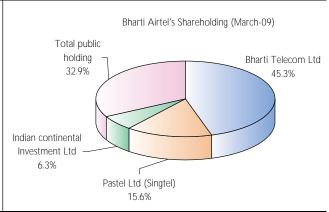
Exhibit 33: Bharti's key business divisions: End to end telecommunications services

Business Division	Activity/Products/Services offered
Mobile services	Mobile services using GSM technology in the 900MHz and 1800MHz bands. Recently launched operations in Sri Lanka
Tele-media services	Broadband (DSL) and telephone services (fixed line) in 95 cities catering to individuals and small enterprises. Recently launched DTH and IPTV services which are targeted to pan India offerings
Enterprise services (corporate)	End to end telecom solutions to India's large corporates - Internet, MPLS-VPN, leased circuits, VSAT, Audio and Video conferencing, data center services, managed network services, corporate value added services, EPBX, Centrex, contact centre solutions, toll free services, Mobile enterprise enablement solutions
Enterprise services (carriers)	Long distance wholesale voice and data services to carrier customers as well as to other business units of Airtel. It also offers virtual calling card services in overseas markets.
Passive Infrastructure services	Provides passive infrastructure services on a non-discriminatory basis to all telecom operators in India.

Source: Company data

Exhibit 34: Population coverage of 81%





Source: Company, IDFC-SSKI Research

Bharti has outsourced its network operations to Nokia and Ericsson, IT operations to IBM and call center to IBM Daksh, Mphasis, TeleTech, Nortel and Hinduja TMT

Comviva has deployed solutions for over 100 mobile operator customers in more than 80 countries

### ☐ 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. Recently, it also signed a managed services deal with Comviva for VAS solutions. These outsourcing agreements enable 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.

#### About the Bharti-Comviva deal

Comviva, registered in India, is a leading provider of integrated VAS solutions for mobile operators in emerging markets. According to data available in its website, Comviva has deployed solutions for over 100 mobile operator customers in more than 80 countries worldwide. Bharti Enterprises, Sequoia Capital, Cisco Systems and Comviva's employees are its major investors. The company's name was changed to Comviva Technologies from Bharti Telesoft in April 2009. As a part of this deal, Comviva will manage 2,000+ of Bharti's VAS nodes across India from various partners to meet the defined service level agreements.

Exhibit 35: Bharti Airtel - consolidated structure

Company	Relationship with Bharti Airtel	Country of incorpora tion	Bharti's ownership	Principal activities/ Comments
Bharti Infratel Limited	Subsidiary	India	92.89%	Created by transfer of Bharti Airtel's passive infrastructure of ~52,000 telecom towers effective Jan 31st 2008
Bharti Infratel Ventures	Subsidiary	India	100%	Created as a 100% subsidiary of Bharti Infratel to hold those assets which would ultimately be merged with Indus Towers
Indus Towers	JV	India	42%	Created for sharing of passive infrastructure in 16 circles between Bharti Airtel, Vodafone Essar & Idea
Bharti Telemedia	JV	India	40%	DTH Venture. Previously owned 100% by Bharti Airtel services. Balance 60% held by Bharti Enterprises. Consolidated with Bharti Airtel as it has management control
Bharti Airtel Lanka Pvt Limited	Subsidiary	Sri Lanka	100%	Providing 2G and 3G Mobile services in Sri Lanka
Bharti Hexacom Limited (BHL)	Subsidiary	India	68.89%	Providing telecom and broadband services in the NE. Scheme for merger with Bharti Airtel filed with the High court for approval
Bharti Airtel Pvt Ltd, a)Singapore b)Canada c)USA d)UK e)Hong Kong	Subsidiaries	Respective countries	100% in each of them	International calling services and wholesale switching data services
Bharti Airtel Services Ltd	Subsidiary	India	100%	Administrative support to Bharti Airtel and VSAT equipment trading
Bharti Aquanet	Subsidiary	India	100%	Owns and operates submarine cable landing station
Network i2i limited	Subsidiary	Mauritius	100%	Bought for Rs5.31bn in FY08. Owns and operates telecom infrastructure like submarine cables and associated terrestrial infrastructure
Bharti Airtel Singapore Holding Ltd	Subsidiary	Singapore	100%	Investment vehicle
Bridge Mobile Pte Ltd.	JV	Singapore	10%	Mobile services
Forum I Aviation Limited	JV	India	14.3%	Chartered Aircraft/Helicopter services along with 6 other parties. Cumulative investment of Rs40m as on FY08

Source: Company data

Leading provider of communication services, offering cellular network access and business solutions across Africa and the Middle-East region

### MOBILE TELEPHONE NETWORKS (MTN) GROUP: COMPANY OVERVIEW

#### **□** MTN Group

The MTN Group (MTN) is a South Africa based (listed on the Johannesburg Securities Exchange) leading provider of communication services, offering cellular network access and business solutions. MTN launched its telecommunications services in 1994 and currently has operations in 21 countries across Africa and the Middle East, with 98.2m subscribers as of March 2009. MTN posted revenues of \$12.4bn and net profit of \$1.9bn in the year ended December 2008. Its market capitalization based on the closing price of 119ZAR prior to announcement of the proposed Bharti-MTN deal was \$27bn.

Exhibit 36: MTN – strong profitability metrics

(\$ bn)	Bharti	MTN
Subscribers (m)	100	100
Mkt cap (pre-announcement)	32	27
EBIDTA Margin (%)	41	42
Net Debt	1.5	1.6
Net gearing (x)	0.2	0.2
EV	35	28
EV/sub (\$)	350	283
Mobile ARPU (most recent) (\$)	6.4	11.0
RoE (%)	36.7	24.8
RoCE (%)	24.6	27.0

Source: Company data, Bloomberg data, IDFC-SSKI Research

#### □ Operational highlights – a diversified telecom player

MTN has operations in 21 countries across Africa and the Middle-East region with a total subscriber base of 98.2m (76m adjusted for its proportionate ownership in overseas operations) as of March 2009. The Group categorizes its operations into three regions – South and East Africa (26% of revenues), West and Central Africa (45%), Middle-East and North Africa (29%) with the share of Middle-East and North Africa region having risen from 12% in CY06 to 29% in March 2009. Vis-à-vis \$16 in CY07, MTN had a blended ARPU of \$14 in CY08, which has further come down to ~\$11 for March 2009. Most markets in which MTN operates have 3-5 players and MTN is one of the top two in all its markets (refer end of the section

Exhibit 37: MTN Group's operational data

for detailed operational data).

Exhibit 07: WTW Group 3 operational data				
	Dec-06	Dec-07	Dec-08	Mar-09*
Total subscribers (m)	40	61	91	98
Proportionate subscriber base (m)	35	50	70	76
Regional Composition (%)				
South and East Africa	39	31	27	26
West and Central Africa	49	46	44	45
Middle-East and North Africa	12	23	29	29
Regional ARPU Trend (\$)				
South and East Africa	22	19	16	14
West and Central Africa	18	16	15	11
Middle-East and North Africa	15	13	10	9

Source: Company reports \*-regional ARPUs for Mar-09 are estimates

### □ Strong growth and returns profile – FCF of \$1.2bn in 2008

MTN posted revenues of \$12.4bn (2-year CAGR of 28%) and net profit before extra-ordinary items of \$2.1bn (2-year CAGR of 8%) in 2008. It generated EBIDTA of \$5.4bn (2-year CAGR of 29%) in 2008, implying an EBIDTA margin of 44%. Effective tax rate for the company has risen from 17.6% in 2006 to 39.9% in 2008. Net debt stood at \$1.6bn (gross interest bearing debt of \$5.2bn, cash and equivalents of \$3.6bn), implying a gross gearing of 0.5x and net gearing of 0.2x. RoE stood at 24.8% and RoCE at 27%, and the company generated FCF of \$1.2bn in 2008 (\$1.9bn in 2007). MTN incurred capex of \$3.5bn in 2008 (\$1.9bn in 2007) and has guided for capex of \$4.7bn in 2009.

MTN is one of the top two players in all its markets

MTN posted revenues of \$12.4bn (and net profit before extra-ordinary items of \$2.1bn in 2008

Exhibit 38: MTN has strong profitability metrics

Particulars (%)	2008	2007	2006	2005
Gross margin	67.5	67.1	69.1	62.6
Sales growth	40.2	41.8	78.0	21.5
Net Inc growth	44.4	(0.0)	65.6	46.6
EBIDTA margin	43.9	43.9	43.2	40.6
Operating margin	31.5	31.7	31.0	31.2
Pretax margin	27.8	26.9	28.5	30.4
Effective tax rate	39.9	39.5	17.6	17.0
Profit margin	14.9	14.5	20.6	22.1
Return on assets	10.7	10.0	16.8	24.8
Return on equity	24.8	24.7	38.8	49.2
Return on cap.	27.0	18.7	30.4	41.9
Course Discussions data IDEO CCKI December				

Source: Bloomberg data, IDFC-SSKI Research

Exhibit 39: MTN's subscriber base and ARPU in each market (March 2009)

Country	Subs	% of	Cumulative	ARPU	Mobile	No. of	Market	Market
	(m)	total	(%)	(USD)	penetration (%)	operators	rank	share (%)
Nigeria	25.9	26%	26%	13	36	4	1	44
Iran	18.3	19%	45%	8	61	3	2	37
South Africa	17.4	18%	63%	17	97	3	2	36
Ghana	6.8	7%	70%	8	50	6	1	55
Uganda	4.0	4%	74%	7	22	5	1	52
Cameroon	3.8	4%	78%	9	33	3	1	62
Cote d'Ivorie	3.8	4%	81%	9	41	5	1	40
Syria	3.4	3%	85%	17	38	2	2	46
Sudan	2.7	3%	88%	5	23	3	2	28
Afghanistan	2.4	2%	90%	5	21	4	2	30
Yemen	2.0	2%	92%	7	22	4	1	38
Rwanda	1.3	1%	93%	7	12	3	1	91
Benin	1.1	1%	95%	13	35	6	1	35
Botswana	1.0	1%	96%	10	82	3	1	60
Guinea Conakry	1.0	1%	97%	8	22	5	1	44
Congo Brazzaville	0.9	1%	98%	12	59	3	2	38
Zambia	0.8	1%	98%	6	21	3	2	25
Swaziland	0.5	1%	99%	11	54	1	1	100
Liberia	0.5	1%	99%	12	23	4	1	65
Guinea Bissau	0.4	0%	100%	10	28	3	1	82
Cyprus	0.2	0%	100%	36	90	2	2	19
MTN Group	98.2	100%	100%	11				

Source: Company reports, ITU data, IDFC-SSKI Research

Exhibit 40: MTN's ARPU trend in its top five markets

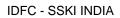
ARPU (\$)	2006	2007	2008	Mar-09
Nigeria	18	17	16	13
Iran	9	10	9	8
South Africa	20	19	18	17
Ghana	17	14	12	8
Uganda	NA	NA	8	7

Source: Company reports

Exhibit 41: Key financials of MTN Group

, uop)	D 00.1	D 07.4	D 0/ 1		
(m USD)	Dec 08 A	Dec 07 A	Dec 06 A	Mar 05 A	Mar 04 A
Income statement					
Turnover	12,417	10,373	7,623	4,637	3,335
EBITDA	5,452	4,558	3,296	1,882	1,239
Operating profit (loss)	3,906	3,285	2,363	1,448	932
Pretax income	3,450	2,795	2,170	1,410	850
Income before XO items	2,075	1,690	1,788	1,170	696
Net profit (loss)	1,855	1,504	1,568	1,025	611
Basic EPS before Abnormal Items (\$)	1.0	0.8	NA	NA	NA
Basic EPS (\$)	1.0	0.8	0.9	0.6	0.4
Diluted EPS (\$)	1.0	0.8	0.9	0.6	0.4
Dividends per share (\$)	0.0	0.1	0.1	NA	NA
Return on common equity (%)	25	25	39	49	32
Balance sheet					
Total current assets	5,820	4,882	2,953	1,705	1,370
Total long-term assets	12,251	11,963	10,916	3,001	2,161
Total assets	18,071	16,846	13,869	4,706	3,531
Total current liabilities	5,800	5,097	2,860	1,200	1,008
Total long-term liabilities	3,715	4,243	4,895	580	694
Total liabilities	9,515	9,340	7,755	1,780	1,701
Total shareholders' equity	8,556	7,506	6,115	2,926	1,830
Shares outstanding (m)	1,868	1,865	1,860	1,660	1,654
Book value per share (\$)	4.3	3.7	3.0	1.5	1.0
Tangible book value per share (\$)	1.7	0.7	(0.1)	1.4	0.8
Equity ratio (%)	47	45	44	62	52
Cash flows					
Operating profit (loss)	1,855	1,504	1,568	1,025	611
Cash from operating activities	4,453	3,904	2,764	1,628	1,201
Cash from investing activities	(3,291)	(2,432)	(5,704)	(1,208)	(684)
Cash from financing activities	55	(544)	2,646	(237)	(56)
Net changes in cash	1,217	927	(294)	184	461
Free Cash Flow	1,196	1,853	1,378	417	496
Free cash flow per basic share (\$)	0.6	1.0	0.8	0	0
Free cash flow per diluted share (\$)	0.6	1.0	0.8	NA	NA
Cash flow per share (\$)	2.4	2.1	1.6	1.0	0.7

Cash flow per share (\$) Source: Bloomberg data



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#### Income statement

Year to Mar 31 (Rs m	n) FY07	FY08	FY09	FY10E	FY11E
Net sales	185,195	270,250	369,615	422,719	463,906
% growth	58.8	45.9	36.8	14.4	9.7
Operating expenses	110,691	156,536	217,935	250,497	278,803
EBITDA	74,504	113,714	151,680	172,222	185,103
% change	69.3	52.6	33.4	13.5	7.5
Other income	1,064	2,740	1,522	744	744
Net interest	(2,228)	(2,160)	312	730	2,089
Depreciation	25,207	37,260	47,581	59,467	67,725
Pre-tax profit	48,068	76,712	104,996	114,983	121,181
Current tax	5,822	8,378	6,615	18,605	19,589
Profit after tax	42,246	68,334	98,381	96,378	101,592
Minorities	(467)	(1,150)	(1,759)	(2,065)	(2,271)
Non-recurring items	1,860	795	(11,925)	2,500	0
Net profit after					
non-recurring items	43,639	67,979	84,697	96,813	99,321
% change	88.3	55.8	24.6	14.3	2.6

#### **Balance sheet**

Year to Mar 31 (Rs m)	FY07	FY08	FY09	FY10E	FY11E
Paid-up capital	18,959	18,979	18,982	18,984	18,984
Reserves & surplus	116,594	203,606	284,963	407,953	502,032
Total shareholders' equity	137,354	225,598	314,649	439,705	536,055
Total current liabilities	95,728	134,787	152,377	152,195	140,680
Total debt	52,461	97,063	118,801	125,706	160,706
Deferred tax liabilities	3,616	5,301	7,556	4,615	4,615
Other non-current liabilities	s 8,733	9,894	10,564	10,708	10,708
Total liabilities	160,538	247,045	289,298	293,224	316,709
Total equity & liabilities	297,892	472,643	603,947	732,929	852,763
Net fixed assets	210,604	313,407	409,136	495,640	532,915
Investments	554	58	12	14	14
Total current assets	43,666	111,012	135,269	161,190	222,749
Deferred tax assets	1,198	2,770	8,810	8,248	8,248
Other non-current assets	41,870	45,396	50,720	67,837	88,837
Working capital	(52,062)	(23,775)	(17,108)	8,995	82,070
Total assets	297,892	472,643	603,947	732,929	852,763

#### Cash flow statement

Year to Mar 31 (Rs m)	) FY07	FY08	FY09	FY10E	FY11E
Pre-tax profit	48,068	76,712	104,996	114,983	121,181
Depreciation	25,207	37,260	47,581	59,467	67,725
Chg in working capital	22,026	17,115	(16,977)	8,720	(16,917)
Total tax paid	(5,822)	(8,378)	(6,615)	(18,605)	(19,589)
Operating cash inflow	89,479	122,709	128,985	164,565	152,400
Capital expenditure	(90,610)	(142,061)	(140,171)	(145,012)	(105,000)
Free cash flow (a+b)	(1,131)	(19,352)	(11,186)	19,553	47,400
Chg in investments	533	(45,513)	9,474	(15,988)	(29,707)
Debt raised/ (repaid)	5,066	44,602	21,738	6,905	35,000
Capital raised/ (repaid)	605	21,132	(3,648)	30,671	-
Dividend (incl. tax)	-	-	(4,328)	(5,410)	(6,492)
Misc	(270)	(1,556)	(7,682)	(646)	(43)
Net chg in cash	4,803	(687)	4,368	35,084	46,157

#### **Key ratios**

Year to March 31	FY07	FY08	FY09	FY10E	FY10E
EBITDA margin (%)	40.2	42.1	41.0	40.7	39.9
EBIT margin (%)	26.6	28.3	28.2	26.7	25.3
PAT margin (%)	22.6	24.9	26.1	22.3	21.4
RoE (%)	36.3	37.0	35.8	25.0	20.4
RoCE (%)	27.9	28.3	26.4	21.8	18.2
Gearing (x)*	0.6	0.5	0.4	0.2	0.1

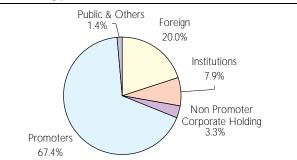
<sup>\* -</sup> net debt adjusted for estimated equipment payables

#### **Valuations**

Year to March 31	FY07	FY08	FY09	FY10E	FY10E
Reported EPS (Rs)	11.5	17.9	22.3	25.5	26.2
Adj. EPS (Rs)	11.0	17.7	25.5	24.8	26.2
PE (x)	34.8	21.7	15.1	15.4	14.7
Price/ Book (x)	10.6	6.5	4.6	3.3	2.7
EV/ Net sales (x)*	8.3	5.8	4.3	3.7	3.2
EV/ EBITDA (x)*	20.7	13.7	10.5	9.0	8.1
EV/ CE (x)*	7.6	4.6	3.5	2.7	2.1

<sup>\* -</sup> net debt adjusted for estimated equipment payables

#### **Shareholding pattern**



As of June 2009

## **Reliance Comm.**

Rs255 OUTPERFORMER

#### Mkt Cap: Rs526bn; US\$11bn

## **Undisrupted**

11 August 2009

BSE Sensex: 15075

Stock data	
Reuters	RLCM.BO
Bloomberg	RCOM IN
1-yr high/low (Rs)	463.2/131.1
1-yr avg daily volumes (m	n) 13.07
Free float (%)	32.7



Performance (%)											
	3-mth	6-mth	1-yr	3-yr							
RCOM	6.3	56.6	(41.8)	-							
Sensey	25.1	63.0	0.3	40.2							

Chirag Shah chirag@idfcsski.com

91-22-6638 3306

Ashish Shah ashishshah@idfcsski.com 91-22-6638 3371 Reliance Communications' (RCOM) impressive GSM foray and a strong asset base in the long distance and enterprise business would likely drive a robust operational performance over FY09-11 (EBIDTA CAGR of 14.7%). However, this is unlikely to reflect in EPS due to higher depreciation and interest charges on account of 3G-related costs. Gearing concerns have been partially addressed by slowing capex but balance sheet leverage still remains high. We expect an equity infusion/ further value unlocking in the tower business to alleviate concerns on balance sheet stress and lead to a recovery in valuations. Re-initiating coverage with a DCF-based price target of Rs298, including Rs19/share contribution from external tower tenancies.

Commendable GSM foray: RCOM's GSM foray has been impressive so far, driving a sustained rise in market share to 18.6% (90bp rise since GSM launch). While RCOM now occupies the number two slot in the industry, its population coverage at 80% too is just a notch below Bharti's 82%. Led by further network expansion, we expect 21% CAGR in RCOM's subscriber base to 107m by FY11.

Operational performance appears sustainable: A strong performance in non-wireless business, led by further asset sweating, would offset the margin stress in RCOM's wireless business and drive 14.7% EBIDTA CAGR over FY09-11. Earnings, however, are likely to be dented (10% decline on compounded annual basis) due to a steep rise in fixed charges from ongoing and estimated 3G capex.

**Re-initiating coverage with a price target of Rs298:** Even as RCOM has lowered its capex, we expect adjusted net gearing to rise from 0.9x in FY09 to 1.0x in FY11 driven largely by our estimate of Rs80bn investments towards 3G roll-out. We expect an equity infusion to alleviate concerns on balance sheet stress and lead to a valuation re-bound. The stock, at 14.3x FY11E earnings and 7.9x EV/EBITDA, currently trades at a discount to its historical valuation. Our DCF-based price target of Rs298 offers 17% upside potential.

#### Key financials

As on 31 March	FY07	FY08	FY09	FY10E	FY11E
Net sales (Rs m)	144,683	190,678	229,411	268,949	312,555
Adj. net profit (Rs m)	31,990	49,776	45,878	36,400	36,825
Shares in issue (m)	2,044	2,064	2,064	2,064	2,064
Adj. EPS (Rs)	15.7	24.2	22.2	17.6	17.8
% change	-	54.8	(8.3)	(20.7)	1.2
PE (x)	16.3	10.5	11.5	14.4	14.3
Price/ Book (x)	2.6	1.9	1.4	1.3	1.2
EV/ EBITDA (x)*	10.2	8.8	9.2	8.9	7.9
RoE (%)	31.4	20.5	13.9	9.2	8.5
RoCE (%)	18.1	12.6	8.8	8.0	7.8

Prices as on August 7 2009 \* - net debt adjusted for estimated equipment payables

### **INVESTMENT ARGUMENT**

RCOM's GSM roll-out has been impressive and it now occupies the number two slot in the wireless industry. While we expect a strong 21.4% CAGR in RCOM's wireless subscriber base, we see revenue/ min and EBIDTA/ min falling due to competitive pressure (ARPU decline of 13.2%). Driven by higher asset utilization in the non-wireless business, we expect 18% revenue and EBIDTA CAGR for RCOM in these businesses, boosting consolidated revenues as also restricting the impact of the 180bp drop in wireless margins. Despite a strong EBIDTA CAGR of 14.7% over FY09-11, we expect a 10.4% CAGR drop in earnings due to a sharp increase in depreciation and interest charges. We expect adjusted net gearing to rise further from 0.9x in FY09 to 1.0x in FY11 driven largely by our estimate of Rs80bn investments towards 3G. We set a DCF-based price target of Rs298 for RCOM with value accretion of Rs19/share from Reliance Infratel's external tenancies; this implies FY11E EV/EBIDTA of 8.6x. Re-initiating coverage with an Outperformer rating.

#### ☐ GSM roll-out – good show so far

RCOM has commendably built a successful business in a high-growth competitive market. RCOM's GSM roll-out has been very impressive with a sustained increase in net additions as well as market share. In fact, RCOM has recently usurped Vodafone to become India's number two player in wireless telephony. The company's share in the mobile subscriber market has increased by ~90bp to 18.6% since its GSM launch. RCOM now has a pan-India CDMA and GSM wireless network (the only carrier in India on both the platforms) with population coverage of 80% – just a notch below Bharti's 82%. Driven by continued traction in its GSM business, RCOM added 6.95m subscribers in Q1FY10 – representing a 19.5% share of industry net adds. Given investments of ~\$8.4bn in FY08 and FY09 (significant proportion of which, we believe, would have been towards GSM business), sustainability of the early traction in its GSM roll-out would be critical.

#### □ RCOM scores over peers in terms of operational parameters

RCOM's wireless ARPU witnessed a 17% compounded annual decline over the last two years, though EBIDTA/min dropped at a lower pace of 6%. Also, while RCOM's Q1FY10 ARPU of Rs210 is at a steep discount to that of Bharti (Rs278) and Idea (Rs232), its EBIDTA/min of Re0.22 is at a premium to Bharti's Re0.19/min and Idea's Re0.16/min. Notably, we expect EBIDTA/min of Re0.20 for RCOM in FY11 against Re0.17 for Bharti and Re0.14 for Idea.

### ☐ Expect wireless subscriber base to cross the 100m mark by FY11

We expect 21.4% CAGR in RCOM's wireless subscriber base to 107m in FY11 with a market share of 18.1% (18.5% in March 2009). Our estimates imply a 17% share of wireless net additions over the period and factor in upside from further increase in RCOM's GSM penetration and likely benefits of MNP implementation even in the backdrop of rising competitive intensity. Resultant, we expect revenue CAGR of 16.2% for RCOM's wireless business over FY09-11 with ARPU declining by 13.2%. We expect a 9% drop in wireless EBIDTA/min, leading to 180bp drop in EBIDTA margins and restricting EBIDTA CAGR to 13.4% over the period.

GSM foray has witnessed sustained increase in net additions and market share

RCOM's EBIDTA/min of Re0.22 is at a premium to Bharti's Re0.19/min and Idea's Re0.16/min

We expect revenue CAGR of 16.2% for RCOM's wireless business over FY09-11 with ARPU declining by 13.2%

Exhibit 1: Expect 107m wireless subscriber base by FY11; ARPU decline at 13.2% CAGR

Wireless segment		FY08	FY09	FY10E	FY11E	FY09-11 CAGR %
All India wireless subs	m	256	392	510	592	22.9
RCOM's subscribers	m	46	73	95	107	21.4
RCOM's market share	%	17.9	18.5	18.6	18.1	
RCOM's share in net adds	%	18.9	19.9	18.9	14.8	(13.7)
Revenue	Rs bn	152	174	208	234	16.2
Revenue growth	%	41.8	14.2	19.9	12.6	(5.8)
EBIDTA	Rs bn	60.8	66.7	78.6	85.8	13.4
EBITDA margin	%	40.0	38.4	37.7	36.6	
ARPU	Rs	347	255	204	192	(13.2)
Revenue / min	Rs	0.74	0.63	0.57	0.54	(6.8)
EBITDA / min	Rs	0.30	0.24	0.21	0.20	(9.0)

Source: TRAI, Company data, IDFC-SSKI Research

#### ■ Non-wireless asset base – yet to be optimally exploited

Having put in place a strong asset base of national & international long distance as also intra-city voice and data communication infrastructure, we expect RCOM to start leveraging its asset base. Aided further by incremental revenues from its acquisition of Vanco, we expect 15.4% revenue CAGR and 16.9% EBIDTA CAGR for the global business. Overall, we expect RCOM's non-wireless businesses to register revenue and EBIDTA CAGR of 18% over FY09-11. Our estimates also factor in a scale-up in the company's DTH venture with 4.2m subscribers in FY11 from 1.5m in FY09.

Exhibit 2: Expect strong performance in the non-wireless business

(Rs m)	FY08	FY09	FY10E	FY11E	CAGR (% - FY09-11)
Revenues					
Global segment	54,750	67,761	78,550	90,248	15
Broadband segment	17,868	25,243	28,370	32,583	14
Total Non-wireless	38,543	55,733	60,723	78,176	18
EBIDTA					
Global segment	14,032	16,170	19,246	22,111	17
Broadband segment	8,652	11,575	12,424	14,342	11
Total Non-wireless	21,142	26,126	28,810	36,255	18
EBIDTA margin (%)					
Global segment	25.6	23.9	24.5	24.5	
Broadband segment	48.4	45.9	43.8	44.0	
Total non-wireless	54.9	46.9	47.4	46.4	
Source: Company reports IDEC S	CKI Docoarch				

Source: Company reports, IDFC-SSKI Research

### □ Non-wireless businesses to cushion margins; earnings to decline

We expect 16.7% CAGR in RCOM's consolidated revenues over FY09-11 with wireless revenues growing by 16.2% and non-wireless revenues by 18%. We expect EBIDTA margins to decline by 140bp over the period with strong growth in non-wireless businesses (especially in the global segment) cushioning the 180bp margin decline in the wireless business. Despite an EBIDTA CAGR of 14.7%, earnings are likely to be pulled down (10.4% drop) by higher depreciation and interest charges. Our estimates factor in 3G-related investments of Rs80bn (including license fees) by FY11, without which we expect the drop in earnings to be lower at 7.2%. We forecast a base case EPS of Rs17.6 and Rs17.8 against ex-3G EPS of Rs17.7 and Rs19.1 for FY10 and FY11 respectively.

We expect RCOM's nonwireless businesses to register revenue and EBIDTA CAGR of 18% over FY09-11

Despite 2-year EBIDTA CAGR of 14.7%, earnings to decline by 10.4%, hit by higher depreciation and interest charges

We forecast a base case EPS of Rs17.6 and Rs17.8 against ex-3G EPS of Rs17.7 and Rs19.1 for FY10 and FY11 respectively

Exhibit 3: Key financial projections

(Rs bn)	FY08	FY09	FY10E	FY11E	CAGR (% - FY09-11)
Revenues	191	229	269	313	16.7
% yoy growth	60.5	20.3	17.2	16.2	
EBIDTA	82	93	107	122	14.7
EBIDTA margin (%)	43.0	40.5	39.9	39.1	
% yoy growth	43.3	13.3	15.7	13.7	
Net profit	50	46	36	37	(10.4)
EPS (Rs)	24.2	22.2	17.6	17.8	(10.4)
% yoy growth	56.4	(8.3)	(20.7)	1.2	
RoE (%)	21.6	14.6	9.4	8.7	
RoCE (%)	13.0	9.1	8.1	7.9	
Gearing (x)*	0.7	0.9	1.0	1.1	
Book value (Rs/share)	137	183	201	219	9.4

Source: company reports, IDFC-SSKI Research \* - adjusted for estimated equipment payables

Exhibit 4: Earnings impact of estimated 3G investments

Particulars	FY09	FY10E	FY11E	CAGR (%)
Base case: Including 3G capex				
Adjusted Net profit (Rsbn)	45,878	36,400	36,825	(10.4)
EPS (Rs)	22.2	17.6	17.8	(10.4)
Sensitivity: Excluding 3G capex				
Adjusted Net profit (Rsbn)	45,878	36,468	39,516	(7.2)
EPS (Rs)	22.2	17.7	19.1	(7.2)

Source: IDFC-SSKI Research

Adjusted net gearing likely Though to rise further to 1.0x in

FY11 from 0.9x in FY09 as we assume debt raising for 3G related capex by FY11

### ☐ Peak capex over; 3G may necessitate equity infusion

Though we believe peak capex is behind for RCOM, its adjusted net gearing (including estimated equipment payables) is likely to rise further to 1.0x in FY11 from 0.9x in FY09 as we assume incremental debt raising for 3G related capex by FY11. Further, FCCBs worth \$1.2bn (at cost), which are deep out of the money at present, if not converted, would be due for redemption in FY12. As we do not expect the company to generate free cash by FY11, the redemption would need to be financed through fresh debt (redemption liability of \$1.6bn including redemption premium). In this backdrop, we believe 3G investments may necessitate equity infusion for checking balance sheet stress and to maintain the company's financial flexibility.

#### We expect the deal with Etisalat DB to generate a rental of Rs100bn over a 10-year period

### □ Reliance Infratel – ringing in external tenants

As of March 2009, Reliance Infratel had ~48,000 telecom towers corresponding to ~200,000 tenancy slots. Reliance Infratel's towers, housing RCOM's GSM as well as CDMA BTSs with a tenancy of 1.6x, are currently only captively utilized. However, RCOM has recently inked a long-term passive infrastructure sharing agreement with Etisalat DB (Swan Telecom earlier), which envisages renting 30,000 tenancy slots in the next 18 months. We expect the deal to generate a rental of Rs100bn over a 10-year period. The company has indicated that it is also in talks with other telecom players for more such deals and that it can increase the tenancy capacity considerably, if required, with nominal capex. With improved visibility on external tenancies, we have valued Reliance Infratel at an EV of Rs186bn (EV/tower of 3.3m).

Equity infusion to alleviate concerns on balance sheet stress

### ☐ Gearing an overhang; valuations may recover on equity infusion

We rule out FCF generation by RCOM till FY11 and we see its adjusted net gearing rising further from 0.9x in FY09 to 1.0x in FY11 (Net Debt/ EBIDTA of 3.6x). Additionally, RCOM would also have to refinance its outstanding FCCBs worth \$1.2bn at cost, if not converted. We believe RCOM's current valuation discount primarily reflects these concerns on potential balance sheet stress. RCOM is currently exploring equity raising options in the parent company (approval secured for up to 25% equity dilution). Further, we believe it may also revive the divestment plans in Reliance Infratel to aid its equity raising plans. We expect such equity infusions to alleviate concerns on balance sheet stress and lead to a recovery in valuations.

#### □ DCF-based price target of Rs298

Our price target offers 17% upside from CMP

We have used the DCF methodology to arrive at RCOM's fair value and set a price target of Rs298 per share by March 2010. Our price target includes contribution of Rs19/share from our estimate of Reliance Infratel's external tenancies going forward. Our FY11E EV/EBIDTA of 8.6x compares with the mid-to-lower band of the stock's historic one-year forward valuation range. This is also at ~7% discount to Bharti's current 12-month forward EV/ EBIDTA. We believe RCOM's ability to secure equity resources and fund-raising through divestments would trigger a valuation recovery. We initiate coverage on RCOM with an Outperformer rating and a DCF-based price target of Rs298 – an upside of 17% from current levels.

**Exhibit 5: DCF calculations for RCOM** 

(Rs m)	FY10	FY11	FY12	FY13	FY14	FY20
EBITDA	107,392	122,086	134,774	150,947	163,885	250,436
Current tax	(1,788)	(6,984)	(8,191)	(12,056)	(16,302)	(50,021)
Capex	(143,461)	(107,000)	(80,000)	(77,630)	(71,161)	(50,087)
Change in WC	(49,540)	(33,738)	42,634	(9,102)	(13,722)	2,238
FCF	(87,397)	(25,635)	89,216	52,159	62,700	152,566
WACC (%)	11.5					
PV of projection period	420,876					
Terminal growth rate (%)	3.5					
Terminal value	1,973,821					
Terminal EV/E	7.9					
PV of terminal value	596,052					
TV as % of EV	59%					
Total Enterprise value	1,002,047					
Net debt	426,112					
Equity value	575,936					
Value per share (Rs)	279					

Source: IDFC-SSKI Research

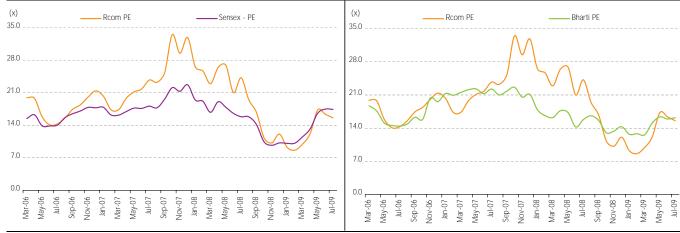
Exhibit 6: Sensitivity of DCF calculations w.r.t terminal growth rate and WACC

WACC / g(x)	2.5%	3.0%	3.5%	4.0%	4.5%
10.5%	318	340	366	396	431
11.0%	279	298	320	344	373
11.5%	244	261	279	300	323
12.0%	214	228	243	261	281
12.5%	187	199	212	227	244

Source: IDFC-SSKI Research

#### IDFC - SSKI INDIA

Exhibit 7: RCOM trades at only a marginal discount to Bharti; also trades at a discount to the Sensex



Source: Company data, IDFC-SSKI Research

### **WIRELESS BUSINESS: EXPANDING HORIZONS**

RCOM's aggressive GSM launch has raked in a smart rise in net additions run rate for the company even post the promotional offer period. RCOM is now elevated to the number two position with a market share of 18.6% in June 2009. Going forward, we expect 21.4% CAGR in RCOM's wireless subscriber base to 107m in FY11 with only a marginal (40bp) dip in market share to 18.1%. Led by the recent cut in termination charges and lower revenue/ min on account of rising competition, we expect 13.2% compounded annual drop in RCOM's ARPU over FY09-11. Our estimates factor in a 9% decline in wireless EBIDTA/ min, and thus a lower EBIDTA CAGR of 13.4% vis-à-vis revenue CAGR of 16.2% for the wireless business. Reliance Infratel's recent agreement with Etisalat DB Telecom for tower sharing provides the much-needed visibility and comfort on external revenues in the tower business.

Exhibit 8: Expect 107m wireless subscriber base by FY11; ARPU decline at 13.2% CAGR

Wireless segment	Units	FY08	FY09	FY10E	FY11E	FY09-11 CAGR %
All India wireless subs	m	256	392	510	592	22.9
RCOM's subscribers	m	46	73	95	107	21.4
RCOM's market share	%	17.9	18.5	18.6	18.1	
RCOM's share in net adds	%	18.9	19.9	18.9	14.8	(13.7)
Revenue	Rs bn	152	174	208	234	16.2
Revenue growth	%	41.8	14.2	19.9	12.6	(5.8)
EBIDTA	Rs bn	60.8	66.7	78.6	85.8	13.4
EBITDA margin	%	40.0	38.4	37.7	36.6	
ARPU	Rs	347	255	204	192	(13.2)
Revenue / min	Rs	0.74	0.63	0.57	0.54	(6.8)
EBITDA / min	Rs	0.30	0.24	0.21	0.20	(9.0)

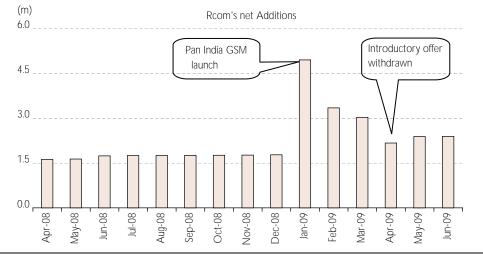
Source: TRAI, Company data, IDFC-SSKI Research

### ☐ Aggressive GSM launch spikes up net addition run rate...

RCOM, post the pan-India commercial launch of its GSM services in January 2009, witnessed a spurt in net additions to 5m in January and 3.3m in February 2009 from average monthly net addition of 1.8m during the previous six months. RCOM's GSM launch was characterized by an aggressive customer experience programme, under which the company offered a new life-time pre-paid connection with a limited period offer of double talk time value for pre-paid top-ups (recharges). This offer was valid for purchases up to 31 March 2009 and the validity period ended phase-wise from April to June 2009. We note that RCOM has sustained its net additions run rate post withdrawal of the customer experience programme.

RCOM has sustained its net additions run rate post withdrawal of the customer experience programme

Exhibit 9: RCOM's net subscriber additions remain strong



Source: TRAI, IDFC-SSKI Research

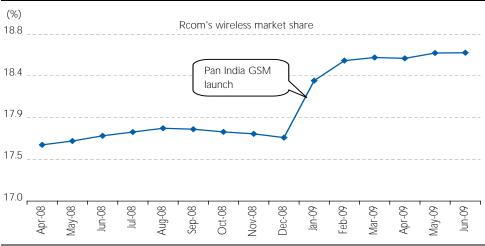
#### ☐ ... and elevates RCOM to no. 2 position

RCOM's market share, since its GSM launch, has risen to 18.6% as of June 2009 from 17.7% in December 2008. This has elevated RCOM to the number two position in the industry (Vodafone, the erstwhile number two, has a 17.8% share). Notably, RCOM has continued to gain market share even post the withdrawal of its promotional customer experience programme. RCOM's population coverage now stands at 80%, which is just a notch below Bharti's population coverage of 82%.

coverage stands at 80% with a market share of 18.6% as of June'09

RCOM's population

Exhibit 10: Sustained increase in market share



Source: TRAI

### ☐ Estimate 107m subscribers in FY11; market share dip to be marginal

We expect 21% CAGR in RCOM's wireless subscribers over FY09-11 to 107m from 73m in FY09. Our estimates imply average monthly net addition of 1.9m in FY10 and 1m in FY11. We estimate a modest 40bp fall in RCOM's wireless market share to 18.1% in March 2011. This implies a 17% share of net industry additions over FY09-11. Our market share estimates for RCOM factor in upside from further increase in RCOM's GSM penetration and likely benefits of MNP implementation even in the backdrop of rising competitive intensity.

RCOM's GSM penetration and likely benefits of MNP implementation to support market share

Increasing incidence of multiple SIM ownership and lower usage profile of incremental subscribers to dampen ARPU and MoU

#### **□** ARPU to decline over FY09-11E

We expect a 13.2% compounded annual decline in RCOM's ARPU over FY09-11 with a drop of 19.8% in FY10 and 6.1% in FY11. Over this period, we expect 7% compounded annual decline in MoU, led by the increasing incidence of multiple SIM ownership and lower usage profile of incremental subscribers. We estimate revenue/ min to decline by 6.8% from Re0.63/ min in FY09 to Re0.54/ min, with a Re0.03/ min impact of the Re0.1/ min cut in mobile termination charges and the remaining due to rising competitive pressures.

Exhibit 11: Expect 13.2% CAGR drop in ARPU over FY09-11

RCOM's Wireless business	FY08	FY09	FY10E	FY11E	FY09-11 CAGR, %
MOU (min)	469	406	360	352	(6.9)
Growth (%)	(6.8)	(13.5)	(11.3)	(2.2)	
ARPU (Rs)	347	255	204	192	(13.2)
Growth (%)	(6.4)	(26.7)	(19.8)	(6.1)	
Realization (Rs/min)	0.74	0.63	0.57	0.54	(6.8)
Growth (%)	0.5	(15.2)	(9.7)	(3.9)	

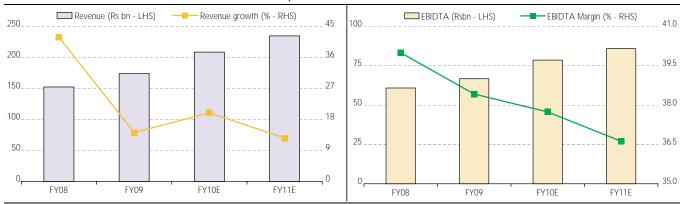
Source: Company data, IDFC-SSKI Research

Increasing competition to depress ARPU and EBITDA/ min

### □ Revenue CAGR of 16% over FY09-11E; 9% drop in EBIDTA/min

We expect 16.2% CAGR in RCOM's wireless segment revenues over FY09-11 based on our estimate of 21.4% CAGR in subscriber base and 13.2% decline in ARPU. Given the imminent spurt in competitive intensity, we factor in a 9% drop in RCOM's wireless EBIDTA/min over FY09-11. Our estimates imply a 180bp decline in EBIDTA margins, resulting in a lower EBIDTA CAGR of 13.4%. Notably, while the proposed 1-2% increase in spectrum fees is a potential margin downside, the proposed 2% cut in USO charges could be an upside. Both the changes have been proposed but there is lack of clarity on the implementation status.

Exhibit 12: Estimate wireless revenue CAGR at 16%; competition to drive EBIDTA/ min lower



Source: Company data, IDFC-SSKI Research

#### Reliance Infratel has entered into a 10-year MSA with RCOM and RTL for providing passive

infrastructure

Tenancy on towers can be increased to seven with minimal capex; thus strong potential for tenancy revenues

The deal with Etisalat DB is for 10 years with current revenue scope of Rs100bn over the period

~5% stake divestment in Reliance Infratel in August 2007 implied equity valuation of Rs280bn

#### RELIANCE INFRATEL: RINGING IN INCREMENTAL REVENUES

#### □ Reliance Infratel – RCOM's vehicle for telecom infrastructure assets

Reliance Infratel owns and manages the hived-off passive infrastructure assets of RCOM and its subsidiaries. It has entered into a 10-year Master Service Agreement (MSA) with RCOM and Reliance Telecom (RTL), nominating Reliance Infratel as the exclusive provider of passive telecom infrastructure to RCOM and RTL. As of March 2009, Reliance Infratel had ~48,000 telecom towers corresponding to ~200,000 tenancy slots. Further, RCOM has recently received the shareholder approval for transfer of its Optical Fibre Division to Reliance Infratel (pending court approval).

#### ☐ Agreement with Etisalat DB to ring in third-party tenancy

Reliance Infratel's telecom towers, housing RCOM's GSM as well as CDMA BTSs with a tenancy of 1.6x, are currently only captively utilized. RCOM has recently inked a long-term passive infrastructure sharing agreement with new entrant Etisalat DB (Swan Telecom earlier), which envisages rental contribution of Rs100bn over a period of 10 years. The company has indicated that it is also in talks with other telecom players for such deals and that it can increase the tenancy capacity to 7 per tower, if required, with only nominal capex. Reliance Infratel also plans to enter into sharing agreements for its OFC assets (transferred from RCOM).

Key highlights of the passive infrastructure sharing agreement with Etisalat DB Telecom are:

- The current scope of the agreement includes sharing of tower and transmission infrastructure. The management has indicated that the scope of the agreement can potentially be extended to other areas like backhaul and long distance carriage.
- The initial duration of the agreement is 10 years with provision for automatic further extension.
- The agreement involves provision of 30,000 sites to Etisalat DB in 15 circles in a phased manner over 18 months, starting within 60-90 days from the date of signing (July 2009). Reliance Infratel estimates that most of this demand is likely to be met from the existing tower base.
- Revenue contribution from the current scope of the contract is Rs100bn (excluding pass-through revenues) for the 10-year period. The management expects steady-state revenue to level to be attained in about two years.

### □ Reliance Infratel – value unlocking?

RCOM had divested ~5% equity stake in Reliance Infratel for Rs14bn in August 2007 (\$337m at the prevailing exchange rate) through private placement to a group of international investors. The transaction implied an equity valuation of Rs280bn for Reliance Infratel and based on this, the company estimated an EV of Rs360bn by March 2008. On a base of ~40,000 towers in March 2008, this implied an EV/tower of ~Rs9m. Further, Reliance Infratel had also filed its DRHP for a public listing in February 2008 but later deferred it. Given RCOM's investment plans and a potential rising in gearing due to additional debt, we believe RCOM may look at further equity divestment in Reliance Infratel as potential option.

Exhibit 13: Business overview of Reliance Infratel

		Comments
Total telecom towers (March-09)	~48,000	Up from just 14,000 in April 2007, presence in all the circles
Tenancy	1.6x	Entirely captive. To increase with addition of third party tenants
Revenues (FY08)	Rs14.6bn	
EBIDTA (FY08)	Rs6.7bn	EBIDTA margin of 46.3%
Total assets (FY08)	Rs117.2bn	BV of Rs2.9m/tower on a base of ~40,000 towers

Source: Company reports, IDFC-SSKI Research

#### □ Reliance Infratel – valued at an EV of Rs186bn

Our DCF valuation implies an EV/tower of Rs3.3m on our estimated tower base of ~56,000 in FY10 Based on available financials for Reliance Infratel and our estimates for external tenancies for the company (after factoring in the recently inked agreement with Etisalat DB Telecom), we estimate a DCF-based EV of Rs186bn for Reliance Infratel as of March 2010. Our DCF valuation implies an EV/tower of Rs3.3m on our estimated tower base of  $\sim$ 56,000 in FY10.

Exhibit 14: DCF calculations for Reliance Infratel

(Rs m)	FY10	FY11	FY12	FY13	FY14	FY20
EBITDA	25,430	31,561	39,314	45,441	46,959	51,791
Current tax	(5,495)	(7,106)	(9,455)	(11,297)	(11,581)	(11,848)
Capex	(30,782)	(15,647)	(12,460)	(11,170)	(11,609)	(11,000)
Change in WC	(5,767)	(6,118)	(2,890)	(1,763)	(811)	(634)
FCF	(16,613)	2,690	14,508	21,211	22,958	28,309
WACC (%)	13.0					
PV of projection period	105,786					
Terminal growth rate (%)	3.5					
Terminal value	306,656					
Terminal EV/E	5.9					
PV of terminal value	79,945					
TV as % of EV	43					
Total enterprise value	185,730					

Source: IDFC-SSKI Research

## **NON-WIRELESS BUSINESS: WELL HEELED**

Having put in place a strong asset base of national and international long distance and intra city voice and data communication infrastructure, we expect RCOM to start reaping in the benefits. Aided further by incremental revenues from its acquisition of Vanco, we expect 15.4% revenue CAGR and 16.9% EBIDTA CAGR for the global business with 13.6% revenue CAGR and 11.3% EBIDTA CAGR for the Enterprise Broadband business. We also factor in a scale-up in RCOM's DTH venture with 4.2m subscribers in FY11 from 1.5m in FY09. Overall, we expect RCOM's non-wireless businesses to register revenue and EBIDTA CAGR of 18% over FY09-11.

## **G**LOBAL BUSINESS: LEVERAGING A STRONG ASSET BASE

Exhibit 15: Key financials and assumptions in global business

			3			
(Voice+Data)	Units	FY08E	FY09E	FY10E	FY11E	CAGR (FY09-11) (%)
NLD min	bn	23	32.2	41.8	49.8	24.4
ILD min	bn	6.8	7.6	8.7	9.9	14.5
NLD revenues	Rs bn	23.3	31.5	38.9	45.4	20.0
ILD revenues	Rs bn	15.0	16.4	18.3	20.7	12.3
Data revenues	Rs bn	16.5	19.9	21.3	24.2	10.4
Total global revenues	Rs bn	54.8	67.8	78.5	90.2	15.4
EBIDTA	Rs bn	14.0	16.2	19.2	22.1	16.9
EBIDTA margin	%	25.6	23.9	24.5	24.5	

Source: IDFC-SSKI Securities \* - NLD, ILD and Data revenue shown here are IDFC-SSKI estimates

## □ Reliance Globalcom – aiming for the top league

A 100% subsidiary of RCOM, Reliance Globalcom provides managed data services Reliance Globalcom (earlier FLAG Telecom Group) is RCOM's 100% subsidiary (20% held through a trust) engaged in the business of managed data services. It owns and operates through FLAG 65,000rkm of submarine cable systems. Reliance Globalcom acquired US-based Yipes Holding and UK-based Vanco in 2007 and 2008 respectively to augment its presence in the global enterprise services market. Its international network infrastructure is seamlessly integrated with its domestic long distance networks. Reliance Globalcom plans to invest \$1.5bn in setting up a 50,000rkm undersea cable network connecting 60 countries across six continents. Further, it also plans to invest \$500m in 4G and \$200m Global Ethernet services to expand its presence in more than 50 countries.

Exhibit 16: Reliance Globalcom has a strong asset base

Exhibit 10. Reliance of	Exhibit 10. Reliable Globalcom has a strong asset base								
Network	Investment	Capacity (tbps)	Length (rkm)	Coverage					
FLAG	Acquired for \$200m	5.4	65,000	40 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					
Yipes	Acquired for \$300m	-	22,000	Across 14 US metros					
Future expansion	\$1.5bn	-	50,000	Connecting 60 countries across 6 continents					

Source: Company reports

Yipes owns over 22,000rkm of OFC network across 14 US metros as also presence in London, Hong Kong and Tokyo

Vanco's Managed Network services are available in over 40,000 locations across 163 countries

RCOM acquired Yipes in 2007 for US \$300m. Yipes is a leading provider of managed Ethernet and application delivery services for the global enterprise. Yipes owns over 22,000rkm of OFC network across 14 US metros in addition to its presence in London, Hong Kong and Tokyo. The acquisition of Yipes has given RCOM a strong foothold in the managed Ethernet services market in the US.

## Vanco enhances Reliance Globalcom's enterprise services customer base

Yipes provides RCOM a strong global footprint in the data market

RCOM acquired a 100% stake in Vanco, a UK-based MVNO, for US \$77m in May 2008 and the acquisition was free of any debt obligations. Vanco's Managed Network services are available in over 40,000 locations across 163 countries and 90% of Vanco's revenue is derived from developed markets including UK, USA, France and Germany. Vanco's acquisition added 220 MNC customers to Reliance Globalcom's customer base, taking the tally to 1,400. According to RCOM, Vanco has an annual revenue potential of \$365m from its secured long-term contracts with large enterprise customers.

Exhibit 17: Vanco Plc (UK) - key financials

Income statement (\$m)	Jan 07	Jan 06	Jan 05	Jan 04	Jan 03
Turnover	340	265	191	127	80
Operating profit (loss)	35	25	18	9	1
Pretax Income	27	20	16	7	1
Income bef XO items	19	14	11	5	0
Net profit (loss)	19	14	11	5	0
EBITDA	46	36	26	16	6
Return on Common Equity (%)	18	21	36	23	-2

Source: Bloomberg

## □ NLD – expect 20% revenue CAGR over FY09-11

RCOM has a network of 175,000rkm of intercity ducted fibre optic cable network (against 101,337rkm for Bharti) with over 25,000rkm of this network installed in leading cities in India. We estimate 17% CAGR in India's ~140bn minutes NLD market (FY09) and 20% CAGR in RCOM's NLD revenues over FY09-11. In the ILD segment, we expect RCOM to leverage its strong asset base in the form of the FLAG submarine cable system as well as its growing calling card business for overseas retail customers (2m customers as of March 2009) to register 12% revenue CAGR over FY09-11.

## **■** Expect revenue CAGR of 15.4% for the global business

Based on our estimates for RCOM's long distance voice business and the managed network and data businesses, we expect revenue CAGR of 15.4% in its global business over FY09-11. While the company's focus on offering higher value-added services in its data business and higher revenue contribution from Yipes (55% gross margins) are likely to be margin-accretive, lower profitability of Vanco and increasing competition in the NLD and ILD segments would exert pressure on overall margins. Thus, we expect a marginal increase in EBIDTA margins, which would lead to EBIDTA CAGR of 16.9%, over FY09-11.

**ILD** business

RCOM to leverage its strong asset base in the

We expect EBIDTA CAGR of 16.9% over FY09-11 in the global business

110 AUGUST 2009

## **ENTERPRISE BROADBAND BUSINESS**

Exhibit 18: Assumptions and financials of broadband business

		FY08	FY09	FY10E	FY11E	CAGR (% - FY09-11)
Access lines	m	1.0	1.4	1.6	2.0	19.6
ARPL	Rs	1,804	1,741	1,559	1,496	(7.3)
Revenue	Rs bn	17.9	25.2	28.4	32.6	13.6
yoy growth	%	56.2	41.3	12.4	14.9	
EBIDTA	Rs bn	8.7	11.6	12.4	14.3	11.3
yoy growth	%	66.6	33.8	7.3	15.4	
EBIDTA margin	%	48.4	45.9	43.8	44.0	

Source: Company data, IDFC-SSKI Research

## **□** Focus on high ARPU customers

RCOM to initially focus on select cities with high ARPU potential

RCOM's strategy in its Enterprise and Broadband business is to focus initially on select cities with high APRU potential. It currently has presence in 18 circles covering 42 cities with ~1m buildings connected to its network. The enterprise customer base includes 850 of the top 1000 Indian Enterprises and MNCs, and the company is rapidly expanding its presence in the SME segment. As of June 2009, it had 1.42m access lines with ARPL of Rs1,626. RCOM targets to cover 1.5m buildings by FY11, which would translate into 2.0m-2.2m subscribers based on average tenancy (access line/building) of 1.3-1.5 over the last two years.

## **■ Expect 14% revenue CAGR, 11% EBITDA CAGR over FY09-11**

We expect 19.6% CAGR in RCOM's enterprise business access lines over FY09-11 with 7.3% decline in ARPL due to increasing competition in the segment from other private players like Bharti. Resultant, we estimate revenue CAGR of 13.6% and EBIDTA CAGR of 11.3% for RCOM over FY09-11.

## DIGITAL MEDIA (DTH) BUSINESS

RCOM's DTH service is based on the MPEG 4 compression platform, which entails lower leasing costs RCOM launched satellite TV services (DTH) in August 2008 through Reliance Big TV, its 100% subsidiary. The DTH offering has been launched under the brand 'Big TV'. As a strategy, RCOM has positioned its DTH business as a pan-India offering and had 1.5m subscribers as of March 2009. RCOM's DTH service is based on the MPEG 4 compression platform, which cuts bandwidth requirement by almost half, and thus lowers leasing costs.

Exhibit 19: Summary financials of the DTH business

(Rs m)	FY09	FY10E	FY11E
Subscribers (EOP) (m)	1.5	2.7	4.2
Revenues	1,035	4,806	8,529
Direct cost	3,079	5,459	8,684
Gross profit	(2,044)	(653)	(155)
Transponder cost	480	600	720
EBIDTA	(2,524)	(1,253)	(875)

Source: Company reports, IDFC-SSKI Research

## **FINANCIAL ANALYSIS**

We expect 16.7% CAGR in RCOM's consolidated revenues over FY09-11 with its wireless revenues growing by 16.2% and non-wireless revenues by 18%. We expect EBIDTA margins to remain stable over the period with the strong growth in non-wireless businesses cushioning margin stress in the wireless business. Earnings, however, are likely to remain flat over the period due to a sharp rise in interest and depreciation charges. Based on RCOM's current capex guidance and our estimate of Rs80bn investments in 3G by FY11, we expect adjusted net gearing to increase to 1.0x in FY11 from 0.9x in FY09. Further, FCCBs worth \$1.2bn at cost, if not converted, would have to be redeemed in FY12. In this backdrop, we believe 3G investments may necessitate equity infusion to check balance sheet stress.

Exhibit 20: Key financial projections

(Rs bn)	FY08	FY09	FY10E	FY11E	CAGR (FY09-11E; %)
Revenues	191	229	269	313	16.7
% yoy growth	60.5	20.3	17.2	16.2	
EBIDTA	82	93	107	122	14.7
EBIDTA margin (%)	43.0	40.5	39.9	39.1	
% yoy growth	43.3	13.3	15.7	13.7	
Net profit	50	46	36	37	(10.4)
EPS (Rs)	24.2	22.2	17.6	17.8	(10.4)
% yoy growth	56.4	(8.3)	(20.7)	1.2	
RoE	21.6	14.6	9.4	8.7	
RoCE	13.0	9.1	8.1	7.9	
Gearing (x)*	0.7	0.9	1.0	1.0	
Book value (Rs/share)	137	183	201	219	9.4

Source: company reports, IDFC-SSKI Research \* - net debt adjusted for estimated equipment payables

## **■ Expect 16.7% CAGR in revenues over FY09-11**

We expect 16.7% CAGR in RCOM's consolidated revenues over FY09-11 with a 16.2% increase in wireless and 18% increase in non-wireless revenues. Key drivers of the non-wireless businesses are higher utilization of its international and domestic long distance infrastructure, continued growth in the enterprise business and incremental revenues from the Vanco acquisition (acquired in FY09). Our estimates also factor in a scale-up of the company's DTH business with the subscriber base increasing from 1.5m in FY09 to 4.2m in FY11.

Exhibit 21: Segment-wise revenue projections

Revenues	FY08	FY09	FY10E	FY11E	CAGR (FY09-11E; %)
Wireless	152,135	173,678	208,226	234,379	16
Global	54,750	67,761	78,550	90,248	15
Broadband and Telephone	17,868	25,243	28,370	32,583	14
Others	4,304	6,646	10,978	15,318	52
Total (post elimination)	190,678	229,411	268,949	312,555	17

Source: IDFC-SSKI Research

Higher utilization of ILD and NLD infrastructure, continued growth in the enterprise business and Vanco – key revenue drivers

Rising contribution from broadband business and improving margin profile of global business to partly offset margin pressure

## □ Strong growth in non-wireless businesses to cushion margins

Our estimates build in a 9% compounded annual drop in wireless EBIDTA/min (180bp drop in EBIDTA margins) as we expect competitive intensity to heat up in the wireless industry over the next two years. We, however, expect rising contribution from the broadband business and improving margin profile of the global business to partly offset this drop for RCOM, restricting the decline in consolidated margins to 140bp over FY09-11. Resultant, we expect 14.7% CAGR in EBIDTA over FY09-11. A stronger-than-expected growth in the global business could provide upside to our margin estimates.

Exhibit 22: Margin pressure in wireless segment partly mitigated by other businesses

EBITDA (Rs m)	FY08	FY09	FY10E	FY11E	CAGR (FY09-11E; %)
Wireless	60,847	66,727	78,582	85,832	13
Global	14,032	16,170	19,246	22,111	17
Broadband and Telephone	8,652	11,575	12,424	14,342	11
Others	(1,223)	(1,281)	(2,492)	169	NA
Total	81,989	92,853	107,116	121,204	14
EBITDA margin (%)					
Wireless	40.0	38.4	37.7	36.6	
Global	25.6	23.9	24.5	24.5	
Broadband and Telephone	48.4	45.9	43.8	44.0	
Others	(28.4)	(12.7)	(18.1)	0.9	
Total	43.0	40.5	39.9	39.1	

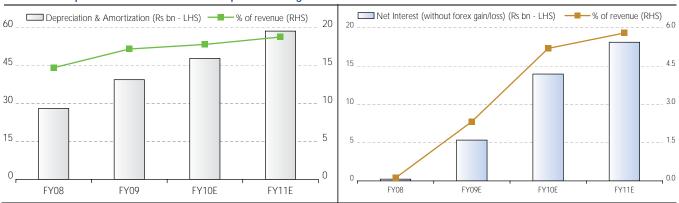
Source: IDFC-SSKI Research

We estimate adjusted EPS of Rs17.6 in FY10 (Rs17.7 ex-3G) and Rs17.8 (Rs19.1 ex-3G) in FY11 vs adjusted EPS of Rs22.2 in FY09

## □ Capex + 3G to result in higher fixed charges, depress earnings

Given RCOM's high CWIP levels (\$2.2bn in June 2009), we believe the ~\$8.5bn capex over FY08 and FY09 is yet to fully translate into higher depreciation and interest charges. Further, RCOM's ongoing capex plans (Rs100bn in FY10E) as well as our estimate for likely 3G capex (Rs80bn by FY11E including license fees) would imply a sharp increase in depreciation and interest charges. This, we believe, would lead to a 10.4% CAGR decline in earnings despite a strong 14.7% CAGR in EBIDTA (7.2% earnings decline ex-3G) over FY09-11. We account for the reported MTM currency translation gains/ losses as below-the-line item and do not factor in any such gains/ losses going forward. Accordingly, we estimate an adjusted EPS of Rs17.6 for RCOM in FY10 (Rs17.7 ex-3G) and Rs17.8 (Rs19.1 ex-3G) in FY11 vis-à-vis adjusted EPS of Rs22.2 in FY09.

Exhibit 23: Depreciation and interest costs expected to surge



Source: Company reports, IDFC-SSKI Research

Exhibit 24: Earnings sensitivity for 3G capex

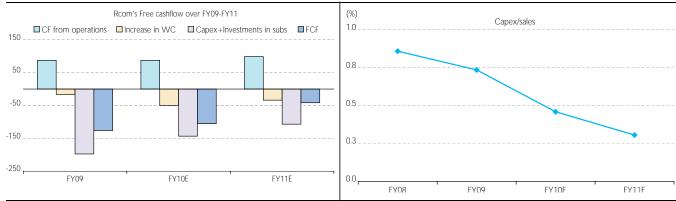
	FY09	FY10E	FY11E	CAGR (%)
Base case: Including 3G capex				
Adjusted net profit (Rs bn)	45,878	36,400	36,825	(10.4)
EPS (Rs)	22.2	17.6	17.8	(10.4)
Sensitivity: Excluding 3G capes	(			
Adjusted net profit (Rs bn)	45,878	36,468	39,516	(7.2)
EPS (Rs)	22.2	17.7	19.1	(7.2)
Source: IDEC-SSKI Research	•	•		

Source: IDFC-SSKI Research

## □ 3G to delay positive FCF generation

We do not expect RCOM to generate positive FCF by FY11 Based on RCOM's Rs100bn capex plan in FY10, likely unwinding of capex-related payables and our estimate for 3G investments, we do not expect RCOM to generate positive FCF by FY11. Resultant, we estimate net gearing to increase from 0.9x in FY09 to 1.0x in FY11. Capex intensity, however, is likely to come down with an expected decline in capex/ sales from  $\sim 73\%$  in FY09 to 31% in FY11.

Exhibit 25: Free cash flow unlikely by FY11 due to 3G investments, but capex intensity to come down



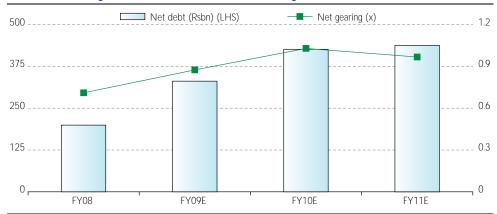
Source: Company reports, IDFC-SSKI Research

RCOM has received shareholders' approval for equity dilution, restricted to maximum of 25%

## □ 3G may necessitate equity infusion to check balance sheet stress

We expect RCOM's adjusted net gearing to rise to 1.0x in FY11 from 0.9x in FY09 as we assume debt financing for the Rs80bn 3G capex by FY11. Further, FCCBs worth \$1.2bn (at cost), which are deep out of the money at present, if not converted, would be due for redemption in FY12. As we do not expect the company to generate free cash by FY11, the redemption would need to be financed by raising fresh debt (redemption liability of \$1.6bn including redemption premium). In this backdrop, 3G investments may necessitate equity infusion for checking balance sheet stress and to maintain the company's financial flexibility. RCOM has recently received shareholders' approval to raise equity resources with maximum equity dilution restricted to 25%.

Exhibit 26: Gearing\* to rise in the near term before coming down



Source: Company reports, IDFC-SSKI Research \* - net debt adjusted for estimated equipment payables

Exhibit 27: FCCBs deep out of money; redemption liability of \$1.6bn in FY12

FCCBs (\$ bn)			Total
Issued in	May-06	Feb-07	
Redemption due	May-11	Feb-12	
Total issue size	0.5	1.0	1.5
Conversion price (Rs/share)	481	661	
Premium to CMP (%)	60	120	
Outstanding FCCBs (post buyback)	0.3	0.9	1.2
Redemption amount (with premium)	0.4	1.2	1.6

Source: Company data, IDFC-SSKI Research

## ☐ One-offs, forex treatment make comparison with peers difficult

We note that RCOM, for the past nine quarters, has reported a net financial income despite having net debt. In Q1FY10, the company reported net financial income of Rs6.2bn while net long-term debt stood Rs221bn. Though the company attributes this to netting off of forex gains from the net interest, net forex gains for up to seven consecutive quarters despite a sharp INR depreciation in FY09 surprise us. It is also noteworthy that Bharti, which follows US GAAP accounting and accounts for currency fluctuations in the P&L, reported a currency loss from Q4FY08 to Q4FY09 – a period coinciding with the duration of consistent INR depreciation. Further, we estimate total asset revaluation of ~Rs220bn for RCOM over the last three years, which also makes asset turnover and asset charge comparisons difficult.

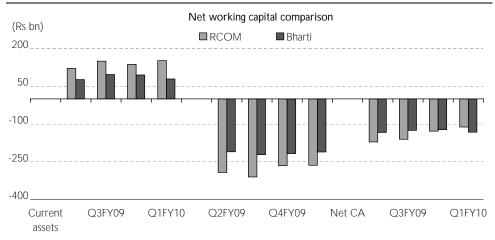
## □ RCOM's WC gap with Bharti has reversed in Q1FY10

Historically, RCOM's current liabilities were significantly higher compared to Bharti's despite both companies having a similar business profile. This could be attributed to higher capex-related short-term payables and higher short-term debt levels for RCOM. However, this gap has recently reversed due to lower new capex intensity as well as unwinding of the current short-term obligations.

Lower capex intensity and unwinding of current short-term obligations have reduced RCOM's current liabilities

## IDFC - SSKI INDIA

## Exhibit 28: Analysis of working capital – RCOM v/s Bharti



Source: Company data, IDFC-SSKI Research

Exhibit 29: Key comparisons between RCOM and Bharti

	FY08	FY09	FY10E	FY11E	Comments
Wireless subscribers (m)					
RCOM	46	73	95	107	Limited GSM presence earlier. Pan-India GSM launch in Jan-09
Bharti	62	94	120	131	
Discount to Bharti	(26.1)	(22.6)	(20.6)	(18.1)	
ARPU (Rs)					
RCOM	347	255	204	192	Lower usage pattern of CDMA subscribers/incremental subscribers
Bharti	366	325	273	249	Higher share of premium subscribers. Early entrant benefit
Discount to Bharti	(5.2)	(21.6)	(25.2)	(23.1)	
MoU (min)					
RCOM	469	406	360	352	Lower usage pattern of CDMA subscribers/ incremental subscribers
Bharti	478	508	479	461	Higher share of premium subscribers. Early entrant benefit
Discount to Bharti	(1.9)	(20.2)	(24.9)	(23.7)	
Realization (Rs/min)					
RCOM	0.74	0.63	0.57	0.54	
Bharti	0.77	0.64	0.57	0.54	
Discount to Bharti	(3.4)	(1.7)	(0.3)	0.0	
EBIDTA/min (Rs/min)	0.00	0.04	0.04	0.00	
RCOM	0.30	0.24	0.21	0.20	
Bharti	0.30	0.20	0.18	0.17	
Premium to Bharti	(1.4)	21.9	15.3	13.8	
Depreciation % of gross block RCOM	6.9	6.5	5.7	5.8	10-20 year depreciation policy for P&M.  Depreciation on revaluation adjusted against business restructuring reserve
RCOM (adjusted) Bharti	8.1 9.5	8.7 8.9	7.8 8.8	7.5 8.5	Adjusted for revaluations 3-20 year depreciation policy for Network
					Equipment
Wireless investments (Rsbn)					
RCOM	249	364	425	472	
RCOM (adjusted)	220	335	396	443	Adjusted for revaluations and capitalized forex gains/ losses
Bharti	234	299	382	428	US GAAP accounting. No capitalization impact
Excess over Bharti (unadjusted)	6.5	22.1	11.3	10.3	
Excess over Bharti (adjusted)	(5.9)	12.3	3.7	3.6	
Wireless revenue/Investment (%)					
RCOM	61	48	49	50	25% lower subscriber base, ARPU at a 25% discount to Bharti
RCOM (adjusted)	69	52	53	53	Adjusted for revaluations and capitalized forex gains/ losses
Bharti	93	102	92	87	US GAAP accounting. No capitalization impact
Total Revenue/Total investment (%)					
RCOM	35	31	31	32	25% lower subscriber base, ARPU at a 25% discount to Bharti
RCOM (revaluation and forex adjusted)	36	35	34	35	Adjusted for revaluations and capitalized forex gains/ losses
Bharti	59	61	56	54	US GAAP accounting. No capitalization impact
RoCE (%)					•
RCOM	22	15	9	8	Impact of lower asset turnover
Bharti	30	28	23	19	

Bharti
Source: Company reports, IDFC-SSKI Research

## **VALUATIONS AND VIEW**

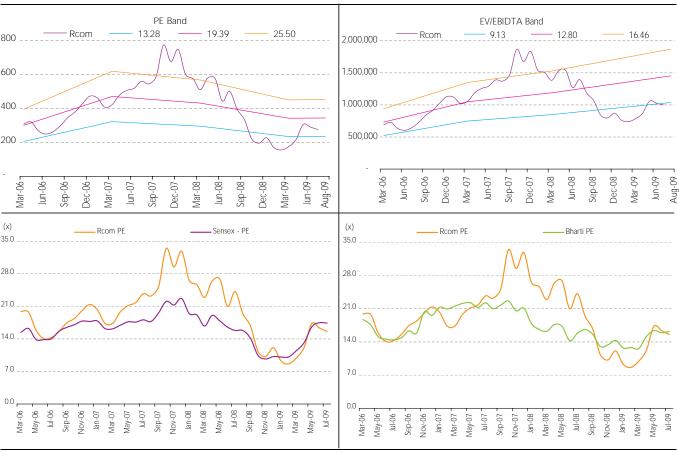
We attribute a valuation discount to RCOM vis-à-vis its own historical levels as well as Bharti to account for concerns on rising gearing on the balance sheet (from 0.9x in FY09 to 1.0x in FY11; Net Debt/ EBIDTA of 3.6x). We believe RCOM's ability to secure equity resources and fund raising through divestments would act as triggers for a valuation recovery. We have set a DCF-based price target of Rs298 for the stock, which includes value-accretion of Rs19/share from Reliance Infratel's external tenancies. Our target valuation of FY11E EV/ EBIDTA of 8.6x compares with the mid-to-lower band of the stock's historic one-year forward valuation range and is at ~7% discount to Bharti's current 12-month forward EV/ EBIDTA. We initiate coverage on RCOM with Outperformer.

Easing liquidity and lowerthan-expected capex have led to valuation recovery for RCOM

## □ Valuation discount to Bharti has narrowed considerably

RCOM, at 12-month forward valuations of 15.6x earnings and 8.9x EV/ EBIDTA, currently trades at the lower end of its historical valuation range. Valuations, however, have recovered from the October-08 to March-09 trough. Also, the valuation discount to Bharti since October 2008 has narrowed significantly. We believe this recovery has been led first by easing of the post-October-08 liquidity crunch and then by lower-than-expected capex incurred in FY09 as well as lower capex guidance for FY10 (which partially alleviates concerns on increasing balance sheet leverage).

Exhibit 30: RCOM - valuations at a discount to historical levels as well as to Bharti



Source: Company data, IDFC-SSKI Research

RCOM is exploring equity raising options in the parent company

Our target price includes Rs19/ share contribution

from Reliance Infratel's

external tenancies

## ☐ Gearing an overhang; valuations may recover on equity infusion

We rule out FCF generation by RCOM till FY11 and we see adjusted net gearing rising from 0.9x in FY09 to 1.0x in FY11 (Net Debt/ EBIDTA of 3.6x). Additionally, RCOM would also have to refinance its outstanding FCCBs worth \$1.2bn at cost (if not-converted). We believe RCOM's current valuation discount to historical levels primarily reflects these concerns on potential balance sheet stress. RCOM is currently exploring equity raising options in the parent company (approval secured for up to 25% equity dilution). Further, we believe it may also revive the divestment plans in Reliance Infratel to aid its equity raising plans. We expect such equity infusions to alleviate concerns on balance sheet stress and lead to a recovery in valuations.

## □ DCF-based price target of Rs298

We have used the DCF methodology to arrive at RCOM's fair value, factoring in WACC of 11.5% and terminal growth rate of 3.5%. We have also adjusted our DCF computation to account for the impact of redemption premium and exchange rate fluctuation on outstanding FCBBs, due for redemption in FY12. Based on these assumptions, we arrive at a target price of Rs298 for RCOM (March 2010) including contribution of Rs19/ share from our estimate of Reliance Infratel's external tenancies going forward.

**Exhibit 31: DCF calculations for RCOM** 

(Rs m)	FY10	FY11	FY12	FY13	FY14	FY20
EBITDA	107,392	122,086	134,774	150,947	163,885	250,436
Current tax	(1,788)	(6,984)	(8,191)	(12,056)	(16,302)	(50,021)
Capex	(143,461)	(107,000)	(80,000)	(77,630)	(71,161)	(50,087)
Change in WC	(49,540)	(33,738)	42,634	(9,102)	(13,722)	2,238
FCF	(87,397)	(25,635)	89,216	52,159	62,700	152,566
WACC (%)	11.5					
PV of projection period	420,876					
Terminal growth rate (%)	3.5					
Terminal value	1,973,821					
Terminal EV/E	7.9					
PV of terminal value	596,052					
TV as % of EV	59					
Total Enterprise value	1,002,047					
Net debt	426,112					
Equity value	575,936					
Value per share (Rs)	279					
Cource: IDEC CCVI Decearch						

Source: IDFC-SSKI Research

Exhibit 32: Sensitivity of DCF calculations w.r.t terminal growth rate and WACC

		<u> </u>			
WACC / g(x)	2.5%	3.0%	3.5%	4.0%	4.5%
10.5%	318	340	366	396	431
11.0%	279	298	320	344	373
11.5%	244	261	279	300	323
12.0%	214	228	243	261	281
12.5%	187	199	212	227	244

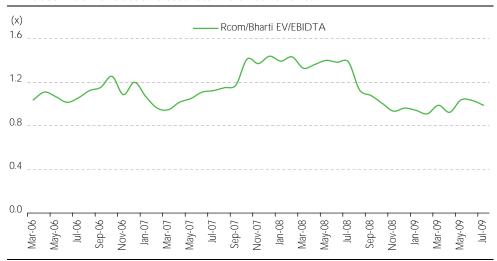
Source: IDFC-SSKI Research

Our DCF-based price target offers 17% upside in stock price from here

## **☐** Initiating coverage with Outperformer

Our target FY10 EV discounts FY11 EBIDTA by 8.6x, which compares with the mid-to-lower band of the stock's historic one-year forward valuation range. This is also at  $\sim$ 7% discount to Bharti's current 12-month forward EV/ EBIDTA. We believe RCOM's ability to secure equity resources and fund-raising through divestments would trigger a valuation recovery. We initiate coverage on RCOM with an Outperformer rating and a DCF-based price target of Rs298 – an upside of 17% from current levels.

Exhibit 33: RCOM's valuation discount to Bharti has narrowed



Source: IDFC-SSKI Research

## **☐** Key risks to our recommendation

- Higher-than-estimated capex leading to higher gearing and higher fixed costs.
- Predatory competition leading to sharp margin erosion.

### RCOM is R-ADAG group's flagship company with R-ADAG owning a 67.34% equity stake in it

RCOM a complete telecom solutions provider with presence across wireless, fixed mobility, basic telephony, broadband, NLD & ILD carriage and enterprise solutions

RCOM organizes its business under three strategic business units – wireless, global and broadband

## **COMPANY OVERVIEW**

## ☐ Strong pedigree

Reliance – Anil Dhirubhai Ambani Group (R-ADAG) – is a diversified conglomerate with business interests ranging from telecommunications (RCOM) to financial services (Reliance Capital), generation and distribution of power (Reliance Infrastructure) and media and entertainment (Reliance Big Entertainment). RCOM is the group's flagship company with R-ADAG owning a 67.34% equity stake in it.

## □ RCOM – a late entrant but an aggressive competitor

RCOM is a complete telecommunications solutions provider with presence across all key business segments like wireless, fixed mobility, basic telephony, broadband, national and international long distance carriage and enterprise solutions. RCOM commenced its wireless business in end-2002 on the CDMA platform and, along with Reliance Telecom's GSM operations (100% subsidiary now), had a market share of 20% by March 2005. In January 2008, RCOM launched its pan-India GSM operations (ex-Reliance Telecom circles). As of April 2009, the company has a wireless subscriber base of 74.8m and wireline subscriber base of 1.1m, implying a market share of 18.5% and 3% respectively.

## □ Company structure

RCOM organizes its business under three strategic business units – wireless, global and broadband. Apart from this, the company has recently entered into the digital media business with its DTH (Direct to Home) arm – Reliance Big TV. RCOM's principal operating companies are Reliance Telecom, Reliance Globalcom, Reliance Communications Infrastructure, Reliance Infratel and Reliance Big TV.

Exhibit 34: RCOM's business overview

Reporting segments	Businesses
Wireless	Mobile handsets, fixed wireless phones/ terminals, high speed data internet
	cards, blackberry services
	Major brands: Reliance Mobile, Reliance Hello, Reliance Netconnect
Global	National/ International long distance voice, video and data network
	services, WiMax. Product offerings for wholesale, retail and enterprise
	customers
	Services: Voice, NLD, ILD, Data and WiMax
Broadband & Enterprise	Provides voice, data, video, internet and IT infrastructure services to
	enterprises. Also caters to residential and SME customers
Others	DTH, retailing (Reliance world), property leasing and Investments
0 0	

Source: Company reports

Exhibit 35: RCOM group's key companies

Principal operating companies	Ownership (%)	Area of operations
Reliance Communications		CDMA based mobile/ fixed, broadband and long distance services. GSM license for 14 circles
Reliance Telecom	100	GSM services in eight service areas. Received spectrum for providing CDMA services in two circles - NE and Assam
Reliance Globalcom (earlier FLAG Telecom)	100*	Enterprise services, capacity sales, managed services. Owns international undersea cables and acquired Yipes
Reliance Communications Infrastructure (RCIL)	100	Provides wireless multimedia and internet services to customers of RCOM
Reliance Infratel	94.5	Holds the hived off tower assets (passive infrastructure) of RCOM's GSM+CDMA services
Reliance BIG TV	100	DTH venture

Source: Company reports \*-20% is held through a trust

RCOM has population coverage of 80% through its network covering 23,000 towns and 600,000 villages

Yipes is a leading provider of managed Ethernet and application delivery services for global enterprises

## ☐ Wide network coverage with ownership of a strong asset base

According to company reports, RCOM has population coverage of 80% through its network covering 23,000 towns and 600,000 villages, including all major railway routes and highways. It has national long distance ducted optical fibre network of 160,000rkm and 25,000rkm of intra-city network. Further, it has IDC capacity at multiple locations for its data business with plans to add more such centres. The international network consists of its ownership of the FLAG undersea cable network, which connects 40 countries from the East Coast of US to Europe, the Middle East, India, South and East Asia through Japan. Through its acquisition of Yipes Holdings Inc., RCOM also owns 22,000km of metro fibre network in the US in 14 metros.

## □ Recent acquisitions enhance international presence

RCOM acquired Yipes in 2007 for US \$300m. Yipes is a leading provider of managed Ethernet and application delivery services for global enterprises and owns 22,000rkm of OFC network across 14 US metros in addition to its presence in London, Hong Kong and Tokyo. RCOM also acquired a 100% stake in Vanco, a UK-based MVNO, for \$77m in May 2008 and the acquisition was free of any debt obligations. Vanco provides Managed Network services in 163 countries with 90% of revenues from developed markets like UK, USA, France and Germany. Vanco's acquisition adds annual revenue potential of \$365m for RCOM along with 220 MNC customers, taking its tally to 1400.

### Income statement

Year to Mar 31 (Rs m)	FY07	FY08	FY09	FY10E	FY11E
Net sales	144,683	190,678	229,411	268,949	312,555
% growth	-	31.8	20.3	17.2	16.2
Operating expenses	87,472	108,689	136,536	161,557	190,469
EBITDA	57,211	81,989	92,875	107,392	122,086
% change	-	43.3	13.3	15.6	13.7
Net interest	(7)	(226)	(5,332)	(13,957)	(18,106)
Depreciation	24,653	28,053	39,388	47,795	58,597
Pre-tax profit	32,600	52,612	45,755	42,222	41,817
Current tax	610	2,836	-123	5,822	4,992
Profit after tax	31,990	49,776	45,878	36,400	36,825
Non-recurring items	0	4,224	13,199	9,382	0
Net profit after					
non-recurring items	31,990	54,000	59,077	45,782	36,825
% change	-	68.8	9.4	(22.5)	(19.6)

## **Balance sheet**

Year to Mar 31 (Rs m)	FY07	FY08	FY09	FY10E	FY11E
Paid-up capital	10,220	10,320	10,320	10,320	10,320
Reserves & surplus	193,708	246,107	359,683	394,379	429,321
Total shareholders' equity	203,987	280,738	378,231	414,276	452,785
Total current liabilities	179,186	241,687	265,142	270,071	248,020
Total debt	155,438	215,681	335,520	359,631	399,631
Total liabilities	334,624	457,368	600,662	629,702	647,651
Total equity & liabilities	538,611	738,106	978,893	1,043,978	1,100,436
Net fixed assets	330,423	522,153	729,476	816,478	864,881
Investments	11,925	2,797	2,857	1,318	1,318
Total current assets	196,263	213,156	246,560	226,182	234,237
Working capital	17,077	(28,531)	(18,582)	(43,889)	(13,783)
Total assets	538,611	738,106	978,893	1,043,978	1,100,436

## Cash flow statement

Year to Mar 31 (Rs m)	FY07	FY08	FY09	FY10E	FY11E
Pre-tax profit	32,600	52,612	45,755	42,222	41,817
Depreciation	24,653	28,053	39,388	47,795	58,597
Chg in working capital	120,123	24,389	(16,353)	(49,540)	(33,738)
Total tax paid	(610)	(2,836)	123	(5,822)	(4,992)
Operating cash inflow	176,767	102,218	68,913	34,655	61,684
Capital expenditure	(152,617)	(196,848)	(197,555)	(145,000)	(107,000)
Free cash flow (a+b)	24,149	(94,630)(	(128,642)	(110,345)	(45,316)
Chg in investments	(11,876)	8,030	(2,459)	(1,880)	(3,566)
Debt raised/ (repaid)	155,438	60,243	119,839	24,111	40,000
Capital raised/ (repaid)	10,220	100	-	-	-
Dividend (incl. tax)	(1,196)	(1,811)	(1,882)	(1,882)	(1,882)
Misc	(39,535)	6,848	6,741	15,149	7,132
Net cha in cash	137.200	(21.219)	(6.404)	(74.847)	(3.632)

## **Key ratios**

Year to March 31	FY07	FY08	FY09	FY10E	FY11E
EBITDA margin (%)	39.5	43.0	40.5	39.9	39.1
EBIT margin (%)	22.5	28.3	23.3	22.2	20.3
PAT margin (%)	22.1	26.1	20.0	13.5	11.8
RoE (%)	31.4	20.5	13.9	9.2	8.5
RoCE (%)	18.1	12.6	8.8	8.0	7.8
Net gearing (x)*	0.3	0.7	0.9	1.0	1.0

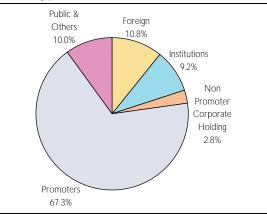
<sup>\* -</sup> net debt adjusted for estimated equipment payables

### **Valuations**

Year to March 31	FY07	FY08	FY09	FY10E	FY11E
Reported EPS (Rs)	15.7	26.3	28.6	22.2	17.8
Adj. EPS (Rs)	15.7	24.2	22.2	17.6	17.8
PE (x)	16.3	10.5	11.5	14.4	14.3
Price/ Book (x)	2.6	1.9	1.4	1.3	1.2
EV/ Net sales (x)*	4.0	3.8	3.7	3.5	3.1
EV/ EBITDA (x)*	10.2	8.8	9.2	8.9	7.9
EV/ CE (x)*	1.6	1.5	1.2	1.2	1.1

<sup>\* -</sup> net debt adjusted for estimated equipment payables

## **Shareholding pattern**



As of June 2009

# **Idea Cellular**

**Rs73** OUTPERFORMER

Mkt Cap: Rs226bn; US\$4.7bn

Good idea!

11 August 2009

BSE Sensex: 15075

Stock	data

Reuters	IDEA.BO
Bloomberg	IDEA IN
1-yr high/low (Rs)	92.6/34
1-yr avg daily volumes (m)	10.93
Free float (%)	50.9

### Price performance



### Performance (%)

	3-mth	6-mth	1-yr	3-yr
Idea	21.5	62.9	(18.1)	-
Sensex	25.1	63.0	0.3	40.2

Chirag Shah chirag@idfcsski.com 91-22-6638 3306

Ashish Shah ashishshah@idfcsski.com 91-22-6638 3371

Idea Cellular's (Idea) power-packed launch in new circles has been impressive and reflects the company's strong brand and execution capabilities. The pan-India roll-out is expected to be complete by December 2009 and would drive a 25% CAGR in Idea's subscriber base over FY09-11E. Idea would report the fastest growth in our telecom universe with an EBIDTA and EPS CAGR of 28% and 20% respectively over FY09-11E. Idea's valuation discount to peers has narrowed and we expect valuations to be sustained at these levels on the back of a strong earnings growth trajectory, market share scale-up and pan-India footprint. Re-initiating coverage on the stock with a price target of Rs90 per share.

Power-packed expansion: Idea's impressive roll-out in Mumbai and Bihar circles is a testimony to its execution capabilities as well as the efficacy of its brand. With Idea gunning for a pan-India presence by December 2009, we expect its subscriber base to grow to 68m by FY11, implying a 2-year CAGR of 25.4% and a 40bp increase in market share to 11.4%.

Earnings to remain strong despite headwinds: Led by peaking of losses in new circles, we expect a robust 28% EBIDTA CAGR for Idea over FY09-11. This would mitigate the impact of higher depreciation charges, leading to a strong 20% 2-year CAGR earnings. Our estimates factor in a 6-7% drop in realizations as also EBIDTA/min due to rising competition in the industry. Our estimates also build in Rs46bn of capex by FY11 for 3G roll-out, leading to increased gearing of 0.8x in FY11 (0.4x in FY09).

Outperformer with a target price of Rs90/share: The sustained narrowing of Idea's discount vis-à-vis Bharti since H2CY08, we believe, has been led by equity infusions that have lowered balance sheet gearing as well as a smart scaleup with new launches. Further, Idea is an apt candidate for any strategic M&As, and thus we see the currently rich valuations as sustainable. We set a DCF-based price target of Rs90 for Idea (by March 2010) - at implied valuation of 8.3x EV/FY11 EBIDTA, which is at ~10% discount to Bharti.

## Key financials

FY11E
158,043
13,630
3,100
4.4
10.9
16.6
1.4
7.7
8.7
7.8
4 1 0 6 4 5 1

- prices as on August 7, 2009 \* - net debt adjusted for estimated equipment payables

124 AUGUST 2009

## **INVESTMENT ARGUMENT**

On the back of Idea's impressive performance in its recent launches and a panIndia footprint (likely by December 2009), we expect a strong 25.4% CAGR in its
subscriber base to 68m by FY11. Despite factoring in a 6% drop in EBIDTA/min
due to competitive pressure and losses in new circles, we estimate a strong
28% EBIDTA CAGR and 20% earnings CAGR over FY09-11. Our estimates factor
in 3G capex of Rs46bn by FY11, and a higher net gearing of 0.8x in FY11 against
0.4x in FY09. Idea's valuation discount to Bharti witnessed in CY08 has
narrowed due to its equity infusions and impressive launches. We find current
valuations justified given Idea's stronger EBIDTA growth potential vis-à-vis
Bharti and RCOM. Further, being a pure mobile play with significant experience
and a strong brand, we believe Idea offers an apt entry point for global telecom
majors through strategic M&As – and thereby can command a strategic
valuation premium. Initiating coverage with Outperformer and a DCF-based
price target of Rs90 including Rs19/share value for its 16% stake in Indus.

## **READY TO JOIN THE BIG BOYS**

Having scaled up impressively in its recent launches, Idea is now gunning for a pan-India presence by December 2009. With an experienced management and established brand, we believe Idea has a headstart vis-à-vis the new entrants even in the new circles and would benefit from its rising population coverage (~66% at present). We expect 25.4% CAGR in Idea's subscriber base (including Spice) over FY09-11 to 68m with an incremental 40bp market share to 11.4%. Our estimates factor in a 90bp decline in market share in Idea's established circles though the same would be more than offset by roll-out in new circles. With rising competition and lower usage profile of incremental subscribers, we expect a 7.2% and 9.9% CAGR drop in revenue/min and ARPU respectively over FY09-11E.

Exhibit 1: Expect a 68m subscriber base by FY11 (including Spice circles)

	FY08	FY09	FY10E	FY11E	CAGR (%)
					(FY09-11)
n	256	392	510	592	22.9
n	24.0	43.0	58.5	67.7	25.4
%	9.4	11.0	11.5	11.4	
%	10.6	14.1	13.2	11.1	
n	18.7	30.8	46.0	59.3	38.7
s	287	265	226	215	(9.9)
s	0.76	0.63	0.57	0.54	(7.2)
	n n % % m	m 24.0 % 9.4 % 10.6 m 18.7 s 287	m 256 392 m 24.0 43.0 6 9.4 11.0 6 10.6 14.1 m 18.7 30.8 s 287 265	m 256 392 510 m 24.0 43.0 58.5 6 9.4 11.0 11.5 6 10.6 14.1 13.2 m 18.7 30.8 46.0 s 287 265 226	m 256 392 510 592 m 24.0 43.0 58.5 67.7 6 9.4 11.0 11.5 11.4 6 10.6 14.1 13.2 11.1 m 18.7 30.8 46.0 59.3 s 287 265 226 215

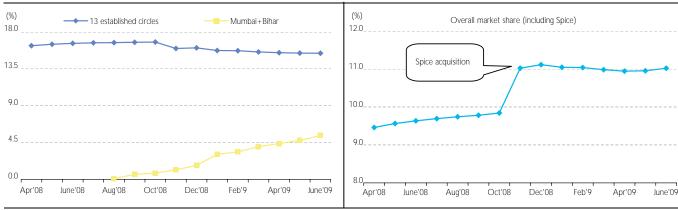
Source: TRAI, Company data, IDFC-SSKI Research

We expect 25.4% CAGR in Idea's subs base to 68m and a 40bp market share gain to 11.4% by FY11

## □ Pan-India presence targeted by December 2009

Idea currently has footprint in 17 circles (including Spice circles). Its market share in the 13 established circles (excluding the four recent launches) is 15.4% with share of 5.4% in Mumbai and Bihar circles (combined) after 9-11 months of launch. Its overall market share (including Spice circles) has remained stable at ~11% over the last 12 months as incremental market share from entry in new circles has compensated for marginal losses in established circles. Idea launched its operations in Orissa in April 2009, in Tamil Nadu in May 2009 and in Chennai in June 2009 with plans to extend coverage to the remaining five circles by December 2009. It has already received start-up spectrum in these circles in the 1800MHz band.

Exhibit 2: Market share sustained in a competitive environment: new launches compensate for loss in market share in older circles



Source: COAI, IDFC-SSKI Research

Exhibit 3: Idea has gradually scaled up its network coverage - going pan India by December 2009

Circle	Category.		Spectrum	Market	Comments
		allotted	band	share (%)	
		(MHz)	(MHz)	May-09	
Established circles					Account for ~66% of total population
Haryana	В	6.2	900	15.4	Acquired from Escotel in January 2004
Gujarat	Α	6.2	900	16.3	
Maharashtra	Α	7.8	900	23.7	
Kerala	В	6.2	900	26.6	Acquired from Escotel in January 2004
Delhi	Metro	8.0	1800	10.1	Launched in 2002
Uttar Pradesh (W)	В	6.2+1.8	900/1800	20.7	Acquired from Escotel in January 2004
Madhya Pradesh	В	6.2+1.8	900/1800	24.6	
Andhra Pradesh	Α	6.2+1.8	900/1800	16.5	
Punjab	В	7.8	900	16.5	Acquired through Spice in June 2008.
Karnataka	Α	6.2	900	6.9	Acquired through Spice in June 2008.
Himachal Pradesh	С	4.4	1800	4.3	Acquired from Escorts in 2006
Rajasthan	В	6.2	1800	5.3	Acquired from Escorts in 2006
Uttar Pradesh (E)	В	6.2	1800	7.7	Acquired from Escorts in 2006
Recently launched					Account for ~22% of total population
Mumbai	Metro	4.4	1800	4.3	Launched in August 2008
Bihar	С	4.4	1800	5.2	Launched in October 2008. Operations
					under ABTL
Orissa	С	4.4	1800	1.0	Launched in April 2009
Tamil Nadu (including Chennai)	Α	4.4	1800	0.0	Launched in May 2009
To be launched					Account for ~12% of total population
West Bengal	В	4.4	1800		To be launched by Dec-09
Kolkata	Metro	4.4	1800		To be launched by Dec-09
Assam	С	4.4	1800		To be launched by Dec-09
North East	С	4.4	1800		To be launched by Dec-09
J&K	С	4.4	1800		To be launched by Dec-09

Source: Company reports, DOT, IDFC-SSKI Research

Bihar, Orissa, West Bengal, Assam, North-East and J&K, accounting for ~25% of India's population, offer significant subscriber addition potential

## □ New launches – a vehicle to ride the rising penetration curve

Idea's established circles cover  $\sim$ 66% of India's population, while the remaining population would be covered under the recently launched/ soon to be launched circles in the near future. While Mumbai and Chennai may not offer significant subscriber addition potential due to the existing high tele-density, circles like Bihar, Orissa, West Bengal, Assam, North-East and J&K (accounting for  $\sim$ 25% of the country's population) offer significant subscriber addition potential at penetration levels between 16% and 30%.

Exhibit 4: Low penetration in new circles – upside potential

Idea cellular service rollouts	Category	Mobile penetration	% of total
	of circle	(FY09E)	population
Recently launched circles			
Mumbai	Metro	77	2
Bihar	С	16	11
Orissa	С	22	3
Tamil Nadu (including Chennai)	Α	59	6
Launch by December 2009			
West Bengal	В	21	6
Kolkata	Metro	75	1
Assam	С	20	2
North East	С	24	1
J&K	С	31	1

Source: TRAI, IDFC-SSKI Research

### □ Definite lead over new entrants

Idea has garnered a market share of 4.6% in Mumbai within 11 months and 6.0% in Bihar within 9 months of launch Despite being a late entrant in its new circles, Idea has a time lead over most new players as also the added advantage of an established brand (in the business since mid-1990s) and network infrastructure. The company has garnered a market share of 4.6% in Mumbai within 11 months and 6.0% in Bihar within nine months of launch. Thus, while we believe that Idea may find it difficult to replicate its market share in established circles in the newer circles, we see it at an advantage vis-à-vis the new entrants.

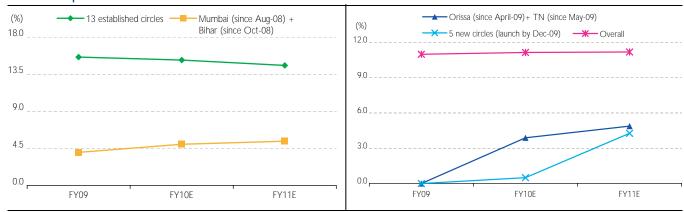
## Our estimates imply Idea's We ex

Our estimates imply Idea's share of net additions at 12% over FY09-11E

## ☐ Expect 68m wireless subscribers by FY11

We expect Idea's subscriber base (inclusive of Spice) to register 25.4% CAGR over FY09-11 to 68m, aided by a further increase in market share in Mumbai and Bihar circles, ramp-up in market share in its two recent launches (Tamil Nadu and Orissa) as well as service roll-outs in five new circles by December 2009. Our estimates factor in a 90bp decline in Idea's market share in its 13 established circles, though we believe the same would be offset by market share gains in new circles. Thus, we expect the company's overall market share to rise 40bp over the next two years (11.4% in FY11). Our estimates imply Idea's share of net additions at 12% over FY09-11E.

Exhibit 5: Expect new launches to offset market share loss in established circles



Source: Company data, TRAI, IDFC-SSKI Research

Revenue/ min and MoU likely to decline 7.2% and 2.8% respectively over FY09-11

## **□** Expect 9.9% CAGR drop in ARPU

We expect Idea's ARPU to decline by 9.9% over FY09-11 with revenue/ min and MoU declining 7.2% and 2.8% respectively over the period. We believe that while competitive pressures would drive the drop in realization, the downside in its MoU vis-à-vis Bharti would be restricted by a lower base (17% discount to Bharti) and due to little differentiation in the usage profile of incremental subscribers.

Exhibit 6: Competitive pressures to drive down revenue/min; ARPU to decline 9.9%

Usage pattern	FY08	FY09	FY10E	FY11E	CAGR (% - FY09-11)
MoU (min)	383	423	401	399	(2.8)
Growth (%)	5.4	10.4	(5.0)	(0.5)	
Realization (Rs/min)	0.76	0.63	0.57	0.54	(7.2)
Growth (%)	(16.4)	(17.4)	(9.9)	(4.5)	
ARPU (Rs)	287	265	226	215	(9.9)
Growth (%)	(11.7)	(7.7)	(14.9)	(4.6)	

Source: Company reports, IDFC-SSKI Research

Exhibit 7: Key operating performance indicators (Q1FY10)

Indicators	ldea	Bharti	RCOM
ARPU (Rs)	235	278	210
MoU (min)	403	478	365
Revenue/ min	0.58	0.58	0.58
EBIDTA/ min	0.15	0.19	0.22
EBIDTA/ sub	62	92	81

Source: Company data, IDFC-SSKI Research

## FINANCIAL ANALYSIS: STRONG EARNINGS GROWTH AHEAD

Led by 38.7% CAGR in average subscriber base over FY09-11 (25.4% CAGR in end of period subscribers), we expect 24.8% CAGR in Idea's consolidated revenues over the period. We expect competitive pressures and losses from new circle launches to lead to a 6% compounded annual drop in consolidated EBIDTA/ min over FY09-11. We expect a robust 28% EBIDTA CAGR to lead to 20% earnings CAGR. Our estimates factor in 3G investments of Rs46bn by FY11 (assuming Idea bids only for licenses in Metros and A Circles), leading to a rise in adjusted gearing from 0.4x in FY09 to 0.8x in FY11.

**Exhibit 8: Key financials** 

Year ended 31 March (Rs bn) FY08 **FY09** FY10E FY11E Revenues 67 101 130 158 54.3 50.6 28.1 21.6 % yoy growth **EBIDTA** 28 37 23 46 EBIDTA margin (%) 33.7 27.9 28.5 29.4 % yoy growth 55.0 24.9 30.5 25.6 Net profit 10.4 9.0 12.3 13.6 Adjusted EPS (Rs) 4.0 3.1 4.0 4.4 % yoy growth 81.6 (22.3)28.8 10.9 RoE (%) 32.5 10.4 8.7 8.5 RoCE (%) 16.2 8.7 7.2 7.8 Adjusted Gearing (x) \* 2.2 0.4 0.7 8.0 Book value (Rs/share) 13.5 47.3 48.6 53.0

Source: Company reports, IDFC-SSKI Research; \* Net debt adjusted for estimated equipment payables

Our estimates factor in 3G investments of Rs46bn by FY11, leading to a rise in adjusted gearing from 0.4x in FY09 to 0.8x in FY11

Revenue growth to be driven by 38.7% CAGR in average wireless subscribers

With 85% of rented cell sites, we see limited scope for incremental cost savings from infrastructure sharing

We assume a 4% drop in EBIDTA/min in Idea's 13 established circles due to rising competition

We assume that Idea would bid for 3G licenses in only metros and the eight A circles

## **□** Expect 24.8% CAGR in revenues over FY09-11

We expect 24.8% CAGR in Idea's revenues over FY09-11 driven by the 38.7% CAGR in average wireless subscribers and 9.9% CAGR drop in ARPU. While our estimates factor in a 32% CAGR in NLD business revenues, we expect the same to accrue almost entirely from Idea's wireless operations, and thereby assume no upside from NLD business in consolidated revenues.

## ☐ Limited scope for margin accretion from infrastructure sharing

Idea had 48,067 cell sites as of June 2009 with 84% on rented towers. Spice had 6,207 cell sites as of June 2009 with 97% on rented towers. Thus, on a consolidated basis, 85% of Idea's cell sites (46,236 cell sites) have been rented, which we believe offers limited scope for incremental cost savings from infrastructure sharing. We estimate \$2.8bn of total capex savings for Idea from infrastructure sharing.

Exhibit 9: 85% of Idea's cell sites (including Spice) are rented

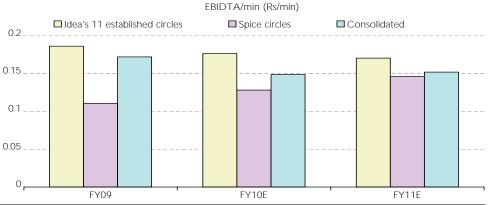
	ldea	Spice	Idea (consolidated)
Total cell sites	48,067	6,207	54,274
Rented	40,211	6,025	46,236
Owned	7,856	182	8,038
% rented	83	97	85

Source: Company reports

## **□** Competitive pressures to dent EBIDTA/min

Idea recently launched its services in Orissa, Tamil Nadu and Chennai with plans to launch services in the remaining five circles by December 2009. Resultant, we expect the benefit of a likely reduction in losses in Mumbai and Bihar circles to be partly mitigated by losses in these circles. Further, we also factor in a 4% drop in EBIDTA/min in Idea's 13 established circles due to rising competitive pressures. Resultant, we expect consolidated EBIDTA/min to decline by 6% over FY09-11.

Exhibit 10: Competitive intensity, losses in circle launches to drive 6% CAGR drop in EBIDTA/min



Source: Company data, IDFC-SSKI Research

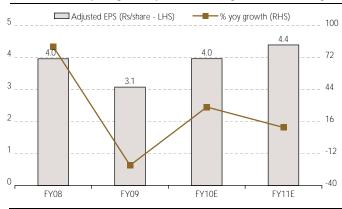
## □ Ongoing capex, 3G to drive higher depreciation charges

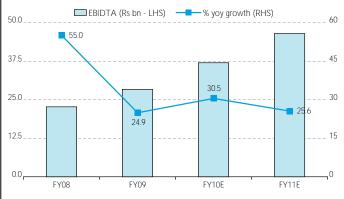
Idea's management has guided for capex of Rs55bn (revised downward from Rs60bn) – the same as in FY09. Further, we also factor in ongoing capex of Rs40bn in FY11 and 3G capex of Rs46bn by FY11 (including license fees). We assume that Idea would bid for 3G licenses in only metros and the eight A circles and that it would start commercial operations in H2FY10. Based on these estimates, we expect a spurt in depreciation charges for Idea with a 37% CAGR over FY09-11.

## □ Robust 28% CAGR in EBIDTA to drive 20% CAGR in earnings

We expect a strong 28% CAGR in EBIDTA to largely offset the impact of higher depreciation charges and drive 20% CAGR in Idea's earnings over FY09-11. This translates into an EPS of Rs4 in FY10E and Rs4.4 in FY11E. Excluding the impact of 3G capex, we expect earnings to be higher with an EPS of Rs5.1 in FY11 (no impact in FY10).

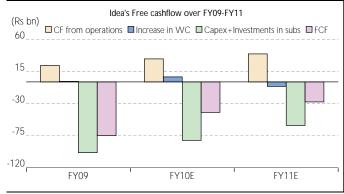
Exhibit 11: Sharp surge in depreciation charges to dent earnings

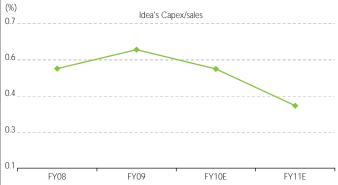




Source: Company data, IDFC-SSKI Research

### Exhibit 12: FCF generation unlikely by FY11





Source: Company reports, IDFC-SSKI Research

Exhibit 13: Sensitivity to 3G capex

	FY09	FY10E	FY11E	CAGR (%)
Base case: Including 3G capex				
Adjusted Net profit (Rsbn)	9.0	12.3	13.6	23.0
EPS (Rs)	3.1	4.0	4.4	19.5
Sensitivity: Excluding 3G capex				
Adjusted Net profit (Rsbn)	9.0	12.3	15.8	32.5
EPS (Rs)	3.1	4.0	5.1	28.7

Source: IDFC-SSKI Research

### Post equity issuances, gearing down from 2.8x in FY06 to 0.4x in FY09

## ☐ Leverage down to manageable levels with capital infusion

Starting with its pre-IPO placement in 2006, Idea has cumulatively raised equity funds worth Rs126bn through issues to strategic and financial investors. Post the equity issuances, Idea's adjusted net gearing has come down from 2.8x in FY06 to 0.4x in FY09. However, we expect net gearing to increase to 0.7x in FY10 and 0.8x in FY11 after factoring in the additional Rs46bn outlay for 3G. Similarly, adjusted Net Debt/ EBIDTA – after declining from 3.4x in FY08 to 2.0x in FY09 – is likely to increase to 2.9x both in FY10 and FY11.

Exhibit 14: Details of equity issuances since CY06

Equity issues Iss Pre-IPO placement (CY06)	sue size (Rs m) 3,750	Remarks
IPO in Q4FY07	28,188	Along with green-shoe option of Rs3.2bn. IPO price of Rs75/share
Preferential equity allotment (for 15% stake) to Telecom Malaysia International in August 2008	72,945	Issue price of Rs157/share. TMI's 49% stake in Spice would translate into 5% stake in Idea post the proposed Spice merger with Idea, resulting in TMI stake at 20%
Convertible preference shares of ABTL to Providence Equity Partr	ners 20,983	Translates into 20% stake in ABTL. ABTL also holds the group's 16% stake in Indus
Total funds raised	125,865	

Source: Company reports

Exhibit 15: Capital infusion brings historical high leverage in control; but 3G to lead rise from current levels

(Rs bn)*	FY06	FY07	FY08	FY09	FY10E	FY11E
Net debt/equity (x)	4.9	1.4	2.2	0.4	0.7	0.8
Net debt/EBITDA (x)	2.9	2.8	3.4	2.0	2.9	2.9
Interest coverage (x)	3.3	4.4	8.2	5.7	9.6	7.5

Source: Company reports, IDFC-SSKI Research \* - net debt adjusted for our estimate of equipment payables

## VALUATIONS AND VIEW: PLAY ON GROWTH, STRATEGIC PREMIUM

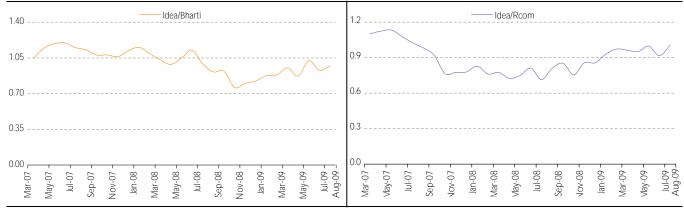
Starting end CY08, Idea's valuation multiples have sharply rebounded vis-à-vis Bharti and RCOM's on the back of its equity infusions and impressive scale-up in new circles. We believe the reduction in spread of Idea's historic valuation discount to Bharti (~3% currently) is justified given a robust 28% CAGR outlook in EBIDTA against 10.5% for Bharti and 14.5% for RCOM. A lower leverage, impressive market share scale-up in new circles as also steady progress towards becoming a pan-India mobile operator also justify a higher multiple. Further, Idea being a pure mobile play with significant experience and a strong brand may provide an apt opportunity to a global telecom major seeking entry in the Indian telecom market. We set a DCF-based price target of Rs90 for the stock including Rs19/share value for its 16% stake in Indus.

Idea currently trades at only a marginal discount to Bharti; we find the valuations justified

## ☐ Equity infusions, impressive launches lead valuation rebound

Idea traded at a sharp ~20% discount to Bharti in mid CY08 at the peak of the liquidity crisis. However, the discount has been narrowing significantly starting end H2CY08 and Idea currently trades at only a marginal (~3%) discount to Bharti. Further, during the same period, Idea's valuation discount to RCOM has also reversed and the stock currently trades at par to the peer. We believe the key catalysts for the valuation rebound include lower leverage on the back of equity infusions, impressive market share scale-up in Mumbai and Bihar circles as also steady progress towards becoming a pan-India mobile operator.

Exhibit 16: Idea's valuation (EV/EBIDTA) discount to Bharti has narrowed; trades at premium to Rcom



Source: IDFC-SSKI Research

A 28% 2-year CAGR outlook in EBIDTA vis-àvis 10.5% for Bharti and 14.5% for RCOM justifies Idea's rich valuations

Idea, with a strong brand and a soon to be attained pan-India presence, a ripe candidate for M&A for a new foreign player

> Our DCF-based price target suggests 24% potential upside

# □ Robust EBIDTA growth justifies narrowing valuation gap with Bharti

Idea currently trades at 8.8x FY10E and 7.6x FY11E adjusted EV/EBIDTA, which is at ~2-7% discount to Bharti's valuations (9.0x and 8.1x respectively). We believe the narrowing of Idea's valuation discount to Bharti is justified given a robust 28% CAGR outlook in EBIDTA vis-à-vis 10.5% for Bharti and 14.5% for RCOM. Further, with the ongoing roll-out plans, Idea too is set to attain a pan-India presence by December 2009 as against its earlier status of being a regional player.

## □ Potential for strategic M&A activity; valuations can remain rich

Idea, being a pure mobile play with its intrinsic strengths, experience of operating in the Indian markets and an established brand, may fit into the entry strategy of a global telecom major seeking a strong foothold in the Indian telecom market. Further, with 3G auctions round the corner, Idea may also seek to have a strategic tie-up with an experienced 3G telecom player for access to 3G technology as well as a good platform.

## □ DCF-based price target of Rs90

We have used the DCF methodology to arrive at Idea's fair value, assuming WACC of 11.5% and a terminal growth rate of 3.5%. Accordingly, we arrive at a target price of Rs90/share for Idea (by March 2010) including contribution of Rs19/share from Idea's 16% stake in Indus through its 80% subsidiary ABTL (effective stake of 12.8%). Our target price implies target FY11 EV/EBIDTA of 8.3x, which is at ~10% discount to Bharti's 12-month forward valuation. We initiate coverage on Idea with an Outperformer rating and potential upside of 24% in the stock price.

Exhibit 17: Idea Cellular – core DCF value of Rs71/share

Core business valued at Rs71 per share

(Rs m)	FY10	FY11	FY12	FY13	FY14	FY20
EBITDA	36,996	46,463	51,799	58,014	64,976	99,291
Current tax	(1,019)	(1,458)	(1,672)	(2,486)	(4,223)	(16,383)
Capex	(81,000)	(60,000)	(45,000)	(41,770)	(38,289)	(28,369)
Change in WC	7,014	(6,300)	(7,095)	(545)	1,243	1,004
FCF	(38,009)	(21,295)	(1,969)	13,212	23,706	55,543
WACC (%)	11.5					
PV of projection period	109,626					
Terminal growth rate (%)	3.5					
Terminal value	718,587					
Terminal EV/E	7.2					
PV of terminal value	216,998					
TV as % of EV	66%					
Total Enterprise value	326,624					
Net debt	105,778					
Equity value	220,846					
Value per share (Rs)	71					
Course, IDEC CCVI Decearch						

Source: IDFC-SSKI Research

Exhibit 18: Sensitivity

WACC / g(x)	2.5%	3.0%	3.5%	4.0%	4.5%
10.5%	80	86	92	99	108
11.0%	71	76	81	87	94
11.5%	63	67	71	76	82
12.0%	56	59	63	67	72
12.5%	49	52	55	59	63

### □ Risks and concerns

- Delay in progress of new launches leading to lower-than-expected subscriber additions.
- Predatory competition exerting further pressure on margins.

### COMPANY OVERVIEW

## ☐ Idea Cellular – part of the Aditya Birla Group

The Aditya Birla Group currently holds a 49.1% stake in Idea Idea Cellular (Idea) is part of the Aditya Birla Group and provides GSM-based mobile services to its subscriber base of 44.2m (including 4.2m subscribers of Spice, in which it holds a 41.09% stake). Idea was originally incorporated in March 1995 as Birla Communications. Its name was changed to Birla AT&T Communications in May 1996, following a JV agreement between AT&T and Grasim Industries. Following the merger with Tata Cellular, the name was changed to Birla Tata AT&T in November 2001 with the three groups (Tatas, AB Group and AT&T) each holding a 33.3% stake in the merged entity. The company introduced the *Idea* brand in May 2002 and renamed itself as Idea Cellular. AT&T exited the venture in September 2005 and the Tatas in June 2006. Idea became a public listed company through its IPO in March 2007 with the Aditya Birla Group currently holding a 49.1% stake in the company. As of March 2009, total foreign holding in Idea stood at 40%.

Exhibit 19: AV Birla Group holdings in Idea

Company	Stake (%)
Aditya Birla Nuvo	27.02
Birla TMT Holdings	9.15
Hindalco Industries	7.37
Grasim Industries	5.5
IGH Holding Pvt Ltd	0.1
Total AV Birla Group	49.1
Source: Company data	

Exhibit 20: Idea Cellular - major operating and holding companies

, 1 3		
Subsidiary/JVs	IDEA's stake (%)	Business area/ Other details
Aditya Birla Telecom (ABTL)	80	Telecom services in the Bihar circle. Also holds 16% stake in Indus. Idea hived of 20% stake recently to Providence Partners.
Idea Cellular Services (ICSL)	100	Wholly owned sub of IDEA cellular. Manpower and services in the areas of subscriber acquisition and servicing required by the Goup
Idea Cellular Infrastructure Services (ICISL)	100	Wholly owned sub of IDEA cellular. Meant for hive off of the Tower business
Idea Cellular Tower Infrastructure (ICTIL)	100	100% sub of ICISL. Meant for hive-off of the tower business
Indus Towers	16	Held through ABTL. So, effective stake will be 80% of 16%=12.8%
Spice Communications	41	Total Spice Group is 49% after including stake held by associate - Green Acre

## ☐ Idea Cellular – major non-promoter shareholders

Idea has two major non-promoter shareholders – TM International Berhad and P5 Asia Investment. Following is the brief profile of these investors.

### TMI Mauritius (a 15% stake in Idea)

TM International Berhad, name changed to AXIATA Group Berhad, has a 15% shareholding in Idea Cellular through its affiliate TMI Mauritius. This stake was issued to AXIATA through a preferential equity allotment in August 2008 @Rs157 per share aggregating to Rs73bn. AXIATA, which is 45% owned by the Malaysian government, was demerged from Telekom Malaysia in April 2008 and is now an independent holding company with controlling interests in various telecommunication companies and assets in Malaysia, Indonesia, Sri Lanka, Bangladesh, Cambodia, Pakistan and Iran as also strategic stakes in India and Singapore. As of December 2008, the group (including subsidiaries and associates) had ~90m mobile subscribers in Asia. AXIATA also holds a 49% equity stake in Spice Communications and post the proposed merger of Spice into Idea, AXIATA's holding in Idea would increase to 20%.

### P5 Asia Investment

P5 Asia Investment is an investment vehicle of Providence Equity Partners and holds a 10.6% stake in Idea. Further, it has also invested \$640m (~Rs21bn) in compulsorily convertible preference shares of ABTL, which offers mobile services in the Bihar circle and also holds Idea's 16% stake in Indus. Post the proposed merger of Spice Communications into Idea, Providence's stake would come down to 10%.

Exhibit 21: Top five non-promoter shareholders as of March-09

Investor	Stake (%)
TMI Mauritius	15.0
P5 Asia Investment (Providence Equity Group)	10.6
Monet Limited	2.9
HSBC Global Investment	2.7
Wagner Limited	2.0

Source: Company data

## **ACQUISITION OF SPICE COMMUNICATIONS**

## ☐ Acquired 41.09% stake in Spice Communications for Rs27.4bn

At the acquisition price, Spice valued at an EV/ sub of \$342 and EV/ EBIDTA of ~17x Spice Communications (Spice) offers GSM-based mobile services in Punjab and Karnataka circles and also holds UASL licenses in Andhra Pradesh, Delhi and Haryana. As of May 2009, Spice had 4.2m subscribers – implying a market share of 1%. Idea Cellular acquired a 40.8% stake in Spice from the Spice Group in June 2008 @ Rs77.3 per share. The acquisition was followed by a mandatory open offer by Idea along with TM International Berhad (and its affiliates) and Green Acre Agro Services (a Birla Group company). Post the open offer, Idea holds a 41.09% stake in Spice, TM International owns 49% and Green Acre Agro Services the remaining 8.8%. Idea's total acquisition cost works out to Rs27.4bn including a non-compete fee of Rs5.44bn. At the acquisition price, Spice was valued at an EV/ sub of \$342 and EV/ EBIDTA of ~17x.

## □ Spice proposed to be merged with Idea

Currently, Idea consolidates Spice's operations as a jointly-controlled entity on a proportionate line-by-line consolidation basis. The company proposes to merge Spice with itself, subject to court approvals. The merger ratio proposed is 49 shares of Idea for 100 shares of Spice. Assuming the merger is approved, it would result in dilution of 6.4% in Idea's equity capital if no treasury stock is issued in lieu of Idea's shareholding in Spice.

The merger ratio proposed is 49 shares of Idea for 100 shares of Spice

Exhibit 22: Proposed merger of Spice with Idea to lead to equity dilution of 6.4%

Merger ratio	49 shares of Idea for every 100 shares of Spice
Spice's total shares outstanding (m)	690
Shares held by Idea Cellular (m)	283
Shares held by others (m)	406
Idea's current outstanding no of shares (m)	3,100
New shares to be issued by IDEA on merger (m)	199
% dilution	6.4
Idea's new outstanding shares (m)	3299
Idea's new equity capital (Rsm)	32,993
0 0 1 1050 0001 0 1	

Source: Company reports, IDFC-SSKI Research

## **□** Likely post-merger developments

Spice Communications (Spice) holds UAS licenses in Andhra Pradesh, Delhi and Haryana with spectrum of 4.4MHz allotted in Andhra Pradesh as per DoT's March 2009 data. Currently, the company does not operate in these circles as Idea already is operational in these markets. Similarly, Idea also holds UAS licenses in Punjab and Karnataka. Idea proposes to de-merge these licenses and sell them to interested parties – with loss, if any, in the process intended to be written off from the share premium account subject to court approval. Idea also intends to adjust the noncompete fee of Rs5.44bn paid to erstwhile Spice Communications' promoters against the share premium account and not amortize it through the P&L. Court approval is pending for the same.

### Income statement

Year to Mar 31 (Rs m)	FY07	FY08	FY09	FY10E	FY11E
Net sales	43,664	67,375	101,484	130,014	158,043
% growth	47.2	54.3	50.6	28.1	21.6
Operating expenses	29,027	44,682	73,139	93,018	111,580
EBITDA	14,637	22,693	28,345	36,996	46,463
% change	37.1	55.0	24.9	30.5	25.6
Other income	465	0	9	9	12
Net interest	(3,291)	(2,776)	(4,943)	(3,854)	(6,178)
Depreciation	6,718	8,768	14,039	20,008	25,640
Pre-tax profit	5,093	11,148	9,372	13,143	14,656
Deferred tax	0	0	0	0	0
Current tax	70	725	362	852	1,026
Profit after tax	5,022	10,423	9,009	12,291	13,630
Preference dividend	0	0	0	0	0
Minorities	0	0	0	0	0
Non-recurring items	0	0	0	0	0
Net profit after					
non-recurring items	5,022	10,423	9,009	12,291	13,630
% change	147.3	107.5	(13.6)	36.4	10.9

## **Balance sheet**

Year to Mar 31 (Rs m)	FY07	FY08	FY09	FY10E	FY11E
Paid-up capital	25,929	26,354	31,001	31,001	31,001
Preference share capital	4,830	0	19	19	19
Reserves & surplus	2,805	9,092	107,266	119,571	133,202
Total shareholders' equity	28,734	35,446	138,267	150,572	164,203
Total current liabilities	21,537	27,022	31,310	42,416	40,485
Total debt	47,335	65,154	89,184	95,373	124,373
Deferred tax liabilities	(1)	661	917	1,115	1,115
Total liabilities	68,871	92,837	121,411	138,904	165,973
Total equity & liabilities	97,605	128,283	259,678	289,477	330,176
Net fixed assets	49,289	89,270	145,149	183,772	220,189
Investments	0	5,560	0	1,000	2,000
Total current assets	24,724	15,500	65,340	33,142	38,482
Other non-current assets	23,592	17,954	49,189	71,563	69,505
Working capital	3,187	(11,523)	34,030	(9,274)	(2,003)
Total assets	97,605	128,284	259,678	289,477	330,176

### Cash flow statement

Year to Mar 31 (Rs m)	FY07	FY08	FY09	FY10E	FY11E
Pre-tax profit	5,093	11,148	9,372	13,143	14,656
Depreciation	6,718	8,768	14,039	20,008	25,640
Chg in working capital	6,018	2,701	789	7,014	(6,300)
Total tax paid	(70)	(725)	(362)	(852)	(1,026)
Operating cash inflow	17,759	21,892	23,837	39,313	32,971
Capital expenditure	(47,555)	(52,161)	(77,041)	(81,000)	(60,000)
Free cash flow (a+b)	(29,796)	(30,269)	(53,204)	(41,687)	(27,029)
Chg in investments	-	(5,560)	5,560	(1,000)	(1,000)
Debt raised/ (repaid)	9,649	22,649	24,011	6,189	29,000
Capital raised/ (repaid)	17,318	3,746	93,686	-	-
Misc	18,319	(2,574)	(23,711)	208	-
Net chg in cash	15,490	(12,008)	46,341	(36,290)	971

## **Key ratios**

Year to March 31	FY07	FY08	FY09	FY10E	FY11E
EBITDA margin (%)	33.5	33.7	27.9	28.5	29.4
EBIT margin (%)	18.1	20.7	14.1	13.1	13.2
PAT margin (%)	11.5	15.5	8.9	9.5	8.6
RoE (%)	28.6	32.5	10.4	8.5	8.7
RoCE (%)	13.2	15.7	8.7	7.1	7.8
Gearing (x)*	1.3	2.2	0.4	0.7	0.8

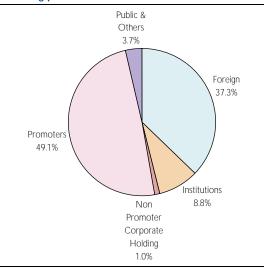
<sup>\* -</sup> net debt adjusted for estimated equipment payables

## **Valuations**

Year to March 31	FY07	FY08	FY09	FY10E	FY11E
Reported EPS (Rs)	2.2	4.0	3.1	4.0	4.4
Adj. EPS (Rs)	2.2	4.0	3.1	4.0	4.4
PE (x)	33.4	19.2	24.7	19.2	17.3
Price/ Book (x)	5.8	5.6	1.6	1.6	1.4
EV/ Net sales (x)*	6.1	4.5	2.8	2.6	2.3
EV/ EBITDA (x)*	18.3	13.4	10.0	9.0	7.7
EV/ CE (x)*	3.5	3.0	1.2	1.3	1.2

<sup>\* -</sup> net debt adjusted for estimated equipment payables

## **Shareholding pattern**



As of June 2009

## **Vodafone Essar**

**NOT LISTED** 

Vodafone Essar (Vodafone) is owned 67% by Vodafone Plc (UK) and 33% by the Essar Group. Currently the third largest player in the Indian wireless market, Vodafone has been on an expansion spree since August 2008. The company covers all 23 circles (seven circles added in the last 12 months) with a subscriber base of 76m and market share of 18%. Vodafone India has invested ~\$4bn over FY08 and FY09 towards network expansion.

## ☐ Vodafone – mixed parentage

### Foreign promoter

Vodafone Plc is a leading telecommunications company based in UK with significant presence in Europe, the Middle-East, Africa, Asia Pacific and USA either directly or through subsidiaries/JVs/Strategic stakes. Vodafone has a base of 303m customers worldwide as on 31 March 2009, based on its proportionate ownership in various group entities. Vodafone reported revenues of \$69.2bn and PAT of \$5.2bn with EBIDTA margin of 35% and FCF of \$11.1bn in FY09.

### Indian promoter

The Essar Group is a diversified business corporation with a balanced portfolio of assets in the manufacturing and services sectors including Steel, Energy, Power, Communications, Shipping Ports & Logistics and Projects. Essar has presence in 15 countries and employs over 50,000 people. The Group is investing more than \$15bn in the next 4-5 years to grow its existing businesses and enter new ventures.

## ☐ Pan-India presence post the recent expansion

Since August 2008, Vodafone has rolled out services in seven new circles (mostly C circles), thus giving it presence in all in all the 23 circles. The market share ramp-up in new circles has been impressive despite the ever-increasing competition in the industry. As on June 30 2009, Vodafone Essar had 76m subscribers with a market share of 18%. Vodafone Essar reported revenues of \$4.4bn and EBIDTA of \$1.2bn in FY09 (EBIDTA margin of 26.4% down from 32.8% in FY08) with capex of \$2.2bn in FY09 (\$1.7bn in FY08).

Vodafone India's market share scale-up in new circles

Market share (%)	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09
MP				0.2	0.5	0.9	1.3	1.7	2.1	2.4
Assam		0.2	0.6	0.9	1.3	1.7	2.2	2.8	3.1	3.7
Bihar			0.2	0.5	1.0	1.8	3.0	3.7	4.8	5.4
HP					0.4	0.6	0.9	1.3	1.7	1.8
J&K									1.5	2.2
NE		0.1	0.6	1.1	1.7	2.4	3.4	4.9	5.9	6.6
Orissa	0.6	0.9	1.4	2.0	2.5	3.0	3.5	4.4	5.3	6.0

Source: TRAI

**BSNL NOT LISTED** 

Bharat Sanchar Nigam Limited (BSNL) is owned 100% by the Gol and offers the entire basket of telecom services including wireline, wireless (GSM+CDMA), internet, broadband, long distance and enterprise data services. It has a wide network coverage in both the mobile and fixed line segments, and is in the midst of a \$16bn expansion programme. In FY09, BSNL reported a sharp deterioration in performance with revenues of Rs349bn and PAT of 1bn vis-à-vis FY08 revenues of Rs381bn and PAT of Rs30.1bn (Rs397bn and Rs78.1bn respectively in FY07). BSNL is the only telco in India to have launched its 3G services in late 2008.

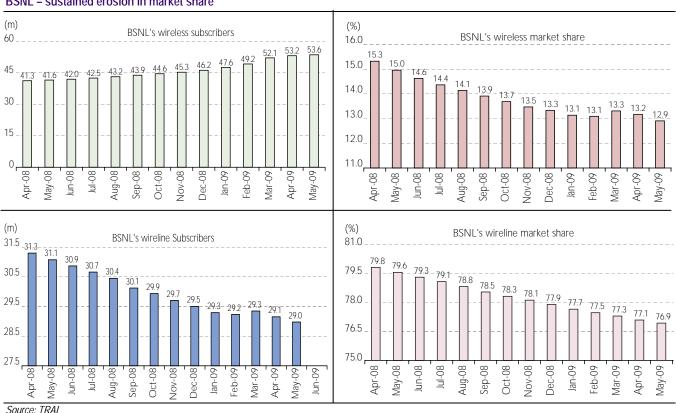
## Company background

BSNL has pan-India presence (except Delhi and Mumbai metros where MTNL is operational) across telecom verticals. As of May 2009, BSNL had 53.5m mobile subscribers (13% market share), 29m wireline subscribers (77%) and 7.3m internet subscribers (54%). The company also launched its 3G services in 2008 and, according to media reports, the response has been lukewarm with only 9,000 3G subscribers so far.

## A massive expansion plan is underway

BSNL has extensive telecom coverage with 560,086rkm of OFC network (September 2008) and mobile services covering 618 (100%) of the DHQs and 92% of the national highways, 60% of the state highways and 78% of the railways network. BSNL is currently evaluating bids by various equipment vendors like Alcatel-Lucent, Ericsson, Huawei and Nokia-Siemens for contracts worth Rs300bn for expansion of its GSM mobile capacity by 93m lines. The company is also evaluating bids from tower companies for sharing of passive infrastructure.





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# Tata Teleservices (TTSL)

**NOT LISTED** 

Tata Teleservices (TTSL) spearheads the Tata Group's telecom operations, wherein it has garnered ~37m subscribers as of June 2009 with market share of 9% since the launch of its pan-India mobile services on the CDMA platform. Tata Teleservices, through a strategic alliance with NTT DoCoMo (which has acquired a 26% stake in TTSL for \$2.7bn) plans to offer pan-India GSM services. The company has committed an investment of \$2bn and has already launched services in Tamil Nadu and Kerala circles. TTSL has adopted an aggressive 'pay as you use' tariff strategy, charging subscribers Re0.1 for every second of usage for voice calls across India.

## ■ About the promoters

## Indian promoter

Tata Group is one of India's largest business conglomerates with diversified interests spanning seven business sectors: communications and information technology, engineering, materials, services, energy, consumer products and chemicals. The total revenues of Tata Group companies, taken together, was \$62.5bn in FY08, with 61% of this coming from businesses outside India. The Group employs around 350,000 people worldwide.

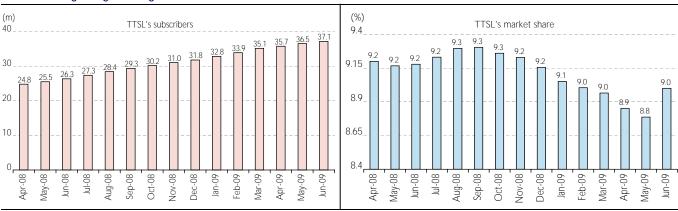
## Foreign promoter/ partner

NTT DoCoMo is the market leader in the Japanese telecom market with a subscriber base of 54m (of this, 49m are 3G subscribers) and a market share of 52%. NTT DoCoMo launched the first full-scale 3G services in the world in October 2001 and its patented web-based product suite *i-mode* has been a runaway success. NTT DoCoMo reported revenues of \$44bn and PAT of \$4.7bn in FY09 with FCF of \$6.5bn. NTT DoCoMo acquired a 26% stake in TTSL for \$2.7bn (~Rs130bn). In addition, DoCoMo acquired a 20.25% stake in TTSL (Maharashtra) for Rs9.5bn resulting from the mandatory open offer for 20% of the stock. DoCoMo will work closely with TTSL's management and provide know-how to help the company develop its mobile business. TTSL expects to leverage DoCoMo's expertise in the development and delivery of VAS.

## □ Rollout/ Expansion plans

TTSL has a license to offer GSM services (branded Tata DoCoMo) in 19 circles and has received spectrum in 18 of these circles. It plans to complete its nationwide launch by end-CY09 and invest \$2bn towards the same. Towards this it has awarded a seven year network expansion and management contract to Alcatel-Lucent. For its GSM foray, TTSL plans to cover the entire Southern region first, followed by the Western and the Northern regions, and has already launched its services in Tamil Nadu and Kerala in June 2009. Tata DoCoMo has adopted a unique and aggressive 'pay as you use' tariff, whereby subscribers pay at the rate of Re0.1 per second usage for all voice calls across India. It has also extended a similar tariff plan for VAS. Apart from its wireless plans, TTSL has also recently announced its entry into the wireline broadband business.

TTSL - looking to regain lost ground



Source: TRAI

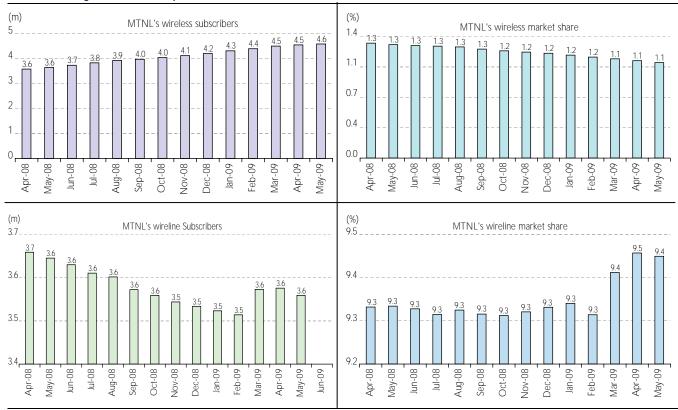
MTNL CMP: RS96

**MCAP: 60.5BN** 

Mahanagar Telephone Nigam (MTNL) is a government-owned (56.3% stake), publicly listed telecom operator with presence in the two metros of Mumbai and Delhi. It was set up on 1 April, 1986 by the Government of India to expand and upgrade the quality of telecom services in these metros. As on May 2009, MTNL had a wireless subscriber base of 4.6m and wireline subscriber base of 3.6m, implying a market share of 1.1% and 9.4% respectively. MTNL also has 2.1m internet subscribers (15.7% market share; 2<sup>nd</sup> rank) with 0.7m broadband subscribers (11.2%; 3<sup>rd</sup> rank) as on 31 March 2009. MTNL reported revenues of Rs53bn and PAT of Rs2.2bn in FY09, with other income of Rs7.2bn from treasury and other non-operating sources.

MTNL recently launched its 3G services in Mumbai and Delhi, which – according to media reports – have met with muted response. In order to capitalize on its lead vis-à-vis private telecom operators in 3G services, MNTL recently invited expression of interest from global and domestic telecom companies to become its franchisee to provide 3G services in India on a revenue-sharing basis. The franchisee would be mandated to acquire, serve and retain MTNL's 3G customers, set up payment collection system, sales and distribution network, and provide value added services and content for 3G access network. The proposed franchise arrangement restricts licensed telecom service providers in Delhi and Mumbai from bidding for as also restricts the selected franchisee from acquiring telecom licenses in these circles during the period of contract with MTNL.

MTNL - banking on 3G to scale up market share



Source: TRAI

Aircel NOT LISTED

Aircel is a joint venture between Maxis Communications Berhad of Malaysia and Dr Prathap Reddy (founder and executive chairman, Apollo Hospital Group), with Maxis effectively holding a 74% equity stake in Aircel. Having commenced operations in 1999, Aircel is currently operational in 18 circles with market leadership in four of these including Tamil Nadu, Chennai, Assam and North-East. As of June 2009, the telco had 21.8m subscribers with a pan-India market share of 5%. Aircel plans to have a pan India presence by end-CY09 and is aggressively promoting mobile internet usage and applications. Maxis plans to invest \$5bn in Aircel over the next four years.

## □ About the promoters

## Indian promoter

Dr Prathap Reddy is the founder and executive chairman of the Apollo Hospitals Group, India. Apollo Hospital group, founded in 1983, is an integrated healthcare solutions provider operating 43 hospitals in India and overseas.

## Foreign promoter

Maxis Communications is Malaysia's biggest telecom operator providing fixed line and mobile services since 1995. Maxis launched its 3G services in 2005. The company was earlier publicly listed but was taken private post its acquisition by Binariang GSM Sdn Bhd in July 2007. Maxis acquired a 74% stake in Aircel in March 2006 at an EV of \$1.1bn from its erstwhile promoter C Sivasankaran (promoter of Sterling Infotech Group, which has now acquired a 51% stake in S Tel). Besides its investment in India, Maxis also holds 44% interest in PT Natrindo Telepon Seluler (NTS), a telecom company based in Indonesia which launched operations in April 2008.

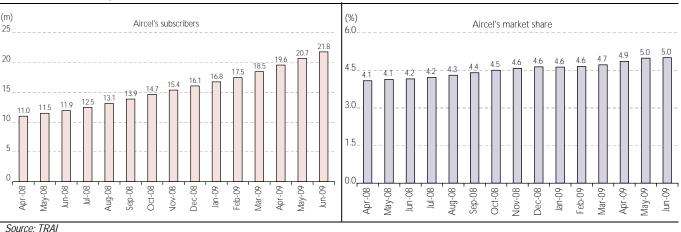
## □ Funding plans

Maxis has committed \$10bn investments in Aircel and plans to invest \$5bn over the next four years towards acquiring 3G licensees and towards network expansion.

## □ Rollout plans

Aircel commenced operations in Tamil Nadu in 1999 and Chennai in 2003 and is currently the market leader in both these circles. Aircel began its expansion in 2005 and has presence in 18 circles with market leadership in four circles – Tamil Nadu, Chennai, Assam and North-East. It plans to have pan-India presence by end-CY09. As of June 2009, it had 21.8m subscribers (subscriber base doubled in the last 12 months) with an overall market share of 5%. Aircel is aggressively promoting mobile internet usage and applications, and has also introduced pre-paid internet cards which start at a low denomination of Rs14.



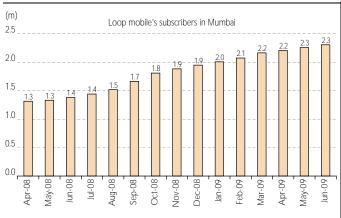


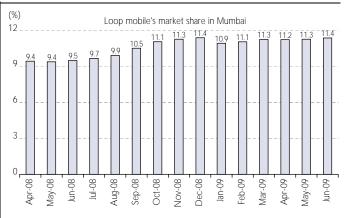
# **Loop Telecom**

**NOT LISTED** 

Loop Telecom is a subsidiary of the erstwhile BPL Mobile (now renamed Loop Mobile) and has received mobile licenses in 21 circles. Loop Mobile has been offering mobile services in the Mumbai Circle for 13 years and has a subscriber base of 2.3m as of June 2009 (market share of 11.4% in the Mumbai circle and 0.5% pan India). Loop Telecom plans to launch services in Tamil Nadu and Orissa circles in the near future which would be followed by launches in Karnataka, Andhra Pradesh and Kerala. The equipment and network solution contract has already been awarded to ZTE.

## Gunning for a pan India presence





Source: TRAI

## **Unitech Wireless**

**NOT LISTED** 

Unitech Wireless has a pan-India license with spectrum allotted in all the circles. Telenor SA (Norway) has signed a definitive agreement to invest Rs61.2bn in four tranches by September 2009 (US\$1.2bn including option of US\$150m) for a 67% stake in Unitech Wireless. Post the deal closure, Unitech Wireless will be managed by Telenor. The company plans to complete its service launch in Q4CY09 and has signed tower sharing agreement with Tata Quippo JV, transmission agreement with Tata Communications and awarded Telcordia a contract for implementing the latter's charging solution.

## □ Promoter background

## Foreign promoter – Telenor

Telenor SA is headquartered in Norway and owned 54% by the Government of Norway. It had revenues of \$17bn and net profit of \$2.3bn in 2008. Total debt stood at \$8.1bn, D/E at 0.5x and free cash flow at ~\$2bn for 2008. The company has operations in 13 countries with significant expertise in emerging markets, particularly in Asia – Thailand, Malaysia and Bangladesh. Telenor has experience with rural telephony (Grameen Mobile in Bangladesh).

## Indian promoter - Unitech

Unitech is India's second largest real estate developer with more than three decades of experience. Unitech's business model is built around the core strategy of developing differentiated products, large scale operations and accreting large land reserves to be developed in future. Unitech has achieved significant milestones in the course of developing  $\sim$ 1,065 acres of township space and over 15msf of residential and commercial space since inception.

## □ Funding

Telenor SA has signed a definitive agreement to invest Rs61.2bn in four tranches by September 2009 (US\$1.2bn including option of US\$150m) for a 67% stake in Unitech Wireless. Telenor has so far completed two tranches of equity infusion, amounting to Rs23.8bn for a 49% stake. It has further paid Rs2.4bn as share application money for eventually raising its stake to 67.25% in Unitech Wireless. Unitech Wireless has also approached a consortium of six public sector banks for raising domestic debt and plans to secure total project financing of \$1.5bn-2bn by next year.

## □ Rollout plans

Unitech Wireless has received license and spectrum in all the circles and expects to complete a service launch in Q3CY09. It targets population coverage of 40% at the time of launch and 60% within one year of launch. The company would extensively adopt the tower rental model and has entered into a tower-sharing agreement with Wireless TT Indo Services (WTTIL), the JV entity which holds tower assets of Tata Teleservices and Quippo. It also plans to outsource functions like network management, IT, ITES, etc. The company has signed a transmission agreement with Tata Teleservices for connecting its cell sites and recently selected Telcordia for implementing the latter's Real Time Charging Solution. The company estimates a cumulative capex for the first three years at Rs75bn.

# Sistema Shyam Tele-Services (SSTL)

**NOT LISTED** 

Sistema Shyam Tele-services (SSTL) is a JV between Sistema – a Russian conglomerate – and the Shyam Group of India. Sistema, along with the Russian government, holds a 73.7% stake in SSTL at a total investment of \$1bn. The company has entered into an agreement with Mobile TeleSystems (MTS) OJSC of Russia to launch its pan-India operations under the MTS brand. SSTL has licenses and spectrum to provide mobile telephony services on the CDMA platform in all 23 circles across the country. SSTL plans to invest \$7bn in network rollout and expansion in India and targets to achieve pan-India coverage by end-CY09 (four circles at present) and market share of 7%.

## About the promoters

## Foreign promoter – Sistema

Sistema is the largest public diversified corporation in Russia and the CIS, which manages fast growing companies operating in the telecommunications, consumer services sectors and technology industries with over 100m customers. Founded in 1993, the company had revenues of \$16.7bn and net reported profit of \$62m for 2008 (\$1.1bn before write-offs and provisions). Net debt on books stood at ~\$10bn, D/E at 1x and free cash flow at \$654m in 2008.

### Indian promoter - Shyam Group

The Shyam Group has diversified interests in telecom, manufacturing, services and fertilizers. Shyam Telelink (STL) was founded in 1998 and operated in the state of Rajasthan since 2000, offering fixed-line services. The Shyam Group, through its JV with the Essel Group, offers pan-India VSAT Services, media management and up-linking.

## □ Funding

Sistema initially acquired a 10% stake in the JV in September 2007 and later increased it to 73.7% with cumulative investments of \$1bn. The Russian government subsequently acquired a 20% stake in SSTL from Sistema in April 2009. Besides the equity infusion by its promoters, SSTL has also received debt financing of \$333m (including equipment financing). China Development Bank has agreed to lend \$900m for purchase of equipment from ZTE.

## □ Rollout plans

SSTL launched its CDMA based mobile services in the state of Rajasthan in September 2008. It launched its services in Kolkata in May 2009 under the MTS brand, taking the tally to four launches (Rajasthan, Tamil Nadu, Kerala and Kolkata). SSTL has 1.1m subscribers as of June 2009 and expects a complete a nationwide rollout in 2009 with a target market share of 7% by 2012. SSTL has signed an IT services agreement with IBM and traffic transmission contract with RCOM, Tata Teleservices, Aircel and BSNL. Recently, it awarded a contract to Tata Communications to manage its call centres on a pay per use basis. SSTL plans to hire 4,500 people by 2010.

## **Swan Telecom** (renamed Etisalat DB Telecom)

**NOT LISTED** 

Swan Telecom has received a license to operate telecom services in 15 circles. UAE-based Emirates Telecommunications Corp (Etisalat) acquired a 45% stake in the company for \$900m (Rs41.1bn) and the remaining 55% stake is held by various entities including the original promoters – Dynamix Balwas Group and Mauritius-based infrastructure fund Delphi Investments (RCOM earlier owned a 9.9% stake in Swan Telecom but later divested it to Delphi). The company had been allotted spectrum in all the 15 circles (including Delhi) as of March 2009 and plans to launch commercial services in end-CY09. The company was recently renamed Etisalat DB Realty India Pvt Ltd.

## Promoter background

## Foreign promoter – Etisalat

Etisalat has been a telecommunications service provider in the UAE since 1976 and offers phone services in 16 countries across Asia, West Asia and Africa with ~80m customers (as of December 2008). The company reported annual net revenues of \$7.1bn and net profit of \$2.36bn in 2008. The company also boasts of a clean and strong balance sheet with a gross gearing of only 0.2x (total debt of ~\$700m) and free cash flow of \$1.95bn in 2008. Eitsalat is banking on its experience of operating in Asian countries like Pakistan, Indonesia and Afghanistan for a successful foray in the Indian telecom space.

## Indian promoter - DB Realty (Dynamix Balwas Group)

DB Realty is a Dynamix Balwas Group company, which in turn is an equal partnership between Mumbai based businessmen Shahid U. Balwa and Vinod K. Goenka. Mr. Balwa is engaged primarily in realty development and Mr. Vinod Goenka belongs to the promoter family of Dynamix Dairy Industries Ltd, an integrated dairy company based in Baramati (Maharashtra). D B Realty is real estate company with presence in commercial, residential, hospitality, retail and IT parks. The company has several ongoing and completed projects (mostly under the umbrella brand name 'Orchid') in Mumbai both in the retail and luxury residential segment.

## □ Funding

Etisalat paid \$900m (Rs41.1bn) for a 45% stake in Swan Telecom.

### Rollout plans

Swan Telecom originally received the license to operate telecom services in 13 circles (two metros, five A Circles and six B Circles). According to media reports, the company has also acquired licenses in two more circles (Bihar and Madhya Pradesh) from Allianz Infratech, which was awarded a license in these two circles only. The company has been allotted spectrum in all the 15 circles as of March 2009 (including Delhi). Etisalat DB Realty is planning to invest \$2.5bn in two years to roll out operations in 15 circles simultaneously with commercial launch planned in end-CY09.

## **Datacom Solutions**

**NOT LISTED** 

Datacom Solutions (Datacom) is a joint venture of Videocon Industries (a 64% stake) and Jumbo Techno Services Pvt Ltd (36%) – a company owned by Mr Mahendra Nahata, promoter of Himachal Futuristic Communications. Datacom has received licences for starting pan-India mobile operations (except Punjab) and plans to invest Rs160bn over the next five years in rolling out its wireless network. Datacom hopes to tap a subscriber base of 40m after five years.

## **□** About the promoters

Videocon is a \$2.5bn industrial conglomerate based in India and with interests all over the world. The Group operates in four key areas – consumer electronics, display industry and components, colour picture tube glass and oil & gas. It has 17 manufacturing sites in India as also plants in China, Poland, Italy and Mexico. The company is also the third largest picture tube manufacturer in the world. Jumbo Techno Services Pvt Ltd is owned by Mr Mahendra Nahata, promoter of Himachal Futuristic Communications (HFCL), which operates CDMA-based mobile services in the Punjab circle with 0.4m subscribers in March 2009. According to media reports, Videocon is seeking to buy the 36% stake in Datacom held by Jumbo and is also looking at bringing in a strategic partner in the telecom venture.

## □ Rollout plans

Datacom has received licences for starting pan-India mobile operations except in Punjab as HFCL already has mobile operations in that circle. As of March 2009, the company had been allotted spectrum in all its new circles except for Delhi. Media reports indicate that Datacom plans to invest Rs160bn over the next five years towards various telecommunication equipment needed for a pan-India rollout. Datacom targets to garner a subscriber base of 25m within three years of operations and 40m after five years. As of March 2008, Datacom had received Rs8.5bn as advance from Videocon Industries. Datacom has hired Interbrand to finalize the brand name for its mobile services.

S Tel NOT LISTED

S Tel is promoted by the Chennai-based Sterling Infotech Group (SIG) and Batelco Millennium India Company (BMICL). S Tel has received licenses for providing mobile telephony in the six "C" circles and also has a Category "A" ISP license for rollout of Internet services pan-India. S Tel has received start-up spectrum in all its circles and expects to commence commercial operations by Q4FY10 under the S Tel brand. S Tel is in final negotiations to outsource its network and technology requirements, and is also in talks with various tower companies to share infrastructure.

## ■ About the promoters

## Indian promoter

Sterling Infotech Group (SIG) is a \$3bn entity having presence in the fields of communication, media, shipping, renewable energy, realty, agriculture, food and wellness. SIG operates under the leadership of its chairman, Mr C. Sivasankaran – erstwhile promoter of the Aircel Group.

### Foreign promoter

Batelco Millennium India Company (BMICL) is an SPV formed by Batelco (Bahrain Telecom) and Millennium Private Equity (MPE), a Dubai Financial Services Authority (DFSA) regulated entity. Batelco, incorporated in the Kingdom of Bahrain in 1981, has an experience of more than 13 years in providing GSM-based mobile services. Its portfolio of services includes communication services like mobile, national and international telephony, business network services, and internet and satellite services. Batelco has operations in seven markets across the Middle East, North Africa and Asia regions. BMICL reported revenues of \$891m with a profit of \$276m in 2008.

## □ Funding

According to media reports, SIG bought a 51% stake in S Tel for Rs11.5bn. BMICL has acquired a 37% stake in S Tel with the right to increase its shareholding to 49% (valuation of \$225m for the 49% stake).

### □ Rollout plans

S Tel has received licenses for providing mobile telephony in the six C circles and also has a Category A ISP license for rollout of Internet services pan-India. S Tel has also received start-up spectrum of 4.4 MHz for the allotted circles and expects to start commercial operations by Q4FY10. According to a statement by Batelco to the Bahrain Stock Exchange, S Tel is in final negotiations to outsource its network and technology requirements, and is also in talks with various tower companies to share infrastructure. Market entry is planned under the brand name of S Tel.

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