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## Indian Telecom Industry

### No Slowdown Yet, But Headwinds Persist...!!

We initiate coverage on the 'Indian Telecom Sector' with a 'Neutral' view. We believe that the sector is fairly immune from the current economic downturn & does provide a good defensive bet in medium term. Increasing wireless penetration is expected to keep the near term volume growth robust, while the 3G / Broadband adoption would ensure long term growth momentum. However, we are concerned about the intense competitive scenario, pricing pressure, high capital intensity & substantial regulatory uncertainties currently faced by the industry & prefer only 'Bharti Airtel' that is best poised to weather these headwinds.

#### Companies covered

■ Bharti	-	ACCUMULATE
■ RComm	-	REDUCE
■ IDEA	-	REDUCE

- **Demand Slowdown - Too early to decipher:** Indian telecom seems to be less impacted by current economic downturn as increasing rural coverage, rising affordability, declining handset/subscription costs, substantially low tariffs & established brand/distribution networks and attractive new launches have pushed subscriber adds to highest levels ever (>15Mn/Month). However, we feel that a steeper economic slowdown could start impacting the subscriber usage patterns as well as operator capital investments & thereby could restrict revenue growth rates going forward.
- **Intensifying competition; Profitability to be hit:** We expect the high capex, network opex & subscriber acquisition costs to weigh heavily on the margins of telcos expanding pan-India (Idea, Vodafone & Airtel), on alternative technology (Rcom, Tata Tele, BSNL, MTNL) or launching fresh operations (Unitech, Datacom, Shyam, Loop, Swan, S-Tel). The strategic interests of established global telcos like Vodafone, NTT DoCoMo, SingTel, Telecom Malaysia, Maxis, Sistema, Telnor, Etisalat & Batelco and further entry through 2G / 3G / WiMAX / MVNO routes may intensify the competitive forces & weed out any extraordinary profits from the sector.
- **Tariff-war returns + declining Elasticity:** Pricing remains a key differentiator due to the economic slowdown, high churn rates (4-5%/month) & upcoming Number Portability. With incumbents trying to garner max subs / squeeze most elasticity & newer operators trying to swiftly add subs to improve network utilization, we expect tariff levels to remain under pressure for next 4-5 quarters (i.e. until penetration levels reach 40-45% & subscriber adds moderates). Considering the economic slowdown, one of the highest usage levels in the world and lower incremental usage from rural/life-time subscribers, we expect a decline in usage elasticity and continued erosion in ARPUs going forward.

#### Recommendations

	Reco	Target price	CMP	M Cap (Rs mn)	Sales Estimate (Rs mn)		EBIDTA Est (Rs mn)		EPS Est (Rs/share)		Target PE (x)		Target EV/EBIDTA (x)	
					FY09E	FY10E	FY09E	FY10E	FY09E	FY10E	FY09E	FY10E	FY09E	FY10E
					Bharti Airtel	Accumulate	730	642	1218516	370,733	453,901	152,304	188,266	43.42
Reliance Com	Reduce	220	154	317856	231,028	285,533	92,961	107,179	27.9	21.6	7.88	10.17	7.34	6.69
Idea Cellular*	Reduce	48	49	151900	111,876	149,916	29,765	36,901	1.6	3.2	29.51	14.81	6.43	6.01

Source: Kotak Securities - Private Client Research; \*Post Spice Merger

- ❑ **Regulatory stance - Pro-competition:** The regulatory authorities have been deliberating on numerous issues to increase affordability, boost rural telephony & accelerate adoption of broadband services. Most recent policy developments around global 3G & WiMAX spectrum auctions, Mobile Number Portability (MNP), Mobile Virtual Network Operators (MVNOs), Dual technology platforms, Long distance calling cards, Internet telephony, Termination charge reduction, etc are pro-competition & would further rationalize the profitability of the sector
- ❑ **3G Auctions - Opportunity Vs. Price:** After over two years of debate and controversy, the government finally seemed to be ready to auction 3G Spectrum & open up a promising revenue stream. However, repeated rescheduling of the auction deadlines, numerous unresolved issues between DOT, TRAI, Finmin & upcoming parliamentary elections have increased uncertainty over 3G auctions. Although value accretive in longer term, we expect the 3G revenues to take time to pick up in non-metro circles and any irrational bidding remains a downside risk.
- ❑ **Robust Business Models - Difficult to replicate:** The incumbents have built up robust business models due to their first mover's advantage, extensive network coverage, experienced workforce, established distribution networks and high brand awareness. We expect the existing operators to build up substantial high usage subscriber bases before the new entrants launch/stabilize operations & hence retain considerable market share. However, a series of new launches and simultaneous implementation of number portability may impact the business prospects in near term.
- ❑ **Alternative revenue streams - promising in longer term:** Although we expect the wireless voice business to continue to be under pressure, we expect increased traction from wireless broadband services, mobile value added services (MVAS), enterprise services, home businesses (DTH & IPTV), passive infrastructure and other non-voice businesses going forward. We expect these segments to pick up steadily & provide downside protection for integrated telcos like Bharti Airtel & Reliance Communications.
- ❑ **Bharti Airtel Ltd: Strong and Resilient in turbulent times...** We initiate coverage on Bharti Airtel, India's leading telecom operator, with an '**ACCUMULATE**' Recommendation and DCF-based target price of Rs 730 per share. Bharti Airtel, with its undisputed market leadership, strong management team, high governance standards, integrated business model, extensive population coverage, peaking capex cycle, low debt burden, potential 3G value accretion, high earnings visibility and strong cash flow expectations, is a strong defensive bet in wake of the current difficult economic conditions. The company has significantly outperformed its peers as well the benchmark over the past one year. We will turn more aggressive in case of any major price decline. We initiate coverage with 6-month price target of Rs 730 and recommend accumulating at each decline.
- ❑ **Reliance Communications - Leverage Concerns; REDUCE on every rise:** We initiate coverage on Reliance Communications with a '**REDUCE**' recommendation and DCF-based price target of Rs 220 per share. We expect the earnings to be significantly dented in FY10 & remain muted for next 2 years due to high costs of running pan-India dual (CDMA & GSM) networks. The high debt burden (>Rs 260 Bn), high current liabilities & provisions (Rs 310 Bn) and high additional capex requirement (Rs 240Bn by FY10) makes us cautious on the balance sheet strength of the company. Again aggressive accounting policies relating to FCCBs / forex loan translation losses, lower depreciation / tax rates reduces our confidence in the earnings quality of the company. Aggressive bidding for 3G licenses and the initial losses post launch of 3G operations will put further pressure on the financials. Considering the numerous headwinds & limited near-term earnings visibility, we recommend reducing exposure to Reliance Communications on every rise & migrating to Bharti Airtel, which, we believe, is better poised to counter these headwinds.

❑ **Idea Cellular - Pain to Persist:** We initiate coverage on Idea Cellular with a **'REDUCE'** recommendation and a 6-months DCF-based price target of Rs 48 per share. Aggressive network rollouts, high network operating expenses, high subscriber acquisition/marketing costs & Spice consolidation are expected to keep the margins under constant pressure. The company, being a pure wireless player, is highly vulnerable to the numerous headwinds faced by the industry like aggressive tariff-war, one-time spectrum enhancement charge, reduction in termination charges, irrational 3G bidding, MNP implementation, internet telephony, long distance calling cards, etc. We are initiating coverage on Idea Cellular Ltd. with a **REDUCE** recommendation and 6-month price target of Rs 48.

#### Peer comparison

	Bharti Airtel			R Com			Idea Cellular		
	FY08	FY09E	FY10E	FY08	FY09E	FY10E	FY08	FY09E	FY10E
Sales (Rs mn)	270,250	370,733	453,901	190,678	231,028	285,533	67,375	111,876	149,916
Sales Growth (%)	46%	37%	22%	32%	21%	24%	54%	66%	34%
EBITDA (Rs mn)	113,715	152,304	188,266	81,989	92,961	107,179	22,693	29,765	36,901
EBITDA margin (%)	42%	41%	41%	43%	40%	38%	34%	27%	25%
EBIT (Rs Mn)	76,454	105,259	130,463	53,935	54,482	55,510	13,925	12,787	17,744
EBIT Margin (%)	28%	28%	29%	28%	24%	19%	21%	11%	12%
Net Profit (Rs mn)	67,007	82,343	98,882	54,011	57,586	44,631	10,424	5,312	10,586
Net Margin (%)	25%	22%	22%	28%	25%	16%	15%	5%	7%
EPS (Rs)	35.30	43.38	52.10	26.17	27.90	21.62	3.96	1.63	3.24
EPS Growth (%)	57%	23%	20%	67%	6%	-22%	81%	-59%	99%
P/E	18.2	14.8	12.3	5.9	5.5	7.1	12.4	30.1	15.1
PEG Ratio	0.3	0.6	0.6	0.1	0.9	(0.3)	0.2	(0.5)	0.2
RoAE (%)	37%	31%	28%	21%	19%	13%	22%	5%	7%
RoACE (%)	26%	23%	23%	12%	10%	7%	10%	3%	4%
RoIC (%)	27%	24%	24%	17%	12%	8%	12%	4%	5%
CROCI (%)	34%	39%	38%	21%	17%	17%	21%	15%	16%
EV/Subs (\$)	421	277	217	181	152	123	152	95	81
EV/Sales	4.8	3.5	2.8	2.2	2.4	2.0	3.1	1.7	1.5
EV/EBITDA	11.5	8.4	6.8	5.1	5.9	5.4	9.1	6.5	6.1
DPS (Rs)	-	-	2.60	0.71	0.76	0.59	-	-	-
Dividend Yield (%)	0.0%	0.0%	0.4%	0.5%	0.5%	0.4%	0.0%	0.0%	0.0%
CEPS	55	68	83	38	44	44	7.3	6.8	9.1
P/Cash Earnings	11.7	9.4	7.8	4.1	3.5	3.5	6.7	7.2	5.4
Networth	222,581	301,073	394,170	229,307	312,082	355,216	49,525	153,376	153,376
Net debt	86,133	65,783	56,436	96,903	228,033	263,421	54,620	42,573	72,910
BVPS	117	159	208	111	151	172	15	47	47
P/BV (x)	5.5	4.0	3.1	1.2	1.0	0.9	2.6	1.0	1.0
Debt/Equity	0.42	0.26	0.21	0.76	0.93	0.90	1.32	0.64	0.74
Net debt/Equity	0.39	0.22	0.14	0.42	0.73	0.74	1.10	0.28	0.48
Net debt/EBITDA	0.76	0.43	0.30	1.18	2.45	2.46	2.41	1.43	1.98

Source: Companies, Kotak Securities - Private Client Research

## Indian Telecom sector projections

	FY09E	FY10E	FY11E	FY12E	2013E	2014E	2015E	2016E	2017E
Overall Wireless Subscribers (Mn)	381	494	575	640	700	750	790	820	850
Subscriber Net Additions (Mn)	120	113	81	65	60	50	40	30	30
<b>Bharti Airtel</b>									
Wireless Subs (Mn)	93	118	134	146	157	165	172	177	182
Market Share (%)	24.4	23.8	23.3	22.8	22.4	22.1	21.8	21.6	21.5
ARPU (Rs/Month)	327	296	271	265	258	254	253	253	252
RPMs (Rs/Min)	0.64	0.57	0.53	0.52	0.51	0.50	0.50	0.50	0.50
MOUs (Min/Month)	513	518	512	510	507	507	506	505	505
EPMs (Rs/Min)	0.20	0.19	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Wireless Revenues (Rs Mn)	303,223	375,031	408,948	444,969	469,873	490,655	512,151	529,985	544,509
Consolidated Revenues (Rs Mn)	370,733	453,901	503,640	553,878	592,899	627,211	661,006	689,257	713,257
Net Profit (Rs Mn)	82,401	98,882	114,354	126,870	142,485	155,484	171,626	185,786	198,010
Earnings Per Share	43.4	52.1	60.2	66.8	75.1	81.9	90.4	97.9	104.3
Wireless EBITDA Margin (%)	31.0	32.8	32.5	32.8	33.0	33.3	33.5	33.8	34.0
Consolidated EBITDA Margins (%)	41.1	41.5	40.5	40.7	41.2	41.7	42.2	42.6	43.0
Consolidated EBIT Margins (%)	28.4	28.7	27.0	27.7	28.9	30.1	31.4	32.6	33.6
Net Profit Margin (%)	22.2	21.8	22.7	22.9	24.0	24.8	26.0	27.0	27.8
EPS Growth (%)	22.8	20.0	15.6	10.9	12.3	9.1	10.4	8.3	6.6
Capex (Rs Mn)	149,930	158,865	105,764	83,082	71,148	56,449	52,880	51,694	49,928
Capex/Sales	40.4	35.0	21.0	15.0	12.0	9.0	8.0	7.5	7.0
<b>Reliance Communications</b>									
Wireless Subs (Mn)	72	94	109	119	128	135	141	145	150
Market Share (%)	18.9	19.1	18.9	18.5	18.2	18.0	17.8	17.7	17.6
ARPU (Rs/Month)	261	214	209	205	202	199	200	202	203
RPMs (Rs/Min)	0.62	0.53	0.53	0.52	0.51	0.50	0.50	0.50	0.50
MOUs (Min/Month)	424	404	395	394	396	399	400	403	406
EPMs (Rs/Min)	0.23	0.17	0.18	0.18	0.17	0.17	0.17	0.17	0.17
Wireless Revenues (Rs Mn)	176,830	214,089	254,667	279,678	298,122	314,290	331,262	346,138	359,140
Consolidated Revenues (Rs Mn)	231,028	285,533	339,376	376,607	407,201	434,974	462,973	486,803	508,724
Net Profit (Rs Mn)	57,586	44,631	46,372	52,201	57,809	62,857	68,006	72,730	77,658
Earnings Per Share	27.9	21.6	22.5	25.3	28.0	30.5	33.0	35.2	37.6
Wireless EBITDA Margin (%)	37.8	33.1	34.1	34.2	34.3	34.4	34.5	34.6	34.7
Consolidated EBITDA Margins (%)	40.2	37.5	38.8	39.0	39.2	39.4	39.7	40.0	40.2
Consolidated EBIT Margins (%)	23.6	19.4	19.5	18.9	18.9	19.1	19.3	19.5	19.6
Net Profit Margin (%)	24.9	15.6	13.7	13.9	14.2	14.5	14.7	14.9	15.3
EPS Growth (%)	6.0	-22.5	3.9	12.6	10.7	8.7	8.2	6.9	6.8
Capex (Rs Mn)	218,532	145,265	107,476	89,924	85,052	83,802	82,279	69,392	69,887
Capex/Sales	94.6	50.9	31.7	23.9	20.9	19.3	17.8	14.3	13.7
<b>Idea Cellular (+ Spice Comm)</b>									
Wireless Subs (Mn)	42	58	68	77	84	90	95	99	102
Market Share (%)	11.1	11.7	11.9	12.0	12.0	12.0	12.0	12.0	12.0
ARPU (Rs/Month)	263	244	231	227	219	214	214	216	218
RPMs (Rs/Min)	0.63	0.56	0.53	0.52	0.51	0.50	0.50	0.50	0.50
MOUs (Min/Month)	416	435	436	436	429	428	428	432	436
EPMs (Rs/Min)	0.18	0.14	0.13	0.13	0.14	0.14	0.15	0.15	0.15
Consolidated Revenues (Rs Mn)	111,876	149,916	178,450	201,087	215,153	228,113	242,137	255,005	266,786
Net Profit (Rs Mn)	5,312	10,586	12,318	15,248	18,312	21,311	24,434	27,827	30,664
<b>Earnings Per Share</b>	<b>1.6</b>	<b>3.2</b>	<b>3.8</b>	<b>4.7</b>	<b>5.6</b>	<b>6.5</b>	<b>7.5</b>	<b>8.5</b>	<b>9.4</b>
Consolidated EBITDA Margins (%)	26.6	24.6	24.9	26.3	27.6	28.6	29.3	29.9	30.4
Consolidated EBIT Margins (%)	11.4	11.8	12.8	13.9	14.7	15.4	16.1	16.6	16.9
Net Profit Margin (%)	4.7	7.1	6.9	7.6	8.5	9.3	10.1	10.9	11.5
EPS Growth (%)	-58.9	99.3	16.4	23.8	20.1	16.4	14.7	13.9	10.2
Capex (Rs Mn)	64,703	58,243	53,158	41,889	32,737	30,138	27,077	28,560	29,916
Capex/Sales (%)	57.8	38.9	29.8	20.8	15.2	13.2	11.2	11.2	11.2

Source: Kotak securities - Private Client Research

## CONTENTS

	Page No.
<b>Mobile Services: Demand Slowdown? Too Early To Decipher .....</b>	<b>6</b>
B and C Circles: Strong growth to continue .....	8
Incumbents: In auto-pilot mode .....	9
Intensifying Competition, profitability to be hit .....	10
2G New Entrants - Challenging business case .....	12
Tariff fall to continue, declining elasticity .....	13
Regulatory developments - Pro competition .....	15
3G Auctions: Opportunity Vs. Price .....	16
Enterprise carrier & data services: Global slowdown may have an impact .....	22
Fixed line services decline, broadband services catching momentum .....	24
Home Business: Enriching customer experience .....	25
Mobile Value Added Services (Mvas): Improving the margins... ..	26
Tower Sharing Business: United we stand .....	27
<b>Bharti Airtel Ltd .....</b>	<b>29</b>
Wireless Business .....	32
Indus Towers .....	39
Bharti Infratel .....	40
3Q Results .....	42
Valuations .....	45
<b>Reliance Communication Ltd.....</b>	<b>52</b>
Wireless Business .....	55
Reliance Globalcom .....	59
Reliance Infratel .....	64
3q Results .....	68
Constrained Balance Sheet .....	71
Valuations .....	77
<b>IDEA Cellular Ltd .....</b>	<b>82</b>
Wireless Subscriber Base .....	85
Regional to pan-India operator .....	86
Spice Merger .....	90
3Q Results .....	94
Valuations .....	97
Appendix 1: Wireless Subscriber statistics .....	100
Appendix 2: Direct to home (DTH) estimates .....	104
Appendix 3: Non-mobile service offerings .....	105
Appendix 4: Mobile Virtual Network Operators .....	106
Appendix 5: WiMAX - A promising platform .....	109
Appendix 6: Mobile Number Portability (MNP) .....	110
Appendix 7: Other regulatory developments .....	111

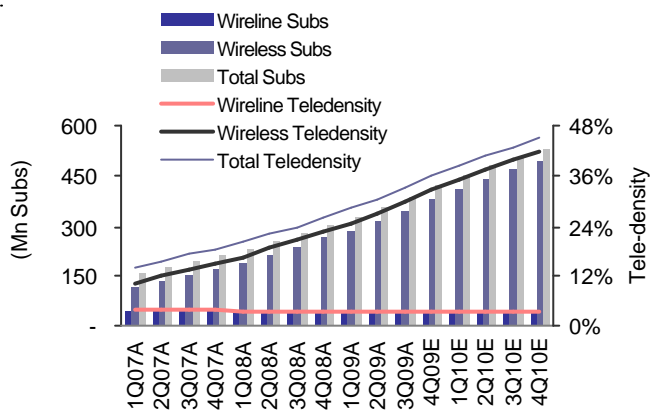
## MOBILE SERVICES: DEMAND SLOWDOWN? TOO EARLY TO DECIPHER...

Indian telecom seems to be less impacted by current economic downturn as increasing rural coverage, rising affordability, declining handset/subscription costs, substantially low tariffs & established brand/distribution networks have pushed subscriber adds to highest levels ever (>15Mn/Month). However, we feel that a steeper economic slowdown could start impacting the subscriber usage patterns as well as operator capital investments & thereby could substantially restrict revenue growth rates going forward.

### Subscriber base & Teledensity

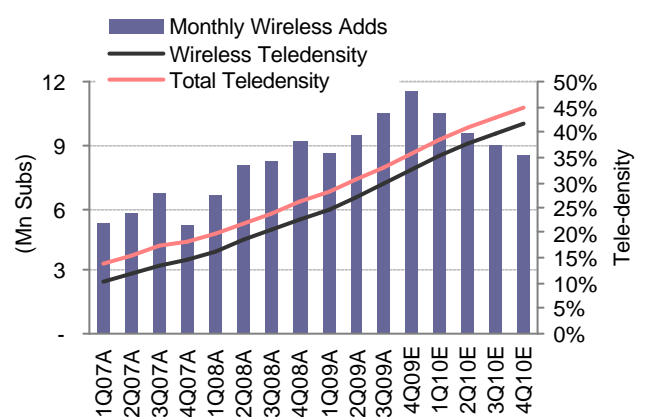
We expect the wireless subscriber base to touch 494 million resulting in a wireless teledensity of 42% by FY10E. Wireline subscriber base would continue to decline marginally due to wireless revolution in the country. We expect the robust net additions (9.5 - 10 million subs / month) to continue till FY10E as the existing operators extend their coverage, regional operators launch pan-India operations & new entrants rollout their operations across the country.

Telecom Subscriber Base



Source: TRAI, Kotak Securities - Private Client Research

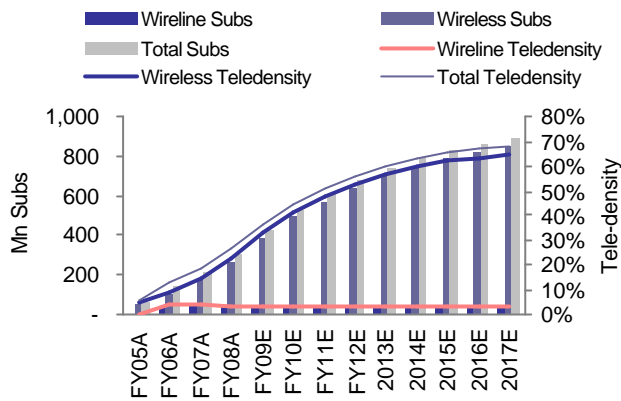
Telecom Subscriber Additions



Source: TRAI, Kotak Securities - Private Client Research

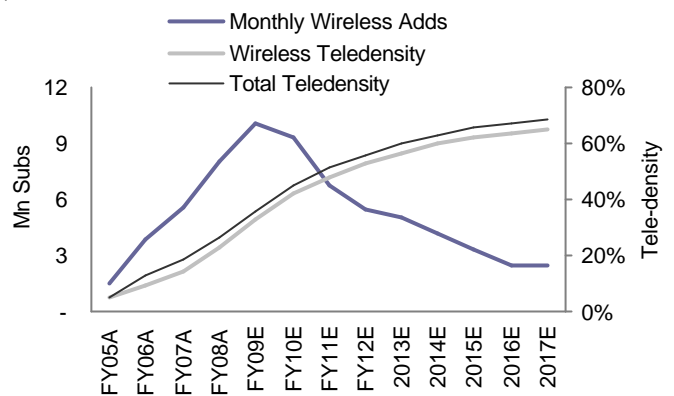
We expect the net subscriber additions to start moderating steadily from FY11 onwards as the incumbents complete their rural expansion & penetration levels approaches 40-45%. Even after factoring slower monthly additions post completion of population coverage by incumbents, we expect an almost three fold increase in subscriber base to 850 million wireless subscribers by FY17E implying a 14% CAGR over FY09-17. Although we expect the wireless teledensity to touch 65% by FY17, we expect the wireline teledensity to remain low (<4%) as India skips the wireline revolution and embrace mobile telephony & wireless broadband services.

**Telecom Subscriber Forecast**



Source: TRAI, Kotak Securities - Private Client Research

**Telecom Monthly adds Forecast**



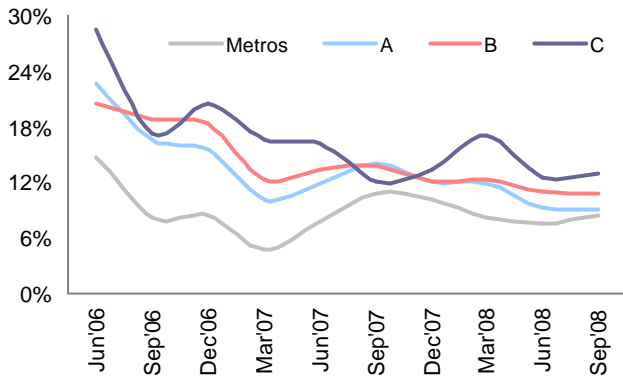
Source: TRAI, Kotak Securities - Private Client Research

However, we are cautious on the sustainability of the high growth rates of the telecom operators whose capex plans get impacted by the current Credit Crunch. We note that the rapid subscriber growth would be driven primarily by rural & life-time subscribers with low incremental usage & hence result in lower revenue growth. We also note that the extremely high churn rates (3-4% i.e. 11-12 million subs/month) & liberal deactivation norms (like the ones that lead to steep fall in Spice subscriber base post acquisition by Idea) could be leading to double counting & overstating of subscriber additions to some extent. Also liberal start-up packs (900 Rs free talk-time for Rs 25 Rcom-GSM, etc) & declining lifetime subscription rates (Rs 25-99 currently) could lead to multiple ownerships of SIM cards & extremely high net additions (although with much lower incremental usage).

## B AND C CIRCLES: STRONG GROWTH TO CONTINUE

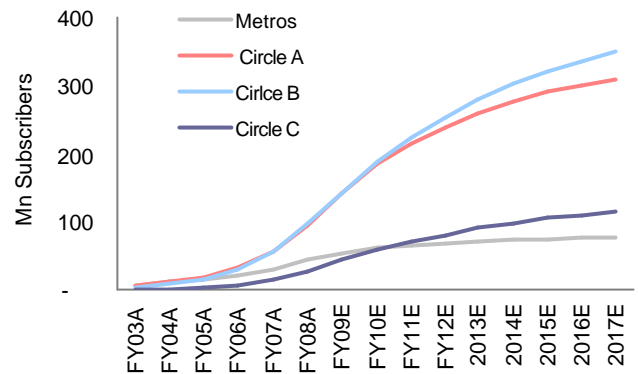
Rapid growth in telecom industry has been spearheaded by increasing teledensity in Metro & A circles. However, the less penetrated B circles & underpenetrated C Circles have caught up recently and are expected to drive the next phase of rapid subscriber additions. C-Circles are expected to show the maximum growth rates and will soon take over Metro circles in terms of both absolute subs as well net additions. Since the telecom operators will have to expand their coverage wide & deep to acquire these low usage customers, the network operating costs would increase substantially.

**Circlewise Subscriber Growth Rates**



Source: TRAI

**Circlewise Subscriber Base Estimates**



Source: TRAI, Kotak Securities - Private Client Research

### Telecom Circles

Circle Description	Circlewise Subscriber Share	Quarterly (Oct-Dec) Subscriber Growth	Wireless Teledensity Estimates*
<b>Metro Circles</b>	16.2%	5.6%	
Chennai	Chennai District	2.5%	8.7%
Delhi	Delhi including Ghaziabad, Faridabad, Noida and Gurgaon	5.8%	4.7%
Kolkata	Kolkata District	3.0%	6.5%
Mumbai	Mumbai, New Mumbai and Kalyan	4.9%	4.6%
<b>Category-A Circles</b>	35.3%	5.6%	
Andhra Pradesh	State of Andhra Pradesh	7.9%	6.0%
Gujarat	Gujarat and Union Territory of Daman and Diu, Dadra and Nagar Haveli	6.2%	5.1%
Karnataka	State of Karnataka	6.1%	5.4%
Maharashtra	States of Maharashtra (Except Mumbai) & Goa	7.9%	6.4%
Tamil Nadu	Tamil Nadu (except Chennai) & Union Territory of Pondicherry	7.1%	5.2%
<b>Category-B Circles</b>	37.2%	6.9%	
Haryana	State of Haryana	2.5%	6.9%
Kerala	State of Kerala and Union Territory of Lakshadweep	4.3%	4.7%
Madhya Pradesh	States of Madhya Pradesh and Chhattisgarh	5.3%	7.7%
Punjab	State of Punjab and Union Territory of Chandigarh	3.8%	5.5%
Rajasthan	State of Rajasthan	5.7%	8.2%
Uttar Pradesh - East	Eastern Uttar Pradesh	6.8%	8.1%
Uttar Pradesh - West	Western Uttar Pradesh and state of Uttaranchal	4.9%	5.9%
West Bengal	West Bengal (except Kolkata), Sikkim & Andaman and Nicobar Islands	3.9%	6.7%
<b>Category-C Circles</b>	11.3%	9.3%	
Assam	State of Assam	1.5%	6.0%
Bihar	States of Bihar and Jharkhand	5.1%	10.9%
Himachal Pradesh	State of Himachal Pradesh	0.9%	8.2%
J&K	State of Jammu & Kashmir	0.9%	9.6%
North East	Arunachal Pradesh, Meghalaya, Mizoram, Nagaland, Manipur and Tripura	0.8%	9.0%
Orissa	State of Orissa	2.2%	8.6%
Pan-India		100.0%	6.5%

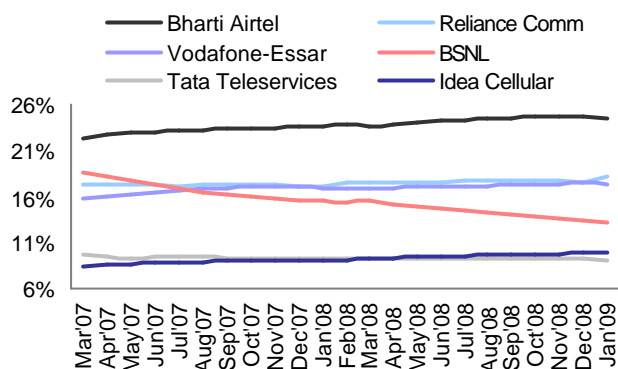
Source: TRAI; \* Oct 2008



## INCUMBENTS: IN AUTO-PILOT MODE

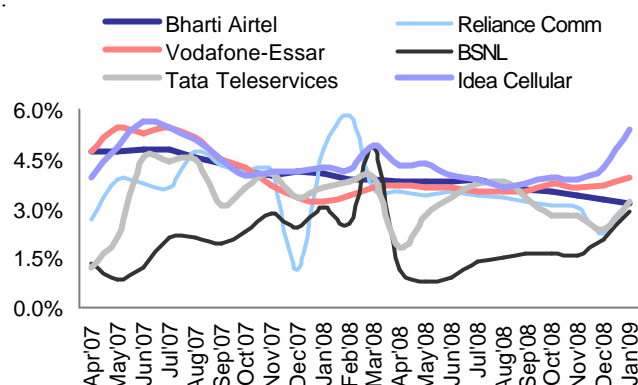
We think that the incumbent players are in an auto-pilot mode & have built up robust business models due to their first mover's advantage, extensive network coverage, experienced workforce, established distribution networks and high brand awareness. We expect the existing operators to build up substantial high usage subscriber bases before the new entrants launch operations & hence retain considerable market share. Although the new launches may not alter the market dynamics significantly, they would deteriorate the business prospects in near term.

### Wireless Market shares



Source: TRAI

### Monthly Subscriber Growth



Source: TRAI

### Comparative Analysis

Telecom Operator	Developments
Bharti Airtel (GSM) (Singapore Telecom-SingTel)	Bharti has lead the industry due to strong pan-India presence, extensive network rollout & increased population coverage ahead of competitors.
Reliance Communications (GSM + CDMA)	Rcom has been the second biggest telecom operator in terms of subscribers. The growth has been crippled by the CDMA handset limitations. The company is expected to get aggressive post its recent GSM launch.
Vodafone-Essar (GSM)	Vodafone has been the second biggest wireless operator in terms of revenue share. The company closely competes with Rcom for the second spot & has high subscriber momentum post its recent pan-India launches.
BSNL (GSM + CDMA)	BSNL has constantly lost market share & shows the low subscriber growth rates primarily due to capacity constraints, delayed decision making & lackluster marketing campaigns.
Idea Cellular (GSM) (Telecom Malaysia)	Idea has been the fastest growing operator due to aggressive network rollout across the country & the acquisition of Spice communications. The company is expected to launch services in a no of newer circles in near term.
Tata Tele (GSM + CDMA) (NTT DoCoMo + Virgin)	Tata Tele has shown a stagnant performance for a few quarters but is expected to pick momentum with its Pan-India GSM launch & thrust from its tie-ups with Virgin Mobile & strategic partnership with NTT DoCoMo.
Aircel (GSM) (Maxis & Saudi Telecom (STC))	Aircel has been the market leader in a no of circles where it is operations. The company is a aggressive regional player & is gearing up to expand operations on pan-India base.
Spice Communications (GSM)	Spice has been struggling in its 2 operational circles – Punjab & Karnataka due to lack of financial resources. It has been recently acquired by Idea cellular, the merger & rebranding is under process.
BPL / Loop (GSM)	BPL Mobile has show subdued growth in Mumbai due to constant ownership conflict between Vodafone & Essar. Loop telecom has received license for pan-India operations & is scouting for foreign partner before network rollouts.
MTNL (GSM + CDMA)	MTNL has shown lackluster performance due to capacity constraints & operational efficiencies. It has recently launched 3G services in Delhi (it will have to pay the highest bidder price) & has good presence in broadband/IPTV segment.
Shyam (CDMA) (Sistema)	Shyam Telelink has a strong foreign partner in form of Russian telecom major Sistema. The company is one of the most aggressive players among the new entrants & plans to start rolling out its CDMA operations by the mid 2009.
Datacom (GSM) (Videocon)	There has been constant strain between the promoters – Videocon group & Nahatas, which has delayed the network rollouts & launch of operations as well as curtailed foreign investment.
Unitech (GSM) (Telnor)	Real estate major Unitech has been under financial stress due to economic downturn. It has sold 60% stake (in form of fresh equity) to Telnor for Rs 61.2 Bn. It has recently signed a 20- year Pan India passive infrastructure sharing deal with wireless-TT Info service, tower JV between Tata Tele Services and Quippo Telecom, for sharing 40,000 cellsites.
Swan Telecom (GSM) (Emirates Tele Corp - Etisalat)	Swan telecom has 2G for 14 circles (most of metros, A & B Circles). It has roped in Etisalat as its strategic partner for \$900 Mn (45% fresh equity) and signed intra-circle roaming agreement with BSNL.
S Tel (GSM) (Bahrain Telecom – Batelco)	S Tel has licenses to offer 2G mobile services in the under-penetrated 6 C-Circles. It has recently roped in Bahrain's Batelco as a strategic investor with 49% stake for \$225 Mn.

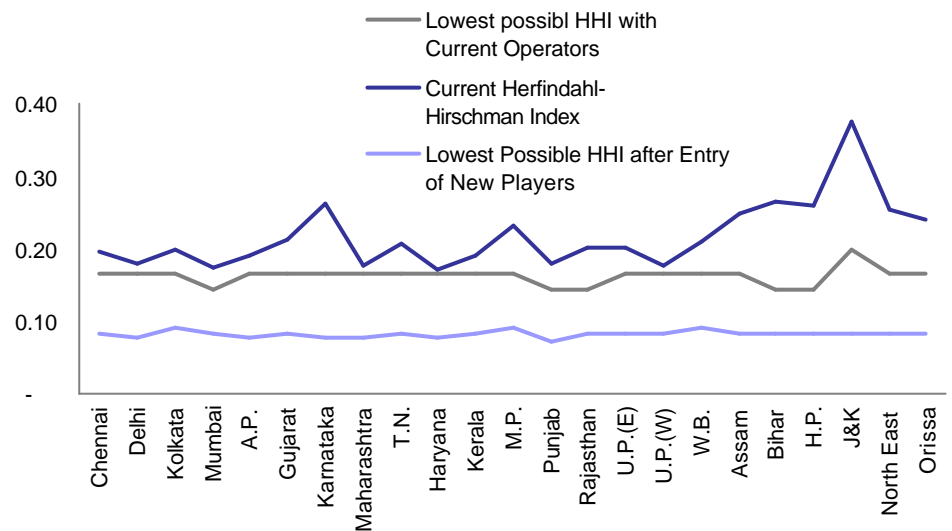
Source: Kotak Securities - Private Client Research

### INTENSIFYING COMPETITION, PROFITABILITY TO BE HIT...

We expect the high capex, network opex & subscriber acquisition costs to weigh heavily on the margins of telcos expanding pan-India (Idea, Vodafone & Aircel), on alternative technology (Rcom, Tata Tele, BSNL, MTNL) or launching fresh operations (Unitech, Datacom, Shyam, Loop, Swan, S-Tel). The strategic interests of established global telcos like Vodafone, NTT DoCoMo, SingTel, Telecom Malaysia, Maxis, Sistema, Telnor, Etisalat & Batelco and further entry of global majors through 2G / 3G / WiMAX / MVNO routes may intensify the competitive forces & weed out any extraordinary profits from the sector.

With over 5-7 existing operators & expected entry of 6-7 new players, there would be as high as 11-14 operators in each circle resulting in one of the highest competitive intensity amongst the major telecom markets in the world. Herfindahl-Hirschman Index - HHI (sum of squares of market shares of the operators, varies from 0 to 1, lower the no higher the competitive forces) depicts the extremely high competition in some circles. The under-penetrated C – circles still have lesser number of operators & lower competition. However, the scenario is expected to change soon as most existing operators expand their foot-print pan-India & newer operators target this underpenetrated circles.

#### Herfindahl-Hirschman Index



Source: TRAI, Kotak Securities - Private Client Research

## Competitive Intensity Analysis using Herfindahl-Hirschman Index (Jan 2009 data)

Wireless market shares	Bharti Airtel	RCOM	Vodafone Essar	BSNL	Idea (+ Spice)	Tata Tele	Aircel (Maxis)	MTNL	BPL/ Loop Telecom	HFCL Info-tel	Shyam (sistema)	Total	No. of Operators present	Lowest Possible HHI with Current Operators	Current HH Index	Expected Operators	Lowest Possible HHI after entry of new Players
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)					
<b>Metros</b>																	
Chennai	23.6	15.4	17.1	12.0		4.9	<b>27.0</b>					100.0	6	0.17	0.20	12	0.08
Delhi	<b>22.4</b>	15.6	19.2		11.3	21.7		9.8				100.0	6	0.17	0.18	13	0.08
Kolkata	22.4	23.4	<b>24.4</b>	11.9		13.7	4.2					100.0	6	0.17	0.20	11	0.09
Mumbai	15.1	<b>23.2</b>	23.1		3.3	12.0		12.5	10.9			100.0	7	0.14	0.17	12	0.08
<b>A Circles</b>																	
AP.	<b>30.3</b>	17.9	12.9	11.1	17.0	10.8						100.0	6	0.17	0.19	13	0.08
Gujarat	17.1	16.8	<b>33.1</b>	11.1	16.1	5.7						100.0	6	0.17	0.21	12	0.08
Karnataka	<b>42.8</b>	17.9	15.5	10.8	7.0	6.0						100.0	6	0.17	0.26	13	0.08
Maharashtra	19.4	13.5	14.8	13.0	<b>24.7</b>	14.6						100.0	6	0.17	0.18	13	0.08
T.N.	22.9	13.6	19.1	12.2		2.8	<b>29.4</b>					100.0	6	0.17	0.21	12	0.08
<b>B Circles</b>																	
Haryana	14.0	14.4	<b>23.6</b>	17.0	16.8	14.2						100.0	6	0.17	0.17	13	0.08
Kerala	13.7	16.9	18.8	19.2	<b>26.5</b>	4.9						100.0	6	0.17	0.19	12	0.08
MP.	22.7	<b>30.4</b>	0.9	15.4	24.3	6.2						100.0	6	0.17	0.23	11	0.09
Punjab	<b>26.8</b>	9.5	15.0	19.3	17.2	9.4				2.8		100.0	7	0.14	0.18	14	0.07
Rajasthan	<b>30.2</b>	14.0	22.4	14.1	5.7	11.5					2.1	100.0	7	0.14	0.20	12	0.08
U.P.(E)	22.0	18.7	<b>24.2</b>	22.2	7.2	5.7						100.0	6	0.17	0.20	12	0.08
U.P.(W)	12.5	17.5	<b>23.2</b>	14.0	21.3	11.4						100.0	6	0.17	0.18	12	0.08
W.B.	23.4	19.6	<b>30.7</b>	12.8		6.3	7.4					100.0	6	0.17	0.21	11	0.09
<b>C Circles</b>																	
Assam	25.2	26.1	1.7	16.8		0.5	<b>29.7</b>					100.0	6	<b>0.17</b>	<b>0.25</b>	12	0.08
Bihar	<b>36.9</b>	28.8	1.8	14.2	2.8	8.4	7.0					100.0	7	<b>0.14</b>	<b>0.25</b>	12	0.08
H.P.	30.0	<b>31.5</b>	0.6	25.6	4.2	4.2	3.9					100.0	7	<b>0.14</b>	<b>0.26</b>	12	0.08
J&K	<b>48.3</b>	0.0		29.7		0.7	21.3					100.0	5	<b>0.20</b>	<b>0.37</b>	12	0.08
North East	28.1	15.5	2.4	22.6		0.2	<b>31.2</b>					100.0	6	<b>0.17</b>	<b>0.25</b>	12	0.08
Orissa	<b>34.8</b>	25.3	3.0	18.4		8.1	10.4					100.0	6	<b>0.17</b>	<b>0.24</b>	12	0.08
<b>Total</b>	<b>24.4</b>	<b>18.3</b>	<b>17.5</b>	<b>13.1</b>	<b>11.0</b>	<b>9.1</b>	<b>4.6</b>	<b>1.2</b>	<b>0.6</b>	<b>0.1</b>	<b>0.1</b>	<b>100.0</b>					

Source: TRAI, Kotak Securities - Private Client Research

## 2G New Entrants – Challenging Business Case...

We have tried to explore the business case for 2G services in India for any Indian cash rich player vs. a foreign player. Even after assuming aggressive net adds share, ARPUs, Margins, Cash flow breakeven, terminal growth rates & conservative capex/WACC assumptions, we find it difficult for the new ventures to turn significantly NPV positive. The value accretion to the foreign cash rich strategic investors may be solely due to their lower WACC & need to diversify into high growth markets.

### Valuation matrix

#### Indian Player

WACC	12%
Terminal Growth	5%
Enterprise Value	69,957
Less: Less Debt	50,000
Equity Value	19,957
Less: License Fees	16,500
<b>Net Present Value</b>	<b>3,457</b>

#### Foreign Player

WACC	11%
Terminal Growth	5%
Enterprise Value	98,913
<b>EV (\$ Bn) (Pre-Money)</b>	<b>2.0</b>

- Market Share:** We have assumed an 8% market share for the incremental subscriber additions starting FY10 (assuming MNP implementation as per guidelines). The new entrant may then be able to garner about 43 Million Subscribers by FY20 representing around 5% of the overall wireless market share.
- Capex:** We expect most of the capex by the new entrants to be on the active components, while the passive infrastructure may be leased from existing operators/independent tower companies. This may significantly reduce the initial 2G capex requirement to just about Rs 50 bn & the cumulative capex to about Rs 120 bn till FY20.
- Opex:** We have assumed a liberal EBITDA breakeven (3 years) & terminal EBITDA margins of 30% post the rental payments to tower companies. We have assumed the new entrants to turn EBITDA positive by 3 years, cash flow positive by 4 years and net profitable by 5-6 years.
- Valuations:** We have factored in a terminal growth rate of 5%, WACC of 12% for Indian player & WACC of 11% for the foreign operators. With this, we arrive at a NPV of about Rs 20 Bn for the Indian operator, much the similar to the licence fees paid by the operator. On the other side, we derive an enterprise value (Pre-Money) of Rs 100 Bn for a foreign player with lower cost of funds & looking for high growth markets.

### 2G New Entrants : Valuation Matrix

(Rs mn)	FY10E	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E	FY18E	FY19E	FY20E
Overall Wireless Subs (mn)	494	575	640	700	750	790	820	850	875	900	925
Overall Net Adds (mn)	113	81	65	60	50	40	30	30	25	25	25
<b>New Entrant - FY2010</b>											
Net Adds Share (%)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Net Adds (mn)	9.0	6.5	5.2	4.8	4.0	3.2	2.4	2.4	2.0	2.0	2.0
Subs Base (mn)	9	15	21	25	29	33	35	37	39	41	43
Market Share (%)	1.8	2.7	3.2	3.6	3.9	4.1	4.3	4.4	4.5	4.6	4.7
ARPU (Rs)	250	250	250	250	250	250	250	250	250	250	250
Wireless Revenues	13,500	36,738	54,276	69,276	82,476	93,276	101,676	108,876	115,476	121,476	127,476
EBITDA	(27,000)	(18,369)	(13,569)	693	8,248	13,991	20,335	27,219	34,643	36,443	38,243
EBITDA Margin (%)	-200	-50	-25	1	10	15	20	25	30	30	30
Capex	50,000	15,000	15,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Depreciation	7,000	8,120	9,083	8,512	8,020	7,597	7,234	6,921	6,652	6,421	6,222
Debt	50,000	65,000	80,000	85,000	90,000	95,000	96,389	90,663	76,627	59,203	38,187
Interest Rate (%)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Interest	5,000	6,500	8,000	8,500	9,000	9,500	9,639	9,066	7,663	5,920	3,819
PBT	(39,000)	(32,989)	(30,652)	(16,319)	(8,772)	(3,106)	3,463	11,232	20,328	24,102	28,202
Tax Rate (%)	0	0	0	0	0	0	10	10	10	10	10
Tax	-	-	-	-	-	-	346	1,123	2,033	2,410	2,820
PAT	(39,000)	(32,989)	(30,652)	(16,319)	(8,772)	(3,106)	3,116	10,109	18,295	21,692	25,382
FCFF	(77,000)	(33,369)	(28,569)	(4,307)	3,248	8,991	14,025	20,189	26,844	28,441	30,041

Source: Kotak Securities - Private Client Research

### TARIFF FALL TO CONTINUE, DECLINING ELASTICITY:

Pricing remains a key differentiator due to the economic slowdown, high churn rates (4-5%/month) & upcoming Number Portability. With incumbents trying to garner max subs / squeeze most elasticity & newer operators trying to swiftly add subs to improve network utilization, we expect tariff levels to remain under pressure for next 4-5 quarters (i.e. until penetration levels reach 40-45% & subscriber adds moderates). Considering economic slowdown, one of the highest MOU levels in the world and lower incremental usage from rural/life-time subscribers, we expect a decline in usage elasticity and continued erosion in ARPUs going forward.

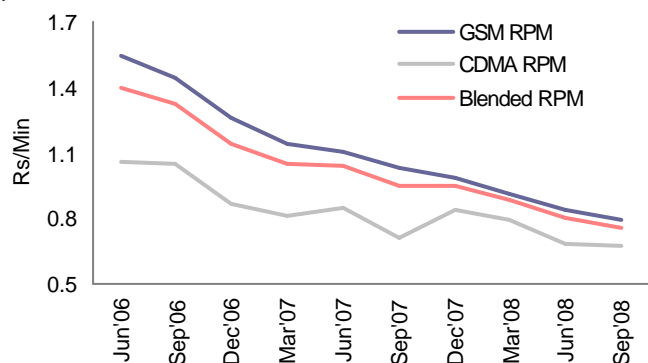
#### Telecom Tariffs : Still Headed Southwards

(Rs)	Current				Likely				Assumptions & Comments	
	(%)	Mins	Tariff	Rev	(%)	Mins	Tariff	Rev		(% chg)
MOUs		450			495				10%	30% Usage Elasticity
Incoming Mins	51%	230			51%	252				
"On-Net"	56%	129			40%	101				Termination charge reduction from 0.3 to 0.1 Rs/Min, Off-net Usage to increase substantially
"Off-Net"	44%	101	0.30	30	60%	151	0.10	15	-67%	
Termination ARPU				30				15	-50%	
Outgoing Mins	49%	221			49%	243				
Local	86%	189			82%	198				Pricing Pressure due to launch of services by newer operators
"On-Net"	58%	109	0.30	33	40%	79	0.20	16	-33%	
"Off-Net"	42%	79	0.75	59	60%	119	0.50	59	-33%	
STD	14%	31			17%	42				Probable impact of Wimax, Internet Telephony & Long Distance Calling Cards
"On-Net"	35%	11	1.20	13	40%	17	0.80	14	-33%	
"Off-Net"	65%	20	1.50	30	60%	25	1.00	25	-33%	
ILD	0.5%	1	7.00	8	1%	2	4.50	11	-36%	
Avg Call Charges			0.71				0.57		-21%	Lower Impact due to NLD, ILD & Off-net Usage Pickup
Effective Call Charges			0.78				0.62		-21%	10% higher due to 60 Sec Pulse
Revenue from Call Charges	60%			157				138	-13%	
Rental Revenue	20%			52				42	-20%	Proportionate Decline in Rental, Roaming & SMS Revenues
Revenue from Roaming	7%			18				15	-20%	
Revenue from SMS	4%			10				8	-20%	
Other Revenues *	9%			24				28	20%	Higher uptake of MVAS
Avg. Rev. Per User				262				231	-12%	
Termination Rev. Per User				30				15	-50%	
Gross ARPU				292				246	-16%	> 33% fall in tariffs = 16% Decline in ARPUs
MOUs				450				495		
<b>Implied RPM</b>				<b>0.65</b>				<b>0.50</b>	<b>-24%</b>	<b>We expect the RPMs to stabilize around these levels</b>

Source: TRAI, Kotak Securities - Private Client Research

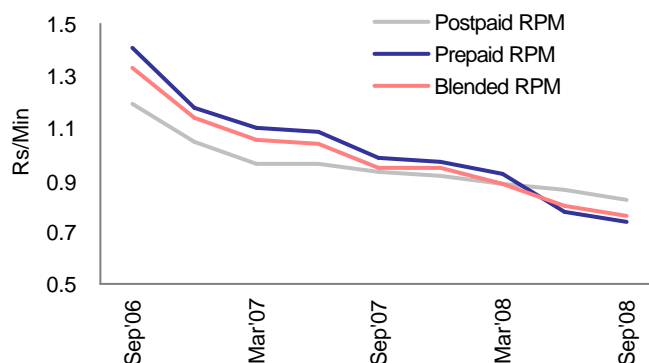
\* Other revenue includes revenue from other value added services, installation etc.

#### GSM Vs. CDMA RPMs



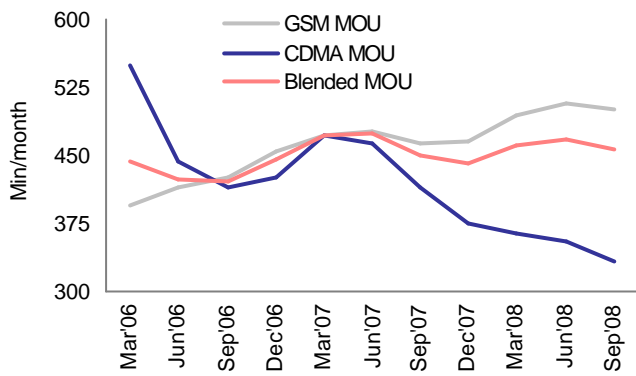
Source: TRAI, \*RPM represents Avg outgo per min

#### Prepaid Vs. Postpaid RPMs



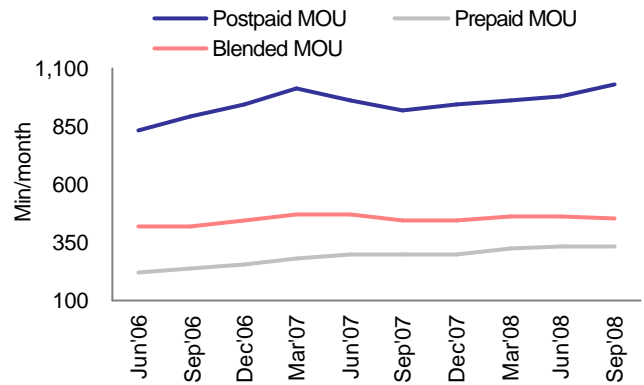
Source: TRAI, \*RPM represents Avg outgo per min

**GSM Vs. CDMA MOUs**



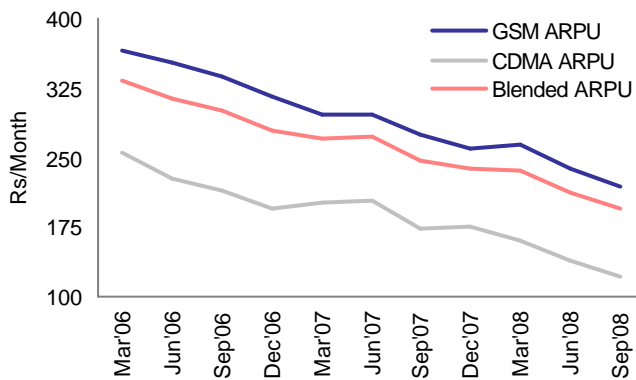
Source: TRAI

**Prepaid Vs. Postpaid MOUs**



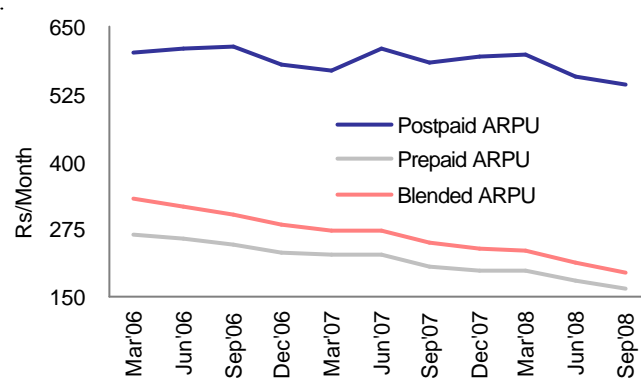
Source: TRAI

**GSM Vs. CDMA ARPUs**



Source: TRAI, \*ARPUs based on TRAI reported nos

**Prepaid Vs. Postpaid ARPUs**



Source: TRAI, \*ARPUs based on TRAI reported nos

## REGULATORY DEVELOPMENTS – PRO COMPETITION

The regulatory authorities have been deliberating on numerous issues to increase affordability, boost rural telephony & accelerate adoption of broadband services. Most recent policy developments around global 3G & WiMAX spectrum auctions, Mobile Number Portability (MNP), Mobile Virtual Network Operators (MVNOs), Dual technology platforms, Long distance calling cards, Internet telephony, Termination charge reduction, etc are pro-competition & would further rationalize the profitability of the sector

### Snapshot of Major Regulatory Developments

Policy Measure	Developments	Impact on Telecom Players
3G Spectrum Auction guidelines	DoT announcement of global Auction for 3G spectrum in 2100Mhz band for GSM players. The reserve price would be Rs 20.2 bn for pan-India 3GSM Spectrum & additional Rs 16.5 bn for newer entrants without UASL. The successful bidders will be eligible for 5Mhz 3GSM spectrum & have to match the highest bid. BSNL/MTNL allocated pan-India 3G spectrum. The reserve price, the number of slots to be auctioned and auction time lines are yet to be finalised.	Higher Base price (Rs 36.7 Bn), limited spectrum (only 5MHz) & stringent M&A norms weakens the case for global telecom majors. Established Telcos with extensive network, 2G spectrum & high usage subscriber base could benefit the most as successful 3G adoption can lead to about 30-50% rise in ARPUs. However, aggressive bidding by the incumbents or by Global majors in collaboration with new 2G license holders, especially in Metros could negatively impact the industry.
WiMAX Spectrum Auction	DoT has announced the auction of 4 slots of 20MHz each for Broadband Wireless Access (BWA) services. Of these, one slot will be reserved for BSNL/MTNL. The DoT intends to allow even voice services using VOIP technology. The reserve price and auction time lines are yet to be finalised.	VOIP based voice telephony could further bring down the overall tariff levels negatively impacting the existing 2G & potential 3G operators. However, WiMAX does provides an attractive opportunity to the telcos to boost their broadband data revenues & become truly integrated players
MNP Implementation	The DoT has announced the guidelines for the implementation of Intra-circle MNP in Metros by mid CY 2009 & across the country by end CY 2009. The bids for being the centralized operators were submitted on 6th Feb and announcement is expected soon.	Increased sales, marketing & customer servicing costs to retain the customers could negatively impact the margins of all telecom players. Newer operators / Operations may gain by churning subscribers from existing operators.
MVNO Entry	TRAI has recommended opening up the telecom sector for Indian as well as global MVNOs. DoT is expected to come out with detailed guidelines soon. The commercial model covering the nature of relationship between MNO and MVNO to be left to the market forces.	Increased distribution, differentiated service offerings, lower operating expenses & better utilizations to positively impact MNOs with successful MVNO partnerships. However, increase in customer churn, customer acquisition & servicing costs may reduce profitability for the industry as a whole.
Internet Telephony	TRAI had made recommendations to permit unrestricted Net telephony to Internet Service Providers (ISPs), without imposing any additional entry fee or license charges. The DoT approvals may take time due to strong opposition from the incumbents who pay USAL licensee fees for providing Mobility services.	International call rates could drop to one-two rupees a minute from the average seven, while national long-distance rates could fall to less than half a rupee. Local calls could be virtually free & thus have a deep impact on the traditional voice business of the incumbents.
Long Distance Calling Cards	TRAI had asked the DoT to permit all NLD & ILD carriers to market their products directly to the consumer in the form of pre-paid package or through calling cards. The DoT has recently approved the recommendations.	It will open up new revenue stream for the NLD players, but negatively impact most existing service providers due to further rationalization of long distance tariffs. It will also impact the NLD revenues of the incumbents as customers choose their own NLD network providers.
Reduction in Termination Charge	DoT has asked TRAI to review the current termination charges on a priority basis & have suggested bringing the ceiling of 0.30 Rs/min down to 0.10 Rs/min in an attempt to make telecom services more affordable. TRAI has started the consultation process & may come out with its recommendation in next 3-6 months.	Considering that about 40-45% local calls & 65-70% NLD calls are made off-net, a 10 paise reduction in termination charge if fully passed on, can lead to a reduction of about 3.5 to 4.5 paise in RPM.

Source: TRAI, DoT, Kotak Securities - Private Client Research

### 3G AUCTIONS – OPPORTUNITY VS. PRICE...

After nearly two years of debate and controversy, the government finally announced a global auction of third-generation (3G) radio frequencies that would facilitate video calling, Video ring back tones, faster video/music downloads, live video streaming, high-speed internet surfing, online gaming, etc and hence open up a new promising revenue stream for the existing telecom operators. However, repeated rescheduling of the auction deadlines, numerous unresolved issues between DOT, TRAI, Finance Ministry & upcoming parliamentary elections increases the event risks associated with 3G auctions. The reserve price, the number of slots to be auctioned and auction time lines are yet to be finalised. In any case, we expect the 3G revenues to take time to pick up in non-metro circles and any irrational bidding remains a downside risk for the sector.

#### Reserve Price

DoT has set a reserve price of Rs 20.2 bn for 5MHz 3GSM spectrum on a pan-India basis with each service area having the following reserve prices. However, there have been numerous deliberations to increase the reserve price to Rs 40.4 bn (double reserve price in each circle) or to Rs 35.4 Bn (double reserve price in all except C circles) to ensure that the scare spectrum is auctioned at substantial price notwithstanding the economic slowdown.

<b>Reserve price (yet to be finalised)</b>	
<b>Service Area</b>	<b>Reserve Price (Rs. In Mn)</b>
Mumbai, Delhi and Category 'A'	1,600
Kolkata & Category 'B'	800
Category 'C'	300
<b>Pan - India</b>	<b>20,200</b>

Source: DOT

#### Roll Out Obligations

<b>Category of Circle</b>	<b>At the End of 3 Years from the date of 3G spectrum allocation</b>	<b>At the End of 5 Years From the date of 3G spectrum allocation</b>
Metros	-	90% of Metro Area
A,B and C	-	50% of the DHQs or Cities in the service area out of which 15% of the DHQs should be rural SDCAs.

Source: DoT



**Service area-wise 3G Spectrum to be auctioned (yet to be finalised)**

Service area	Category	Reserve price (Rs. cr)	Total paired frequency bandwidth to be allotted (MHz)	No. of blocks of 2x5 MHz to be allotted	No. of blocks of 2x5 MHz reserved for BSNL/MTNL	No. of blocks of 2x5 MHz available for auction
Delhi	Metro	160	15	3	1	2
Mumbai	Metro	160	25	5	1	4
Kolkata	Metro	80	25	5	1	4
Maharashtra	A	160	25	5	1	4
Gujarat	A	160	15	3	1	2
Andhra Pradesh	A	160	25	5	1	4
Karnataka	A	160	25	5	1	4
Tamil Nadu	A	160	25	5	1	4
Kerala	B	80	25	5	1	4
Punjab	B	80	25	5	1	4
Haryana	B	80	25	5	1	4
Uttar Pradesh (E)	B	80	25	5	1	4
Uttar Pradesh (W)	B	80	20	4	1	3
Rajasthan	B	80	0	0	na	0
Madhya Pradesh	B	80	25	5	1	4
West Bengal	B	80	10	2	1	1
Himachal Pradesh	C	30	20	4	1	3
Bihar	C	30	25	5	1	4
Orissa	C	30	25	5	1	4
Assam	C	30	25	5	1	4
North East	C	30	5	1	1	0
Jammu & Kashmir	C	30	25	5	1	4

Source: DoT

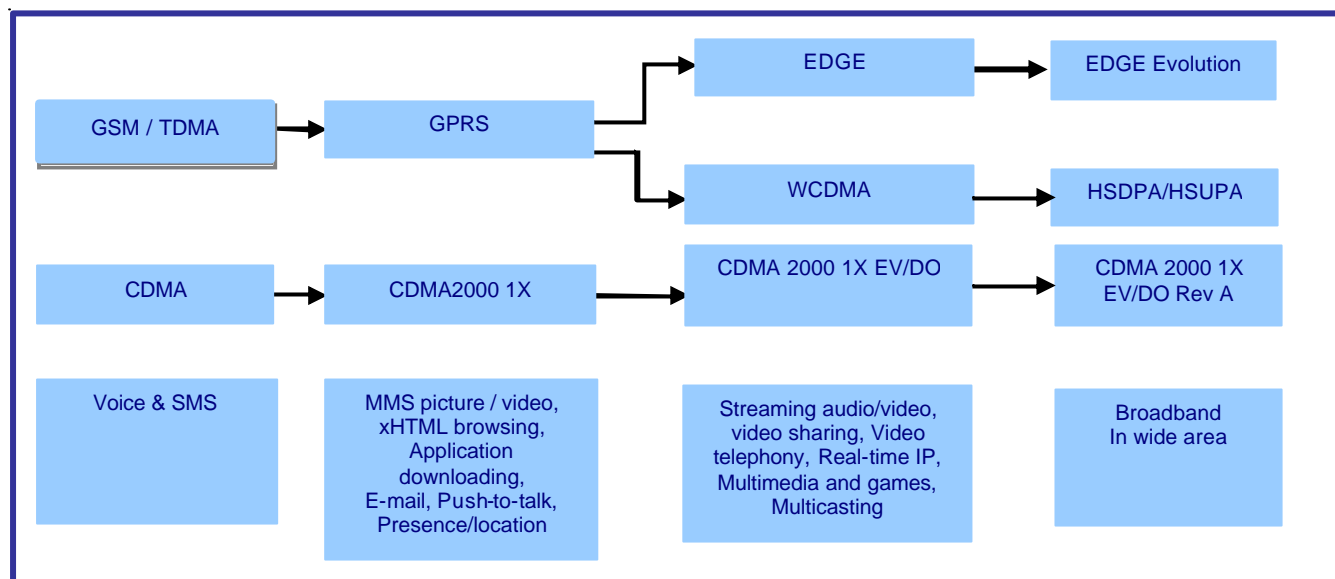
**3G Auction for CDMA players**

DoT has amended the 3G policy & will now auction 3G spectrum in the coveted 800 MHz band instead of allotting it to the CDMA player with highest subscriber base as announced earlier. Reliance communications (having maximum CDMA subs in all circles except Delhi and Maharashtra) will now have to compete with Tata Teleservices, Shyam, BSNL and MTNL as well as new global players who want to enter India with EVDO services. However, due to the uncertainty over when will the defense forces vacate this spectrum, the present 3G auction does not include spectrum in 800 Mhz band.

**M&A Norms for 3G Licence holders**

DoT has also amended the 3G policy such that the existing M&A norms (3 year lock-in for new licensees) will apply only to existing licence holders. The successful foreign 3G bidders will now have an option of getting a new UASL licence for Rs.16.5bn or acquiring a 2G player with existing UASL licence.

**Mobile Technology Evolution**



Source: The Global mobile Suppliers Association (GSA)

**Frequency Bands**

GSM operators would adopt WCDMA (3GSM) technology while CDMA operators would adopt CDMA EVDO technology to offer 3G services. The frequency bands of 2.1 GHz & 800 MHz are efficient, cost effective and the most widely accepted bands globally for WCDMA (3GSM) & EVDO services respectively.

2G bands prevalent in India				3G bands suggested in India			
	Uplink	Downlink	Technology		Uplink	Downlink	Technology
800 MHz	824-844 MHz	869-889 MHz	CDMA	450 MHz	452.5-457.475 MHz	462.5-467.475 MHz	CDMA EVDO
900 MHz	890-915 MHz	935-960 MHz	GSM	800 MHz	824-849 MHz	869-894 MHz	CDMA EVDO
1800 MHz	1710-1785 MHz	1805-1880 MHz	GSM	2.1 GHz	1920-1980 MHz	2110-2170 MHz	WCDMA (3GSM)

Source: TRAI

**Spectrum bands used for 3G services internationally**

	WCDMA		CDMA 2000 1X EV-DO				
	1900	2100	450	800	1700	1900	2100
Australia		Vodafone, Optus, Testra		Telstra			
Brazil				Vivo		Vesper	
China							China Unicom
Indonesia		Hutchison		Bakrie, Mobile 8		Wireless Indo.	
Japan							KDDI
South Korea		KTF, SKT		SKT	LG, KTF		
Russia			Delta, KCC, Moscow Cellular, UralWest				
Singapore		MobileOne, Sing Tel, Star Hub					
USA	Cingular			ACS, ALLTEL, Verizon Wireless		ALLTEL, Sprint-Nextel, Verizon Wireless	

Source: TRAI, COAI & CRISIL Reports

## Impact on Telecom Operators

### Foreign players

- Apart from the Rs.20.2bn pan-India reserve price, foreign players will have to shell out additional Rs.16.5bn for an UAS license (without any visibility for 2G spectrum allotment) or acquire an existing 2G licensee with assured 2G spectrum.
- Standalone foreign players would be at disadvantage compared to the incumbents as they would have to offer both voice and high-end data services with a mere 5 MHz spectrum. Again considering current 3G-handset economics, cost sensitive Indian markets & 74% FDI limit, we do not see significant value accretion from standalone 3G play in India.
- Aggressive valuations (about \$2-\$3 billion) demanded by new 2G entrants may make even the acquisition route difficult for foreign players (especially who bag 3G spectrum only in few circles).

### GSM Players

- Bharti Airtel & Vodafone-Essar would stand to benefit the most from the 3G spectrum availability as they have substantial high ARPU & potential 3G subscriber base.
- Idea Cellular has being in an aggressive rollout mode & in the process of launching operations in 7 newer circles. Although the balance sheet is strengthened by the recent capital infusions (by Telecom Malaysia & Providence), lack of high ARPU subscriber base & Metro presence may make Idea a less aggressive bidder.

### CDMA Players

- Reliance communications intends to get 3G spectrum for both its GSM & CDMA operations. This might further deteriorate the already low return ratios for the company in the short term.
- Tata Teleservices too has an option of bidding for 3G spectrum for both GSM & CDMA operations. Its balance sheet is strengthened significantly by the recent capital infusion from NTT DoCoMo.

### PSU Players

- With 3G spectrum already allocated, both BSNL & MTNL plan to launch 3G services within 2-3 months. MTNL has already launched the "3G Jadoo" services in Delhi circle. This would give them a first-mover advantage of a minimum 4-6 months over private sector rivals.
- Bidding may get really aggressive in Mumbai & Delhi circles due to fewer slots, high ARPU customers & time to market advantages negatively impacting MTNL that has to match the highest bid.

### New Entrants

- We do not expect new entrants to bid aggressively for 3G spectrum on a standalone basis as most of them are yet to tie up resources and fulfill their 2G rollouts obligations.
- However, the new entrants may tie up with foreign players who successfully bid for 3G spectrum & who will eventually need USAL licensee & 2G spectrum.

## Overall Industry Impact

- Severe competition & aggressive tariff cuts may bring in significant pressures on the ARPU in coming quarters. It is only the 3G content & data services that can bring in next phase of rapid growth in ARPU for the telecom sector. Successful launch of 3G services may lead to a rise in ARPU levels by as high as 30-50% for the existing telcos. A part of the 5 MHz 3G spectrum would initially be used to carry voice traffic too. This will improve the network quality of the existing operators & also reduce the capex requirements for 2G operations.
- Currently, value-added services contribute only 8-9% to operators' revenues, with SMS as a large contributor. We believe that it will take time for the VAS to really pick up & improve the top-line growth of the telcos. It will gain acceptance in rural areas only when localized content can be offered at a very nominal price.
- 3G rollout in India may be impacted by parallel rollouts of WiMax technology that promises to offer data download speeds that are 10-30 times faster than 3G. Any irrational bidding can stretch the balance sheets of existing telcos in the short term, especially the regional players & could affect their existing pan-India 2G rollout plans.

## 3G Spectrum - potential value accretion

We think that Bharti & Vodafone stands to gain the most from the launch of 3G services as they have built up a substantial high ARPU / Metro subscriber base with advanced handsets that would rapidly adopt 3G services. Although, value accretion can be good for Rcom too once it completes its pan-India GSM rollout, the price at which spectrum is auctioned will become vital considering its leveraged balance sheet. Tata Teleservices may bid aggressively post the recent tie-up & equity infusion from NTT DoCoMo. With the above four players well poised for aggressive bidding, we expect Idea Cellular to pick & choose circles based on synergies with its existing 2G operations.

We have tried to explore the value accretion potential from 3G spectrum for Bharti Airtel and Idea Cellular (seemingly the strongest and weakest contenders respectively among the Top-5 private telcos). We have assumed 60% of the wireless subscribers adopt 3G services by 2020 and 3G ARPU to turn out to be 30% higher than 2G ARPU. We have also assumed EBITDA margins (post tower rental payments) of around 35%, Incremental Capex of around Rs.1-1.2 million/tower for 3G services, 10% interest rate, 30% Tax rate, 12% WACC & 4-5% terminal growth. We find the value accretion to be in tune of Rs. 67 bn for Bharti Airtel & Rs.36 bn for Idea Cellular Vs Rs 20 bn reserve price. However, aggressive bidding will dent the earnings in near term due to higher network opex, high spectrum charges (1% higher), amortization costs (spectrum), depreciation (3G active capex) & interest costs (for incremental debt).

**3G Spectrum: Potetial Value Accretion**

(Rs mn)	FY10E	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E	FY18E	FY19E	FY20E
Overall Wireless Subscribers (mn)	494	575	640	700	750	790	820	850	875	900	925
3G Subs (% of Overall)	10.0	20.0	30.0	35.0	40.0	45.0	50.0	55.0	60.0	60.0	60.0
3G ARPU (% Higher)	10.0	12.5	15.0	17.5	20.0	22.5	25.0	27.5	30.0	30.0	30.0
3G EBITDA Margin (%)	-200	-50	-10	5	15	25	30	35	35	35	35
Interest Rate (%)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Tax Rate (%)	0	0	0	0	0	0	30	30	30	30	30

**Bharti Airtel - 3G Business Case**

Market Share	24%	23%	23%	22%	22%	22%	22%	21%	21%	21%	21%
Subscriber base (mn)	118	134	146	157	165	172	177	182	187	192	197
2G Subs (mn)	106	107	102	102	99	95	89	82	75	77	79
3G Subs (mn)	12	27	44	55	66	77	89	100	112	115	118
2G ARPU (Rs)	296	271	265	258	254	253	253	252	252	252	252
3G ARPU (Rs)	326	305	305	304	304	310	316	322	328	328	328
Incr. 3G ARPU (Rs)	30	34	40	45	51	57	63	69	76	76	76
Incr. 3G Revenues	4,177	10,884	20,907	29,806	40,288	52,900	67,215	83,525	102,126	104,851	107,576
Incr. 3G EBITDA	(8,355)	(5,442)	(2,091)	1,490	6,043	13,225	20,164	29,234	35,744	36,698	37,652
Active Capex - 3G	10,073	12,855	14,639	9,501	9,638	9,711	9,565	10,003	10,388	2,571	2,571
Depreciation	1,410	3,012	4,640	5,321	5,925	6,455	6,891	7,326	7,755	7,029	6,405
Interest	1,007	2,293	3,757	4,707	5,671	6,642	7,192	7,002	6,261	4,491	2,511
Tax Expense	-	-	-	-	-	-	1,825	4,472	6,519	7,553	8,621
PAT	(10,772)	(10,747)	(10,488)	(8,537)	(5,553)	128	4,257	10,434	15,210	17,624	20,115
FCFF	(18,427)	(18,297)	(16,730)	(8,011)	(3,595)	3,514	6,617	12,659	16,959	25,226	25,706

<b>Bharti Airtel</b>		Enterprise Value	77,505
WACC	12%	Less: Debt	10,073
Terminal Growth	4%	<b>3G Value Accretion</b>	<b>67,432</b>

**Idea Cellular - 3G Business Case**

Wireless Market Share	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%
Wireless Subs (Incl. Spice) - (mn)	58	68	77	84	90	95	99	102	105	108	111
2G Subs (mn)	52	55	54	55	54	52	49	46	42	43	44
3G Subs (mn)	6	14	23	29	36	43	49	56	63	65	67
2G ARPU (Rs)	244	231	227	219	214	214	216	218	218	218	218
3G ARPU (Rs)	269	260	261	257	257	262	270	278	283	283	283
Incremental 3G ARPU (Rs)	24	29	34	38	43	48	54	60	65	65	65
Incremental 3G Revenues	1,694	4,753	9,397	13,545	18,550	24,716	31,911	40,372	49,459	50,872	52,286
Incremental 3G EBITDA	(3,387)	(2,376)	(940)	677	2,783	6,179	9,573	14,130	17,311	17,805	18,300
3G - Active Capex	4,949	6,792	8,010	5,521	5,665	5,704	5,600	5,903	5,922	1,545	1,545
Depreciation	693	1,547	2,452	2,881	3,271	3,612	3,890	4,172	4,417	4,015	3,669
Interest	495	1,174	1,975	2,527	3,094	3,664	4,146	4,352	4,370	3,955	3,281
Tax Expense	-	-	-	-	-	-	461	1,682	2,557	2,951	3,405
PAT	(4,575)	(5,097)	(5,367)	(4,732)	(3,583)	(1,097)	1,076	3,924	5,967	6,885	7,945
FCFF	(8,337)	(9,169)	(8,950)	(4,844)	(2,883)	475	2,269	5,240	7,521	12,123	12,366

<b>Idea Cellular</b>		Enterprise Value	41,040
WACC	12.0%	Less: Debt	4,949
Terminal Growth	5.0%	<b>3G Value Accretion</b>	<b>36,090</b>

Source: Kotak Securities - Private Client Research

## ENTERPRISE CARRIER & DATA SERVICES: GLOBAL SLOWDOWN MAY HAVE AN IMPACT...

### Global Bandwidth Demand

The global bandwidth requirement has increased considerably over the last 5 years on back of robust growth in internet & broadband services as well as increased access speed requirements due to high end video applications. According to Telegeography, the international bandwidth usage has increased by a CAGR of about 52% annually over 2002-2007. However, we expect the global bandwidth demand to be impacted by the steep economic downturn that may force cutbacks on discretionary spend by individuals & organizations alike.

### Global Submarine cable systems



Source: Telegeography

In India, the Bandwidth requirement is largely being driven by the IT & BPO industry and rapid Internet adoption at homes and high end video applications. The bandwidth requirement of corporates expanding overseas as well as from Internet Telephony has been on the rise. However, with the global slowdown starting to hurt the outsourcing – IT & BPO industry, we expect the cracks in bandwidth demand to show up in the domestic markets soon. Indian players such as Tata Communications, Bharti Airtel and Reliance Communications have made significant investments in the submarine cable systems around emerging markets like south-east Asia & Africa. The unit cost of submarine cables has reduced considerably from about \$5300/Km/Gbps to just about \$340/Km/Gbps improving the return ratios of these investments. However, we are cautious on the capacity utilizations of these upcoming capacities in near term due to the current economic downturn.

### Wholesale Voice Business - Pricing pressure to continue, Play on Volumes

Robust volume growth & sustained pressure on tariffs has been a consistent trend in wholesale voice business. According to research by Telegeography, the International traffic volumes have grown from 20 bn minutes in 1987 to 298 bn minutes in 2006 (excluding Skype Traffic). However, it has still been a challenge for international carriers to maintain profitability due to constant pricing pressures resulting from bandwidth glut in trans-Atlantic region & constant capacity additions in bandwidth deficit regions. We think that the demand slowdown due to current global downturn & aggressive capacity additions by Indian operators would weigh negatively on the profitability in near term.

### Voice over Internet Protocol (VOIP) - A Ray of hope

We expect VOIP services to be the next growth engine for the wholesale voice business as it costs significantly less to deliver calls over IP than traditional TDM. VoIP termination bypasses the settlement rates charged by incumbent international toll switches. This is expected to result in a sustained growth in VOIP traffic over the next 3-4 years. TRAI has recently recommended allowing all ISPs to provide unrestricted Internet telephony services within the country. With DoT soon to act upon the recommendations, Internet telephony market in India is soon expected to catch up with the global trend.

### Enterprise Data Services: An Opportunity to Grab

Enterprise Data business derives its revenues from services such as raw bandwidth, private leased circuits, and Internet leased lines, IP transit, virtual private networks and other value added services like data hosting, co-location & managed services. Overall, the Enterprise data segment is a high margin business with strong long term growth potential. However, we expect the segment to show muted growth in near term as the domestic & global enterprises cut back on their capex & modernization plans due to current economic slowdown & credit crisis.

#### Global Communications: Market Size

Services Provided	2007F Global Demand (\$ Bn)	Typical Margins
Wholesale	5	15-35%
Enterprise	90	30-55%
Managed Services	85	45-65%

Source: Company Reports

## FIXED LINE SERVICES DECLINE, BROADBAND SERVICES CATCHING MOMENTUM...

We expect the Wireline subscriber base to continue to decline gradually due to wireless revolution in the country. Although the wireless teledensity is expected to touch 65% by FY17, we expect the Wireline teledensity to remain low (<4%) as India skips the wireline revolution and embraces mobile telephony & wireless broadband services. We expect sustained enterprise demand for fixed line services & the increased adoption of fixed internet/broadband services to restrict the fall in wireline subscriber base to some extent going forward. We expect the fixed line subscriber base to increase to about 45 million (3.5% teledensity) by FY17E.

Fixed Line Services		
	No of Subs (Sep 08)	Market Share (%)
BSNL	30,122,269	78.5
MTNL	3,572,461	9.3
Bharti Airtel	2,509,460	6.5
Reliance Communications	1,021,484	2.7
Tata TeleServices	821,602	2.1
Others	301,778	0.8
<b>Total</b>	<b>38,349,054</b>	<b>100</b>

Source: TRAI

Public Call Offices		
	No of PCOS (Sep 08)	Market Share (%)
Reliance Communications	2,318,943	37.0
BSNL	1,915,106	30.6
Tata Tele Services	1,543,544	24.6
MTNL	234,941	3.7
Bharti Airtel	189,122	3.0
Others	67,057	1.1
<b>Total</b>	<b>6,268,713</b>	<b>100</b>

Source: TRAI

Broadband & Internet services are expected to pick up significantly post the sustained government initiatives, increasing availability & affordability and increasing awareness / demand due to the IT boom in the country. Internet has been increasingly transforming education, healthcare, entertainment, e-governance & has been enriching the quality of life. Also with the growth of e-commerce, commercial use of Internet has increased. Going forward with the cost of Computers/Laptops coming down and its increased household adoption, the Internet user base may increase rapidly. The push by Telecom service providers into smaller towns is also expected to give a major fillip to household penetration of Internet.

### Government Targets (Mn)

	2005	2007	2010
Broadband subscribers	3	9	20
Internet subscribers	6	18	40

Source: TRAI

Mobile phones are becoming the next access point for Internet. Recognizing the growth potential in Broadband services, the Indian government is strongly promoting WiMAX as a technology to connect the country with broadband services. The Telecom Regulatory Authority had given its recommendation for allocation and pricing of spectrum for broadband wireless technologies (including WiMAX).

Internet Services		
	No of Subs (Sep 08)	Market Share (%)
BSNL	6,377,051	52.1
MTNL	1,951,851	15.9
Bharti Airtel	938,251	7.7
Reliance Communications	878,252	7.2
Sify Technologies	510,071	4.2
Others	1,586,895	13.0
<b>Total</b>	<b>12,242,371</b>	<b>100</b>

Source: TRAI

Broadband Service		
	No of Subs (Sep 08)	Market Share (%)
BSNL	2,688,739	54.8
MTNL	616,235	12.6
Bharti Airtel	653,502	13.3
Tata Communications	201,883	4.1
Reliance Communications	96,774	2.0
Others	645,875	13.2
<b>Total</b>	<b>4,903,008</b>	<b>100.0</b>

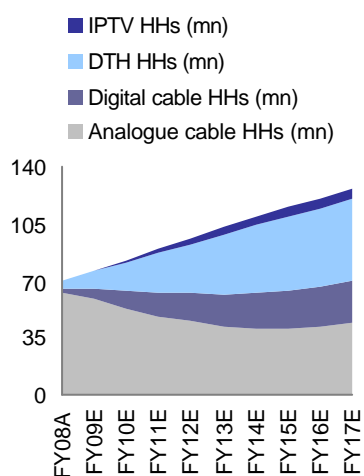
Source: TRAI



## HOME BUSINESS: ENRICHING CUSTOMER EXPERIENCE...

- **Direct to Home (DTH) services:** Direct to Home (DTH) service is the technology in which a large number of channels are digitally compressed, encrypted and beamed from very high power satellites. A set top box is used at home to de-multiplex the digital signals view them on a TV. DTH removes the dependence on local cable operators and gives the control of content selection & quality of service in the hands of consumers.
- **IPTV Services:** IPTV is triple play (video, voice & data) service with innovative value added features like video-on-demand, interactive TV with facilities to pause, fast forward and rewind live TV or recorded content stored on the service provider's remote servers, interactive advertising, games and e-education. For this, viewers need a broadband connection and a set-top box to send and receive requests. The biggest plus of IPTV is the fact that it allows interactivity which is not possible in either DTH or the CAS.
- **Lower penetration:** India is one of the world's largest TV-viewing nations with over 120 million TV Homes in the country, out of which about 71 million are served by cable TV network, over 10 million by DTH and the rest by terrestrial TV. While the number of TV HHs is impressive in absolute terms, the penetration is still significantly lower compared to developed countries. Increasing affordability & per capita income, declining tariff levels & equipment costs, excellent movie/sports content & thriving media with 300 plus channels would lead to a rapid growth in TV and C&S penetration in the country.
- **Unorganized cable TV network:** Lack of transparency, monopoly in the last-mile cable operations and a highly fragmented distribution chain are the main concerns against of the cable TV network. There is an under declaration of over 80% of the revenues and the consequent loss of tax revenue is a big issue. Government is keen on increasing the addressability of the industry by encouraging digitalization of cable TV with the help of CAS (Conditional Access System), DTH, HITS (Head-end in the Sky) & IPTV services.
- **CAS Adoption:** CAS is currently mandatory in Zone 1 of the four metros – Mumbai, Delhi, Chennai and Kolkata. The implementation of CAS in non-metros cities could be a major boost to DTH services which has similar tariffs but provides a variety of content & better quality of services.
- **Market Dynamics:** Dish TV (Essel/Zee group) and Tata Sky (Star TV - Tata group JV) are the two national players currently 4.5 m & 3 m subscribers respectively. Sun group offers DTH services mostly in core southern market, while Reliance Big TV and Airtel Digital TV have recently launched DTH services. We expect the industry to gain momentum with the entry of bigger players & DTH subscriber base to grow at a 57% CAGR to 31.5 million by 2012. This will take the DTH contribution to 32% of total C&S households from the around 12-13% presently.

### Indian C&S Households



Source: TRAI, Kotak Securities - Private Client Research

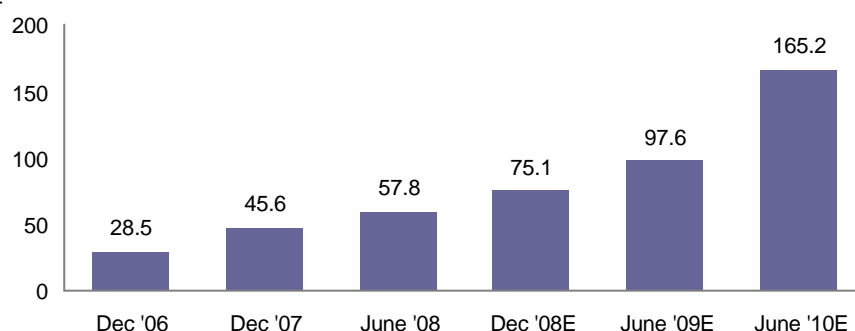
MTNL & Bharti Airtel has already launched its IPTV services while Reliance communications is expected to launch the same shortly. This helps providing a consolidated bill for all the three services – phone, broadband and IPTV. Rcom has paid a licence fee of \$500 million to use Microsoft's IPTV software while Bharti has tied up with Cisco Systems for their IPTV rollouts. We expect the DTH services to target the masses while IPTV services to remain premium service used by high speed broadband users.

## MOBILE VALUE ADDED SERVICES (MVAS): IMPROVING THE MARGINS...

Rapidly expanding mobile subscriber base coupled with telcos focus to arrest ARPU decline through differentiated service offerings has led to a robust growth in the Mobile value added services (like Caller ring back tones, music downloads, news alerts, interactive voice response systems, m-commerce, etc) over the last 3-4 years. The introduction of high-end 3G services (like online gaming & video downloads, video callback tunes) & entry of specialized MVNOs would further compound the MVAS growth going forward.

According to Internet & Mobile Association of India (IAMAI), the Mobile VAS industry was estimated at Rs.57.8 billion by end June 2008 and is estimated to grow steadily by 70% over the next two years to touch Rs.97.6 billion by end June 2009 and Rs.165.2 billion by end June 2010. MVAS currently contributes around 9 % to the operator's revenue & is expected to increase to about 13% by June 2012. As 60-80% of MVAS revenues are retained by the telcos, we expect MVAS to support the ARPUs of the telecom operators to some extent going forward & thereby boost their margins.

### Indian MVAS Market (Rs bn)



Source: Internet & Mobile Association of India (IAMAI)

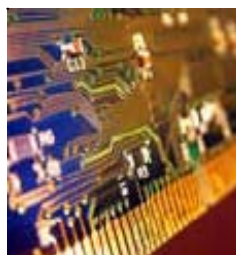
### MVAS Ecosystem & Revenue Distribution



End user pays for Content / service / voting



Mobile operator keeps 60-80% of the revenue



Technology enabler gets 10-20% of the revenue



Content Aggregator gets 10-15% of the revenue



Content owner gets 5-10% of the revenue

Source: Internet & Mobile Association of India (IAMAI)

### MVAS Revenue Distribution:

	MVAS Revenue Percentage	MVAS Revenue (In Rs Crores)
Mobile Operator	60-80%	Rs 2185-2910 Crores
Technology Enabler	10-20%	Rs 364-730 Crores
Content Aggregator	10-15%	Rs 364-545 Crores
Content Owner	5-10%	Rs 180-364 Crores

Source: Internet & Mobile Association of India (IAMAI)

## TOWER SHARING BUSINESS: UNITED WE STAND...

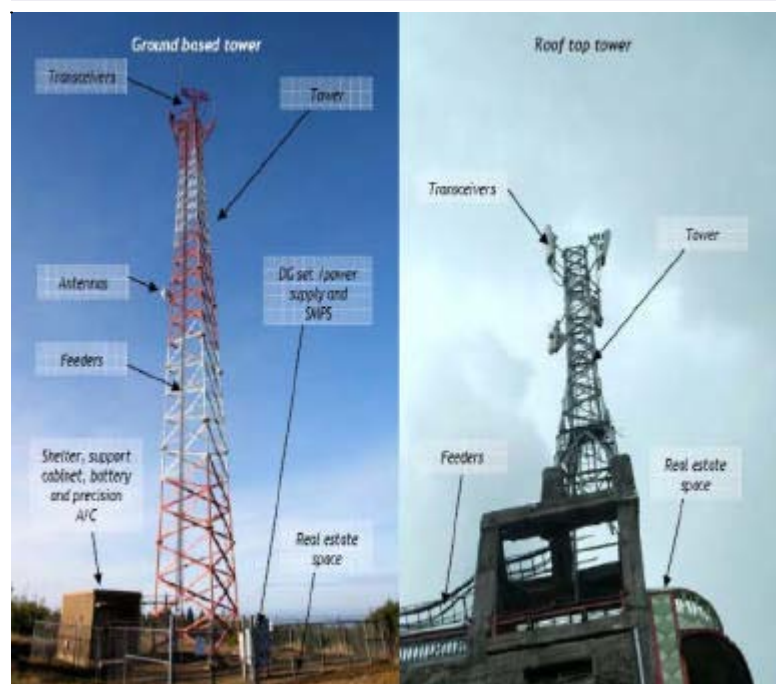
Passive infrastructure-sharing refers to sharing of physical sites, buildings, shelters, towers, masts, power supply and battery back-up. Active infrastructure sharing is about accessing a common antenna, feeder cable, radio access network, node and transmission system. The DoT has allowed passive & active infrastructure sharing in an attempt to reduce costs & boost rural network coverage. Infrastructure sharing

leads to capex & opex savings which in turn help faster network rollouts, increased network coverage, better quality of services & healthy overall margins. The need for tower sharing will increase immensely in the current liquidity-credit crunch & economic downturn as companies slow down their capex plans, reduce leverage & conserve cash.

### Tower Estimates

Tower demand is expected to remain robust going forward as the incumbents roll out networks deeper into untapped rural areas & concentrate on network quality in dense metros. The series of newer licensees planning to launch operations will keep the tower demand buoyant. We expect the total no of towers to increase at a 23% CAGR from about 210K towers in FY08 to about 392K towers by FY11. We expect the average tenancy ratios to increase significantly from around 1.1 in FY08 to about 1.7 in FY11. The subs/BTS is expected to come down consistently in order to improve Quality of Services (QoS) & increase coverage in sparsely populated rural areas.

### Passive infrastructure components



Source: GTL Infra Company Reports

### Telecom Tower Projections

		FY08E	FY09E	FY10E	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
Indus Towers ( JV between Airtel, Idea & Vodafone operational in 16 circles)	No of Towers	72000	95000	110000	125000	135000	143000	150000	155000	160000	165000
	Tenancy Ratio	1.22	1.51	1.69	1.80	1.92	2.05	2.17	2.29	2.40	2.48
Bharti Infratel (Subsidiary of Airtel operating in 7 Non-Indus circles)	No of Towers	21,000	27,906	34,842	39,167	42,301	44,957	46,943	48,450	49,493	50,253
	Tenancy Ratio	1.15	1.35	1.54	1.63	1.72	1.81	1.89	1.98	2.06	2.11
Reliance Infratel (Subsidiary of Reliance operating in all 23 circles)	No of Towers	36,500	50,364	58,397	66,798	72,655	79,736	86,205	92,028	94,388	96,777
	Tenancy Ratio	1.20	1.44	2.02	2.11	2.16	2.22	2.27	2.32	2.37	2.42
BSNL + MTNL (State Owned Companies)	No of Towers	38500	49,468	55,385	61,361	65,396	70,177	74,447	78,218	79,723	81,236
	Tenancy Ratio	1.00	1.05	1.35	1.40	1.50	1.60	1.70	1.80	1.85	1.90
Wireless T T Info Services (Tata Tele - Quippo Telecom JV in all 23 circles)	No of Towers	18000	22,000	30,000	36,000	40,000	42,000	44,000	46,000	48,000	50,000
	Tenancy Ratio	1.25	1.35	1.70	1.80	1.90	2.00	2.10	2.20	2.25	2.30
GTL Infrastructure (Present in 15 circles)	No of Towers	6500	11000	15000	18000	20000	21000	21500	22000	22500	23000
	Tenancy Ratio	1.00	1.26	1.44	1.55	1.75	1.85	1.95	2.05	2.10	2.15
Essar Telecom Infrastructure (Part of Essar Group, present in 13 circles)	No of Towers	7000	11000	15000	18000	20000	21000	21500	22000	22500	23000
	Tenancy Ratio	1.00	1.26	1.44	1.55	1.75	1.85	1.95	2.05	2.10	2.15
Other Operators (Towers by Idea & Vodafone in Non-Indus Circles + Aircel + Other Operators)	No of Towers	10000	20000	25,000	30,000	35,000	40,000	45,000	50,000	55,000	60,000
	Tenancy Ratio	1.20	1.26	1.35	1.40	1.50	1.60	1.70	1.80	1.85	1.90
Total Towers		209,500	286,737	343,625	394,325	430,351	461,870	489,595	513,696	531,603	549,266
Total BTS		242,108	388,906	560,105	678,500	786,434	889,809	989,326	1,087,102	1,161,510	1,231,612
Average Occupancy Ratio		1.16	1.36	1.63	1.72	1.83	1.93	2.02	2.12	2.18	2.24
Total Wireless Subs (Mn)		261	381	494	575	640	700	750	790	820	850
Implied Sub/BTS		1,078	981	882	847	814	787	758	727	706	690

Source: Companies, Kotak Securities - Private Client Research

\* Tata Teleservices & Quippo towers have announced a deal to merge their tower portfolio into an independent tower company

## COMPANIES

**Siddharth Shah**  
siddharth.s@kotak.com  
+91 22 6621 6307

### Stock details

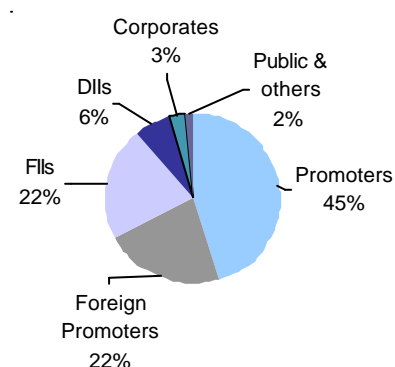
BSE code	: 532454
NSE code	: BHARTIARTL
Market cap (Rs mn)	: 1218516
Free float (%)	: 32.85%
52-wk Hi/Lo (Rs)	: 950/484
Avg. daily volume BSE	: 812491
Avg. daily volume NSE	: 4002135
Shares o/s (mn)	: 1898

### Summary table

(Rs mn)	FY08	FY09E	FY10E
Sales	270,250	370,733	453,901
Growth (%)	45.9	37.2	22.4
EBITDA	113,715	152,304	188,266
EBITDA margin (%)	42.1	41.1	41.5
Net Profit	67,007	82,343	98,882
Net debt (cash)	86,133	65,783	56,436
EPS (Rs)	35.3	43.4	52.1
Growth (%)	57.3	22.8	20.0
CEPS	54.9	68.2	82.5
DPS (Rs)	-	-	2.6
ROAE (%)	37.4	31.5	28.4
ROACE (%)	26.3	23.3	22.6
EV/Sales (x)	4.8	3.5	2.8
EV/EBITDA (x)	11.5	8.4	6.8
P/E (x)	18.2	14.8	12.3
P/Cash Earnings	11.7	9.4	7.8
P/BV (x)	5.5	4.0	3.1

Source: Company,  
Kotak Securities - Private Client Research

### Shareholding pattern



Source: Capitaline

### One-year performance (Rel to Sensex)



Source: Capitaline

## Bharti Airtel Ltd

**PRICE: Rs.642**

**RECOMMENDATION: ACCUMULATE**

**TARGET PRICE: Rs.730**

**FY10E: EV/EBITDA: 6.8x; P/E: 12.3x**

### Strong and Resilient in turbulent times...!!

We initiate coverage on Bharti Airtel, India's leading telecom operator, with an 'ACCUMULATE' Recommendation and DCF-based target price of Rs 730 per share. Bharti Airtel, with its undisputed market leadership, strong management team, high governance standards, integrated business model, extensive population coverage, peaking capex cycle, low debt burden, potential 3G value accretion, high earnings visibility and strong cash flow expectations, is a strong defensive bet in wake of the current difficult economic conditions. The company has significantly outperformed its peers as well the benchmark over the past one year. We will turn more aggressive in case of any major price decline. We initiate coverage with 6-month price target of Rs 730 and recommend accumulating at each decline.

### Investment Summary

- Strong Wireless growth Momentum:** Bharti's wireless subscriber growth momentum has been unabated even in the wake of high inflationary & slowing economic conditions and has accelerated to about 2.7 Mn/Month. With the majority of incremental subscribers coming from under-penetrated B & C circles as well rural areas, Bharti Airtel with one of the most extensive network coverage stands to gain the most.
- Integrated Telecom player:** Bharti Airtel has shown excellent growth in Long Distance, Enterprise, Telemedia & passive infrastructure segments (35% of revenues now) & thereby decreased its dependence on wireless segment. We expect a relatively lower impact of regulatory measures for further tariff rationalization like reduction in termination charges & introduction of net telephony, calling cards, etc. because of the integrated business model of the company.
- Superior (3G ready) subscriber Base:** Bharti Airtel already has a huge subscriber base of over 88 Mn subscribers & has one of the highest ARPUs in the industry (Rs 324/month). The higher ARPUs indicate high usage / corporate customers with advanced handsets that are more likely to adopt VAS and the much-awaited 3G services. Hence, the company stands to gain the most from the upcoming 3G revolution by leveraging this superior subscriber base.
- Strong Balance Sheet - At the Peak of 2G Capex Cycle:** Bharti Airtel, although near the peak of its 2G network rollout & capex cycle, has just Rs 59 Bn net debt (net debt / equity = 0.2) on its balance sheet. We think that the company is well poised for the upcoming 3G auctions due to its strong balance sheet & healthy cash flow expectations.
- Passive Infrastructure Sharing:** The passive infrastructure sharing is all set to get a boost as the existing/new operators try to rationalize the costs/capex due to the current credit crunch. The upcoming 3G & WiMAX auctions will provide further upside to passive infra valuations due to increased demand for towers.
- New Business Ventures:** Capitalizing on the existing network infrastructure & extensive distribution points, Bharti Airtel has launched its DTH and IPTV services to extend the customer experience & increase the share of wallet. The company has also launched 2G & 3G services in Sri Lanka which is expected to show strong uptake.

- **Valuations:** We have arrived at a price target of Rs 730 for Bharti Airtel using DCF based valuation with a WACC of 11.8% and terminal growth rate of 3.5%. We value the core business at 605 Rs/share (WACC 12.1%, G 3.5%) and Bharti Infratel stake at 125 Rs/share (WACC 10.3%, G 3.5%). Our target price is 14x FY10 earnings and 7.5 x FY10 EV/EBITDA. The company has significantly outperformed its peers as well the benchmark over the past one year. We will turn more aggressive in case of any major price decline. We initiate coverage with 6-month price target of Rs 730 and recommend accumulating at each decline.

**Risks to Our Recommendation:**

- The company has the highest MOU levels in the industry & has shown considerable usage elasticity. Steeper than expected fall in MOUs due to economic slowdown or freebies from competitors remains a downside risk.
- Delays in 3G auctions/spectrum allocations or failure in successfully bidding may provide downside as the company would not be able to leverage upon its competitive strengths - strong balance sheet & high ARPU subs.



## BHARTI GROUP

Bharti Enterprises is one of India's leading business groups with interests in telecom, agri business, insurance and retail. The integrated telecom operator Bharti Airtel has been a pioneer in the Indian telecom revolution and is the flagship company of the group. The other businesses in the group are Beitel (communication and media devices), Bharti AXA (financial services JV with AXA of France) and Bharti Del Monte India (joint venture with Del Monte to offer fresh and processed fruits and vegetables in the domestic as well as international markets). Bharti has also forayed into the retail sector with its subsidiary Bharti Retail which has entered into a joint venture with Wal-Mart for setting up the supply chain, logistics and cash and carry to support the burgeoning retail market in India.

### Bharti group



Source: Company

### Bharti Airtel – An Integrated Telecom Player

Bharti Airtel is India's largest & fully integrated telecom operator and the first private telecom services provider with a footprint in all the 23 telecom circles. It provides a wide range of telecom offerings in form of mobility services, landline & broadband, national and international long distance carrier and data connectivity services to corporate, small and medium scale enterprises, DTH, IPTV and passive infrastructure services.

Bharti Airtel offers GSM mobile services in all the 23-telecom circles of India and is the largest mobile service provider in the country with over 88 Million subscribers (24.4% market share). Telemedia Services offers landline & high speed broadband services to about 2.6 Million customers in top 95 cities. Enterprise services provide end-to-end telecom solutions to corporate customers and national & international long distance services to carriers. The company has over 90,205 route kilometers of long distance optical fiber network. For international connectivity to east, it has a submarine cable landing station at Chennai. For international connectivity to the west, the Company is a member of the South East Asia-Middle East-Western Europe – 4 (SEA-ME-WE-4) consortium along with 15 other global telecom operators. The company also owns an extensive network of 61,355 telecom towers, now hived off to its subsidiary Bharti Infratel. Bharti Infratel is in the process of transferring around 35,000 towers in 16 Circles to a 3-way JV, Indus Towers, formed with Vodafone & Idea Cellular. The company has also entered the home entertainment business recently with the launch of quality DTH & IPTV offering. Bharti Airtel has also become the fifth operator to launch 2G & 3G wireless services in Sri Lanka.

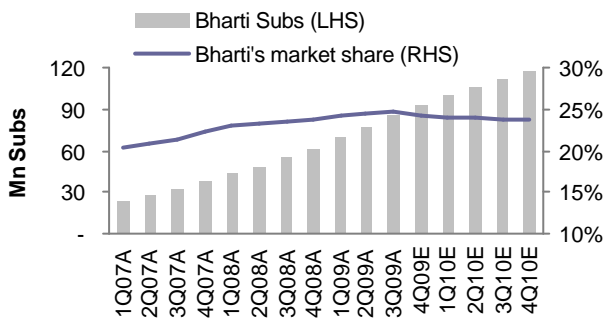
## WIRELESS BUSINESS: STRONG MOMENTUM CONTINUES...

Bharti Airtel has established a leadership position in the Indian Wireless space with the one of the most extensive network coverage (88,319 cell sites) and with over 88 Million subscribers (24.4% of the Indian wireless market). The company has been a pioneer in the Indian telecom space and is an undisputed trend & tariff setter. Along with the highest subscriber base, the company also has the high usage subscribers with one of the highest MOUs (505 Mins/month) & ARPUs (324 Rs/month) in the Industry.

### Subscriber Leadership to continue...

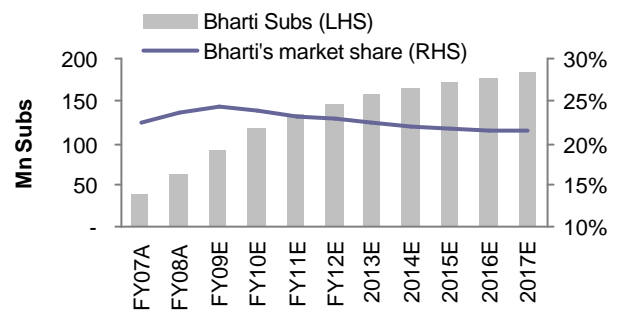
Bharti Airtel has shown a strong multi-fold growth in wireless subscriber base from 32 million in Dec 06 to about 85 million subs at the end of Dec 2008. The net subscriber additions have seen a strong acceleration from about 1.3 million to above 2.7 million subs per month. Even after considering lower net adds share due to increase in competition in the coming quarters, we expect Bharti Airtel to have over 117 Mn subs by FY10 & over 182 Mn subs by FY17. Higher than expected churn after implementation of Mobile Number Portability & significant uptake from alternative technologies like WiMAX remain a downside risk to our estimates.

**Bharti Airtel: Wireless Subscriber Base**



Source: Company, Kotak Securities - Private Client Research

**Bharti Airtel: Wireless Subscriber Base**

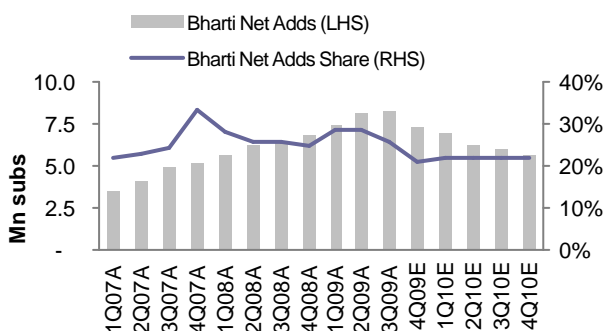


Source: Company, Kotak Securities - Private Client Research

### Market share to reduce marginally as peers catch up...

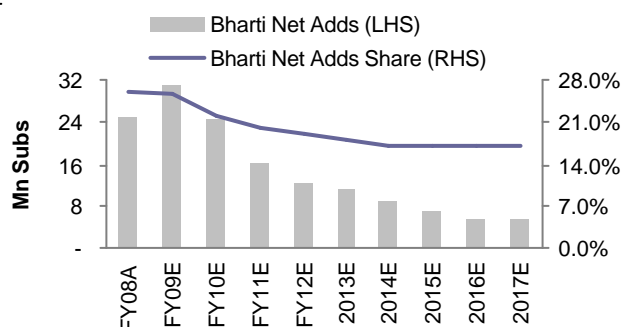
The launch of GSM services in newer circles by a series of formidable competitors like Vodafone, Rcom & Idea Cellular is expected to alter the subscriber addition dynamics to some extent. These launches are soon to be followed by Airtel, Tata Teleservices (GSM) & 5-6 other newer licensees. We expect the net adds share of Bharti Airtel to reduce substantially to about 17% from current 25% & the overall market share to dip by 2-3% in the coming years. However, the effect on valuations would be marginal as Bharti Airtel has already garnered a larger subscriber base of high ARPU customers & the new net additions are mostly low usage rural & life-time customers.

**Bharti Airtel: Wireless Net Additions**



Source: Company, Kotak Securities - Private Client Research

**Bharti Airtel: Wireless Net Additions**



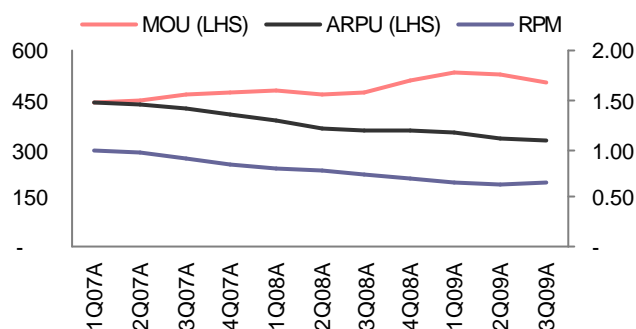
Source: Company, Kotak Securities - Private Client Research



### Superior (3G ready) subscriber Base

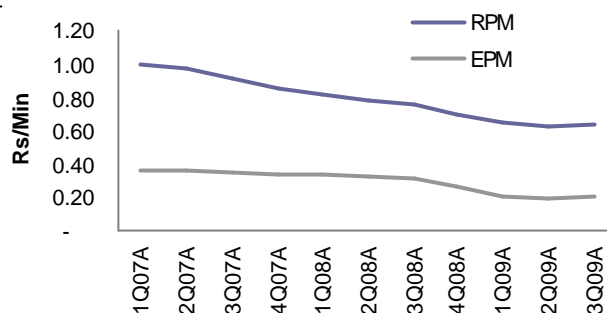
Bharti Airtel continues to lead the wireless market in term of subscriber as well as revenue share. The company has substantial high usage/corporate customers who have shown strong usage elasticity. The MOUs have increased sharply from around 430 Mins/Month to about 505 Mins/Month and are far higher than other industry players. Although the ARPUs have fallen from over 440 to about 324, the fall has been lower than most implying superior high usage subscriber base.

#### Bharti Airtel: Elasticity of Usage



Source: Company

#### Bharti Airtel: Realizations



Source: Company

### Extensive Network Coverage

Bharti Airtel has increased its population coverage substantially from about 42% in March 2006 to about 79% currently. It covers 5057 census towns & 401882 Non-Census Towns & villages. The company has 61355 telecom towers, 88319 cell sites and 90205 Kms of domestic optical fiber network as of December 2008.

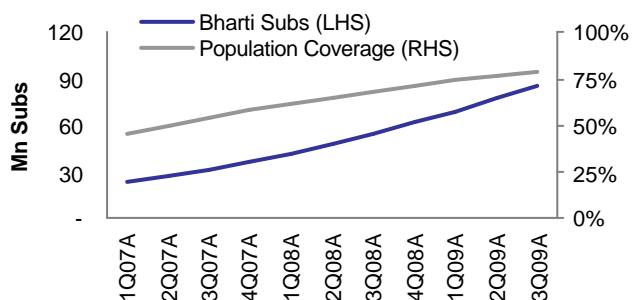
#### Bharti Airtel - Network coverage

	4Q06	1Q07	2Q07	3Q07	4Q07	1Q08	2Q08	3Q08	4Q08	1Q09	2Q09	3Q09
<b>Wireless Segment</b>												
Census Towns	3778	4026	4357	4581	4676	4855	4876	4902	5023	5048	5050	5057
Non-Census Towns and Villages	80687	101614	155076	176593	207327	243584	290000	320623	342623	364287	384521	401882
Population Coverage (RHS)	42%	46%	50%	54%	59%	62%	65%	68%	71%	74%	77%	79%
Telecom Towers	NA	NA	NA	NA	NA	NA	NA	NA	52,865	58,013	59,966	61,355
Network Sites	NA	NA	NA	NA	NA	NA	52826	60299	69141	75876	82554	88319
<b>Long Distance Carrier</b>												
Optic Fibre Network (RHS)	32,900	35,016	36,151	39,330	40,484	43,658	55,574	67,138	73,787	78,540	83,389	90,205

Source: Company; NA : Not Available

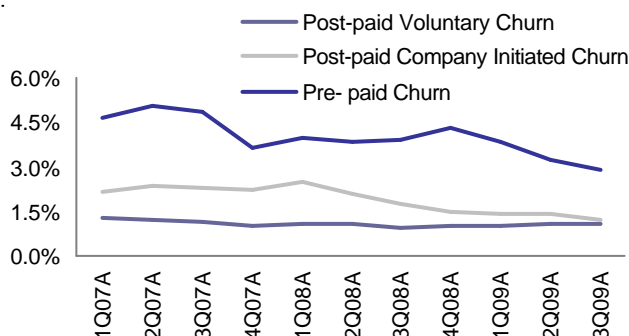
We attribute the stellar performance of the company partly to its first mover's advantage and aggressive network rollout as compared to its peers. The company had been the only GSM operator with pan-India presence and has a deep wireless coverage even in under-covered/under-penetrated B & C circles.

#### Bharti Airtel: Extensive Network Rollout



Source: Company

#### Bharti Airtel: Churn Rates



Source: Company

### Moderating Churn Rates

The churn rates for the prepaid segment (>93% of total subs) has been decreasing steadily for Bharti Airtel from around 5% a month to around 2.9% a month. The churn rates in the high ARPU post-paid subs too have been moderating consistently. Since the company has already built up a huge subscriber base of over 85 Mn subs, higher than expected churn post the implementation of MNP remains the most crucial downside risk to our valuation.

### Lower Capex Requirements

With 2G population coverage reaching over 79%, Bharti Airtel is near the peak of its capex cycle. We expect the company to start generating significant positive cash flows in coming years as 2G capex starts moderating.

#### Bharti Airtel - Capex Assumptions

	FY08A	FY09E	FY10E	FY11E	FY12E	2013E	2014E	2015E	2016E	2017E
Capex (Rs mn)	138000	149930	158865	105764	83082	71148	56449	52880	51694	49928
Capex/Sales (%)	51%	40%	35%	21%	15%	12%	9%	8%	8%	7%
Capex/Sub (Rs)	2,226	1,614	1,352	791	569	453	341	307	292	274
Capex/Min (Rs)	0.41	0.27	0.21	0.12	0.09	0.07	0.05	0.05	0.04	0.04
Capex/Incremental Sub (Rs)	129	113	150	152	156	153	154	181	236	228
Capex/Incremental Min (Rs)	0.92	0.70	0.80	0.83	0.88	0.96	0.84	1.09	1.29	1.49

Source: Company, Kotak Securities - Private Client Research

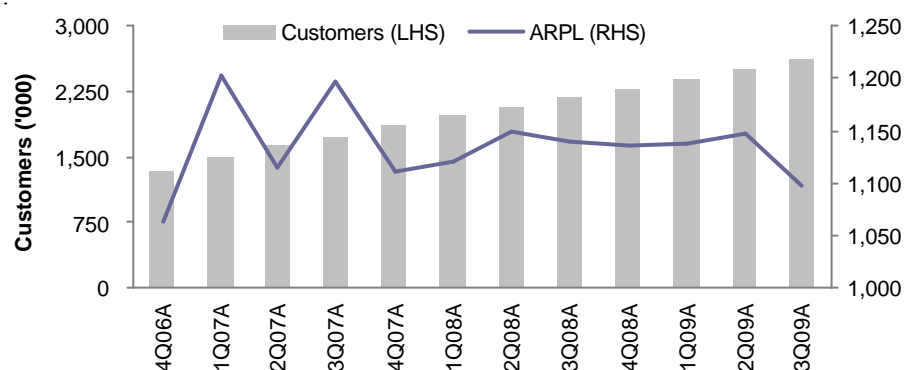
### Sri Lanka Operations

Bharti Airtel has recently entered Sri Lanka as the fifth mobile operator and has launched 2G & 3.5G wireless services under the Airtel brand. The company plans to invest USD 200 Mn over the next five years for Sri Lanka operations of which USD 100 Mn may be spent in near term. The management is upbeat on the business prospects and is determined to extend its low-cost business model overseas. It will compete against Dialog Telekom, owned by Telekom Malaysia, Celltel, owned by Millicom, Mobitel, owned by state-run Sri Lanka Telecom, and Hong-Kong-owned Hutchison Telecommunications Lanka.

## TELEMEDIA BUSINESS: PROFITABLE GROWTH DUE TO CHERRY PICKING STRATEGY..

Under its Telemedia segment, Bharti Airtel provides fixed line telephone service and broadband (DSL), spanning over 15 circles covering 95 cities. The company follows a cherry picking strategy focused on cities with high revenue potential unlike a mass market strategy followed in the mobile services segment. The reason behind following this strategy is the high acquisition cost per subscriber. The company has to lay optic fiber network till the house of the customer and if the customer churns out very fast it becomes a dead investment for the company unlike mobile service where the customer acquisition cost is minimal. We expect slower growth momentum in near term due to lower uptake from SMB segment impacted by the economic slowdown. However, we expect strongly profitable growth in longer term due to the cherry picking strategy & immense potential in the broadband market in India.

### Bharti Airtel: Telemedia Services



Source: Company

### Bharti Airtel: Telemedia and Home business

Business Units	Media	SMBs	Homes
Products	<ul style="list-style-type: none"> <li>DTH</li> <li>IPTV</li> </ul>	<ul style="list-style-type: none"> <li>Voice</li> <li>Data</li> <li>Mobile Services</li> </ul>	<ul style="list-style-type: none"> <li>Broadband</li> <li>Voice</li> </ul>
Goal	<ul style="list-style-type: none"> <li>A Pan-India DTH Businesses;</li> <li>A targeted IPTV Presence in top metros</li> </ul>	<ul style="list-style-type: none"> <li>One-Stop Shop for All Airtel Services and Solutions to SMBs</li> </ul>	<ul style="list-style-type: none"> <li>Dominant Broadband &amp; Fixed Voice share of the affluent in targeted 94 cities</li> </ul>
Strategies	<ul style="list-style-type: none"> <li>Best-in-class Technology;</li> <li>World-class Installation &amp; Customer Service</li> <li>Interactive VAS to Drive ARPU enhancement</li> <li>One Airtel Synergies for Distribution, Brand &amp; IT</li> </ul>	<ul style="list-style-type: none"> <li>Data Products: Internet, MPLS etc</li> <li>Integrated Solutions to Drive Share of wallet</li> <li>Strategic Alliances</li> <li>Indirect Channel to Drive Penetration</li> </ul>	<ul style="list-style-type: none"> <li>Deeper &amp; Not Wider: 94 Cities</li> <li>Vertical &amp; Not Horizontal: Hi-Rise</li> <li>Network Enhancement to Deliver 8+ MBPS</li> <li>New Products &amp; VAS to drive Flat, Combo Plans</li> </ul>

Source: Company

## **AIRTEL DIGITAL TV: COME HOME TO MAGIC..!!**

In Oct 2008, Bharti launched Airtel digital TV, its Direct to Home (DTH) TV service in 62 cities across the country. Airtel digital TV uses the latest MPEG4 standard with DVB S2 technology, which translates into excellent picture clarity, consistent high quality audio & is High Definition ready. With Airtel's strong brand equity and wide distribution network, we think that the company is well placed to emerge as a leading player in the DTH segment.

### **Infosys' Digital Convergence Platform**

Bharti has entered into an innovation and technology partnership with Infosys Technologies to provide a suite of products including devices and interactive applications providing an Internet-like television-viewing experience with online shopping, personalized stock quotes, news, local events and traffic updates on Airtel digital TV.

### **Revenue Estimates:**

We see Bharti Digital TV as a high quality offering with excellent interactive features & targeting the premium segment resulting in better than industry ARPU's and margins. Although the segment will show robust revenue growth in near term, it will take 10-12 quarters to breakeven at EBITDA levels due to high upfront set-up box subsidies, startup packages & lower economies of scale initially. We will factor the segment in our valuations once the company starts reporting its KPIs on regular basis.

## **ENTERPRISE SERVICES**

Bharti Airtel provides long distance wholesale voice and data services to carrier customers as well as to other business units of Bharti Airtel. It also offers virtual calling card services in the overseas market. The business unit owns a state of the art national and international long distance network infrastructure enabling it to provide connectivity services both within and outside India. Although the segment has excellent margins & longer term growth potential, we expect muted performance in near term due to slowdown in global bandwidth demand, launch of long distance calling cards by standalone carriers & delays in capex plans of enterprises hit by economic slowdown.

### **Submarine Cable Systems:**

For international connectivity to the east, it has a submarine cable landing station at Chennai & "Network i2i" submarine cable system between Chennai and Singapore. The company has partnered with SingTel to create "Network i2i" submarine cable system with 8.4 Tbps capacity. This 3200 km undersea cable structure stretches from Chennai to Singapore and thereon to Tier-1 carriers on SingTel's capacity on 175,000 km of cables.

For international connectivity to the west, it is, jointly with 15 other global telecom operators, a member of the South East Asia - Middle East - Western Europe - 4 (SEA ME WE 4) consortium that has commissioned the fourth generation cable system. Se-Me-We-4 is the new undersea cable connecting the Pacific to the Atlantic, and has been built with 4th generation Terabit DWDM technology. On its 20,000 km journey from Singapore to France, it lands in each of the 13 countries along the way. The company also has other international tie ups to provide capacity, speed & seamless connectivity across the globe.

**Bharti Airtel - ILD & NLD Optical Fiber Network**



Source: Company Website

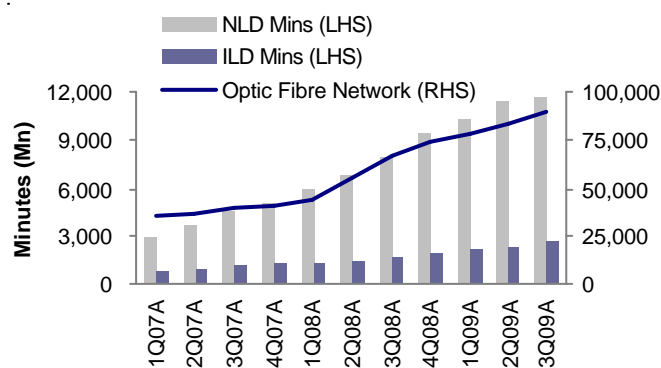
**Domestic Optical Fiber Network**

The NLD infrastructure comprises of 90,205 route kilometers (rKms) of optic fiber cable as on Dec 2008 which has increased from 39,330 rkms in Dec 2006. This advanced national fibre-optic network covers India's top 200 cities and powers the services of India's leading private telecom service providers - cellular, fixed line and internet.

**Enterprise Services - Long Distance Carrier:**

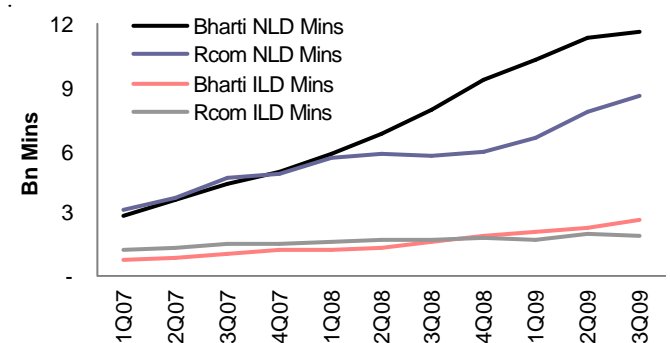
Bharti Airtel has shown excellent growth in National & International long distance traffic carried through its well entrenched optical fibre network. The NLD traffic has increased multifold from 4.42 Bn mins in Dec 2006 to 11.61 Bn mins in Dec 2008. The ILD mins too has shown excellent growth with an increase from 1.06 Bn in Dec 2006 to 2.60 Bn mins in Dec 2008. The growth in the long distance mins carried over its network has been higher than its peers like Reliance communications / Tata Communications.

**Bharti Airtel: Long Distance Carrier Business**



Source: Company

**Long distance Carrier Segment**



Source: Companies

The NLD and ILD minutes are expected to continue to grow at a healthy rate in line with the increase in mobile and fixed line minutes. About 90% of the long distance traffic is captive as Bharti has a strong presence in metros with high long distance usage. We expect the company to continue its robust growth in NLD mins from about 30 Bn mins in FY08 to about 58 Bn mins in FY10. ILD traffic too is expected to increase significantly from 6 Bn Mins to over 13 Bn mins in FY10. This would be on the back of robust captive subscriber growth, increased affordability & usage of long distance calls and higher traffic from the newer entrants in the telecom sector. However, there could be some impact of the launch of long distance cards by standalone carriers, the interconnection deals on which are yet to be worked out.

### Enterprise Services – Corporate:

Under this segment Bharti Airtel provides secure, scalable and customized integrated solutions of voice and data communications to corporate, small and medium scale enterprises, thus offering total telecom solutions through a single window. This is a very high margin business for the company as there is limited competition in this segment. The company is targeting 1000 top large corporate and 20003000 medium multi location companies. Although, the segment is expected to show robust growth & margins in longer run, there could be near term challenges as the enterprises cut-back on their capex plans in the difficult economic conditions.

#### Bharti Airtel - Enterprise business

(Rs mn)	FY08A	FY09E	FY10E	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
<b>Enterprise Services (Long Distance - Carrier)</b>										
ILD Voice (Mn Mins)	6,029	9,757	13,226	15,052	16,442	17,658	18,615	19,380	19,954	20,528
NLD Voice (Mn Mins)	29,926	45,701	58,129	66,157	72,266	77,609	81,813	85,177	87,700	90,222
Revenue	43,170	68,840	80,679	90,197	98,526	105,810	111,542	116,128	119,568	123,007
Revenue Growth (%)	24	59	17	12	9	7	5	4	3	3
EBITDA	14,310	30,551	35,197	39,260	42,787	45,844	48,216	50,082	51,446	52,803
EBITDA Margin (%)	33	44	44	44	43	43	43	43	43	43
<b>Enterprise Services (Corporates)</b>										
Revenue	13,217	17,022	18,087	20,697	22,958	24,883	26,629	28,204	29,197	30,049
Revenue Growth (%)	46	29	6	14	11	8	7	6	4	3
EBITDA	6,123	7,329	7,603	8,659	9,559	10,310	10,981	11,574	11,923	12,211
EBITDA Margin (%)	46	43	42	42	42	41	41	41	41	41

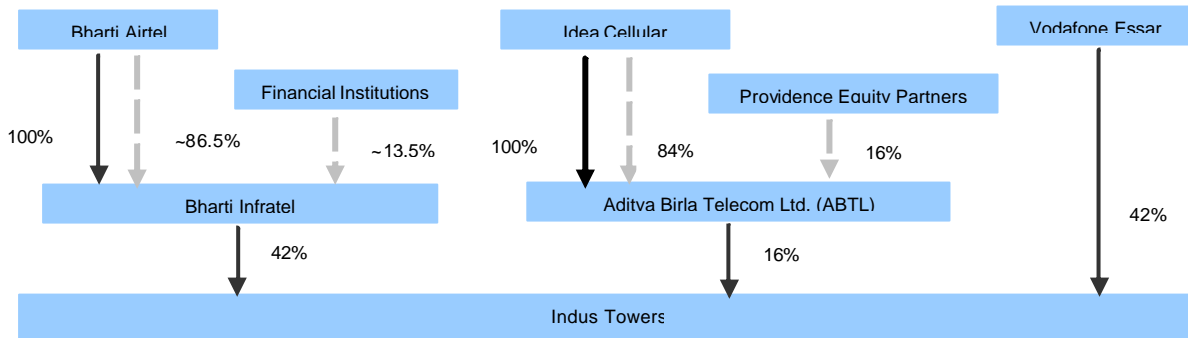
Source: Company, Kotak Securities - Private Client Research



### INDUS TOWERS:

Indus Towers is a three-way Joint venture between Bharti Airtel, Vodafone-Essar & Idea Cellular to pull together & share passive infrastructure components. Bharti & Vodafone had agreed to pull together around 35,000 telecom towers each while Idea was expected to add around 11,000 towers in the 16 telecom Circles where Vodafone had operations. Bharti & Vodafone owns 42% stake each in Indus Towers while the balance 16% is owned by Idea Cellular's subsidiary Aditya Birla Telecom Ltd. (ABTL). Indus towers, with 3 assured tenants in terms of JV partners, stands to gain the most from the increased focus on sharing due to economic slowdown & difficult credit environment.

#### Indus shareholding pattern

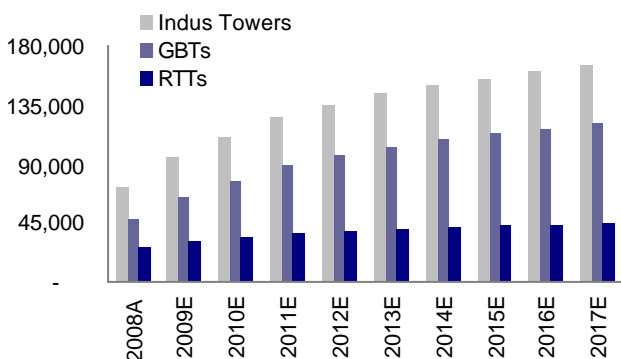


Source: Company Reports, Kotak Securities - Private Client Research

We have estimated the subscriber bases for Bharti, Vodafone & Idea Cellular in the Indus circles going forward and the number of base transceiver stations (BTSs) required to support them. We have not factored in any incremental BTSs due to 3G & WiMAX rollouts by the JV partners. We do not foresee aggressive WiMAX rollouts from Vodafone or Idea & the 3G rollouts may be limited to the major cities initially. We will incorporate the same in our estimates, once the 3G/WiMAX spectrum is allotted and there is more clarity on the rollout plans. We also expect Indus towers to offer passive infrastructure services to the new entrants once the needs of the JV partners are satisfied.

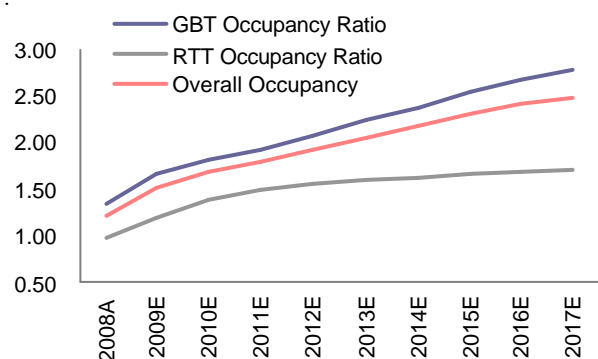
Indus towers is expected to be formed with about 35,000 towers each from Bharti & Vodafone while Idea cellular will transfer about 11,100 towers. We estimate 65% of the existing & about 80% of incremental towers to be ground based in order to facilitate infrastructure sharing. The RTTs can support only 2-3 BTSs while the GBTs can support as high as 4-7 BTSs depending on the height & strength of the foundation. We expect Indus to own 125,000 towers (1.8 occupancy) by FY11 as compared to about 86000 towers (~1.3 occupancy) currently.

#### Indus Tower Portfolio



Source: Company, Kotak Securities - Private Client Research

#### Indus Occupancy Ratios



Source: Company, Kotak Securities - Private Client Research



## BHARTI INFRA TEL

Bharti Infratel is the passive infrastructure arm of Bharti Airtel which would lease towers to Bharti and other operators in 7 non-Indus circles (6 'C' circles and MP). It also holds 42% stake in the Joint Venture called Indus towers formed between Bharti Airtel, Vodafone & Idea Cellular in the remaining 14 Circles. As on Sep 2008 it had 61355 towers, out of which approx 35000 towers would be transferred to Indus Towers, and the rest will remain with Bharti Infratel. We expect Bharti Infratel to show significant traction as the telcos rush to the underpenetrated C circles in search of subscribers.

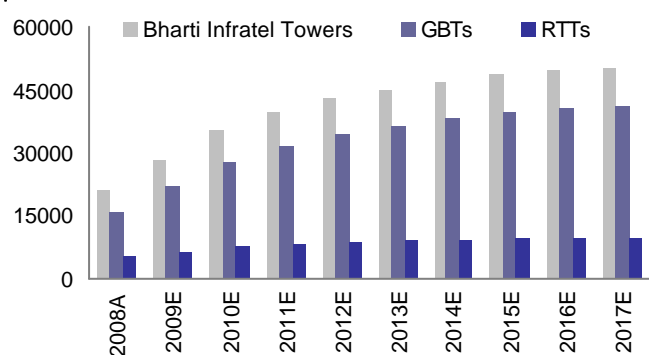
### Business Opportunity

Due to fewer no of operators in 'C' circles, the penetration levels are substantially lower in most of these circles (less than 20%). With penetration levels in metros approaching over 100% & high competition in A & B circles, the operators are now looking to capture untapped markets in C circles. We expect Bharti Infratel to see sustained demand & increase in tenancy due to rapid roll outs by other incumbents and newer licensees. We expect the no of towers to increase from about 25000 towers in Dec 2008 to over 40000 towers by March 2011. The tenancy ratio too is expected to rise substantially from 1.2 in March 2008 to 1.6 in March 2010.

### Funding

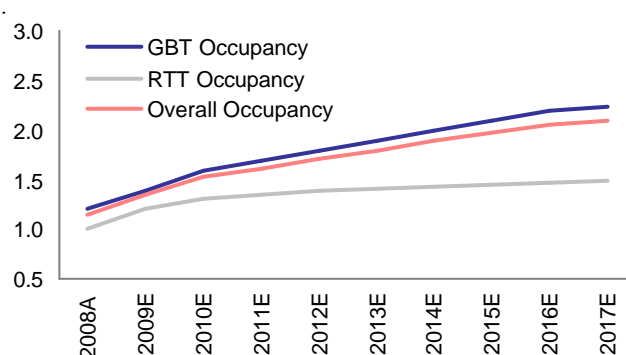
To fund its capex plans, Bharti Infratel has secured PE investments worth \$ 1.35 bn from international investors. As per the deal the valuation of Infratel has been pegged at \$10bn - \$12.5 bn. The final valuation would be within this range and will be determined based on the actual operating performance in FY09. The equity dilution will be in the range of 10.8% - 13.5%. We have assumed 13.5% dilution in our valuations on a conservative basis. Lower than expected equity dilution, listing of Bharti Infratel or further PE investments at premium valuations remain upside risks to our estimates.

**Bharti Infratel (Standalone): Tower Estimates**



Source: Company, Kotak Securities - Private Client Research

**Bharti Infratel (Standalone): Occupancy Ratios**



Source: Company, Kotak Securities - Private Client Research



## TOWER DYNAMICS

We have assumed rentals payments of 35,500 Rs/month & 22,500 Rs/month for GBTs & RTTs respectively, resulting in a blended monthly rental of about 31,600 Rs/month. Although the tower companies have 3% annual escalation clauses, we expect the overall rentals to reduce by about 4-5% annually for next 3 years due to increased passive infrastructure sharing & the competitive scenario post the formation of independent tower companies.

Apart from the monthly rental payments, power/fuel costs are the major operational costs that are passed on to the telecom operators. The use of electricity in urban areas leads to a lower cost of 10000 Rs/month while use of diesel generators in rural areas may lead to fuel costs of as high as 24000 Rs/month. We have assume a blended passthrough cost of 16000 Rs/month for FY09 and 3-4% cost escaltions going forward.

The operating expenses of the tower companies include land lease rentals, repair & maintenance costs, AMC costs, security & employee costs as well as SG&A expenses. We estimate a land lease rental of Rs. 4000 / month, repair & maintenance costs of Rs.5000 / month & other operating expenses of Rs.11,000 / month for FY09.

The capital expenditure per tower is estimated to be around Rs.3.4mn for a GBTs & Rs.1.7mn for RTTs for FY09. We have assumed 3-4% annual escalation in rentals & passthrough costs as well as tower capex & opex costs.

### Tower Dynamics

	(In Rs)
GBT Capex/Tower	3,400,000
RTT Capex/Tower	1,700,000
GBT Rental/Tenant/Month	35,500
RTT Rental/Tenant/Month	22,500
Avg Rental/Tenant/Month	33,300
Passthrough/Tenant/Month	16,000
Land Rentals/Tower/Month	4500
Repair & Maintenance/Tower/Month	5000
Other Opex/Tower/Month	11500
Total Opex/Tower/Month	21000

Source: Kotak Securities - Private Client Research

### 3Q RESULTS: STRONG GROWTH MOMENTUM CONTINUES...

Bharti Airtel continued its stellar quarterly performance in 3Q09 with revenues of Rs. 96.3 Bn (6.8%qoq, 38%yoy), EBITDA of 39.5 Bn (6.6% qoq, 33% yoy) & net profit of Rs. 21.6 Bn (5.5%qoq, 25%yoy). The EBITDA margins were maintained at 41% (flat qoq, -1.6%yoy). Fall in interconnection charges & employee costs (as % of revenues) compensated the rise in network operating costs, spectrum charges & SGA costs. The translation losses on outstanding foreign currency loans/payables stood at Rs 2.2 Bn (mostly notional as a significant part of the forex exposure is hedged). The tax expense was Rs. 2.6 Bn (10.4% tax rate). The capex for the quarter was Rs 38.7 Bn.

- **Wireless Segment:** Wireless revenues increased to Rs 79.4 Bn (9% qoq, 42% yoy), EBITDA grew to Rs 25 Bn (13.4% qoq, 9% yoy) & EBITDA margins improved by 120 bps to 31.4%. This has been on the back of strong subscriber growth (11%qoq, 55%yoy) & growth in total wireless mins (6.7%qoq, 67%yoy). The company added 8.2 Mn wireless subs in the quarter taking the total subscriber base to 86 Mn (24.7% market share, 25.9% net adds share). Total wireless mins stood at 123.6 Bn for the quarter. The MOUs fell 4% sequentially to 505 Min/month; RPMs improved 2% to 0.64 Rs/min & ARPUs fell 2% to 324 Rs/month. The capex for the wireless segment was Rs 21 Bn (26% of sales). Total cell sites increase by 7% sequentially to 88,319. We find the overall usage elasticity reducing substantially as MOUs increased just 7%yoy compared to 15%yoy fall in RPMs. Although the management assigns the steep decline in MOUs (4%qoq) to reduction in free usage plans, we are concerned as the decline has been on the back of a seasonally weak 2Q. However, we have assumed little usage elasticity in our valuations considering the slowing economy & low usage incremental subscribers.
- **Telemedia Segment:** Telemedia revenues declined marginally to Rs 8.5 Bn (-0.3%qoq, 15.8%yoy), EBITDA declined to Rs 3.5 Bn (-4.4%qoq, +11.3%yoy) and EBITDA margins contracted by 180 bps qoq to 41.7%. Total Telemedia subs increased 4.4%qoq to 2.6 Mn (DSL subs form 38%). ARPL declined 4.3% sequentially to 1098 Rs/Month. Total telemedia mins declined 5%qoq & stood at 4.75 Bn for the quarter. The capex for the segment was Rs. 4.3 Bn (51% of sales). We think find the usage & ARPLs under pressure due to lower uptake from the SMB segment impacted by the economic slowdown & expect the pressure to continue in near term.
- **Long Distance Segment:** Long distance revenues increased to Rs. 17.7 bn (4%qoq, 56%yoy), EBITDA increased to Rs 8 bn (10%qoq, 120%yoy) & EBITDA margins improved by 220 bps qoq to 45.4%. The revenues growth was impacted partially due to the full quarter impact of phasing out of ADC on ILD mins which subsequently resulted in EBITDA margin expansion. NLD mins stood at 11.6 bn (2.3%qoq, 47%yoy) & ILD mins stood at 2.6 Bn (14%qoq, 64%yoy). The capex for the segment was Rs 3.6 Bn (20% of sales). The company added 6800 kms of optic fiber taking the total network to 90205 Kms. We expect the segment to be impacted by the recent DoT approval for launch of long distance calling cards by various standalone NLD/ILD operators.
- **Enterprise - corporate segment:** Corporate revenues declined to Rs 4.1 bn (-16%qoq, +24%yoy), EBITDA declined to Rs 1.7 Bn (-13%qoq, 27%yoy) while the EBITDA margins increased by 150 bps qoq to 42.9%. The sequential decline has been due to completion of large no of projects, strong revenue recognition in the last quarter which saw over 25% growth qoq. The capex for the segment was Rs 0.4 bn (8% of sales). The segment, although as tremendous potential in longer term, is expected to remain under pressure in near term.

- Passive infrastructure segment:** Revenues increased to Rs. 12.7 bn (6%qoq), EBITDA increased to Rs 4.3 bn (6.7%qoq) & EBITDA margins improved by 22 bps qoq to 33.5%. The company added 1389 towers in the 3Q taking the total tower count to 61355. The tenancy ratio improved from 1.26 to 1.34. The rental per tenant declined 2% qoq to 31488 Rs/month. The company is expected to transfer about 35000 towers to Indus towers JV & retain the remaining under Bharti Infratel. The proportionate earnings (42%) from Indus towers will be reported under earnings from associates. The capex for the segment stood at Rs 8 Bn (64% of sales) for the quarter. We expect strong growth momentum in this segment as telcos increase infrastructure sharing to rationalize costs going forward.
- DTH Segment:** The Company reports DTH business under 'other segments' currently. Other revenues grew from Rs 911Mn to Rs 929 Mn qoq, while EBITDA loss increased from Rs 1284 Mn to Rs 2283 Mn. The segment is adding 100,000 subs/month. We await further disclosures from the company before valuing DTH business.
- Capex Guidance:** The Company has given a capex guidance of \$3.5 Bn for FY10 - \$2.5 Bn for core business, \$ 1Bn for passive infrastructure (including proportionate capex for Indus towers). We have not factored in any incremental capex on account of 3G / WiMAX auctions or rollout in our valuations.

**Bharti Airtel - Quarterly Results Analysis**

(Rs mn)	1Q08A	2Q08A	3Q08A	4Q08A*	1Q09A	2Q09A	3Q09A	QoQ %	YoY %	9MFY09	9MFY08	YoY %
Total revenues	59,046	63,374	69,639	78,191	84,833	90,203	96,334	6.8%	38.3%	271,370	192,059	41.3%
Interconnection costs	9,071	9,317	10,424	12,298	12,426	12,902	13,426	4.1%	28.8%	38,754	28,812	34.5%
License fee and spectrum charges	5,827	6,281	6,991	7,801	8,532	9,096	10,030	10.3%	43.5%	27,658	19,099	44.8%
Network operating costs	6,824	7,520	8,851	9,807	12,324	14,392	15,734	9.3%	77.8%	42,450	23,195	83.0%
Employee costs	3,512	3,745	3,789	3,722	3,967	4,209	4,311	2.4%	13.8%	12,487	11,046	13.0%
SG&A expenses	9,346	9,414	9,950	12,045	12,364	12,611	13,383	6.1%	34.5%	38,358	28,710	33.6%
Total Operating costs	34,580	36,277	40,005	45,673	49,613	53,210	56,884	6.9%	42.2%	159,707	110,862	44.1%
EBITDA	24,466	27,097	29,634	32,518	35,220	36,993	39,450	6.6%	33.1%	111,663	81,197	37.5%
EBITDA margin (%)	41.4%	42.8%	42.6%	41.6%	41.5%	41.0%	41.0%			41.1%	42.3%	
Depreciation	8,120	9,062	10,377	9,702	10,045	11,549	12,702	10.0%	22.4%	34,296	27,559	24.4%
EBIT	16,346	18,035	19,257	22,816	25,176	25,444	26,748	5.1%	38.9%	77,367	53,638	44.2%
EBIT Margin (%)	27.7%	28.5%	27.7%	29.2%	29.7%	28.2%	27.8%			28.5%	27.9%	
Net finance cost	(2,554)	564	225	1,684	1,362	5,720	2,119	-63.0%	841.8%	9,201	(1,765)	-621.3%
PBT	18,900	17,471	19,032	21,132	23,814	19,724	24,629	24.9%	29.4%	68,166	55,403	23.0%
Tax Rate	19.0%	6.5%	8.2%	9.9%	13.8%	-6.3%	10.4%			6.7%	11.4%	
Tax Expense	3,594	1,135	1,564	2,085	3,282	(1,247)	2,558	-305.1%	63.6%	4,593	6,293	-27.0%
Share of Minority and associates	191	197	244	518	282	508	478	-5.9%	95.9%	1,268	632	100.6%
Reported net income	15,115	16,139	17,224	18,529	20,250	20,463	21,593	5.5%	25.4%	62,305	48,478	28.5%
Net Profit Margin	25.6%	25.5%	24.7%	23.7%	23.9%	22.7%	22.4%	-1.2%	-9.4%	23.0%	25.2%	
EPS	7.98	8.52	9.09	9.78	10.68	10.78	11.38	5.5%	25.2%	32.84	25.59	
Capex (Rs Mn)	37,172	39,795	33,294	28,206	40,671	31,867	38,775					
Capex / Sales	63%	63%	48%	36%	48%	35%	40%					

**Wireless segment**

Total Revenues	46,976	50,579	56,105	64,201	69,150	72,843	79,392	9.0%	41.5%	221,385	153,659	44.1%
EBITDA	19,087	20,728	22,887	22,779	21,218	22,009	24,963	13.4%	9.1%	68,190	62,701	8.8%
EBITDA Margin (%)	40.6%	41.0%	40.8%	35.5%	30.7%	30.2%	31.4%			30.8%	40.8%	
EBIT	13,321	14,058	15,345	16,934	15,720	15,728	18,403	17.0%	19.9%	49,851	42,724	16.7%
EBIT Margin (%)	28.4%	27.8%	27.4%	26.4%	22.7%	21.6%	23.2%			22.5%	27.8%	
Subscribers (Mn)	42.70	48.88	55.16	61.98	69.38	77.48	85.65	10.5%	55.3%			
Subs Net Additions	5.56	6.17	6.29	6.82	7.40	8.10	8.17	0.9%	30.0%			
Subs Market Share	23.1%	23.4%	23.6%	23.7%	24.2%	24.6%	24.7%					
Subs Net Adds Share	28.1%	25.6%	25.6%	24.8%	28.7%	28.5%	25.9%					
ARPU (Rs/Sub/Month)	390	366	358	357	350	331	324	-2.0%	-9.3%			
MOU (Mins/Sub/Month)	478	469	474	507	534	526	505	-3.9%	6.7%			
RPM (Rs/Min)	0.82	0.78	0.76	0.70	0.65	0.63	0.64	2.0%	-14.9%			
EPM (Rs/Min)	0.33	0.32	0.31	0.26	0.20	0.19	0.20	6.3%	-34.9%			

(Rs mn)	1Q08A	2Q08A	3Q08A	4Q08A*	1Q09A	2Q09A	3Q09A	QoQ %	YoY %	9MFY09	9MFY08	YoY %
Prepaid as % of Total Subs	89.7%	90.4%	91.0%	91.6%	92.3%	92.9%	93.5%					
Prepaid Churn	4.0%	3.8%	3.9%	4.3%	3.8%	3.2%	2.9%					
Postpaid Churn	3.6%	3.2%	2.7%	2.5%	2.5%	2.5%	2.3%					
SMS revenue (% of ARPU)	5.0%	4.6%	4.4%	4.4%	4.2%	4.3%	4.1%					
Non-voice revenue (% of ARPU)	9.9%	9.8%	9.3%	9.4%	9.7%	10.0%	9.5%					
Total Mins (Mn)	57,125	64,375	73,840	89,058	105,217	115,834	123,626	6.7%	67.4%	344,677	195,341	76.4%
Capex (Rs mn)	32,806	28,661	27,538	(88,219)	16,900	15,834	20,936	32.2%	-24.0%	53,670	89,005	-39.7%
Capex / Sales	69.8%	56.7%	49.1%	-137.4%	24.4%	21.7%	26.4%			24.2%	57.9%	
Capex / Inc Sub (Rs/Sub)	5,897	4,644	4,380	(12,932)	2,284	1,956	2,562					
Capex / Inc Mins (Rs/Min)	4.16	3.95	2.91	(5.80)	1.05	1.49	2.69					
Census Towns	4,855	4,876	4,902	5,023	5,048	5,050	5,057	0.1%	3.2%			
Non-Census Towns and Villages	243,584	290,000	320,623	342,623	364,287	384,521	401,882	4.5%	25.3%			
Population Coverage (RHS)	62.0%	65.0%	68.0%	71.0%	74.0%	77.0%	79.0%					
Network Sites	-	52,826	60,299	69,141	75,876	82,554	88,319	7.0%	46.5%			
<b>Telemedia Services (Fixed Line and Broadband)</b>												
Total Revenues	6,513	7,023	7,307	7,641	7,988	8,486	8,458	-0.3%	15.8%	24,932	20,843	19.6%
EBITDA	2,100	2,790	3,173	3,344	3,367	3,696	3,531	-4.5%	11.3%	10,594	8,063	31.4%
EBITDA margin (%)	32.2%	39.7%	43.4%	43.8%	42.2%	43.6%	41.7%		-3.9%	42.5%	38.7%	
EBIT	943	1,680	1,592	1,910	1,981	2,270	1,969	-13.3%	23.7%	6,220	4,215	47.6%
EBIT Margin (%)	14.5%	23.9%	21.8%	25.0%	24.8%	26.7%	23.3%			24.9%	20.2%	
Customers (LHS)	1,972	2,075	2,178	2,283	2,394	2,509	2,619	4.4%	20.3%			
Customer Additions ('000)	101	103	103	105	110	116	110	-4.9%	6.7%			
ARPL (RS/Line/Month)	1,121	1,150	1,140	1,137	1,138	1,147	1,098	-4.3%	-3.7%			
Total Telemedia Mins (Mn)	4,454	4,596	4,604	4,736	4,842	5,002	4,750	-5.0%	3.2%	14,594	13,653	6.9%
Capex (Rs Mn)	1,384	1,738	2,157	4,185	2,301	2,815	4,341	54.2%	101.3%	9,457	5,279	79.1%
Capex / Sales (%)	21%	25%	30%	55%	29%	33%	51%			38%	25%	
Capex / Inc Line (Rs/Line)	13,720	16,910	20,914	39,799	20,842	24,324	39,463					
Capex / Inc Mins(Rs/Min)	6.51	12.24	261.95	31.69	21.73	17.56	(17.25)					
<b>Long Distance Voice</b>												
Total Revenues	9,210	10,048	11,346	12,566	15,694	17,002	17,733	4.3%	56.3%	50,429	30,604	64.8%
EBITDA	3,169	3,462	3,652	4,027	6,884	7,351	8,050	9.5%	120.4%	22,285	10,283	116.7%
EBITDA margin (%)	34.4%	34.5%	32.2%	32.0%	43.9%	43.2%	45.4%			44.2%	33.6%	
EBIT	2,756	2,740	2,837	3,170	5,987	6,352	6,936	9.2%	144.5%	19,275	8,333	131.3%
EBIT Margin (%)	29.9%	27.3%	25.0%	25.2%	38.1%	37.4%	39.1%			38.2%	27.2%	
ILD Mins (Mn)	1,243	1,345	1,591	1,850	2,048	2,284	2,603	13.9%	63.6%	6,935	4,179	66.0%
NLD Mins (Mn)	5,856	6,774	7,898	9,398	10,322	11,349	11,609	2.3%	47.0%	33,279	20,528	62.1%
Optical Fibre Network (Kms)	43,658	55,574	67,138	73,787	78,540	83,389	90,205					
Capex (Rs Mn)	2,176	8,924	3,012	5,059	5,239	3,992	3,559	-10.8%	18.2%			
Capex / Sales	24%	89%	27%	40%	33%	23%	20%					
Capex / Inc Min (Rs/Min)	2.41	8.75	2.20	2.88	4.67	3.16	6.15	94.7%	179.9%	14	13	4.6%
Capex / Inc Fibre Network (Rs/Kms)	0.69	0.75	0.26	0.76	1.10	0.82	0.52					
<b>Enterprise Corporates</b>												
Total Revenues	2,730	3,423	3,290	3,774	3,878	4,872	4,075	-16.4%	23.9%	12,825	9,443	35.8%
EBITDA	1,159	1,435	1,377	2,152	1,771	2,018	1,749	-13.3%	27.0%	5,538	3,971	39.5%
EBITDA margin (%)	42.5%	41.9%	41.9%	57.0%	45.7%	41.4%	42.9%	3.6%	2.5%	43.2%	42.1%	
EBIT	883	1,237	1,215	1,798	1,396	1,619	1,323	-18.3%	8.9%	4,338	3,335	30.1%
EBIT Margin (%)	32.3%	36.1%	36.9%	47.6%	36.0%	33.2%	32.5%	-2.3%	-12.1%	33.8%	35.3%	
Capex (Rs Mn)	732	313	91	411	253	279	339			871	1,136	-23.3%
Capex / Sales	27%	9%	3%	11%	7%	6%	8%			7%	12%	
<b>Passive Infrastructure Services</b>												
Total Revenues				6,023	10,563	11,983	12,702	6.0%				
EBITDA				2,236	3,870	3,991	4,258	6.7%				
EBITDA margin (%)				37.1%	36.6%	33.3%	33.5%					
EBIT				986	1,574	1,185	436	-63.2%				
EBIT Margin (%)				16.4%	14.9%	9.9%	3.4%					
Total Towers				52,865	58,013	59,966	61,355	2.3%				
Sharing Factor				1.22	1.22	1.26	1.34	6.6%				
Revenue per operator per month				30,329	31,893	32,177	31,488	-2.1%				
Capex (Rs Mn)				106,214	15,327	7,562	8,076	6.8%				
Capex / Sales				1763%	145%	63%	64%	0.8%				
Capex / Inc Tower					2.98	3.87	5.81	50.2%				

Source: Company, Kotak Securities - Private Client Research; \* Separate Reporting of Passive Infrservices

## VALUATIONS

### Bharti Airtel Segmental Analysis

(Rs mn)	FY08A	FY09E	FY10E	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
<b>Wireless Business</b>										
Total Wireless Subscribers	261	381	494	575	640	700	750	790	820	850
Total GSM Subscribers	192	288	384	457	515	569	614	650	677	704
Bharti Subscribers	62	93	118	134	146	157	165	172	177	182
Bharti Subscriber Growth	66.9%	49.8%	26.5%	13.8%	9.2%	7.4%	5.4%	4.1%	3.0%	2.9%
Bharti Avg Monthly Additions	2.07	2.57	2.05	1.35	1.03	0.90	0.71	0.57	0.43	0.43
Bharti GSM Market Share	32.2%	32.2%	30.6%	29.3%	28.3%	27.6%	26.9%	26.5%	26.2%	25.9%
Bharti GSM Net Adds Share	34.6%	32.2%	25.8%	22.2%	21.1%	20.0%	18.9%	18.9%	18.9%	18.9%
Bharti Overall Market Share	23.7%	24.4%	23.8%	23.3%	22.8%	22.4%	22.1%	21.8%	21.6%	21.5%
Bharti Overall Net Adds Share	25.9%	25.7%	21.9%	20.0%	19.0%	18.0%	17.0%	17.0%	17.0%	17.0%
Bharti RPM (Rs/Min)	0.76	0.64	0.57	0.53	0.52	0.51	0.50	0.50	0.50	0.50
Bharti MOU (Min/Month)	483	513	518	512	510	507	507	506	505	505
Bharti ARPU (Rs/Month)	369	327	296	271	265	258	254	253	253	252
Bharti EPM (Rs/Min)	0.30	0.20	0.19	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Wireless Revenue	217,860	303,223	375,031	408,948	444,969	469,873	490,655	512,151	529,985	544,509
Wireless Revenue Growth	54%	39%	24%	9%	9%	6%	4%	4%	3%	3%
Wireless EBITDA	85,480	94,086	123,001	133,102	145,939	155,281	163,376	171,814	179,122	185,392
Wireless EBITDA Margin (%)	39%	31%	33%	33%	33%	33%	33%	34%	34%	34%
<b>Telemedia Services (Fixed Line and Broadband)</b>										
Subscribers ('000)	2,283	2,732	3,224	3,702	4,081	4,423	4,707	4,948	5,144	5,343
Net Additions ('000)	412	449	492	478	379	342	284	241	196	199
ARPL	1,137	1,120	1,101	1,091	1,087	1,088	1,095	1,107	1,107	1,107
Telemedia Revenue	28,484	33,755	39,287	45,350	50,758	55,521	59,973	64,120	67,019	69,645
Telemedia Revenue Growth	27%	19%	16%	15%	12%	9%	8%	7%	5%	4%
Telemedia EBITDA	11,407	14,255	16,053	18,621	20,942	23,019	24,984	26,840	28,188	29,432
Telemedia EBITDA Margin (%)	40%	42%	41%	41%	41%	41%	42%	42%	42%	42%
<b>Enterprise Services (Long Distance - Carrier)</b>										
ILD Voice (Mn Mins)	6,029	9,757	13,226	15,052	16,442	17,658	18,615	19,380	19,954	20,528
NLD Voice (Mn Mins)	29,926	45,701	58,129	66,157	72,266	77,609	81,813	85,177	87,700	90,222
Revenue	43170	68840	80679	90197	98526	105810	111542	116128	119568	123007
Revenue Growth	24%	59%	17%	12%	9%	7%	5%	4%	3%	3%
EBITDA	14,310	30,551	35,197	39,260	42,787	45,844	48,216	50,082	51,446	52,803
EBITDA Margin (%)	33%	44%	44%	44%	43%	43%	43%	43%	43%	43%
<b>Enterprise Services (Corporates)</b>										
Revenue	13,217	17,022	18,087	20,697	22,958	24,883	26,629	28,204	29,197	30,049
Revenue Growth	46%	29%	6%	14%	11%	8%	7%	6%	4%	3%
EBITDA	6,123	7,329	7,603	8,659	9,559	10,310	10,981	11,574	11,923	12,211
EBITDA Margin (%)	46%	43%	42%	42%	42%	41%	41%	41%	41%	41%
<b>Passive Infrastructure</b>										
No of Towers	51,240	67,806	81,042	91,667	99,001	105,017	109,943	113,550	116,693	119,553
Occupancy Rate	1.2	1.4	1.6	1.7	1.8	1.9	2.1	2.2	2.3	2.3
Passive Infra Revenues (Incl Passthrough)	6,023	46,214	62,522	77,401	92,358	106,763	123,105	139,523	156,078	171,919
Revenue Growth			35%	24%	19%	16%	15%	13%	12%	10%
Passive Infra EBITDA (Incl Passthrough)		16,645	22,595	26,889	32,285	37,493	44,630	51,936	59,381	66,292
Passive Infra EBITDA Margins		36%	36%	35%	35%	35%	36%	37%	38%	39%
<b>Intersegmental Eliminations</b>										
Intersegment Revenue	38,504	98,321	121,705	138,953	155,691	169,951	184,692	199,119	212,589	225,873
Intersegment EBITDA	5,841	10,441	16,182	22,468	26,009	27,487	30,410	33,409	36,410	39,425
<b>Consolidated</b>										
Bharti Consolidated Revenues	270,250	370,733	453,901	503,640	553,878	592,899	627,211	661,006	689,257	713,257
Bharti Consolidated Revenue Growth	45.9%	37.2%	22.4%	11.0%	10.0%	7.0%	5.8%	5.4%	4.3%	3.5%
Bharti Consolidated EBITDA	113,715	152,425	188,266	204,063	225,502	244,461	261,776	278,836	293,650	306,704
Bharti Consolidated EBITDA Margin	42.1%	41.1%	41.5%	40.5%	40.7%	41.2%	41.7%	42.2%	42.6%	43.0%

Source: Company, Kotak Securities - Private Client Research

## CORE BUSINESS VALUATION

We value Bharti Airtel - Core Business at an Enterprise value of Rs. 1133 Bn & equity value to Rs. 1148 Bn (Rs. 605/ share) based on discounted cash flow valuation. We have used a WACC of 12.1% and terminal growth rate of 3.5% for our calculations. We have made projections till FY17 & then applied terminal growth rate for future earnings.

### Bharti Airtel - Ex Tower - Valuations

(Rs mn)	FY09E	FY10E	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
Total Income from Operations	367,660	446,791	492,222	537,575	571,492	600,057	627,834	649,836	668,594
Growth %		22%	10%	9%	6%	5%	5%	4%	3%
Total Expenditure	222,875	270,024	303,538	331,604	350,597	366,322	381,601	393,442	403,225
Opex Savings Due to Tower Demerger	34,136	44,317	54,473	63,302	71,429	79,362	87,018	94,532	102,299
Rental Payouts	43,141	55,412	65,983	76,055	85,356	95,951	106,350	116,657	127,256
EBITDA After Rental Payouts	135,779	165,671	177,174	193,217	206,968	217,146	226,900	234,269	240,412
EBITDA Margins	37%	37%	36%	36%	36%	36%	36%	36%	36%
Depreciation and Amortization	32,123	39,751	47,120	49,152	48,861	46,934	44,090	41,084	38,130
EBIT	103,656	125,920	130,054	144,066	158,107	170,212	182,811	193,185	202,282
EBIT Margin	28%	28%	26%	27%	28%	28%	29%	30%	30%
Financial Charges (Net)	11,734	10,942	(6,811)	(14,058)	(20,959)	(27,842)	(34,828)	(41,663)	(48,329)
PBT	91,922	114,978	136,864	158,123	179,066	198,055	217,638	234,847	250,612
PBT Margin	25%	26%	28%	29%	31%	33%	35%	36%	37%
Tax	7,158	13,997	20,530	31,625	40,290	51,494	60,939	70,454	80,196
Tax Rate	8%	12%	15%	20%	23%	26%	28%	30%	32%
Profit after Tax	84,764	100,981	116,335	126,499	138,776	146,561	156,700	164,393	170,416
PAT Margin	23%	23%	24%	24%	24%	24%	25%	25%	25%

### Discounted Cash Flow

PAT	84,764	100,981	116,335	126,499	138,776	146,561	156,700	164,393
Depreciation	32,123	39,751	47,120	49,152	48,861	46,934	44,090	41,084
Int (1-tax)	10,820	9,610	(5,789)	(11,246)	(16,243)	(20,603)	(25,076)	(29,164)
Capex	128,210	117,774	71,569	58,522	50,185	38,617	39,296	39,416
NWC change	(45,749)	(19,512)	(5,022)	(3,369)	778	3,273	4,910	7,366
FCFF	45,246	52,081	91,118	109,252	120,430	131,001	131,508	129,532

	FY10	Assumptions
Total FCFF	1,133,844	Terminal Growth 3.5%
Less Debt	(14,730)	WACC 12.1%
Shareholders' Value	1,148,574	
<b>Core Business value per Share</b>	<b>605</b>	
Bharti Infratel value per Share	125	
<b>Consolidated value per Bharti Share</b>	<b>730</b>	

Source: Kotak Securities - Private Client Research

## INDUS TOWERS VALUATION

We value Indus towers at an Enterprise value of \$ 10.6 Bn (Rs. 475 Bn) & an equity value to \$ 8.6 Bn (Rs. 390 Bn) based on discounted cash flow valuation. We have used a WACC of 10.3% and terminal growth rate of 3.5% for our calculation. This implies a valuation of Rs. 4.4 Mn/tower vs. average capex of Rs. 2.5 – 3.0 Mn/tower. Adjusting for the proportionate stake, the value accretion to Bharti Airtel turns out to be 75 Rs/share & for Idea cellular to be 16Rs/share. We haven't yet factored in the 3G/WiMax rentals & aggressive 3G rollouts by JV partners remain upside risks to our valuations.

### Indus Towers Valuations

(Rs mn)	FY09E	FY10E	FY11E	FY12E	2013E	2014E	2015E	2016E	2017E
Bharti Subs in Indus Circles	74.5	93.8	106.2	115.5	123.3	129.3	133.9	137.0	140.2
Idea Subs in Indus Circles	32.6	44.4	52.8	58.9	64.2	68.2	71.1	72.9	74.7
Vodafone Subs in Indus Circles	64.8	80.3	89.5	95.7	100.5	103.6	105.4	106.0	106.5
Subs/BTS	1,157	1,057	1,022	987	952	917	882	847	812
Bharti BTS	61,182	79,891	93,564	105,280	116,597	126,911	136,606	145,625	155,354
Idea BTS	27,612	37,786	46,474	53,754	60,712	66,916	72,508	77,479	82,796
Vodafone BTS	54,882	68,389	78,823	87,258	95,042	101,704	107,585	112,667	118,025
External Tenant BTS	-	-	6,250	13,500	21,450	30,000	38,750	48,000	52,800
Total Tenants	143,676	186,065	225,111	259,792	293,801	325,531	355,449	383,770	408,975
<b>Indus Tower Estimate</b>	<b>95,000</b>	<b>110,000</b>	<b>125,000</b>	<b>135,000</b>	<b>143,000</b>	<b>150,000</b>	<b>155,000</b>	<b>160,000</b>	<b>165,000</b>
GBTs	65,200	77,200	89,200	97,200	103,600	109,200	113,200	117,200	121,200
RTTs	29,800	32,800	35,800	37,800	39,400	40,800	41,800	42,800	43,800
GBT Occupancy Ratio	1.66	1.82	1.92	2.07	2.23	2.37	2.53	2.66	2.76
RTT Occupancy Ratio	1.20	1.40	1.50	1.55	1.60	1.63	1.66	1.68	1.70
<b>Overall Occupancy</b>	<b>1.51</b>	<b>1.69</b>	<b>1.80</b>	<b>1.92</b>	<b>2.05</b>	<b>2.17</b>	<b>2.29</b>	<b>2.40</b>	<b>2.48</b>
Total Capex	70,380	45,900	47,736	33,097	27,537	25,058	18,615	19,359	20,134
GBT Rental Revenue	36,436	47,553	56,468	67,534	78,291	91,434	104,810	118,419	131,856
RTT Rental Revenues	8,162	9,924	11,444	12,899	13,972	15,328	16,561	17,736	18,923
Total Rental Revenues	44,597	57,477	67,911	80,433	92,263	106,762	121,371	136,155	150,780
Total Passthrough Expenses	22,226	31,655	41,052	50,349	59,781	69,555	79,538	89,793	100,147
Total Revenues Inc Passthrough	66,823	89,133	108,963	130,782	152,043	176,317	200,909	225,948	250,927
Total Opex costs	20,040	24,600	29,328	33,746	37,525	41,132	44,529	47,829	51,321
Total Opex Inc Passthrough	42,266	56,255	70,380	84,095	97,306	110,687	124,067	137,622	151,468
EBITDA	24,557	32,877	38,583	46,687	54,737	65,630	76,842	88,326	99,458
EBITDA Margins Ex Passthrough	55.1%	57.2%	56.8%	58.0%	59.3%	61.5%	63.3%	64.9%	66.0%
<b>EBITDA Margins Inc Passthrough</b>	<b>36.7%</b>	<b>36.9%</b>	<b>35.4%</b>	<b>35.7%</b>	<b>36.0%</b>	<b>37.2%</b>	<b>38.2%</b>	<b>39.1%</b>	<b>39.6%</b>
<b>Discounted Cash Flow Valuation:</b>									
PAT	4,409	5,619	6,313	9,505	14,097	21,314	29,679	38,985	48,451
Depreciation	14,101	18,171	21,448	24,277	26,399	28,240	29,769	31,098	32,480
Int (1-tax)	2,503	4,102	5,013	5,307	4,634	3,401	1,436	(1,158)	(4,179)
Capex	70,380	45,900	47,736	33,097	27,537	25,058	18,615	19,359	20,134
FCFF	(49,367)	(18,008)	(14,962)	5,993	17,594	27,896	42,269	49,566	56,619
	FY10								
Total FCFF	474,756								
Less Net Debt	85,469	<b>Assumptions</b>							
Shareholders' Value	389,287	Terminal Growth						3.5%	
Indus Enterprise Value (Billion \$)	10.55	WACC						10.3%	
Indus Equity Value (Billion \$)	8.65								
Bharti Infratel Equity Stake (42%)	163,501	Idea Shareholder Value (13.5%)						52,320	
Bharti Airtel Equity Stake (36.33%)	141,428	No of Idea Shares (Diluted)						3,266	
<b>Indus Value/Bharti Share</b>	<b>75</b>	<b>Idea Value/Share</b>						<b>16</b>	

Source: Kotak Securities - Private Client Research



## BHARTI INFRATEL VALUATION

We value standalone Bharti Infratel at an Enterprise value of \$3.2 Bn (Rs. 145 Bn) & an equity value to \$2.4 Bn (Rs. 110 Bn) based on discounted cash flow valuation. We have used a WACC of 10.3% and terminal growth rate of 3.5% for out calculation. This implies a valuation of Rs. 4.3 Mn/tower vs. average capex of Rs. 2.5 – 3.0 Mn/tower. After adjusting for 13.5% dilution on account of the private equity deal, we arrive at a value of 50 Rs/share for the standalone Infratel business & 125 Rs/share for consolidated Bharti Infratel. We haven't yet factored in the 3G/WiMax rentals in our valuations. Lower than expected equity dilution or aggressive 3G rollouts by Bharti Airtel remain upside risks to our Infratel valuations.

### Bharti Infratel Valuations

(Rs mn)	FY09E	FY10E	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
Bharti Subs (Mn)	93	118	134	146	157	165	172	177	182
Subs in Infratel Circles	18	24	27	31	34	36	38	40	42
BTS required	31007	38713	43519	47001	49952	52159	53834	54992	55836
<b>Tower Estimates</b>	<b>27,906</b>	<b>34,842</b>	<b>39,167</b>	<b>42,301</b>	<b>44,957</b>	<b>46,943</b>	<b>48,450</b>	<b>49,493</b>	<b>50,253</b>
Tower Additions	6,906	6,936	4,325	3,134	2,656	1,986	1,507	1,042	760
No of GBTs	21,620	27,516	31,192	33,856	36,114	37,802	39,083	39,969	40,615
No of RTTs	6,286	7,326	7,975	8,445	8,844	9,141	9,368	9,524	9,638
GBTs as % of Total	77.5%	79.0%	79.6%	80.0%	80.3%	80.5%	80.7%	80.8%	80.8%
<b>Total Capex</b>	<b>21,720</b>	<b>21,814</b>	<b>14,146</b>	<b>10,659</b>	<b>9,398</b>	<b>7,308</b>	<b>5,766</b>	<b>4,148</b>	<b>3,146</b>
Bharti Occupancy	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
External Tenant Occupancy	0.35	0.54	0.63	0.72	0.81	0.89	0.98	1.06	1.11
<b>Overall Occupancy</b>	<b>1.35</b>	<b>1.54</b>	<b>1.63</b>	<b>1.72</b>	<b>1.81</b>	<b>1.89</b>	<b>1.98</b>	<b>2.06</b>	<b>2.11</b>
GBT Revenue	10,473	14,242	17,590	20,656	23,481	26,923	30,318	33,669	36,579
RTT Revenue	1,727	2,074	2,331	2,595	2,801	3,043	3,271	3,486	3,692
Total Rental Revenue	12,200	16,316	19,921	23,251	26,282	29,966	33,589	37,156	40,270
Passthrough Costs	5,948	8,771	11,715	14,179	16,623	19,085	21,551	24,024	26,260
Total Revenue Incl Passthrough	18,148	25,086	31,636	37,430	42,905	49,052	55,141	61,180	66,530
Total Opex Costs	5,869	7,530	9,236	10,574	11,778	12,901	13,927	14,871	15,751
Total Costs Inc Passthrough	11,817	16,300	20,952	24,753	28,402	31,987	35,479	38,896	42,011
EBITDA	6,331	8,786	10,685	12,677	14,504	17,065	19,662	22,284	24,519
EBITDA Margin Excl Passthrough	51.9%	53.8%	53.6%	54.5%	55.2%	56.9%	58.5%	60.0%	60.9%
<b>EBITDA Margin Incl Passthrough</b>	<b>34.9%</b>	<b>35.0%</b>	<b>33.8%</b>	<b>33.9%</b>	<b>33.8%</b>	<b>34.8%</b>	<b>35.7%</b>	<b>36.4%</b>	<b>36.9%</b>

### Discounted Cash Flow Analysis

Net Profit	(3,407)	(3,783)	(4,093)	(3,185)	(1,127)	727	2,994	5,632	8,332
Depreciation	9,000	10,420	11,745	12,711	13,454	14,068	14,558	14,932	15,210
Int (1-tax)	739	2,149	3,032	3,151	1,820	1,254	380	(773)	(2,179)
Capex	21,720	21,814	14,146	10,659	9,398	7,308	5,766	4,148	3,146
FCFF	(15,389)	(13,028)	(3,462)	2,017	4,750	8,742	12,165	15,644	18,217

Bharti Infratel (Standalone)	FY10	Bharti Infratel (Cons)	FY10	Assumptions
Total FCFF	145,664	Total FCFF	345,061	Terminal Growth
Less Debt	35,269	Less Debt	71,166	WACC
Equity Value	110,394	Equity Value	273,895	
Bharti Airtel Stake	86.5%	Bharti Airtel Stake	86.5%	
<b>Value per Bharti Share</b>	<b>50</b>	<b>Value per Bharti Share</b>	<b>125</b>	

Source: Kotak Securities - Private Client Research

## TOWER COMPANIES: GLOBAL PEER COMPARISON

We have compared our tower company valuations with the listed global tower majors American Tower Corp, Crown Castle & SBA communications. We cannot compare the tower companies on EV/tower basis due to difference in geographies, tower density & occupancy rates. Global tower companies have reached a mature stage, are net profitable as well as cash flow positive. Hence, we think that EV/Sales & EV/EBITDA based comparison would be more appropriate. Our DCF based valuations of \$8.6Bn for Indus Towers, \$ 2.4 Bn for standalone Bharti Infratel & \$ 4.3 Bn for Reliance Infratel are at premium to the global peers on these comparables due to their inherent high growth potential.

### Global peer comparison

	American Tower Corp*	Crown Castle Int. Corp*	SBA Communications Corp*	Indus Towers	Bharti Infratel #	Reliance Infratel	
Share Price (\$)	27.23	17.51	18.46	-	-	-	
Market Cap (Mn \$)	10801	5055	2152	8,651	2,453	4,353	
Enterprise Value (Mn \$)	15163	11382	4534	10,550	3,237	5,702	
Current Tower Estimates	22000	23500	5400	95000	28000	50000	
EV/Tower (Mn \$)	0.69	0.48	0.84	0.11	0.12	0.11	
EV/Tower (Mn Rs)	31.02	21.79	37.78	5.00	5.20	5.13	
Sales Estimate (Mn \$)	CY08E	1589	1510	461	991	271	519
	CY09E	1694	1595	533	1277	363	812
EV/Sales	CY08E	9.54	7.5	9.8	10.6	11.9	11.0
	CY09E	8.95	7.1	8.5	8.3	8.9	7.0
EBITDA Estimate (Mn \$)	CY08E	1090	859	265	546	141	281
	CY09E	1174	934	328	731	195	522
EV/EBITDA Estimates	CY08E	13.91	13.25	17.11	19.33	23.01	20.28
	CY09E	12.92	12.19	13.82	14.44	16.58	10.92

Source: Bloomberg, Kotak Securities - Private Client Research

\*Consensus Estimates for CY08 & CY09

\*\* Kotak PCG Estimates for FY09 & FY10

# Bharti Infratel Ex Indus

\* Data as on Feb 17, 2008

However, our tower valuations are at significant discount to the private equity placements to foreign institutional investors. We feel that the discount is justified considering the fact that the foreign institutional investors have lower cost of funds & higher time horizon (Tower companies have most of the cash flows back ended). Also we note that most of these PE deals were struck at the times of high global liquidity & healthy credit markets.

### Private Placements:

	Tower Estimates	Deal Details	Equity Valuation	Valuation/Tower
Bharti Infratel	50000	10.8 % to 13.5% Equity at about \$1.35 Billion	\$10-12.5 Billion	Rs 9.0-11.3 Million
Reliance Communications	14000	5% Equity at \$ 337.5 Million	\$ 6.75 Billion	Rs 21.7 Million
Spice Communications	750	Tower Sale at Rs 5.12 Bn	Rs 5.12 Billion	Rs 6.9 Million
Indus Towers (via ABTL)*	70000	2.57% Stake at about Rs 21 Bn	Rs 815 Billion	Rs 12 Million
Tata Tele	13500	Merger with Quippo having 4500 Towers, Quippo paid Rs 24 bn additional cash	Rs 100 Billion	Rs 5.6 Million
GTL Infra	6000	Current Market Capitalization	Rs. 22.3 Billion	Rs 3.7 Million
<b>Indus Valuation</b>	<b>88000</b>	<b>Kotak PCG Estimates</b>	<b>\$ 8.65 Billion</b>	<b>Rs 4.4 Million</b>
<b>Bharti Infratel Valuation</b>	<b>26000</b>	<b>Kotak PCG Estimates</b>	<b>\$ 2.45 Billion</b>	<b>Rs 4.3 Million</b>
<b>Reliance Infratel Valuation</b>	<b>46000</b>	<b>Kotak PCG Estimates</b>	<b>\$ 4.35 Billion</b>	<b>Rs 4.3 Million</b>

Source: Companies; Kotak Securities - Private Client Research; \* The deal is limited to 16.1% stake Now

## CONSOLIDATED VALUATION

We value Bharti Airtel at an Enterprise value of Rs. 1441 Bn & equity value to Rs. 1385 Bn (Rs. 730/ share) based on discounted cash flow valuation. We have used a WACC of 11.8% and terminal growth rate of 3.5% for our calculations. The terminal EBITDA margins are expected to be around 43% due to economies of scale & growth in high margin non-voice businesses. We value the core business at Rs1149 Bn (605 Rs/Share, WACC 12.1%, g 3.5%), standalone Bharti Infratel at Rs 95 Bn (50 Rs/share, WACC 10.3%, g 3.5%) & stake in Indus towers at Rs 142 (75 Rs/share, WACC 10.3%, g 3.5%). We have made projections till FY17 & then applied terminal growth rate for future earnings.

### Profit & Loss Account

(Rs mn)	FY09E	FY10E	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
Total Revenues	370,733	453,901	503,640	553,878	592,899	627,211	661,006	689,257	713,257
<b>Revenue Growth</b>	<b>37%</b>	<b>22%</b>	<b>11%</b>	<b>10%</b>	<b>7%</b>	<b>6%</b>	<b>5%</b>	<b>4%</b>	<b>3%</b>
Licence Fees	38,109	43,876	49,188	54,648	59,091	63,138	67,201	70,762	73,939
Licence Fees as % of Revenues	10.3%	9.7%	9.8%	9.9%	10.0%	10.1%	10.2%	10.3%	10.4%
Access Charges	52,319	57,135	65,340	69,897	72,612	74,456	74,782	74,327	73,279
Access Charges as % of Revenues	14.1%	12.6%	13.0%	12.6%	12.2%	11.9%	11.3%	10.8%	10.3%
Employee Costs	17,068	20,387	23,435	25,855	28,044	29,859	31,397	32,651	33,926
Employee Costs as % of Revenues	4.6%	4.5%	4.7%	4.7%	4.7%	4.8%	4.7%	4.7%	4.8%
Network Operating costs	58,903	76,932	89,160	97,738	104,175	109,743	113,401	116,139	118,179
Network Opex as % of Revenues	15.9%	16.9%	17.7%	17.6%	17.6%	17.5%	17.2%	16.8%	16.6%
SG&A Costs	50,523	66,244	71,278	78,944	83,132	86,775	93,844	100,119	105,564
SG&A Costs as % of Revenues	13.6%	14.6%	14.2%	14.3%	14.0%	13.8%	14.2%	14.5%	14.8%
Costs of equipment sales	1,507	1,060	1,176	1,294	1,385	1,465	1,544	1,610	1,666
Total Expenditure	218,429	265,635	299,577	328,376	348,439	365,435	382,170	395,608	406,553
EBITDA	152,304	188,266	204,063	225,502	244,461	261,776	278,836	293,650	306,704
<b>EBITDA Margins (%)</b>	<b>41.1%</b>	<b>41.5%</b>	<b>40.5%</b>	<b>40.7%</b>	<b>41.2%</b>	<b>41.7%</b>	<b>42.2%</b>	<b>42.6%</b>	<b>43.0%</b>
Depreciation	47,045	57,802	67,873	72,059	73,403	72,863	71,150	69,077	66,982
EBIT	105,259	130,463	136,190	153,444	171,058	188,913	207,686	224,572	239,722
EBIT Margins (%)	28.4%	28.7%	27.0%	27.7%	28.9%	30.1%	31.4%	32.6%	33.6%
Net Financial Charges	14,063	15,698	(593)	(7,534)	(15,260)	(23,784)	(33,339)	(43,568)	(54,280)
Profit Before Tax	91,196	114,765	136,783	160,978	186,318	212,697	241,026	268,140	294,003
Tax rate (%)	8	12	15	20	23	26	28	30	32
Tax	7,106	13,971	20,517	32,196	41,922	55,301	67,487	80,442	94,081
Minority Interest	1,746	1,912	1,912	1,912	1,912	1,912	1,912	1,912	1,912
Adjusted Net Profit	82,343	98,882	114,354	126,870	142,485	155,484	171,626	185,786	198,010
Net Profit Margins (%)	22.2%	21.8%	22.7%	22.9%	24.0%	24.8%	26.0%	27.0%	27.8%
<b>EPS</b>	<b>43.42</b>	<b>52.10</b>	<b>60.25</b>	<b>66.84</b>	<b>75.07</b>	<b>81.92</b>	<b>90.42</b>	<b>97.88</b>	<b>104.32</b>
EPS Growth	23%	20%	16%	11%	12%	9%	10%	8%	7%
Cash Profit	129,388	156,684	182,226	198,929	215,887	228,347	242,776	254,863	264,991
Cash Profit Margin	34.9%	34.5%	36.2%	35.9%	36.4%	36.4%	36.7%	37.0%	37.2%
CEPS	68.17	82.55	96.00	104.80	113.74	120.30	127.90	134.27	139.61
Divident Payout Ratio	-	5.00%	10.00%	20.00%	30.00%	30.00%	30.00%	30.00%	30.00%
Divident Paid	-	4,944	11,435	25,374	42,745	46,645	51,488	55,736	59,403
DPS	-	2.60	6.02	13.37	22.52	24.57	27.13	29.36	31.30

Source: Kotak Securities - Private Client Research

**Balance Sheet**

	FY09E	FY10E	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
Share Capital	18,982	18,982	18,982	18,982	18,982	18,982	18,982	18,982	18,982
Reserves and Surplus	282,091	375,188	476,162	573,345	665,818	766,727	878,112	998,687	1,127,196
Total Shareholders Funds	301,073	394,170	495,144	592,327	684,800	785,709	897,094	1,017,669	1,146,178
Minority Interest	10,369	10,369	10,369	10,369	10,369	10,369	10,369	10,369	10,369
Total Loans	61,642	61,642	61,642	61,642	61,642	61,642	61,642	61,642	61,642
Other Liabilities	16,852	20,393	22,627	24,884	26,637	28,179	29,697	30,966	32,045
<b>Total Liabilities</b>	<b>389,936</b>	<b>486,574</b>	<b>589,783</b>	<b>689,222</b>	<b>783,448</b>	<b>885,899</b>	<b>998,802</b>	<b>1,120,647</b>	<b>1,250,233</b>
Property and equipment, net	418,950	520,012	557,904	568,927	566,672	550,259	531,989	514,606	497,552
Intangible assets, net	13,523	13,523	13,523	13,523	13,523	13,523	13,523	13,523	13,523
Goodwill	27,043	27,043	27,043	27,043	27,043	27,043	27,043	27,043	27,043
Investment in joint ventures	116	116	116	116	116	116	116	116	116
Investments	-	-	-	-	-	-	-	-	-
Other assets	10,472	12,672	14,061	15,463	16,553	17,511	18,454	19,243	19,913
Cash and cash equivalents	12,711	25,598	94,549	184,933	279,545	394,179	519,499	650,572	787,108
Other Current Assets	135,811	164,343	189,646	216,906	241,475	265,667	291,180	315,771	339,836
Total Current Assets	148,523	189,942	284,195	401,839	521,020	659,846	810,679	966,342	1,126,945
Total current liabilities	228,690	276,734	307,059	337,688	361,479	382,398	403,002	420,227	434,859
Net Current Assets	(80,168)	(86,793)	(22,864)	64,150	159,541	277,447	407,677	546,116	692,086
<b>Total Assets</b>	<b>389,936</b>	<b>486,574</b>	<b>589,783</b>	<b>689,222</b>	<b>783,448</b>	<b>885,899</b>	<b>998,802</b>	<b>1,120,647</b>	<b>1,250,233</b>
<b>Capex Assumption</b>	<b>149,930</b>	<b>158,865</b>	<b>105,764</b>	<b>83,082</b>	<b>71,148</b>	<b>56,449</b>	<b>52,880</b>	<b>51,694</b>	<b>49,928</b>
Net Debt	65,783	56,436	(10,280)	(98,407)	(191,266)	(304,358)	(428,160)	(557,963)	(693,422)
Debt/Equity	20%	16%	12%	10%	9%	8%	7%	6%	5%
Net Debt/Equity	22%	14%	-	-	-	-	-	-	-

Source: Kotak Securities - Private Client Research

**Bharti Airtel - Discounted Cash Flow Valuations**

(Rs mn)	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
PAT	82,401	98,882	114,354	126,870	142,485	155,484	171,626	185,786	198,010
Depreciation	47,045	57,802	67,873	72,059	73,403	72,863	71,150	69,077	66,982
Int (1-tax)	13,223	13,787	(504)	(6,027)	(11,827)	(17,600)	(24,004)	(30,497)	(36,911)
Capex	149,930	158,865	105,764	83,082	71,148	56,449	52,880	51,694	49,928
NWC change	(45,749)	(19,512)	(5,022)	(3,369)	778	3,273	4,910	7,366	9,434
Investments	-	-	-	-	-	-	-	-	-
FCFF	38,488	31,118	80,980	113,189	132,134	151,024	160,982	165,306	168,719

	FY10	Assumptions
Total FCFF	1,441,733	Terminal Growth 3.5%
Less Net Debt	56,436	WACC 11.8%
Shareholders' Value	1,385,297	
No of Bharti Shares	1,898	
<b>Value Per Bharti Share</b>	<b>730</b>	

**Sensitivity analysis**

	WACC %		
<b>Terminal Growth %</b>	11.3%	11.8%	12.3%
3.0%	750	703	661
3.5%	781	730	684
4.0%	817	760	710

Source: Kotak Securities - Private Client Research

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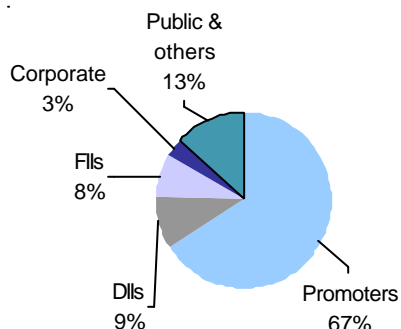
**Stock details**

BSE code	: 532712
NSE code	: RCOM
Market cap (Rs mn)	: 317856
Free float (%)	: 33.9%
52-wk Hi/Lo (Rs)	: 609/149
Avg. daily volume BSE	: 2901854
Avg. daily volume NSE	: 7071451
Shares o/s (mn)	: 2064

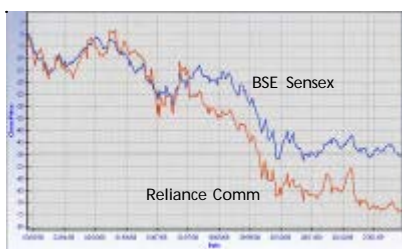
**Summary table**

(Rs mn)	FY08	FY09E	FY10E
Sales	190,678	231,028	285,533
Growth (%)	31.8	21.2	23.6
EBITDA	81,989	92,961	107,179
EBITDA margin (%)	43.0	40.2	37.5
Net Profit	54,011	57,586	44,631
Net debt (cash)	96,903	228,033	263,421
EPS (Rs)	26.2	27.9	21.6
Growth (%)	67.2	6.0	-22.5
CEPS	37.7	44.1	44.2
DPS (Rs)	0.7	0.8	0.6
RoE (%)	21.2	19.1	12.9
RoCE (%)	12.0	10.4	6.9
EV/Sales (x)	2.2	2.4	2.0
EV/EBITDA (x)	5.1	5.9	5.4
P/E (x)	5.9	5.5	7.1
P/Cash Earnings	4.1	3.5	3.5
P/BV (x)	1.2	1.0	0.9

Source: Company,  
Kotak Securities - Private Client Research

**Shareholding pattern as on 30 June 08**

Source: Capitaline

**One-year performance (Rel to sensx)**

Source: Capitaline

**Reliance Communication Ltd****PRICE: Rs.154****RECOMMENDATION : REDUCE****TARGET PRICE: Rs.220****FY10E: EV/EBITDA: 5.4x; P/E: 7.1x****Leverage Concerns: Reduce on every rise**

We initiate coverage on Reliance Communications with a 'REDUCE' recommendation and a 6-months DCF-based price target of Rs 220 per share. We expect the earnings to be significantly dented in FY10 & remain muted for next 2 years due to high costs of running pan-India dual (CDMA & GSM) networks. The high debt burden (>Rs 260 Bn), high current liabilities & provisions (Rs 310 Bn) and high additional capex requirement (Rs 240Bn by FY10) makes us cautious on the balance sheet strength of the company. Again aggressive accounting policies relating to FCCBs / forex loan translation losses, lower depreciation / tax rates reduces our confidence in the earnings quality of the company.

Our estimates do not fully factor in the possible negative surprises in the near term, like significant operating losses in GSM / DTH operations, high CDMA churn due to attractive GSM pricing, high GSM churn on expiry of free talk-time schemes, aggressive tariff war to improve GSM network utilization post the entry of newer operators, difficulty in funding aggressive capex plans (i.e. raising debt at reasonable rates, equity infusion at premium valuation), reduction in vendor financing, non-conversion of FCCBs and potential outgo on account of 3G/WiMAX spectrum auction/rollouts..

The company is also vulnerable to weakening demand from global & domestic enterprises, lower SMB broadband uptake, introduction of long distance calling cards by standalone NLD/ILD players, competition from Internet telephony, reduction in termination charges, increase in spectrum usage charges and other regulatory uncertainties faced by the industry.

Considering the numerous headwinds & limited near-term earnings visibility, we recommend reducing exposure to Reliance Communications on every rise & migrating to Bharti Airtel (ACCUMULATE), which, we believe, is better poised to counter these headwinds.

**Investment Summary**

- **GSM Launch: Margins to come under pressure:** Rcom has launched its GSM across the remaining 14 circles with an aggressive customer experience package. We expect the margins to come under significant pressure due to the free talk-time plans, likely tariff-war post the initial 3 months trial period & high network costs for running a pan-India dual network.
- **Global Business: muted performance:** The global business has shown a muted growth since the last 2-3 quarters due to Vanco integration costs & lower uptake. We expect the global bandwidth demand to shrink & global enterprise business to remain under significant pressure in near term due to the steep economic downturn.
- **Stretched Balance Sheet:** Highly leveraged balance sheet (Total debt Rs 266 Bn, Current liabilities Rs 310 Billion), in our view, may restrict the company to raise further debt at reasonable rates. We also remain cautious on the high FCCB exposure (about Rs 65 bn) which is deeply out of money & may be redeemed.

- ❑ **High Capex Requirements/ Low return ratios:** The Company has given an aggressive capex guidance of Rs 240 bn (Rs 9 bn for 4Q09, Rs 15 bn for FY10), excluding 3G auction/rollouts. The return ratios have been deteriorating each quarter and we believe that the management will have to show significant execution capabilities to turn around the low capital productivity levels.
- ❑ **Lower Financing Costs - Implying aggressive Treasury Operations:** Although the company has significant net debt (Rs 183 Bn), the company has consistently reported net interest income in its financial statements. We believe that the company has very active & aggressive treasury operations resulting in high cash yield & high forex gains.
- ❑ **Aggressive Accounting policies:** We find some of the accounting policies regarding Depreciation, Forex gains, translation losses on foreign loans, premium payable on redemption (non-conversion) of FCCBs, etc to be relatively more aggressive as compared to peers. This has the effect of net profits being correspondingly higher than peers.
- ❑ **Valuations:** We have arrived at a price target of Rs 220 for Reliance Communications using DCF based valuation with a WACC of 12% and terminal growth rate of 3.5%. We value the core business at 130 Rs/share (WACC 12.6%, G 3.5%) and 95% stake in Reliance Infratel at 90 Rs/share (WACC 10.7%, G 3.5%). Our target price is 10x FY10 earnings and 6.7 x FY10 EV/EBITDA. Although our target price is about 40% higher than the current price, we remain cautious due to aggressive leverage & significant execution risks faced by the company and recommend reducing exposure on every rise. We initiate coverage with a **REDUCE** Rating and a 6-month target price of Rs 220.

#### **Risks to Our Recommendations:**

- ❑ Equity infusion from a global telco or private equity players at a significant premium to the market valuations.
- ❑ Long term passive/active infrastructure sharing contracts with the new entrants at a premium rental agreement.
- ❑ Higher than expected uptake on the back of aggressive & innovative start-up packs on the newly launched GSM platform (14 circles) remains upside risk to our valuations.

## BUSINESS PROFILE

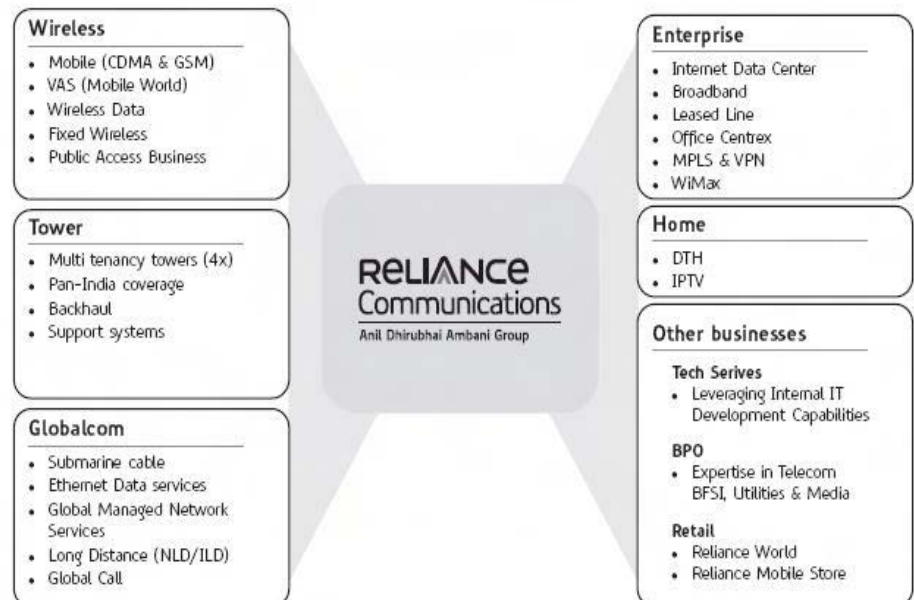
### Reliance ADAG Group

The Reliance - Anil Dhirubhai Ambani Group is among India's top three private sector business houses with businesses ranging from communications (Reliance Communications) and financial services (Reliance Capital Ltd), to generation, transmission and distribution of power (Reliance Energy), infrastructure and entertainment. Across different companies, the group has a customer base of over 100 million and a shareholder base of over 12 million. It has a business presence that extends to over 20000 towns and 4.5 lakh villages in India, and 5 continents across the world.

### Reliance Communications (Rcom)

Rcom is India's second-largest private integrated telecom solutions provider. The company offers the full portfolio of telecom and telephony solutions, including mobile services (both CDMA & GSM), wire-line services, national and international long distance services, enterprise broadband, global voice and data services, provision of bandwidth to global corporates, DTH, passive infrastructure and managed services. The company has an extensive pan-India CDMA presence, established GSM operations in 8 Circles and has recently launched its GSM services in the remaining 14 Circles (Major towns currently, complete coverage expected by mid CY09). Its global subsidiary Reliance Globalcom has established an excellent global network to offer carrier voice, data & managed services across the globe. The passive infrastructure subsidiary Reliance Infratel has an extensive pan-India tower portfolio ready to host multiple tenants. The company also has substantial broadband, Internet, DTH presence & is expected to launch its IPTV services in near term.

### Business mix



Source: Company



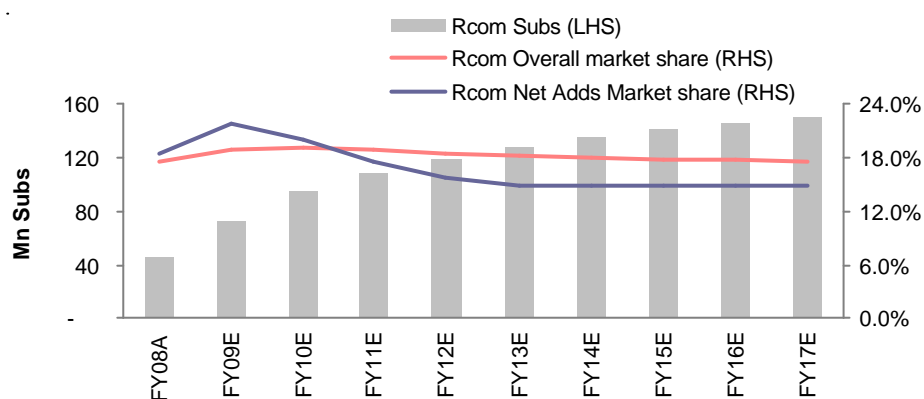
## WIRELESS BUSINESS

Reliance Communications is the second largest wireless player in the rapidly growing Indian telecom market with over 66 Mn subscribers (Jan 09) & 18.3% market share. It has an extensive pan-India CDMA presence, established GSM operations in 8 Circles and has recently launched its GSM services in the remaining 14 Circles (Major towns currently, complete coverage expected by mid CY09). The company has reported a strong subscriber addition of 5mn subs in Jan 2009 post the aggressive GSM launch. The company also has a substantial market share in mobile handsets market, high speed Data cards / USB modem as well in the public calling office ("PCO") services.

### Robust Subscriber Growth to continue in near term

The Company has shown a robust growth in wireless subscriber base from 30 Mn in Dec 06 to over 61 Mn subs at the end of Dec 08. The net subscriber additions too have seen a strong acceleration from about 1.15 Mn to 1.75 Mn subs per month. We expect the net monthly additions to cross 2 Mn subs / month with the launch of GSM services in 14 new circles. Although the company claims to have added 5 mn subs in Jan 2009, we think that it was one-off due to temporary free talk time under the customer experience schemes. We expect the Rcom's subscriber base to touch 72 million by FY09 & 94 million by FY10. However with the launch of services by new entrants, possible entry of MVNOs and the wireless teledensity approaching 40%, the net additions are expected to start moderating since FY10.

### RCom wireless subscriber estimates

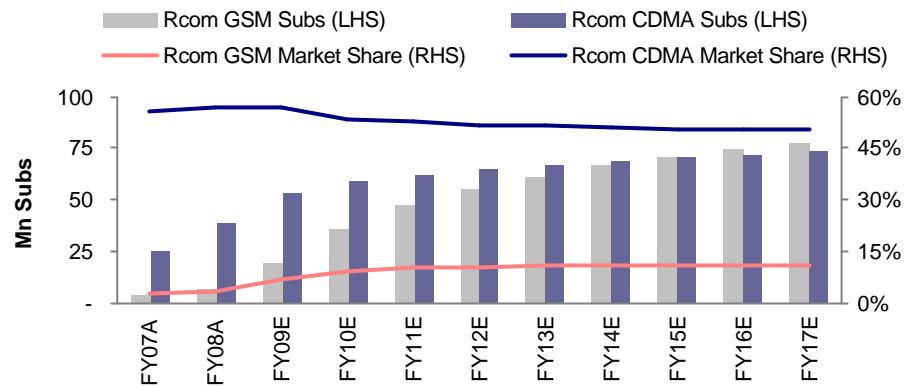


Source: TRAI, Kotak Securities - Private Client Research

### GSM Launch to accelerate subscriber Additions:

RCOM is the dominant player in CDMA space in India with about 51 Mn Subs, 57% market share & 56% share in net additions. However, we expect the overall CDMA market share to constantly shrink from about 26% currently to just about 17-18% by FY17E as the CDMA players launch GSM operations. Rcom is expected to remain the CDMA leader with about 50% market share & over 40% incremental additions. In GSM space we expect RCOM to garner about 15% net subscriber additions. With this, RCOM may be able to garner about 77 Million GSM subs by FY17 (11% of GSM market, 12% of incremental GSM additions and 51% of the total Rcom subs base).

### Reliance Communications: Wireless Subs



Source: TRAI, Kotak Securities - Private Client Research

### GSM Launch: Margins to come under pressure...

Reliance Communications has launched its GSM services in the remaining 14 circles with a disruptive customer experience package and has already added 5 million subs in the first month of operations. Under this plan, Rcom offers GSM SIMs with 6-months validity at Rs. 25. The plan also provides 450 / 900 mins free talk time (Rs. 5/10 free talk-time daily for first 90 days depending on the circle), free night calling (11 pm to 6 am) to local RCOM GSM & CDMA and no recharge obligations. The offer is now available at 49 Rs/SIM with a mandatory initial recharge of Rs.50-60 & the validity has been extended to life-time. Although the headline tariff rates are kept constant (Local 1 Rs/min, STD 1.5 Rs/min), the company offers double talk-time on any recharge made up to 31st March 2009. We find the RCOM-GSM launch to be innovative & disruptive, but also quite aggressive in nature. Although the free calling is just for first 3 months, we expect further offers & incentives to retain subscribers by both Rcom-GSM & the incumbent GSM operators.

- **Dual Strategy:** The Company aims to use the GSM services to target the high ARPU customers with diverse smart phones, international travel and other high end service requirements. The CDMA services would target the lower end market with high on-net calling requirement and data access in remote areas. The company also plans to bring both the segments on-net, facilitating the use of GSM services by high level executives & CDMA services by field Force. However, the company has yet to announce plans to attract high end post-paid GSM subscribers.
- **Market Opportunity:** (1) GSM operators add 6.5-7.5 million subscribers per month (over 75% of net additions). The company aims to improve market share by participating in the GSM additions on pan-India basis. However, we believe that the company's GSM subscriber additions will cannibalize its CDMA additions to a significant extent. (2) The GSM operations will improve ARPUs as the subscriber mix turns in favor of higher MOU/ARPU GSM subs. However, the company has yet to detail its plans for acquiring these high ARPU subs. (3) The high churn rate of 3-4% in the GSM industry (8-10 Mn Subs/month) & implementation of number portability may provide an attractive opportunity to Reliance GSM. We have already factored a higher net adds share for Rcom going forward (20-22% vs. current 17-18%). (4) The company may be able to garner 20% share of In-Bound Roaming revenues of 15bn.

- Margin Impact:** Even after considering the synergies with already existing CDMA operations (network opex, interconnect & marketing synergies), we expect the GSM operations to take at least 18-24 months to breakeven at the EBITDA levels impacting the consolidated margins in near term. We have factored in 5% wireless margin compression and 3% consolidated margin compression as the company launches GSM operations in a phased manner. Higher than expected margin pressure due to aggressive pricing remains a major downside risk to our valuations.

#### Reliance Communications - Impact of GSM Operations

	Wireless Expenses (% of Wireless Revenue)	Impact of GSM Operations			Comment
		Bull Case	Base Case	Bear Case	
Access Charges & License Fees % Increase	15.5%	15.5% 0%	15.7% 1.0%	15.8% 2%	Higher Interconnect Charges due to greater GSM Off-Net Usage; Higher GSM spectrum Charges
Employee Costs % Increase	7.8%	7.8% 0%	7.8% 1.0%	7.9% 2%	Increased workforce requirement due to GSM operations, customer support
Network operating Costs % Increase	20.7%	22.7% 10%	23.8% 15%	24.8% 20%	Increased Power, Fuel, Utilities, repair & maintenance, insurance etc due to dual network in 14 new circles
Sales, General & Admin Costs % Increase	18.1%	19.0% 5%	19.9% 10%	20.8% 15%	Increased Advertising, Branding, Customer Acquisition & Customer Care
Total Expenses % Increase	62.0%	65% 3%	67% 5.1%	69% 7.3%	
Wireless EBITDA Margins % Increase	38.0%	35.0% -3.0%	32.9% -5.1%	30.7% -7.3%	We expect a decline of about 5% in wireless margins due to dual network burden in our base case scenario.

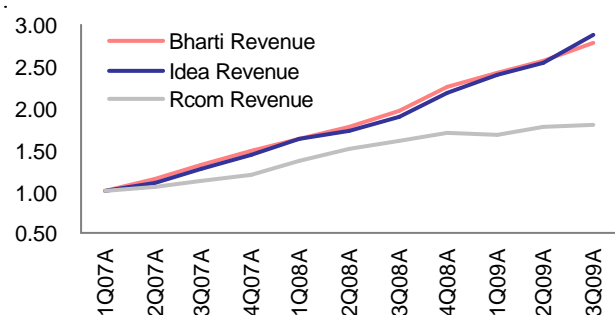
Source: Kotak Securities - Private Client Research

Note: A part of this EBITDA impact may be absorbed by lower Diesel prices, 2% Levy reduction & seasonal rise in MOUs

#### CDMA Bottlenecks: Lower Wireless Growth Rates...

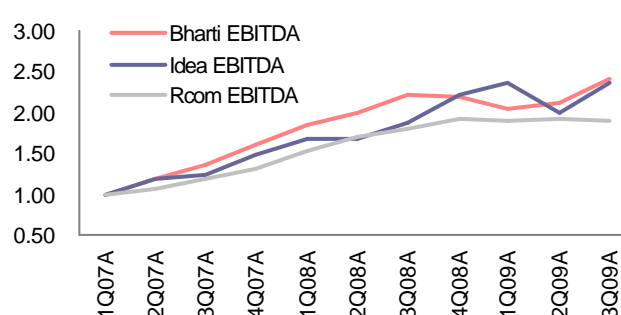
Although CDMA is more spectrum efficient, GSM has been the preferred technology in the India due to favorable regulations as well as customer preference for handset choice & reusability. The CDMA market share has been constantly shrinking both in terms of subscribers as well as revenue per subscribers. Most of the high usage customers prefer GSM tech, while CDMA caters to the low usage, high on-net usage customers. This has resulted in lower revenue & EBITDA growth rates for Reliance Communications against its listed peers Bharti Airtel & Idea Cellular. Although the company has entered the GSM space to counter these bottlenecks, we think that there are significant challenges for the late entrants (with spectrum in 1800 MHz band) vs. the incumbent GSM operators (with spectrum in 900 MHz band).

#### Revenue Growth Comparison



Source: Company

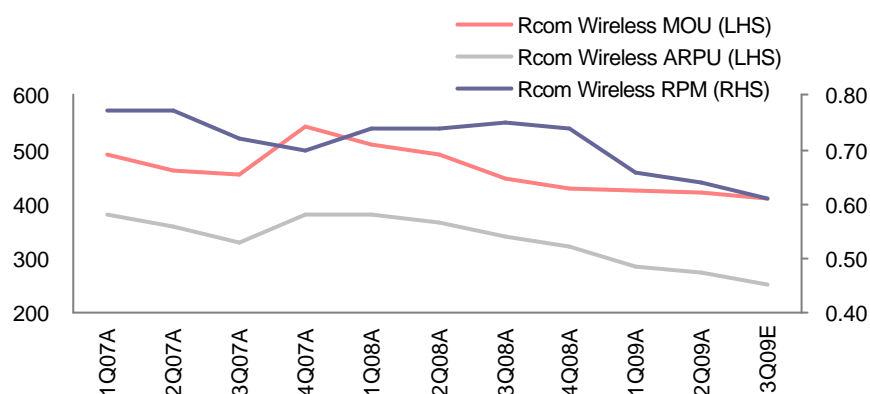
#### EBITDA Growth Comparison



Source: Company

- Low Usage Elasticity:** Although Rcom too has been facing tariff pressure in sync with the industry, the drop in Revenue per Min is to a lesser extent than the GSM operators. Rcom tariffs levels which were substantially lower initially are now in sync with the overall industry at about 0.61 Rs/Min. However, this is due to the conscious efforts of the company to weed out free talk-time schemes from its CDMA network which has lead to constant fall in MOUs for the company. Rcom has once again introduced free calling for its GSM network, which will give substantial lift to the MOUs at the cost of RPMs. We expect substantial tariff cuts in near term due to aggressive entry in GSM space and a number of newer launches expected by competitors & newer players. We have already factored in MOU uplift from the GSM operations & increased traction in mobile value added Services (MVAS) in our valuations.

#### Reliance Communications: Low Usage Elasticity



Source: Company

- Low Net Realizations:** Although we expect robust subscriber additions to continue in near term, we are concerned over the revenue/margin contributions from these incremental subscribers. The subscriber additions are backed by aggressive tariff reductions, attractive start-up packs, low usage rural & life-time customers. We find that incremental RPMs have fallen from about 0.70 Rs/Min to about 0.17 Rs/min & incremental EBITDA per Mins (EPMs) have fallen steeply to -0.06 Rs/Min for the company. A strategy to woo customers by free usage may further deteriorate these ratios going forward.

#### Reliance Communications: Low Net Realizations

(Rs mn)	1Q07	2Q07	3Q07	4Q07	1Q08	2Q08	3Q08	4Q08	1Q09	2Q09	3Q09
Revenues	24,320	25,744	27,520	29,692	33,730	37,230	39,567	41,608	41,187	43,356	44,119
EBITDA	8,746	9,294	10,293	11,511	13,392	14,873	15,819	16,763	16,623	16,859	16,616
Total mins (Mn)	31,440	33,520	38,100	42,500	45,800	50,700	52,500	56,500	62,000	67,800	72,195
RPM (Rs/Min)	0.77	0.77	0.72	0.70	0.74	0.74	0.75	0.74	0.66	0.64	0.61
Incremental RPM (Rs/min)		0.68	0.39	0.49	1.22	0.71	1.30	0.51	(0.08)	0.37	0.17
EPM (Rs/min)	0.28	0.28	0.27	0.27	0.29	0.29	0.30	0.30	0.27	0.25	0.23
Incremental EPM (Rs/min)		0.26	0.22	0.28	0.57	0.30	0.53	0.24	(0.03)	0.04	(0.06)

Source: Kotak Securities - Private Client Research

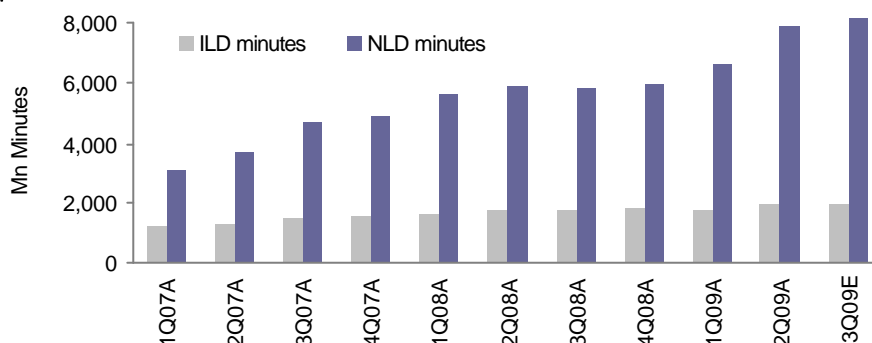
## RELIANCE GLOBALCOM

Reliance Globalcom, a 100% subsidiary of Reliance Communications is fast emerging as a strong player in the in US \$ 285 Bn Global communication market. The subsidiary was formed to consolidate the Global Telecom businesses of Reliance Communications under a single umbrella. Reliance Globalcom offers a diverse portfolio of global communication business services, including Fiber Capacity, Enterprise Services, Managed Networks & a bouquet of other Value Added Services. The company serves over 1400 enterprises, 750 carrier partners and 2 million retail customers in 50 countries across 5 continents. However, the global business has shown a lack luster performance since the last two quarters due to Vanco integration costs & lower uptake. We are cautious on the global bandwidth demand scenario in the wake of the current economic downturn & the capacity addition plans of the company in current demand scenario

### Long distance voice services

Reliance Globalcom offers national and international long distance calling services, wholesale connectivity solutions, carriage and termination to other carriers as well as on an inter-segment basis to its wireless business. RCOM entered the long distance market in India in mid-2003, and has become one of the largest carriers of international voice minutes. The company has recently signed agreements with three private service providers, Idea, Tata and Aircel, for NLD carriage of 1,100 million minutes per quarter. The management expects this contact to increase the NLD traffic by 15 to 20% and revenues by Rs.10 Bn per quarter. However, we expect the long distance carrier revenues to be impact by the launch of calling cards by standalone NLD/ILD operators post the recent DoT approval.

### Reliance Globalcom - Long Distance Voice



Source: Company

### Global data services

Reliance communications is a leading provider of international connectivity and data services to telecom operators, content providers, internet communities and enterprises around the globe. Reliance Globalcom Limited (formerly known as FLAG Telecom), is one of the world's largest private undersea cable system spanning 65,000 kms seamlessly integrated with Reliance Communications 110,000 kms of domestic optic fibre & provides a robust Global Service Delivery Platform connecting 37 key business markets in India, the Middle East, Asia, Europe, and the U.S.

Reliance Globalcom Services Inc (formerly known as Yipes Enterprises) is a leading provider of managed Ethernet and application delivery services for the global enterprise & owns own 22,000 kms of metro fibre network in the U.S. in 14 metros. Reliance Globalcom is investing \$200mn (Rs.8bn) to more than double the metro coverage in the U.S. to over 35 top metros.

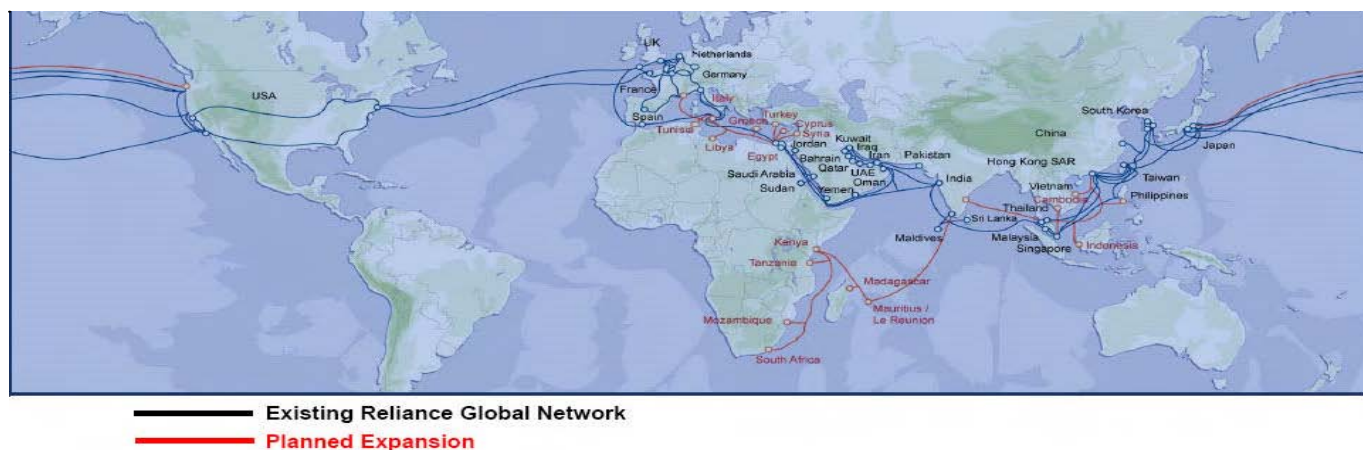
Reliance Vanco Group (formerly known as Vanco Group) enables the company to provide managed services to over 700 global, regional and domestic carriers. VANCO Managed Network services are currently available in over 40,000 locations across 163 countries.

Reliance WiMAX World (formerly known as eWave World) holds WiMAX licenses and has received spectrum to commence WiMAX services in several countries & plans to invest additional \$500 Million to build and acquire WiMAX networks in emerging markets in Asia, Europe, Latin America and Africa. The company aims to launch 4G WiMAX services in about 50 countries by 2012.

### Flag Telecom

In Oct 2003, Rcom had acquired Flag Telecom for US\$207m. Flag owns and manages an extensive next generation optical fiber network of over 65,000 km in 37 key business markets. Flag is among the world's largest IP network undersea submarine cable systems providing a suite of bandwidth, IP, internet and Ethernet services which are delivered over a high speed fiber optic and MPLS/IP-based network. Flag's network is very well-positioned in the Europe, Middle East and Southeast Asian regions that are expected to be major growth drivers of international data and voice traffic over the next few years. To leverage Flag assets better Rcom has spent US\$400m on building the 11,589km-long Falcon cable system. The 2.56 terabit Falcon cable running through 11 countries, mostly in the Gulf region and North Africa commenced in September 2006 and is integrated with the Flag network. RCOM is also undertaking an ambitious expansion plan, initiating implementation of the FLAG Next Generation Network (NGN, a packet-based network that has greater bandwidth capacity to carry voice and data minutes through fibre-optic cables), which when complete, will provide seamless connectivity to countries in East Africa, the Eastern Mediterranean, South and East Asia, and the Trans-Pacific. The company will invest US\$1.5bn in laying 50,000 additional kilometers of undersea optic fiber cable. On completion in December 2009, Flag Global Network will span over 115,000km.

#### Flag Telecom - Global network



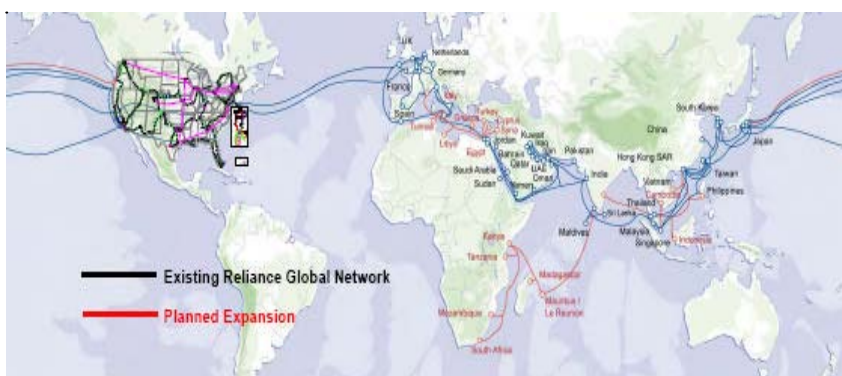
Source: Company



### Yipes acquisition

In July 2007, Rcom announced the US\$300mn cash acquisition of Yipes Communications. Yipes is a leading provider of managed Ethernet services based in San Francisco, California. Ethernet services provide networking services using shared coaxial cable or point-to-point links connected by Ethernet hubs. Yipes owns over 22,000 route-km of fibre across 14 US metros, covering 40% of the US data communications market. It is also present in London, Hong Kong and Tokyo. Global Ethernet is the fastest growing segment of the data services market, projected to climb to over US\$25bn or Rs.1000bn by 2010. Yipes has nearly 1,000 enterprise customers, concentrated across four industry verticals - financial, legal, government and healthcare, which account for 50% of the Ethernet market. Reliance Globalcom is investing \$200mn (Rs.8bn) to more than double the metro coverage in the U.S. to over 35 top metros. We see the acquisition of Yipes as a key step in Rcom's plan to move up the value chain in the global data business. Yipes Ethernet services will be overlaid on Flag's global next generation network, allowing Yipes to expand its reach worldwide and enabling Flag to leverage its network assets in the India, the Middle East, and East Asia.

### Yipes network



Source: Company

### Reliance Global IP Enabled Optic Fiber Network:

	FY2003	Current (Incl. FALCON + Yipes)	Post NGN (Under Execution)
Int'l Submarine & Terrestrial (Rkms)	55000	87000	137000
Landing Points (Nos)	26	43	64
Countries Connected	28	40	60

Source: Company

### Vanco Acquisition

In May 2008, Reliance Globalcom Ltd acquired London based globally managed network-services provider Vanco Group Ltd for about US\$76.9m. The company also assumed the US\$243m debt Vanco had on its balance sheet. Vanco is a Virtual Network Operator, owning no network infrastructure itself, but providing management services by reselling network from other telecommunications suppliers to multiple third-party customers. It serves around 220 MNCs in over 40,000 locations across 163 countries. Reliance Globalcom, through this acquisition, would add 9 Network Management Centers & increases its tally of enterprise customers to over 1,400. The acquisition would add \$365 Million (Rs.15.5bn) to the annual revenues of Reliance Globalcom through secure Long-term contracts with its enterprise customers. 90% of VANCO's revenue is from developed markets of UK, US, France and Germany. Although Global managed network services is a high margins business (45-65% EBITDA margins) VANCO is making losses at EBITDA levels. The management expects to turn it EBITDA positive in 2-3 quarters by leveraging upon its extensive global network.



### **eWave World Acquisition**

In April 2008, Reliance Globalcom acquired 90 per cent stake in UK's WiMAX operator, eWave World for an undisclosed amount. The company was set up just two-years ago & has yet to make profits but holds licenses and spectrum to initiate WiMax services in 22 high growth countries, including China and Brazil. Recently, eWave World had entered into a joint venture in China to invest in nation-wide broadband operations. Reliance Globalcom plans to invest additional \$500 Million through eWave world to build and acquire WiMAX networks in emerging markets in Asia, Europe, Latin America and Africa. The company has ambitious plans to leverage upon its 115,000 km IP enabled optic network spread across 6 continents to provide future proof 4G WiMAX services to millions of Corporate & retail customers in about 50 countries by 2012.

### **Uganda Operations**

RCOM has acquired 90% stake in Anupam Globalsoft (U) Limited, Uganda-based Company, holding Licenses to offer Mobile, Fixed Line, Internet, National and International Long Distance services, in addition to WiMAX and Wi-Fi services in Uganda. The company has received Spectrum allocation and plans to launch its Mobile services soon.

### **Reliance Global Call**

Global virtual calling card services: The Company offers virtual international calling services and has over 1.7 million retail customers in the U.S.A., Canada, U.K., Australia, New Zealand, Hong Kong, Malaysia & Singapore.

### **Reliance Passport**

The Company has launched Reliance Passport suite of services that provides international roaming services to Indians traveling to about 120 countries.

Overall, we believe that Reliance Globalcom has built up an impressive asset base that could lead to strong revenue stream in longer term. However, there are significant integration challenges faced by the company in near term. The expansion plans in terms of NGN fiber network, Yipes ethernet network & launch of WiMAX services in a no of emerging countries will need significant capital expenditures. We think that the ambitious capacity expansion plans would have to be curtailed to some extent considering the stretched balance sheet of the company & the weak global demand scenario due to the steep economic downturn.

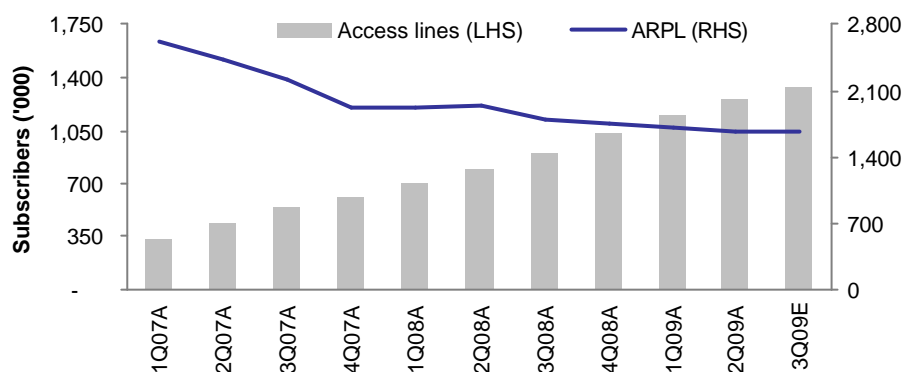
## ENTERPRISE BUSINESS

RCOM offers a range of enterprise connectivity solutions, namely voice, data, video, internet and IT infrastructure services, including national and international private leased circuits, broadband internet access, audio and video conferencing, MPLS-VPN, Office Centrex, managed Internet Data Centre (IDC) services and WiMAX and Wi-Fi services through this business unit. The company's enterprise customer base includes 900 of the top-1,000 Indian enterprises and MNCs. Although we think that the enterprise business holds immense potential in longer term, we expect the growth to remain muted in near term as the enterprises cut back on their capex & modernization plans to fight credit crisis & economic downturn.

### Broadband & Internet

With the increased focus on directly connecting buildings in the top 44 cities in India, RCOM's Broadband business now has more than 892,000 buildings directly connected to its network, recording more than 60% growth in the network coverage during the year.

#### Reliance Communications: Enterprise business



Source: Company

### WiMAX Services:

RCOM has received spectrum and has launched WiMAX services in top 10 cities - Mumbai, Bangalore, Pune, Delhi, Kolkata, Chennai, Hyderabad, Ahmedabad, Baroda & Surat. The Service offering includes Business internet for SMEs/SMBs, Telecommute packages for work-from-home professionals and Basic internet packages for high-end residential users.

#### Internet data centers



Source: Company reports

### Internet Data Centers (IDCs)

The company is India's largest Internet Data Center (IDC) service provider with over 60% market share and provides business critical applications to Indian and foreign blue chip companies, financial institutions and other important organizations. It has more than 304,000 sq ft of IDC capacity & aims to increase it 1 million sq ft by FY2010 making itself one of the top three IDC services provider in the world. Two IDCs - of 35,000 sq ft (IDC1) and 100,000 sq ft (IDC2) - are functioning in Mumbai and another two - of 20,000 sq ft (IDC1) and 50,000 sq ft (IDC2) - are functioning at Bangalore. The Hyderabad IDC is expected to become operational in this quarter & the company plans to start new IDCs in Delhi, Chennai & Kolkata. The services range from offering bulk co-location space to fully managed hosting of servers on rent/lease model. Further, a whole range of managed value added services are offered like firewall, intrusion detection, backup, streaming, mailing, system administration, data base administration, load balancing, storage services and disaster recovery / BCP solutions.

## RELIANCE INFRATEL

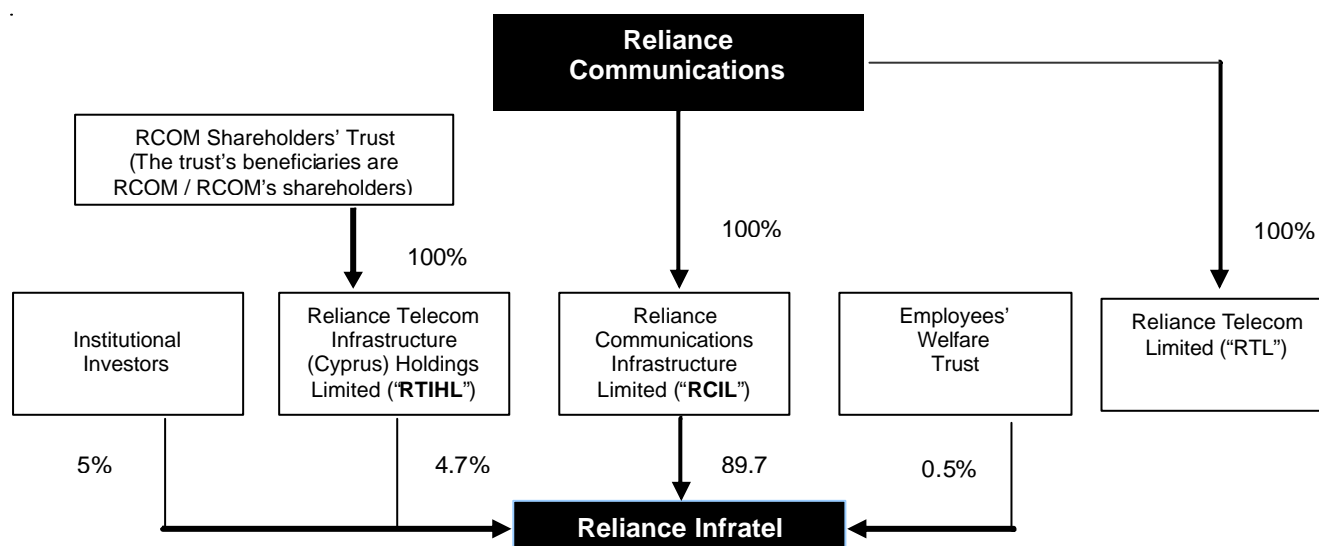
In March 2007, the Bombay high court had approved the demerger of Passive Infrastructure consisting of the wireless towers (CDMA and GSM) and related infrastructure of RCOM to Reliance Infratel (RITL, earlier known as Reliance Telecom Infrastructure). Currently the company has an extensive pan-India tower portfolio of over 45,000 towers, which is expected to expand to 50000 towers by March 2009 & about 55000-65000 towers by FY10. The tower assets of RTIL are 3G ready & are capable to host 3.5 - 4 tenants. Rcom board has recently approved transfer of its optic fiber network to Reliance Infratel at fair value consideration.

The company has been in talks with multiple operators & new entrants for a long term contract to share passive infrastructure as well as provide integrated solutions, including electronics, fiber connectivity, long-distance networks, Internet Data Center facilities, IT and billing systems. We have already factored in higher tenancy ratios for reliance Infratel considering its attractiveness for the newer operators. However, a large multi-year contract for extensive network sharing at high rental agreements with any of the new entrants remains an upside risk to our valuations. We have not factored in the same due to lack of clarity regarding the rollout schedule / strategies of the newer entrants.

### Corporate Structure

Rcom holds about 95% stake in the Reliance Infratel through various subsidiaries & Trusts. The company the company had transferred 20% stake in Reliance Infratel to Trusts acting in beneficial interests of the Rcom shareholders for efficient tax planning in case of monetization of these assets through private equity placements. Of this, 10% stake has been transferred back to Reliance communications at fair value consideration in Dec 2008.

### Corporate Structure



Source: Reliance Infratel RHP, Company Reports

### Private Equity Placement

In August 2007, Rcom had placed 5% stake of the tower company with 7 institutional investors including - HSBC Principal Investments & Quantum Fund (George Soros) at \$ 337.5 million (Rs 14 Bn). This valued the company at \$ 6.75 Bn (Rs 270 Bn) when it had about 14000 towers. This implied a high valuation of about Rs.20mn/tower versus a capex requirement of just around Rs.3-3.5mn / tower.

## **IPO Plans**

Reliance communications had plans to further monetize the tower assets through IPO plans for Reliance Infratel & had already obtained the SEBI approval for the same. The company had planned to raise around Rs.50bn to Rs.60bn through the public issue by selling about 10% of its post-issue paid capital which put the overall company valuations around Rs.500/600bn. However, the company had to let the SEBI approval lapse due to deteriorating investor sentiment/risk appetite & global financial turmoil. We do not expect the IPO plans to be revived anytime soon and equity infusion through attractive private equity placements could be difficult in current market conditions.

## **DIRECT TO HOME (DTH) SERVICES**

The Company's DTH segment - Big TV has shown good traction due to good marketing campaign, extensive distribution network & quality service offerings. However, intense competitive intensity in the DTH space, high upfront CPE subsidies on MPEG4 setup boxes, liberal start-up packs & other aggressive customer acquisition tactics makes us concerned over the EBITDA breakeven period & profitability of the DTH segment in near term.

Reliance Big TV offers DTH services using the advanced MPEG4 technology that provides superior picture quality and also allows for better transponder utilization. Although it gives an advantage as compared to Dish TV & Tata Sky that use MPEG2 technology, the subsidy burden would be higher for the MPEG4 set-up boxes (MPEG4 Rs2500-3000 vs. MPEG2 Rs1500-2500). However, the upfront operating losses may not be as significant as peers since Rcom mostly leases these set-up boxes & depreciate the same over the useful lifetime.

The capex for the DTH business has been lower than USD \$100mn. The company claims to have sales and service presence in over 6,500 towns and over 105,000 retail outlets and plans to further leverage its extensive distribution & retail network. The company has already added 1 million subscribers in the first 100 days of operations & has an ambitious target to garner & maintain 40% market share of DTH net adds.

We expect the DTH HHs to grow almost Five-fold to about 25 Mn by FY11E from the 5.2 Mn HHs in FY08 on the back of better quality of service, setup box subsidies, favorable regulations & aggressive marketing campaigns by the service providers. We expect Reliance Big TV to remain an aggressive player in the still nascent DTH industry & garner over 25% market share of incremental additions. We have not yet factored the DTH projections in our valuation model (revenues as well as initial losses) & will soon do it once the company starts reporting it separately.

## **IPTV SERVICES**

Reliance communications is about to launch its IPTV services on Microsoft's software platform, capitalizing on its extensive metro Ethernet network. The company already has excellent last mile connectivity and hence the incremental Capex for IPTV rollout is expected to be lower. As the strategy would be to target niche high end customers instead of a mass strategy in DTH segment, we expect the business to have higher margins & be value accretive in longer run.

## **Rcom NAVI MUMBAI SEZ**

Reliance Communications has received all relevant approvals from Maharashtra Industrial Development Corporation for its proposed 45-acre (18.6 hectares) special economic zone (SEZ) near the company headquarters in the 132-acre Dhirubhai Ambani Knowledge Centre (DAKC), Navi Mumbai. The management has contracted Reliance Infrastructure to implement the project. The project cost is estimated to be around Rs.10bn & the company has contacted Reliance Infrastructure to implement it over the next few years. However, considering the high debt burden, current liquidity crunch & aggressive capex requirements of the company, we do not expect the SEZ project to pick up anytime soon. Also the cutback in the capex plans of IT/ITES companies in wake of the industry slowdown will keep the demand subdued in near term. So we do not value the SEZ business (Capex as well as cash flows) in our present valuations.

## **RELIANCE TECH SERVICES**

Reliance Tech Services is formed with a view to deriving synergies from the in-house strength of skilled IT resources and assets at the Group level. Reliance Tech Services will initially provide IT Consulting, Services and System Integration to various business verticals of the Group, including Telecom, Financial Services, Utilities, Infrastructure, Media & Entertainment and Healthcare. Reliance Tech Services has a workforce of about 2,000 skilled IT professionals and development centers at Mumbai, Kolkata, Gurgaon, Hyderabad, Bangalore, Pune and has signed IT Outsourcing deals with all the Group companies to provide IT Consulting and Services for the next several years.

## **BPO BUSINESS**

Rcom operates its BPO at the Dhirubhai Ambani Knowledge Centre on the outskirts of Mumbai. The BPO division currently employs 10,000 people providing 24X7 multilingual support in voice and back office services. In line with its value unlocking strategy, Rcom plans to spin off its BPO business as a separate subsidiary and is planning a big expansion over the next two years, aiming to go to 30,000 employees. The firm plans to capitalize through geographic expansion of the BPO operations as well and is exploring ways to expand the business by external client servicing. However we do not value the BPO business separately as it is still in quite nascent stage and the expansion plans are yet to materialize.

## CVC (CENTRAL VIGILANCE COMMISSION) PROBE

According to publicly available information, CVC (Central Vigilance Commission) has asked the DOT to investigate under-reporting of revenues by Reliance Communications. The DoT has in turn approved the appointment of Parekh & Co to audit RCom's accounts for 2007-08. Comptroller and Auditor General of India (CAG), who audits all receipts and expenditure of the government, states and other government bodies, is also learnt to be looking into the matter.

RCOM has paid revenue share on gross revenue of Rs.158bn earned between June 2007 and June 2008 as per the documents filed by the company with TRAI. However, RCOM has reported revenues of Rs.183bn in its financial statements. This leads to a non-payment of revenue share on Rs.35bn i.e., about Rs.3.5bn. If the charges are proved correct, there could be an added penalty & interest payment on the evaded amount.

According to the company, the main reason for the discrepancy between reported revenues in financial statements and the TRAI reported revenues is that RCOM reports all its non-voice revenues through one of its subsidiary that has an ISP status. We note that while there is no revenue sharing licence fee for ISPs, there is a 6-10% licence fee and 2-4% spectrum charges (% AGR - Adjusted Gross Revenues) for wireless revenues.

The management has assigned the difference to:

- Revenues from non-SMS non-voice segment (6% of RCOM's revenue comes from internet access, downloads, and other VAS accessed through the mobile phones),
- Data cards (>1m subscribers, ~5% of revenue assuming an ARPU of Rs.700/month),
- USO subsidy on certain rural lines
- Data services (R-World, Content, Net Connect, Wireless terminals, etc).

While it is difficult to ascertain whether or not RCOM has breached any regulatory guidelines by segregating its wireless revenues in this manner, we note that the only other listed CDMA operator Tata Teleservices (Maharashtra) does not categorize revenues differently. TTML, whose non-voice revenue constitutes ~13.5% of total revenues, reported revenue of Rs4.8b in the DOT report, only 1% lower than that reported in its 2QFY09 financial statements.

### RCOM - Wireless Segment

(Rs mn)	3Q09	2Q09	1Q09	Vs.	2Q07
<b>Nos Reported to the Regulator Authority (TRAI )</b>					
Gross Revenue	32,984	34,182	31,608		25,310
Interconnection & Access Charges	8,836	11,280	6,830		5,676
Adjusted Gross Revenue	24,149	22,902	24,778		19,634
License Fees	2,117	2,009	2,175		1,742
Spectrum Charges	475	446	491		311
Net Revenues	21,557	20,447	22,112		17,580
Implied Avg Revenue Per User (APRU)	187	213	218		348
<b>Nos Reported to Shareholders</b>					
Gross Revenue	44,119	43,356	41,187		25,744
Interconnection & Access Charges	9,674	9,730	9,907		7,746
Net Revenue	34,445	33,626	31,280		17,998
Avg Revenue Per User (APRU)	251	271	282		355
<b>Reported Shareholder Nos - % Higher than TRAI Nos</b>					
Gross Revenue	33.8%	26.8%	30.3%		1.7%
Net Revenue	59.8%	64.5%	41.5%		2.4%

Source: TRAI; Kotak Securities - Private Client Research

## **Rcom 3Q RESULTS: HIGH LEVERAGE, LOW GROWTH...**

Rcom showed a muted performance in 3Q09 with revenues at Rs. 58.5 Bn (3.6% qoq, 20% yoy), EBITDA at Rs 35 bn (2.2% qoq, 11.7% yoy) and net profit of Rs. 14.1Bn (-7.9% qoq, 2.7% yoy). The revenues include other income of Rs 637.5 Mn on account of savings due to buyback & cancellation of FCCBs trading at discount. The EBITDA margins declined 60 bps qoq / 300bps yoy to 40.2%. The fall was mainly due to 14% qoq / 114% yoy increase in network operating costs. The EBIT margins declined 150 bps qoq / 530 bps yoy to 23%, partly due to higher depreciation. The company reported a net financial income of Rs 1.5 bn on account of high cash yields & forex gains. The Tax provisioning remains significantly low for the fourth straight quarter at Rs 153 Mn (1% tax rate). The overall capex slowed down to Rs 43.6 Bn even after aggressive GSM rollout (steep decline seen in global & broadband capex).

### **Wireless Segment**

Wireless revenues increased marginally to Rs 44.1 Bn (+1.8% qoq, 12% yoy), EBITDA declined to Rs 16.6 Bn (-1.4% qoq, 5% yoy) & EBITDA margins declined 120 bps qoq / 230 bps yoy to 37.7%. This was in spite of strong subscriber growth (9.5% qoq, 50% yoy) & growth in total wireless mins (6.5% qoq, 38% yoy). The company added 5.3 Mn wireless subs in the quarter taking the total subscriber base to 61.4 Mn (17.7% market share, 16.8% net adds share). Total wireless mins stood at 72.2 Bn for the quarter. The MOUs declined 3.1% qoq / 9% yoy to 410 Min/month, RPMs declined 4.3% qoq / 18% yoy to 0.61 Rs/min & ARPUs fell 7.4% qoq / 26% yoy to 251 Rs/month depicting extremely low usage elasticity for the segment. The capex for the wireless segment was Rs32.5 Bn (74% of wireless sales). Although the management assigns the steep decline in MOUs (3%qoq) to reduction in free usage plans, we are concerned as the decline has been on the back of a seasonally weak 2Q. However, we have assumed reasonable MOU/ARPU uplift going forward as the company enters the GSM space.

### **Global Business**

Global business revenues declined marginally to Rs. 16.8 bn (-0.8% qoq, 26% yoy), EBITDA increased to Rs 4.3 bn (20%qoq, 26%yoy) & EBITDA margins improved by 440 bps qoq / -10bps yoy to 25.7%. The revenues growth was impacted partially due to the full quarter impact of phasing out of ADC on ILD mins which subsequently resulted in EBITDA margin expansion. NLD mins stood at 8.6 bn (9.2%qoq, 48%yoy) & ILD mins stood at 1.9 Bn (- 2.1%qoq, 9%yoy). The capex for the segment was Rs 5.7 Bn (34% of segment sales). We are concerned about the slower growth in ILD mins & expect the segment to be impacted by global economic slowdown as well as introduction of long distance calling cards by various standalone NLD/ILD operators post the recent DoT approval.

### **Broadband Segment:**

Broadband revenues increased to Rs 6.5 Bn (8.6%qoq, 43%yoy), EBITDA declined to Rs 2.8 Bn (-6.2% qoq, +24%yoy) and EBITDA margins contracted by 660 bps qoq / 650 bps yoy to 42.2%. Total broadband access lines increased 6% qoq / 48% yoy to 1.33 Mn. ARPL stood at Rs 1681 (+0.8% qoq, -6% yoy). The capex for the segment was Rs. 1.1 Bn (17% of sales). In our view, the steep margin decline has been due to stiff negotiations by the SMB segment impacted by the economic slowdown.



**Passive infrastructure segment:**

The management is looking to have about 50,000 towers (1.7 tenancy ratio) by FY09 & add further 5000-15000 towers next fiscal. The company also plans to bid in the USO scheme II for rolling out 11000 towers in rural areas. We expect increased traction in this segment as a number of newer licenses are looking for pan-India network sharing deals to facilitate faster rollouts.

**DTH Segment:**

The management indicates 1 Mn DTH subs additions (30% market share in gross additions) in first 100 days after the launch of BIG TV. However, the company has not seen any inflection in EBITDA losses in the others segment where it currently reports the DTH numbers. The company does not book upfront subsidy losses as the setup boxes are leased & depreciated over the useful life. We await further disclosures from the company before valuing the DTH business.

**Capex Guidance**

The Company has revised its FY09 capex guidance 20% downwards to about Rs 250 Bn from the earlier guidance of Rs 300Bn. The company guides a capex in range of Rs 90 Bn for 4QFY09 as the company is in last leg of its GSM rollouts. The company has guided a capex of Rs 150 bn for FY10 (inclusive of capex for Reliance Infratel). We have not factored in any incremental capex on account of 3G / WiMAX auctions or rollout in our valuations & remain concerned about the high capital requirement & increasing debt burden of the company as detailed ahead.

**RCom: Quarterly Results Analysis**

(Rs mn)	1Q08A	2Q08A	3Q08A	4Q08A	1Q09A	2Q09A	3Q09A	QoQ %	YoY %	9MFY09	9MFY08	YoY %
Total revenues	43,037	45,785	48,742	53,114	53,222	56,450	58,502	3.6%	20.0%	168,174	137,564	22.3%
Interconnection costs	6,702	6,829	7,821	6,845	6,289	5,366	5,633	5.0%	-28.0%	17,289	21,352	-19.0%
License fee and spectrum charges	2,985	2,917	3,367	3,117	2,870	2,958	3,059	3.4%	-9.1%	8,887	9,269	-4.1%
Network operating costs	4,338	5,662	5,446	6,562	8,128	10,266	11,666	13.6%	114.2%	30,060	15,446	94.6%
Employee costs	2,464	3,056	3,087	3,430	3,516	4,589	4,383	-4.5%	42.0%	12,488	8,607	45.1%
SG&A expenses	8,406	7,703	7,956	9,996	9,916	10,255	10,235	-0.2%	28.6%	30,406	24,065	26.3%
Total Operating costs	24,895	26,167	27,677	29,950	30,719	33,434	34,977	4.6%	26.4%	99,130	78,739	25.9%
EBITDA	18,142	19,618	21,065	23,164	22,503	23,016	23,526	2.2%	11.7%	69,045	58,825	17.4%
EBITDA margin (%)	42.2%	42.8%	43.2%	43.6%	42.3%	40.8%	40.2%			41.1%	42.8%	
Depreciation	6,192	6,754	7,252	7,856	8,638	9,180	10,070	9.7%	38.9%	27,888	20,198	38.1%
EBIT	11,950	12,864	13,813	15,308	13,865	13,836	13,456	-2.7%	-2.6%	41,157	38,627	6.6%
EBIT Margin (%)	27.8%	28.1%	28.3%	28.8%	26.1%	24.5%	23.0%			24.5%	28.1%	
Net finance cost	(1,274)	(1,125)	(1,518)	(81)	(2,339)	(2,353)	(1,496)			(6,188)	(3,917)	58.0%
Extraordinary item	(15)	(12,203)	-	(611)	640	647	358			1,645	(12,218)	-113.5%
PBT	13,239	26,192	15,331	16,000	15,564	15,542	14,595	-6.1%	-4.8%	45,701	54,762	-16.5%
Tax Rate	7.8%	2.7%	9.0%	-1.7%	-1.2%	-3.6%	1.0%			-1.3%	5.7%	
Tax Expense	1,031	698	1,379	(272)	(194)	(567)	153			(608)	3,108	-119.6%
Share of Minority and associates	4	12,448	223	1,240	635	800	339			1,774	12,675	-86.0%
Reported net income	12,204	13,046	13,729	15,032	15,123	15,309	14,103	-7.9%	2.7%	44,535	38,979	14.3%
Net Profit Margin	28.4%	28.5%	28.2%	28.3%	28.4%	27.1%	24.1%	-11.1%	-14.4%	26.5%	28.3%	
EPS	5.91	6.32	6.65	7.28	7.33	7.42	6.83	-7.9%	2.7%	21.58	18.89	14.3%
Capex (Rs mn)	17,926	53,179	88,179	52,756	69,686	47,731	43,607	-8.6%	-50.5%	161,024	159,284	1.1%
Capex / Sales	41.7%	116.1%	180.9%	99.3%	130.9%	84.6%	74.5%			95.7%	115.8%	

(Rs mn)	1Q08A	2Q08A	3Q08A	4Q08A	1Q09A	2Q09A	3Q09A	QoQ %	YoY %	9MFY09	9MFY08	YoY %
<b>Wireless segment</b>												
Gross revenue	33,730	37,230	39,567	41,608	41,187	43,356	44,119	1.8%	11.5%	128,662	110,527	16.4%
Net revenue	9,486	9,508	10,675	9,851	9,907	9,730	9,674	-0.6%	-9.4%	29,311	29,669	-1.2%
EBITDA	13,392	14,873	15,819	16,763	16,623	16,859	16,616	-1.4%	5.0%	50,098	44,084	13.6%
EBITDA Margin (%)	39.7%	39.9%	40.0%	40.3%	40.4%	38.9%	37.7%			38.9%	39.9%	
EBIT	9,284	10,236	10,738	10,995	10,486	10,318	9,657	-6.4%	-10.1%	30,461	30,258	0.7%
EBIT Margin (%)	27.5%	27.5%	27.1%	26.4%	25.5%	23.8%	21.9%			23.7%	27.4%	
<b>Subscribers (Mn)</b>												
GSM	4.15	5.04	6.00	7.02	8.07	9.21	10.35	12.5%	72.5%			
CDMA	27.73	31.29	34.96	38.78	42.71	46.84	50.99	8.9%	45.8%			
Subs Net Additions	3.87	4.45	4.64	4.83	4.98	5.28	5.30	0.4%	14.2%			
Subs Market Share	17.2%	17.4%	17.5%	17.5%	17.7%	17.8%	17.7%					
Subs Net Adds Share	19.5%	18.4%	18.9%	17.6%	19.3%	18.5%	16.8%					
<b>Usage Metrics</b>												
ARPU (Rs/Sub/Month)	377	363	337	318	282	271	251	-7.4%	-25.5%			
MOU (Mins/Sub/Month)	510	490	449	430	424	423	410	-3.1%	-8.7%			
RPM (Rs/Min)	0.74	0.74	0.75	0.74	0.66	0.64	0.61	-4.3%	-18.4%			
EPM (Rs/Min)	0.29	0.29	0.30	0.30	0.27	0.25	0.23	-7.4%	-23.6%			
Wireless churn	N.A	1.5%	1.4%	1.4%	1.4%	1.3%	1.0%					
SMS revenue (% of ARPU)	1.4%	1.4%	1.2%	1.2%	1.2%	1.2%	1.3%					
Non-voice revenue (% of ARPU)	5.7%	6.2%	6.4%	6.9%	7.6%	7.3%	7.4%					
Total Mins (Mn)	45,800	50,700	52,500	56,500	62,000	67,800	72,195	6.5%	37.5%	201,995	149,000	35.6%
Capex (Rs mn)	14,973	49,685	60,605	46,442	56,926	33,260	32,508	-2.3%	-46.4%	122,694	125,263	-2.1%
Capex / Sales	44.4%	133.5%	153.2%	111.6%	138.2%	76.7%	73.7%			95.4%	113.3%	
Capex / Inc Sub (Rs/Sub)	3,867	11,177	13,061	9,616	11,439	6,304	6,134					
Capex / Inc Mins (Rs/Min)	4.54	10.14	33.67	11.61	10.35	5.73	7.40					
<b>Global Business</b>												
Revenues	13,033	13,161	13,299	15,257	15,260	16,915	16,783	-0.8%	26.2%	48,958	39,493	24.0%
Net revenue	7,364	7,253	7,078	9,374	10,038	11,578	12,129	4.8%	71.4%	33,745	21,695	55.5%
EBITDA	3,239	3,276	3,428	4,089	3,222	3,608	4,315	19.6%	25.9%	11,145	9,943	12.1%
EBITDA margin (%)	24.9%	24.9%	25.8%	26.8%	21.1%	21.3%	25.7%			22.8%	25.2%	
EBIT	1,898	1,903	1,935	2,634	1,585	1,766	2,264	28.2%	17.0%	5,615	5,736	-2.1%
EBIT Margin (%)	14.6%	14.5%	14.5%	17.3%	10.4%	10.4%	13.5%			11.5%	14.5%	
ILD minutes (Mn)	1,590	1,688	1,747	1,769	1,726	1,946	1,906	-2.1%	9.1%	5,578	5,025	11.0%
NLD minutes (Mn)	5,639	5,853	5,795	5,964	6,641	7,856	8,576	9.2%	48.0%	23,073	17,287	33.5%
Capex (Rs Mn)	744	895	22,393	1,682	9,643	10,624	5,675	-46.6%	-74.7%	25,942	24,032	7.9%
Capex / Sales (%)	6%	7%	168%	11%	63%	63%	34%			53%	61%	
Capex / Inc Mins (Rs/Min)	0.87	2.87	22,393	8.81	15.21	7.40	8.35					
<b>Broadband Business</b>												
Revenues	3,833	4,371	4,564	5,100	5,603	6,023	6,542	8.6%	43.3%	18,168	12,768	42.3%
Net revenue	3,275	3,802	3,947	4,424	4,815	5,184	5,682	9.6%	44.0%	15,681	11,024	42.2%
EBITDA	1,836	2,102	2,222	2,492	2,714	2,941	2,760	-6.2%	24.2%	8,415	6,160	36.6%
EBITDA margin (%)	47.9%	48.1%	48.7%	48.9%	48.4%	48.8%	42.2%			46.3%	48.2%	
EBIT	1,272	1,508	1,617	1,862	1,974	2,160	1,926	-10.8%	19.1%	6,060	4,397	37.8%
EBIT Margin (%)	33.2%	34.5%	35.4%	36.5%	35.2%	35.9%	29.4%			33.4%	34.4%	
Access lines ('000)	705	792	901	1,031	1,147	1,259	1,335	6.0%	48.2%			
Access line additions ('000)	85	87	109	130	116	112	76			304	281	8.2%
ARPL (Rs/line/Month)	1,929	1,948	1,797	1,760	1,715	1,668	1,681	0.8%	-6.5%	5,064	5,674	-10.8%
Buildings directly connected ('000)	593,805	666,368	727,229	787,567	821,638	857,982	892,301	4.0%	22.7%			
Capex (Rs mn)	2,176	2,596	5,034	4,605	3,030	3,674	1,104	-70.0%	-78.1%	7,808	9,806	-20.4%
Capex / Sales (%)	57%	59%	110%	90%	54%	61%	17%			43%	77%	
Capex / Inc Access Line (Rs/Line)	25,600	29,839	46,183	35,423	26,121	32,804	14,526					

Source: Company, Kotak Securities - Private Client Research

## CONSTRAINED BALANCE SHEET: EQUITY INFUSION ON CARDS???

We think Rcom may have to consider equity infusion due to stretched balance sheet & high capex requirement. However, significant infusion would be difficult due to sluggish primary markets, global credit crunch & the unresolved disputes with Reliance Industries. The company has a total debt of Rs 266 Bn & net debt of Rs 183 Bn as of Dec 2008. The company has further guided capex of around Rs 90 Bn for 4Q09 & Rs 150 Bn for FY10. The Current liabilities of the company stand at Rs 309 Bn as of Dec 2008 (which in our view includes over Rs. 100 Bn on account of vendor financing). We expect this high vendor financing to start reversing as the peak of the capex cycle is already behind us. There could be further outlays due to 3G / WiMax spectrum auctions & subsequent network rollouts.

In our bear case scenario, we see overall debt levels increasing to Rs 483 Bn (about \$ 10 bn), net debt to increase to Rs 400 bn by FY10 (Debt / equity = 1.32, Net debt / Equity =1.09, Interest Coverage Ratio =1.77). The management indicates that only a small portion of the loans are short-term, complete foreign currency loans are long term in nature & the company has approved long term credit lines of US\$ 1.5 billion (@ LIBOR +2%) & multiple avenue to further raise debt. However, we note that the company has slowed down its capital expenditure in last two quarters.

### RCom: Increasing Debt Burden

(Rs mn)	2Q07A	3Q07A	4Q07A	1Q08A	2Q08A	3Q08A	4Q08A	1Q09A	2Q09A	3Q09A
Total Shareholder Equity	180,385	201,711	203,987	215,226	240,098	263,359	280,738	282,904	293,219	301,663
Secured Loans										
Foreign Loans	21,426	21,064	20,049	18,148	16,778	16,597	0	0	0	0
Rupee Loans	47,000	47,389	31,755	30,255	19,005	19,005	9,500	2,375	0	0
Unsecured Loans										
Foreign Loans	46,346	44,930	88,039	107,626	106,762	97,250	131,631	143,297	157,068	178,374
Rupee Loans	8,888	900	15,595	15,485	15,484	46,812	74,550	61,870	83,667	88,348
Total Debt Funds	123,660	114,283	155,438	171,514	158,029	179,664	215,681	207,542	240,735	266,722
Cash & Investments	103,207	99,724	149,125	160,615	136,248	113,839	118,778	79,187	90,092	83,565
Net Debt	20,453	14,559	6,313	10,899	21,781	65,825	96,903	128,355	150,643	183,157
Debt/Equity	0.69	0.57	0.76	0.80	0.66	0.68	0.77	0.73	0.82	0.88
Net Debt/Equity	0.11	0.07	0.03	0.05	0.09	0.25	0.35	0.45	0.51	0.61

Source: Company

**RCom: Bear case - Debt Position by March 2010**

(Rs mn)	9MFY09A	4QFY09E	FY10E
Total Loan Funds (Dec 2008)	266,722		
Foreign Currency Loans	178,374		
Rupee Loans	88,348		
Capex Guidance		90,000	150,000
Current Liabilities & Provisions	309,898		
Equipment Payables Est. (Vendor Financing)	100,000		
Potential Reduction in Vendor Financing		10,000	40,000
3G Spectrum Auction - (Dual Technology)			50,000
Cash Earnings		25,850	96,300
Total Loan Funds	266,722	340,872	484,572
Cash & Investments	83,565	83,565	83,565
Net Debt	183,157	257,307	401,007
Total Shareholders Equity	301,663	323,096	366,230
EBITDA*	92,060	95,667	107,179
EBIT*	54,876	53,298	55,510
Interest Expense (@ 8% x Net Debt)*	14,653	20,585	32,081
Debt/Equity	0.88	1.06	1.32
Net Debt / Equity	0.61	0.80	1.09
Net Debt / EBITDA	1.99	2.69	3.74
Interest Coverage Ratio	3.75	2.59	1.73
RoE		18%	12%
RoCE		9%	5%

Source: Kotak Securities - Private Client Research;

\* Annualized

**RCom: Increasing Current Liabilities**

(Rs mn)	1Q07A	2Q07A	3Q07A	4Q07A	1Q08A	2Q08A	3Q08A	4Q08A	1Q09A	2Q09A	3Q09A
Current Assets (Ex Cash)	44,259	49,464	51,146	59,063	65,310	90,185	126,692	97,175	113,186	120,925	149,630
Current Liabilities	122,096	164,121	170,661	179,186	180,826	212,150	264,781	241,687	282,251	291,824	309,898
Net Working Capital	-77,837	-114,657	-119,515	-120,123	-115,516	-121,965	-138,089	-144,512	-169,065	-170,899	-160,268

Source: Company

**Aggressive Capex: Low Capital productivity...**

Reliance communications has been on an aggressive capex spree with about Rs.700bn of cumulative capex by Dec 2008. The company continues to have high capex requirements for its dual network rollouts & capacity additions on its submarine cable systems. The Company has guided a capex of Rs 240 Bn over the next 15 months (Rs 9 bn for 4Q09 & Rs 15 Bn for FY10). The return ratios have been deteriorating each quarter and we believe that the management will have to show significant execution capabilities to turn around the low capital productivity levels.

**RCom: Aggressive Capex**

(Rs mn)	1Q07A	2Q07A	3Q07A	4Q07A	1Q08A	2Q08A	3Q08A	4Q08A	1Q09A	2Q09A	3Q09A
Wireless	8,529	14,990	12,090	9,860	14,973	49,685	60,605	46,442	56,926	33,260	32,508
Global	6,732	3,670	490	3,330	744	895	22,393	1,682	9,643	10,624	5,675
Broadband	522	270	3,230	2,240	2,176	2,596	5,034	4,605	3,030	3,674	1,104
Others	76	528	30	510	33	3	147	27	87	173	4,320
Total	15,859	19,458	15,840	15,940	17,926	53,179	88,179	52,756	69,686	47,731	43,607
Cummulative Capex	275,451	294,909	310,749	326,689	344,615	397,794	485,973	538,729	608,415	656,146	699,753
Net Profit	5,127	7,023	9,244	10,243	12,204	13,046	13,729	15,032	15,123	15,309	14,103
Annualized ROIC %		9.85%	12.21%	12.86%	14.54%	14.06%	12.43%	11.74%	10.55%	9.68%	8.32%

Source: Company; Kotak Securities - Private Client Research

**RCom: Consolidated Capex Assumptions**

	FY07A	FY08A	FY09E	FY10E	FY11E	FY12E	2013E	2014E	2015E	2016E	2017E
Capex (Rs Mn)	65953	212261	218532	146031	107512	89960	84915	83651	82112	69437	69928
Capex/Sales (%)	46%	111%	95%	51%	32%	24%	21%	19%	18%	14%	14%
Capex/Sub (Rs)	2,355	4,635	3,039	1,548	991	758	665	620	583	478	467
Capex/Min (Rs)	0.45	1.03	0.75	0.36	0.22	0.17	0.15	0.13	0.12	0.10	0.10
Capex/Incremental Sub (Rs)		11,934	8,365	6,522	7,571	8,815	9,562	11,304	13,870	15,639	15,749
Capex/Incremental Min (Rs)		3.54	2.60	1.26	1.43	1.57	1.82	1.90	2.42	2.33	2.69

Source: Company; Kotak Securities - Private Client Research

**FCCBs Buyback: Too little to cheer...**

The company plans to spend USD 150-200 million to buy-back 15-20% of its USD 1.3 billion foreign currency convertible bonds (FCCBs) maturing in 2011-12. The company may use USD 50 million from internal resources and may borrow overseas for the balance to complete the buyback in a staggered manner over next 2-3 months. We think that the buyback of bonds trading at 30-50% discount could be value accretive in longer term. However, considering the high capital requirements of the company, we expect the quantum of buyback to remain low & hence not have much material impact on the financials of the company.

Rcom had about USD 1.29bn in outstanding FCCBs as of March 2008 (a part of it is bought back). Post the steep share price correction, we are concerned about the prospects of FCCB conversions due in 2011 & 2012. Considering that the bonds have a Yield-to-Maturity of 4.65% & 4.95%, the effective conversion price comes up to Rs.682 & Rs.957 per share respectively for the two FCCB Issues. The company has been accounting for the premium payable on redemption (non-conversion) through capital reserves & not through profit & loss account. In case they are redeemed, they will lead to an outgo of \$ 1.63 bn at maturity according to our calculations. We however have not factored redemption of FCCBs in our valuation model and it remains a downside risk to our valuations.

**RCom: FCCBs Details**

	(1)	(2)
Amount Raised	US\$ 500 Million	US\$ 1 Billion
Issue Date	9th May, 2006	28th Feb, 2007
Maturity	May '11	Feb '12
Convertible on or after	19th June, 2006	9th April, 2007
No of new shares if fully converted (Mn)	46.16	66.71
Equity Dilution if fully converted	2.2%	3.1%
Conversion Price Rs/Share	Rs. 480.68	Rs. 661.23
Yield To Maturity	4.65%	4.95%
Effective Conversion Price	Rs. 682	Rs. 957
Outstanding FCCBs (Mar 2008)	US \$ 297 Million	US \$ 990 Million
Potential Payout if redeemed	US \$ 373 Million	US \$ 1258 Million

Source: Company; Kotak Securities - Private Client Research

### Sharp reduction in Interconnect, License & spectrum charges

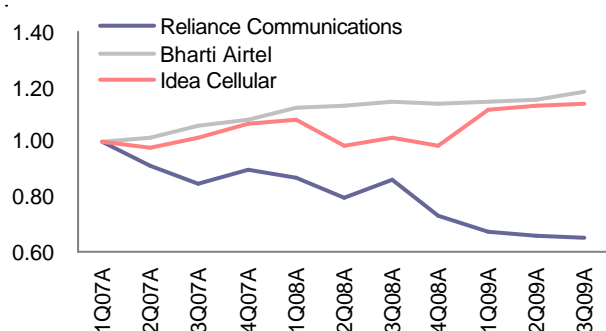
The interconnection charges for Rcom have reduced considerably from around 20% in 1Q2007 to just about 9.6% of total revenues in Dec 08. A part of the reduction can be attributed to higher on-net traffic & higher number of Points of Interconnects (POIs). However, we are surprised by the extent of the fall (in % as well as absolute terms) considering the massive increase in overall traffic and expect the fall to be attested going forward. The Licence fees & spectrum Charges too have been reducing consistently from about 8% in of revenues 1Q07 to about 5.2% in Dec 08. The reduction is attributed to increase in non-wireless business contribution for the company. However, we find the reduction in licence fees/spectrum charges to be quite steep compared to peers & expect a trend reversal post the launch of GSM services.

#### RCom: Interconnection, Licence & Spectrum Charges (as % of Gross Revenues)

	1Q07A	2Q07A	3Q07A	4Q07A	1Q08A	2Q08A	3Q08A	4Q08A	1Q09A	2Q09A	3Q09A
<b>Reliance Communications</b>											
Interconnection Charges	20.6%	18.4%	18.5%	18.2%	15.6%	14.9%	16.0%	12.9%	11.8%	9.5%	9.6%
Licence & Spectrum Charges	8.0%	7.3%	6.8%	7.2%	6.9%	6.4%	6.9%	5.9%	5.4%	5.2%	5.2%
Total Access, License & Spectrum Charges	28.6%	25.7%	25.3%	25.3%	22.5%	21.3%	23.0%	18.8%	17.2%	14.7%	14.9%
<b>Bharti Airtel</b>											
Interconnection charges (% of Gross)	17.1%	16.5%	16.8%	17.3%	15.4%	14.7%	15.0%	15.7%	14.6%	14.3%	13.9%
Licence & Spectrum Charges (% of Gross)	8.8%	8.9%	9.3%	9.5%	9.9%	9.9%	10.0%	10.0%	10.1%	10.1%	10.4%
Total Access, License & Spectrum Charges	25.9%	25.4%	26.1%	26.8%	25.2%	24.6%	25.0%	25.7%	24.7%	24.4%	24.3%
<b>Idea Cellular</b>											
Interconnection charges (% of Gross Revenues)	16.8%	16.1%	17.0%	16.8%	16.2%	16.3%	17.1%	17.4%	18.2%	18.5%	18.8%
Licence & Spectrum Charges ( (% of Gross Revenues)	10.1%	9.8%	10.2%	10.7%	10.8%	9.9%	10.2%	9.9%	11.2%	11.3%	11.4%
Total Access, License & Spectrum Charges	26.9%	25.9%	27.1%	27.5%	27.0%	26.2%	27.3%	27.3%	29.4%	29.9%	30.2%

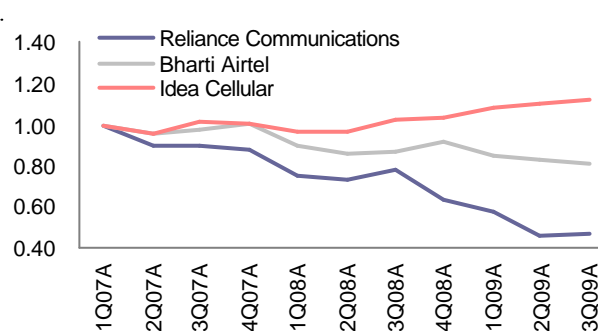
Source: Companies; Kotak Securities - Private Client Research

#### Licence & Spectrum Charges (as % of Total Revenues)



Source: Companies

#### Interconnection charges (as % of Total Revenues)



Source: Companies

### Lower Depreciation

We feel that Rcom follows a less conservative depreciation policy than its peers Bharti Airtel & Idea Cellular which results in higher comparable net profits. Although the capex has been consistently higher (30% higher) than Bharti Airtel, depreciation charges has been much lower (20% lower). Quarterly depreciation as a % of Gross block has reduced considerably from about 2.22% to just about 1.79% and is lower as compared to Bharti & Idea.

**Depreciation Policies**

	Bharti Airtel	Reliance Com	Idea Cellular
Leasehold Land	Min of Lease Period or 10 years	Lease period	Lease period
Building	20	30 & 60	9 to 30
Plant and Machinery // Network Equipment	3 to 20	10-20	5 to 13
Furniture and Fixture	2 to 5	15	3 to 10
Office Equipment	2 to 5	20	3 to 9
Vehicles	5	10	4 to 5

Source: Companies

**Reliance communications Vs Bharti Airtel**

	1Q08A	2Q08A	3Q08A	4Q08A	1Q09A	2Q09A	3Q09A
Incremental Capex (% of Bharti)	48.2	133.6	264.8	187.0	171.3	149.8	112.5
Cummulative Capex (% of Bharti)	106.2	110.0	121.1	123.9	131.4	130.3	130.7
Depreciation (% of Bharti)	76.3	74.5	69.9	81.0	86.0	79.5	79.3

Source: Companies, Kotak Securities - Private Client Research

**Rcom Vs Bharti Vs Idea**

	1Q08A	2Q08A	3Q08A	4Q08A	1Q09A	2Q09A	3Q09A
Bharti Dep as % of Gross Block	2.41	2.41	2.51	2.18	2.09	2.23	2.29
Rcom Dep as % of Gross Block	1.76	1.85	1.85	1.80	1.79	1.76	1.79
Idea Dep as % of Gross Block	2.18	2.11	2.17	2.18	2.00	1.96	2.04

Source: Companies, Kotak Securities - Private Client Research

**Lower Financing Costs**

Although the company has significant net debt (Rs 183 Bn), the company has consistently reported net interest income in its financial statements. We believe that the company has quite active and aggressive treasury operations resulting in high cash yields and high forex gains.

**RCom: Active Treasury Operations**

(Rs mn)	1Q09A*	2Q09A*	3Q09A*
Total Debt	207,542	240,735	266,722
Rupee Loans	64,245	83,667	88,348
Interest Expense (@10%)	1,854	1,849	2,150
Foreign Loans	143,297	157,068	178,374
Outstanding FCCBs Estimate	58,913	63,786	66,682
FC Loans (Ex FCCBs)	84,384	93,282	111,692
Interest Expense (@6%)	1,208	1,332	1,537
Total Interest Expense	3,062	3,181	3,687
Cash & Investments	79,187	90,092	83,565
Cash Yield (@10%)	2,475	2,116	2,171
Net Interest expense	587	1,065	1,517
Reported Financial Income/(Costs)	2339	2353	1496
Implied Forex/Other Gains	2,926	3,418	3,013

Source: Kotak Securities - Private Client Research; \*Company adopts Schedule 6 in place of AS-11



### Aggressive Accounting Policies:

- Rcom had changed its accounting policy related to foreign currency borrowings in June 08 quarter from AS 11 to AS 6. The translation profits/losses on the overseas borrowings due to foreign exchange fluctuations were earlier routed through the P&L. Since June 08, the company adopted AS 6 schedule of Companies Act, 1956 & adjusts this quarterly fluctuations against the carrying cost of fixed assets i.e. through fixed assets in the balance sheet.
- Had the company continued to follow AS 11, the net profit for the nine months ended on December 31, 2008 would have been lower by Rs 12.17 Bn for realized losses and by Rs 23.53 Bn for unrealized currency exchange fluctuation losses. This does not include a forex translation loss of Rs 11.46 Bn on account of FCCBs, which the company will not be liable for, if the FCCBs are converted on or before Maturity. We note that the overall net profit for the corresponding 9 months has been Rs 44.5 Bn (Vs total realized & unrealized forex loss of Rs. 47.16 bn).
- The two FCCBs tranches (worth \$ 1.29 Bn) are significantly out of money and have Yield-to-Maturities of 4.65% & 4.95% respectively. The company does not account for the premium payable on redemption (non-conversion) of these FCCBs through the P&L.
- However, the Company continues to route the profits/losses on derivative instruments used to hedge these foreign currency loans through the P&L. According to our estimates, the company has booked forex gains of around Rs 3 bn in each of the previous 3 quarters resulting in a net financial income for the company.
- The company also routes the yield on cash resulting from the unused portions of the foreign currency loans / FCCBs through the P&L account.
- The company also adjusts the gains on buyback of FCCBs trading at 30-50 % discount through the P&L.

Although these accounting treatments/changes are permissible under the current accounting standards, we find them aggressive & resulting in net financial income for the company even though it has large debt burden & foreign currency exposure.

### Lower Tax rates

Telecom companies in India including Rcom enjoy tax benefits under Section 80IA of the Income Tax Act. This benefit allows 100% tax deductions for five years of operations and 30% deductions for the next five years. However, the Company has been reporting extremely low tax provisioning for last 4 quarters mainly due to benefits from tower demerger. We expect the tax rates to increase to 8-10% levels going forward in-line with other operators & applicable Minimum Alternative Tax rates.

#### Tax rates

	1Q07A	2Q07A	3Q07A	4Q07A	1Q08A	2Q08A	3Q08A	4Q08A	1Q09A	2Q09A	3Q09A
Bharti Tax Rate (%)	11.1%	12.8%	14.8%	9.0%	19.0%	6.5%	8.2%	9.9%	13.8%	-6.3%	10.4%
Rcom Tax rate (%)	5.3%	0.9%	1.4%	1.4%	8.4%	2.7%	9.9%	-1.7%	-1.2%	-3.5%	1.1%
Idea Tax Rate (%)	0.5%	0.5%	2.7%	1.5%	0.5%	11.2%	10.2%	5.6%	10.1%	6.4%	7.0%

Source:Companies

## VALUATIONS

### RCom: Segmental Analysis

(Rs mn)	FY08A	FY09E	FY10E	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
<b>Wireless Business</b>										
GSM Subscribers	192	288	384	457	515	569	614	650	677	704
CDMA Subscribers	69	93	110	118	125	131	136	140	143	146
Total Wireless Subscribers	261	381	494	575	640	700	750	790	820	850
GSM as % of Total Subs	74%	76%	78%	79%	81%	81%	82%	82%	83%	83%
Rcom GSM Subs	7	19	36	47	54	61	66	71	74	77
Rcom CDMA Subs	39	53	58	62	64	67	69	70	72	73
Total Rcom Subs	46	72	94	109	119	128	135	141	145	150
GSM Subs as % of Rcom Subs	15.3%	26.9%	38.0%	43.1%	45.8%	47.7%	49.1%	50.1%	50.8%	51.5%
Rcom GSM Market Share	3.6%	6.7%	9.3%	10.2%	10.6%	10.7%	10.8%	10.9%	10.9%	10.9%
Rcom CDMA Market Share	56.4%	56.5%	53.2%	52.3%	51.6%	51.1%	50.7%	50.4%	50.2%	49.9%
Rcom Overall Market Share	17.5%	18.9%	19.1%	18.9%	18.5%	18.2%	18.0%	17.8%	17.7%	17.6%
Rcom GSM Net Adds Share	5.1%	12.9%	17.2%	15.0%	13.0%	12.0%	12.0%	12.0%	12.0%	12.0%
Rcom CDMA Net Adds Share	58.6%	56.7%	35.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%
Rcom Overall Net Adds Share	18.5%	21.7%	19.9%	17.5%	15.7%	14.8%	14.8%	14.8%	14.8%	14.8%
Rcom RPM (Rs/Min)	0.74	0.62	0.53	0.53	0.52	0.51	0.50	0.50	0.50	0.50
Rcom MOU (Min/Month)	466	424	404	395	394	396	399	400	403	406
Rcom ARPU (Rs/Month)	346	261	214	209	205	202	199	200	202	203
Rcom EPM (Rs/Min)	0.30	0.23	0.17	0.18	0.18	0.17	0.17	0.17	0.17	0.17
Wireless Revenue	152,135	176,830	214,089	254,667	279,678	298,122	314,290	331,262	346,138	359,140
Wireless Revenue Growth	42%	16%	21%	19%	10%	7%	5%	5%	4%	4%
Wireless EBITDA	60,847	66,794	70,840	86,813	95,619	102,223	108,081	114,249	119,725	124,582
Wireless EBITDA Margin (%)	40%	38%	33%	34%	34%	34%	34%	34%	35%	35%
<b>Global Business</b>										
ILD Mins (Mn)	6,794	7,503	7,895	8,289	8,704	9,139	9,596	10,076	10,580	11,109
NLD Mins (Mn)	23,251	32,335	41,917	44,013	46,213	48,524	50,950	53,498	56,172	58,981
Global Business Revenues	54,750	66,419	78,081	87,595	97,109	105,672	112,237	118,014	121,914	126,008
Revenue Growth	5.8%	21.3%	17.6%	12.2%	10.9%	8.8%	6.2%	5.1%	3.3%	3.4%
Global Business EBITDA	14,032	15,678	20,770	23,388	26,025	28,426	30,304	31,982	33,161	34,400
EBITDA Margin	26%	24%	27%	27%	27%	27%	27%	27%	27%	27%
<b>Broadband Business</b>										
Access Lines ('000)	1031	1416	1790	2183	2576	2963	3318	3617	3834	4026
Access Line additions	411	385	374	394	393	386	356	299	217	192
ARPL	1848	1678	1593	1449	1348	1281	1242	1217	1205	1205
Broadband Revenues	17,868	24,999	30,502	34,553	38,497	42,561	46,815	50,657	53,879	56,834
Broadband Revenue Growth	56%	40%	22%	13%	11%	11%	10%	8%	6%	5%
Broadband EBITDA	8,652	11,280	12,597	13,925	15,476	17,067	18,726	20,212	21,444	22,563
Broadband EBITDA Margins	48%	45%	41%	40%	40%	40%	40%	40%	40%	40%
<b>Passive Infrastructure</b>										
No of Towers	36,500	50,364	58,397	66,798	72,655	79,736	86,205	92,028	94,388	96,777
Occupancy Rate	1.20	1.44	2.02	2.11	2.16	2.22	2.27	2.32	2.37	2.42
Passive Infra Revenues (Incl Passthrough)	-	-	54,810	72,011	82,761	94,088	107,499	122,139	134,982	146,180
Passive Infra EBITDA (Incl Passthrough)	-	-	23,496	30,850	34,031	37,831	42,810	48,797	54,055	58,649
Passive Infra EBITDA Margins	-	-	43%	43%	41%	40%	40%	40%	40%	40%
<b>Eliminations</b>										
Intersegment Revenue	38,379	47,607	107,178	127,234	141,037	154,309	168,206	182,693	194,742	205,018
Intersegment EBITDA	319	377	20,021	23,157	24,150	25,883	28,334	31,399	33,868	35,827
<b>Consolidated</b>										
Rcom Revenues	190,678	231,027	285,533	339,376	376,607	407,201	434,974	462,973	486,803	508,724
Revenue Growth	31.8%	21.2%	23.6%	18.9%	11.0%	8.1%	6.8%	6.4%	5.1%	4.5%
Rcom EBITDA	81,989	92,959	107,179	131,819	147,001	159,664	171,586	183,841	194,518	204,367
Rcom EBITDA Margin	43.0%	40.2%	37.5%	38.8%	39.0%	39.2%	39.4%	39.7%	40.0%	40.2%

Source: Company, Kotak Securities - Private Client Research

## CORE BUSINESS VALUATION

We value Rcom - Core business at an Enterprise value of Rs. 440 Bn & an equity value to Rs. 268 Bn (Rs. 130/ share) based on discounted cash flow valuation. We have used a WACC of 12.6% and terminal growth rate of 3.5% for our calculations. We have made projections till FY17 & then applied terminal growth rate for future earnings.

### RCom: Ex Tower - Valuations

(Rs mn)	FY09E	FY10E	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
Total Income from Operations	231,027	279,891	326,855	360,224	387,176	410,584	433,650	452,730	470,125
Total Expenditure	138,069	176,473	203,064	223,473	239,857	253,894	267,652	278,865	289,061
Opex Savings Due to Tower Demerger	21,664	29,434	36,669	42,598	48,578	55,196	61,861	67,506	72,237
Rental Payouts	33,965	49,168	59,490	66,378	74,063	83,109	92,815	100,910	107,581
EBITDA After Rental Payouts	80,658	83,683	100,969	112,970	121,833	128,777	135,044	140,462	145,719
EBITDA Margins	35%	30%	31%	31%	31%	31%	31%	31%	31%
Depreciation and Amortization	35,265	41,670	53,920	62,320	67,570	71,770	75,970	80,170	84,370
Financial Charges (Net)	(3,926)	(162)	(232)	(2,125)	(1,546)	(9,921)	(30,071)	(29,765)	(32,735)
Tax Expense	77	2,109	4,728	5,277	7,255	10,708	16,937	19,812	23,521
Tax Rate	0%	5%	10%	10%	13%	16%	19%	22%	25%
Profit after Tax	47,597	40,066	42,553	47,497	48,554	56,219	72,207	70,244	70,563

### Discounted Cash Flow

PAT	47,597	40,066	42,553	47,497	48,554	56,219	72,207	70,244	70,563
Depreciation	35,265	41,670	53,920	62,320	67,570	71,770	75,970	80,170	84,370
Int (1-tax)	(3,920)	(154)	(209)	(1,912)	(1,345)	(8,333)	(24,357)	(23,216)	(24,551)
Capex	174,931	120,000	80,000	70,000	60,000	60,000	60,000	60,000	60,000
NWC change	(22,306)	(15,074)	(9,812)	3,973	5,013	6,979	6,942	7,446	6,624
FCFF	(72,500)	(23,344)	26,076	33,932	49,766	52,677	56,878	59,752	63,758

	FY10	Assumptions
Total FCFF	440,608	Terminal Growth 3.5%
Less Debt	172,267	WACC 12.6%
Shareholders' Value	268,341	
<b>Core Business value per Share</b>	<b>130</b>	
Reliance Infratel value per Share	90	
<b>Consolidated value per Rcom Share</b>	<b>220</b>	

Source: Kotak Securities - Private Client Research

## RELIANCE INFRATEL VALUATIONS

We value Reliance Infratel at an Enterprise value of \$ 5.7 Bn (Rs. 257 Bn) & an equity value to \$4.4 Bn (Rs. 196 Bn) based on discounted cash flow valuation. We have used a WACC of 10.7% and terminal growth rate of 3.5% for our calculation. This implies a valuation of Rs. 4.3 Mn/tower vs. average capex of Rs. 2.5 - 3.0 Mn/tower. We haven't yet factored in the 3G/WiMax rentals in our valuations & aggressive 3G rollouts by Reliance communications remain upside risks to our tower valuations.

### Reliance Infratel Valuations

(Rs mn)	FY09E	FY10E	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
Rcom Subs (Mn)	72	94	109	119	128	135	141	145	150
BTS required	70,509	99,275	114,224	124,966	137,943	149,997	161,049	166,123	171,295
<b>Tower Estimate</b>	<b>50,364</b>	<b>58,397</b>	<b>66,798</b>	<b>72,655</b>	<b>79,736</b>	<b>86,205</b>	<b>92,028</b>	<b>94,388</b>	<b>96,777</b>
Additional towers	13,864	8,033	8,400	5,857	7,081	6,469	5,822	2,360	2,389
No of New GBTs	11,784	6,828	7,140	4,978	6,019	5,499	4,949	2,006	2,031
No of New RTTs	2,080	1,205	1,260	879	1,062	970	873	354	358
GBTs as % of Incremental Towers	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%
<b>Total Capex</b>	<b>43,601</b>	<b>25,265</b>	<b>27,476</b>	<b>19,924</b>	<b>25,052</b>	<b>23,802</b>	<b>22,279</b>	<b>9,392</b>	<b>9,887</b>
Rcom Occupancy	1.40	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77
Third Party Occupancy	0.04	0.32	0.40	0.44	0.49	0.53	0.57	0.61	0.65
<b>Overall Occupancy</b>	<b>1.44</b>	<b>2.02</b>	<b>2.11</b>	<b>2.16</b>	<b>2.22</b>	<b>2.27</b>	<b>2.32</b>	<b>2.37</b>	<b>2.42</b>
Total No of Occupants	72,513	117,725	141,060	157,285	176,851	195,717	213,710	223,976	234,548
GBT Revenue	20,585	33,178	42,570	47,819	53,585	60,669	68,675	75,576	81,475
RTT Revenue	2,752	3,370	3,604	3,964	4,421	4,988	5,644	6,240	6,781
Total Rental Revenue	23,337	36,548	46,174	51,783	58,006	65,657	74,318	81,816	88,255
Passthrough Costs	11,148	18,263	25,837	30,978	36,082	41,842	47,821	53,166	57,925
Total Revenue Incl Passthrough	34,486	54,810	72,011	82,761	94,088	107,499	122,139	134,982	146,180
Total Opex Costs	10,684	13,051	15,324	17,752	20,175	22,847	25,521	27,761	29,607
Total Costs Inc Passthrough	21,833	31,314	41,161	48,730	56,257	64,689	73,342	80,927	87,532
EBITDA	12,653	23,496	30,850	34,031	37,831	42,810	48,797	54,055	58,649
EBITDA Margin (%)	54.2%	64.3%	66.8%	65.7%	65.2%	65.2%	65.7%	66.1%	66.5%
<b>EBITDA Margin Incl Passthrough</b>	<b>36.7%</b>	<b>42.9%</b>	<b>42.8%</b>	<b>41.1%</b>	<b>40.2%</b>	<b>39.8%</b>	<b>40.0%</b>	<b>40.0%</b>	<b>40.1%</b>

### Discounted Cash Flow Analysis

Net Profit	2,125	7,389	9,710	10,194	11,327	13,407	16,609	20,401	24,655
Depreciation	7,764	9,999	11,845	13,504	15,078	16,788	18,401	19,509	20,184
Int (1-tax)	1,107	1,532	2,852	3,375	3,713	3,793	3,483	2,434	770
Capex	43,601	25,265	27,476	19,924	25,052	23,802	22,279	9,392	9,887
NWC change	(1,088)	(2,439)	1,207	2,937	2,484	2,051	1,868	1,940	1,873
FCFF	(31,517)	(3,906)	(4,276)	4,212	2,582	8,135	14,346	31,012	33,850

	FY10	Assumptions
Total FCFF	256,570	
Less Debt	60,693	Terminal Growth 3.5%
Shareholders' Value	195,877	WACC 10.7%
Rcom equity value (95%)	186,083	
<b>Value per Rcom Share</b>	<b>90</b>	

Source: Kotak Securities - Private Client Research

## CONSOLIDATED VALUATION

We value Rcom at an Enterprise value of Rs. 721 Bn & an equity value to Rs. 455 Bn (Rs. 220/ share) based on discounted cash flow valuation. We have used a WACC of 12% and terminal growth rate of 3.5% for our calculations. The terminal EBITDA margins are expected to be around 40% due to economies of scale & higher non-voice contributions. However, we have assumed lower terminal EBITDA margins for the company than Bharti Airtel considering the costs associated with running pan-India dual networks. We value the core business at Rs 268 Bn (130 Rs/Share, WACC 12.6%, g 3.5%) and 95% stake in Reliance Infratel at Rs 186 Bn (90 Rs/share, WACC 10.7%, g 3.5%). We have made projections till FY17 & then applied terminal growth rate for future earnings.

### RCom - Valuations

(Rs mn)	FY08A	FY09E	FY10E	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
Total Revenues	190,678	231,028	285,533	339,376	376,607	407,201	434,974	462,973	486,803	508,724
<b>Revenue Growth</b>	<b>32%</b>	<b>21%</b>	<b>24%</b>	<b>19%</b>	<b>11%</b>	<b>8%</b>	<b>7%</b>	<b>6%</b>	<b>5%</b>	<b>5%</b>
Licence Fees	12,386	12,236	14,237	17,601	20,285	22,747	25,168	27,714	30,114	32,488
Licence Fees as % of Revenues	6.5%	5.3%	5.0%	5.2%	5.4%	5.6%	5.8%	6.0%	6.2%	6.4%
Access Charges	28,197	24,188	30,606	36,044	39,740	42,534	45,030	46,717	48,035	49,032
Access Charges as % of Revenues	14.8%	10.5%	10.7%	10.6%	10.6%	10.4%	10.4%	10.1%	9.9%	9.6%
Employee Costs	12,037	17,370	20,569	23,939	26,000	27,501	28,724	29,879	30,687	31,305
Employee Costs as % of Revenues	6.3%	7.5%	7.2%	7.1%	6.9%	6.8%	6.6%	6.5%	6.3%	6.2%
Network Operating costs	22,008	44,778	64,602	75,854	84,057	90,443	96,283	100,468	103,929	106,755
Network Opex as % of Revenues	11.5%	19.4%	22.6%	22.4%	22.3%	22.2%	22.1%	21.7%	21.3%	21.0%
SG&A Costs	34,061	39,494	48,339	54,119	59,525	64,311	68,182	74,355	79,520	84,776
SG&A Costs as % of Revenues	17.9%	17.1%	16.9%	15.9%	15.8%	15.8%	15.7%	16.1%	16.3%	16.7%
Total Expenditure	108,689	138,066	178,353	207,557	229,606	247,537	263,387	279,133	292,285	304,356
EBITDA	81,989	92,961	107,179	131,819	147,001	159,664	171,586	183,841	194,518	204,367
<b>EBITDA Margins (%)</b>	<b>43.0%</b>	<b>40.2%</b>	<b>37.5%</b>	<b>38.8%</b>	<b>39.0%</b>	<b>39.2%</b>	<b>39.4%</b>	<b>39.7%</b>	<b>40.0%</b>	<b>40.2%</b>
Depreciation	28,054	38,480	51,669	65,765	75,824	82,648	88,558	94,371	99,679	104,554
Depreciation as % of Gross Block	6.9%	7.1%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
EBIT	53,935	54,482	55,510	66,054	71,177	77,016	83,028	89,470	94,838	99,813
EBIT Margins (%)	28.3%	23.6%	19.4%	19.5%	18.9%	18.9%	19.1%	19.3%	19.5%	19.6%
Net Financial Charges	(16,827)	(5,314)	7,103	13,023	11,670	9,011	6,585	3,837	(144)	(5,538)
Profit Before Tax	70,762	59,795	48,407	53,032	59,507	68,006	76,444	85,633	94,983	105,352
Tax rate (%)	4%	0%	5%	10%	10%	13%	16%	19%	22%	25%
Tax	2,836	97	2,420	5,303	5,951	8,841	12,231	16,270	20,896	26,338
Minority Interest	13,915	2,113	1,356	1,356	1,356	1,356	1,356	1,356	1,356	1,356
Adjusted Net Profit	54,011	57,586	44,631	46,372	52,201	57,809	62,857	68,006	72,730	77,658
Net Profit Margins (%)	28.3%	24.9%	15.6%	13.7%	13.9%	14.2%	14.5%	14.7%	14.9%	15.3%
<b>EPS (Basic)</b>	<b>26.32</b>	<b>27.90</b>	<b>21.63</b>	<b>22.47</b>	<b>25.29</b>	<b>28.01</b>	<b>30.46</b>	<b>32.95</b>	<b>35.24</b>	<b>37.63</b>
EPS (Fully Diluted)	24.81	26.46	20.50	21.30	23.98	26.56	28.88	31.24	33.41	35.68
Cash Profit	82,065	96,065	96,300	112,138	128,025	140,457	151,415	162,377	172,410	182,212
Cash Profit Margin	43.0%	41.6%	33.7%	33.0%	34.0%	34.5%	34.8%	35.1%	35.4%	35.8%
CEPS	38	44	44	52	59	65	70	75	79	84
Divident Payout Ratio	2.87%	2.87%	2.87%	5.00%	10.00%	25.00%	30.00%	30.00%	30.00%	30.00%
Divident Paid	1,548	1,650	1,279	2,319	5,220	14,452	18,857	20,402	21,819	23,297
DPS	0.71	0.76	0.59	1.07	2.40	6.64	8.66	9.37	10.02	10.70

Source: Company, Kotak Securities - Private Client Research

**RCom: Valuations**

(Rs mn)	FY08A	FY09E	FY10E	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
Share Capital	10,320	10,320	10,320	10,320	10,885	10,885	10,885	10,885	10,885	10,885
Reserves and Surplus	246,107	301,762	344,896	388,556	500,396	541,296	582,089	626,226	673,428	723,828
Total Shareholders Funds	256,427	312,082	355,216	398,876	511,280	552,180	592,974	637,110	684,312	734,712
Minority Interest	24,311	11,014	11,014	11,014	11,014	11,014	11,014	11,014	11,014	11,014
Total Loans	215,681	290,000	320,000	295,000	200,000	200,000	180,000	145,000	100,000	60,000
<b>Total Liabilities</b>	<b>496,419</b>	<b>613,096</b>	<b>686,230</b>	<b>704,890</b>	<b>722,294</b>	<b>763,194</b>	<b>783,988</b>	<b>793,124</b>	<b>795,326</b>	<b>805,726</b>
Gross Block	463,640	625,499	850,764	1,028,240	1,138,164	1,223,216	1,307,018	1,389,297	1,458,689	1,528,576
Less: Depreciation	89,814	128,294	179,963	245,728	321,552	404,200	492,759	587,130	686,809	791,363
Net Block	373,826	497,205	670,801	782,512	816,612	819,015	814,259	802,167	771,880	737,212
Capital Work-in-Progress	148,327	205,000	125,000	55,000	35,000	35,000	35,000	35,000	35,000	35,000
Total Fixed Assets	522,153	702,205	795,801	837,512	851,612	854,015	849,259	837,167	806,880	772,212
Investments	2,797	2,818	2,818	2,818	2,818	2,818	2,818	2,818	2,818	2,818
Inventories	4,059	4,672	5,486	6,194	6,530	6,707	6,806	6,882	6,875	6,825
Sundry Debtors	27,224	31,336	36,792	41,544	43,796	44,986	45,652	46,161	46,110	45,777
Cash and Bank Balances	115,981	59,149	53,761	40,521	39,853	73,337	91,908	106,194	131,237	169,681
Other Current Assets	23,058	26,540	31,162	35,186	37,094	38,102	38,666	39,097	39,054	38,772
Loans and Advances	42,834	49,303	57,888	65,364	68,908	70,781	71,828	72,629	72,549	72,025
Total Current Assets	213,156	171,000	185,088	188,809	196,181	233,913	254,860	270,963	295,824	333,080
Current Liabilities	199,267	217,291	241,699	258,549	258,222	251,279	241,575	231,413	218,992	205,968
Provisions	42,420	45,637	55,778	65,701	70,095	76,273	81,373	86,411	91,204	96,416
Total Current Liabilities	241,687	262,928	297,478	324,250	328,317	327,552	322,949	317,824	310,196	302,384
Net Current Assets	(28,531)	(91,928)	(112,389)	(135,440)	(132,135)	(93,639)	(68,089)	(46,861)	(14,372)	30,696
<b>Total Assets</b>	<b>496,419</b>	<b>613,096</b>	<b>686,230</b>	<b>704,890</b>	<b>722,294</b>	<b>763,194</b>	<b>783,988</b>	<b>793,124</b>	<b>795,326</b>	<b>805,726</b>
<b>Capex Assumption</b>	<b>212,261</b>	<b>218,532</b>	<b>145,265</b>	<b>107,476</b>	<b>89,924</b>	<b>85,052</b>	<b>83,802</b>	<b>82,279</b>	<b>69,392</b>	<b>69,887</b>
Net Debt	96,903	228,033	263,421	251,661	157,329	123,845	85,274	35,988	(34,055)	(112,499)
Debt/Equity	0.84	0.93	0.90	0.74	0.39	0.36	0.30	0.23	0.15	0.08
Net Debt/Equity	0.38	0.73	0.74	0.63	0.31	0.22	0.14	0.06	(0.05)	(0.15)

Source: Company, Kotak Securities - Private Client Research

**RCom: Discounted Cash Flow Valuations**

	2008	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
PAT	54,011	57,586	44,631	46,372	52,201	57,809	62,857	68,006	72,730	77,658
Depreciation	28,054	38,480	51,669	65,765	75,824	82,648	88,558	94,371	99,679	104,554
Int (1-tax)	(3,838)	(6,947)	6,748	11,720	10,503	7,839	5,531	3,108	(113)	(4,154)
Capex	212,261	218,532	145,265	107,476	89,924	85,052	83,802	82,279	69,392	69,887
NWC change	(42,154)	(6,564)	(15,074)	(9,812)	3,973	5,013	6,979	6,942	7,446	6,624
Investments	(74,317)	21	-	-	-	-	-	-	-	-
FCFF	(17,563)	(122,871)	(27,144)	26,194	44,631	58,231	66,165	76,264	95,459	101,548

	FY10	Assumptions		
Total FCFF	721,199	Terminal Growth	3.5%	
Less Debt	266,239	WACC	12.0%	
Shareholders' Value	454,959			
		WACC %		
No of Rcom Shares	2,064	11.5%	12.0%	12.5%
<b>Value per Rcom Share</b>	<b>220</b>	Terminal growth	3.0%	230
			3.5%	247
			4.0%	266
				205
				183
				196
				210

Source: Company, Kotak Securities - Private Client Research

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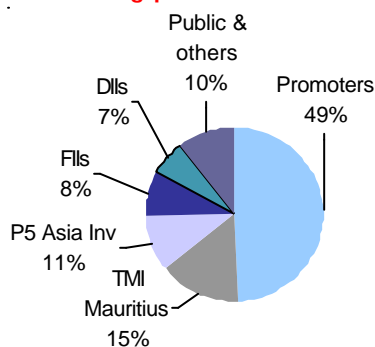
**Stock details**

BSE code	: 532822
NSE code	: IDEA
Market cap (Rs mn)	: 151900
Free float (%)	: 25%
52-wk Hi/Lo (Rs)	: 118/34
Avg. daily volume BSE	: 2008609
Avg. daily volume NSE	: 6165205
Shares o/s (mn)	: 3100

**Summary table**

(Rs mn)	FY08	FY09E	FY10E
Sales	67,375	111,876	149,916
Growth (%)	53.6	66.0	34.0
EBITDA	22,693	29,765	36,901
EBITDA margin (%)	33.7	26.6	24.6
Net Profit	10,424	5,312	10,586
Net debt (cash)	54,620	42,573	72,910
EPS (Rs)	4.0	1.6	3.2
Growth (%)	80.8	-58.9	99.3
CEPS	7.3	6.8	9.1
RoAE (%)	21.8	5.2	6.9
RoACE (%)	10.2	2.9	4.1
EV/Sales (x)	3.1	1.7	1.5
EV/EBITDA (x)	9.1	6.5	6.1
P/E (x)	12.4	30.1	15.1
P/Cash Earnings	6.7	7.2	5.4
P/BV (x)	2.6	1.0	1.0

Source: Company,  
Kotak Securities - Private Client Research

**Shareholding pattern**

Source: Capitaline

**One-year performance (Rel to sensx)**

Source: Capitaline

**IDEA Cellular Ltd****PRICE : Rs.49****TARGET PRICE : Rs.48****RECOMMENDATION : REDUCE****FY10E: EV/EBITDA: 6.1x P/E: 15.1x****Pain to Persist!!**

We initiate coverage on Idea Cellular with a **REDUCE** recommendation and a 6-months DCF-based price target of Rs 48 per share. Aggressive network rollouts, high network operating expenses, high subscriber acquisition/marketing costs & Spice consolidation are expected to keep the margins under constant pressure. The company, being a pure wireless player, is highly vulnerable to the numerous headwinds faced by the industry like aggressive tariff-war, one-time spectrum enhancement charge, reduction in termination charges, irrational 3G bidding, MNP implementation, internet telephony, long distance calling cards, etc. We are initiating coverage on Idea Cellular Ltd. with a **REDUCE** recommendation and 6-month price target of Rs 48.

**Investment Summary**

- ❑ **Pure wireless player:** Idea cellular, being a pure wireless operator as compared to the integrated peers like Bharti Airtel & Reliance Communications, is more susceptible to tariff-war & decline in termination charges, introduction of Net telephony, Long distance calling cards or regulatory changes in spectrum usage/enhancement charges.
- ❑ **Aggressive network rollout:** Post the recent Mumbai & Bihar launches, the company is expected to continue aggressive network rollout and launch operations in a series of newer circles - Tamil Nadu (Including Chennai), Orissa, West Bengal, Kolkata, Assam, Jammu & Kashmir and North-East keeping the margins under significant pressure over the next 12 months.
- ❑ **Margins Pressures to intensify:** Intensifying competition, probable tariff-war with Rcom-GSM, threat of simultaneous launch by Aircel/new licensees, higher network opex due to tower demerger & consolidation of spice communications are expected to put further pressure on the already dented EBITDA margins.
- ❑ **Missing hold on Metros, Limited benefits from 3G rollouts:** Idea has been losing market share in Delhi circle, has recently launched services in Mumbai and is not yet operational Kolkata & Chennai. Since Idea does not have a reasonably high ARPU/corporate customer base like Bharti or Vodafone to leverage at the time of 3G rollouts, any irrational bidding for 3G spectrum can negatively impact valuations.
- ❑ **Spice Consolidation:** Spice communication has lost over million subscribers & has posted significant losses since the acquisition by Idea cellular (mostly due to realignment of the subscriber deactivation norms & accounting policies) creating concerns on the value accretion from the deal. We expect Spice circles to keep impacting the consolidated earnings in near term due to continued capex / marketing / branding expenses.
- ❑ **Limited positive developments in near term:** With Idea roping in Telecom Malaysia as the strategic foreign partner, diluting its stake in Indus towers, acquiring spice communications & launching operations in Mumbai & Bihar, most of the positive developments are behind us. Apart from launch of services in Orissa & Tamil Nadu, there are limited positive triggers for the stock in near term.



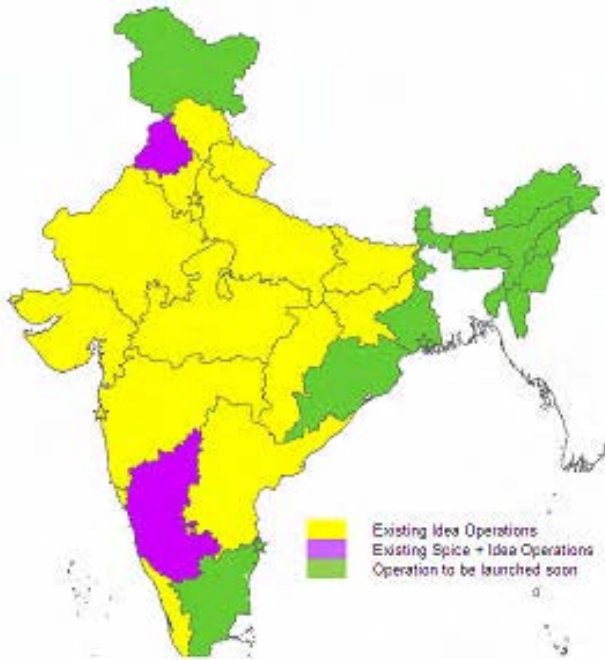
- **Valuations:** We have arrived at a price target of Rs 48 for Idea Cellular using DCF based valuation with a WACC of 12.3% and terminal growth rate of 3.5%. We value the core business at 32 Rs/share (WACC 13%, G 3.5%) and its Indus towers stake at 16 Rs/share (WACC 10.3%, G 3.5%). Our target price is 14.8x FY10 earnings and 6.0 x FY10 EV/EBITDA. Although at the lower end of its valuation band, considering the numerous headwinds for the pure wireless telecom operator, we initiate coverage on Idea Cellular with a REDUCE Rating and a 6-months target price of Rs.48.

**Risk to Our Recommendations:**

- Faster than expected turnaround of the Spice Circles, lower than expected losses on the newer circle launches & significant delay in launch of services by newer operators may provide upside to our valuation model.
- Successful bidding of 3G spectrum at lower valuations or delay in 3G auction until completion of 2G rollouts will provide upside to our valuations.

## BUSINESS PROFILE

Idea Cellular Ltd (Idea), an Aditya Birla Group company is the 5th biggest telecom service provider in the rapidly growing Indian telecom industry. With a subscriber base of over 40 million subscribers and overall market share of 11%, Idea is one of the faster growing telecom operators in the country. With about 12-13% market share of net subscriber additions, Idea has been adding about a 1.2-1.5 mn subscribers each month. The net subscriber additions has crossed 2 mn for the first time in Jan 2009 due to strong uptake in Mumbai and Bihar circles.



Idea has extensive operations in 8 telecom circles - Delhi, Andhra Pradesh, Gujarat, Madhya Pradesh, Maharashtra, Haryana, Kerala, Uttar Pradesh (West). It had launch services in Uttar Pradesh (East), Himachal Pradesh, and Rajasthan between Sept & Nov 2006. It has launched services in Mumbai circle in August 2008 & Bihar Circle in Sep 2008. It has also acquired Spice Communications, a smaller regional player having around 4.5 Mn (now 4 Mn) subscribers in Punjab and Karnataka in June 2008. The company has received 2G spectrum for all the remaining circles and is expected to become a pan-India operator in 3-4 quarters. The company plans to launch operations in Orissa by 1QFY10, Tamil Nadu (& Chennai) by 2QFY10 & all remaining circles by 3QFY10.

In the 11 older circles where Idea has been operational, the company has a remarkable market share of 16.7% subscribers. The company has launched services in two new circles (Mumbai & Bihar) and the net additions market share for these circles too has been at an impressive 17.6%. In the 2 Spice Circles (Punjab & Karnataka), the company has about 11% market share & 8.5% net additions share. The company has launched its Idea brand and is ramping up operations rapidly in the 2 circles.

Source: Kotak Securities - Private Client Research

Idea is the market leader in Maharashtra & Kerala Circles while it is the 2nd largest player in Madhya Pradesh & Uttar Pradesh (W). The company has an impressive market share in all its established circles & is soon gaining ground in its newer circles.

Idea is an original incumbent player in seven circles and holds spectrum in the coveted 900 MHz frequency band reducing the upfront capital expenditure & network operating costs going forward. The recent spice acquisition would add 2 more circles with 900 MHz startup frequency.

Idea has a comprehensive network coverage covering 137,585 towns & villages in the 13 circles where it is operations. Again it covers 15,466 towns & villages through spice communications in the 2 spice circles. It had around 17,000 telecom towers, 40,000 base transceiver stations (BTS) in Dec 2008 (excluding Spice communications).

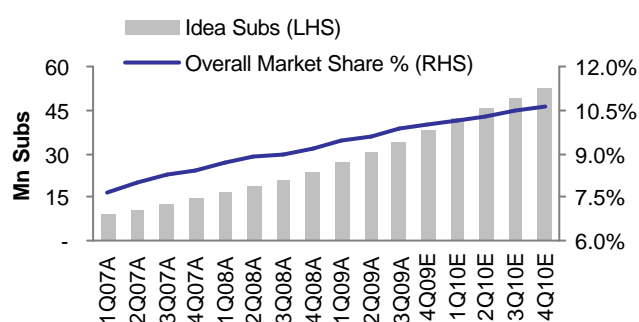
Idea has formed a three way joint venture 'Indus Towers' to share passive infrastructure with 2 other GSM telecom majors - Bharti Airtel & Vodafone Essar in 16 circles where Vodafone was originally present. Idea owns 16% stake in the joint venture through its subsidiary Aditya Birla Telecom Ltd. (ABTL).

Idea is a pure wireless player with wireless mobile business contribution about 93% of the revenues. It has launched National Long Distance (NLD) services to carry its own captive NLD traffic and is in the process of setting up its own long distance fiber network.

## WIRELESS SUBSCRIBER BASE: STRONG GROWTH TO CONTINUE

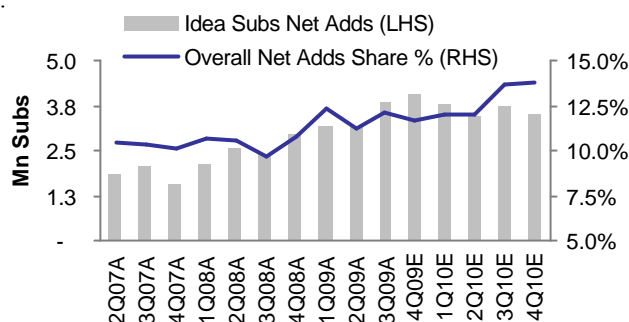
Idea Cellular has shown a multi-fold growth in wireless subscriber base from 12.4 Mn in Dec 06 to about 36 Mn subs at the end of Jan 2009. The net subscriber additions too has seen a strong acceleration from about 0.6 million to above 1.85 million subs per month. We expect the net monthly additions to remain robust in near term due to the launch of services in the remaining circles. We expect the Idea's subscriber base to touch 38 million by FY09 & 52 million by FY10. However with the launch of services by new entrants, possible entry of MVNOs and the wireless teledensity approaching 40%, the net additions are expected to start moderating since FY10.

Idea Cellular: Subscriber Base



Source: Company, Kotak Securities - Private Client Research; Ex-Spice Comm

Idea Cellular: Net Subscriber Additions

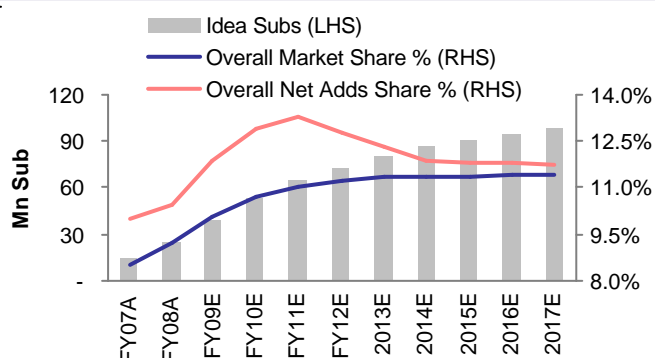


Source: Company, Kotak Securities - Private Client Research; Ex-Spice Comm

### Market Share Expansion

Idea has steadily increased its market share on a pan-India basis from around 7.5% in March 06 to 10% in Dec 2008 (Ex Spice). The strong gain has been on the back of higher market share in net subscriber additions - around 12%. We expect the net additions share to increase further as Idea has launched operations in Mumbai & Bihar Circles & is expected to launch operations in all remaining seven circles by end of CY09. After including Spice Communications, we expect Idea to garner about 12% subscriber market share & 14% net additions share by FY10.

Idea Cellular - Subscriber Forecast



Source: Company, Kotak Securities - Private Client Research; Ex-Spice Comm

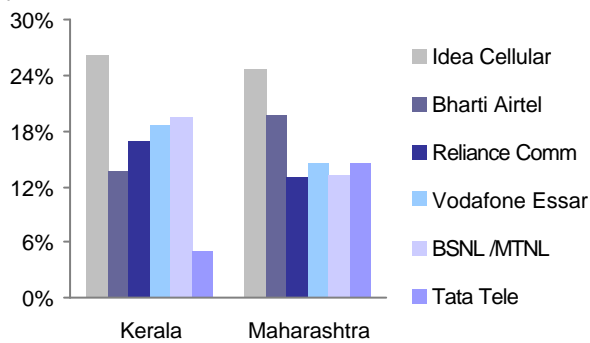
### Missing Metros - Low Leverage for 3G:

In our view, the lack of strong foothold in any of the Metros is a major damper for the pure wireless operator. Metro Circles typically has high usage/ARPU subscriber with advanced handsets & would be the first ones to adopt high end 3G services like Video calling, Video ring back tones, online gaming, Video Streaming & online gaming. Idea has been losing considerable market share in Delhi metro, has just recently launched operations in Mumbai Metro & will enter the Chennai & Kolkata circles later in CY09. Idea will continue to suffer the consequences of being a late entrant in these highly penetrated circles & subsequent net additions would be primarily low usage subscribers.

## REGIONAL TO PAN-INDIA OPERATOR

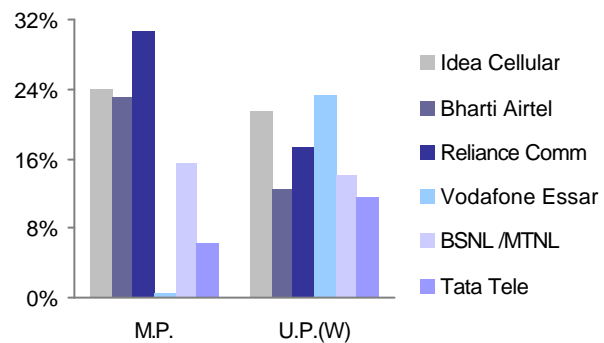
Idea has shown a strong operational performance in its 11 older Circles with leadership position in Kerala & Maharashtra. It has increased its market share from about 13.8% in June 2006 to around 16.7% in Dec 2008. The strong subscriber growth has partly been boosted by the increased population coverage in last one year. The company has recently launched services in Mumbai & Bihar circles (including Jharkhand). It has acquired Spice communications & thereby launched Idea brand in Punjab & Karnataka Circles. It has also received startup spectrum for all remaining telecom circles in the country & is rapidly rolling out network in these circles. The sharing of Indus towers will ensure lower capex & faster launch in Tamil Nadu (Incl Chennai) & West Bengal(Incl Kolkata). Thus Idea is expected to transform itself from a regional player to complete a pan-India wireless operator by Dec 2009.

### IDEA Cellular: Market leadership



Source: TRAI; Kotak Securities - Private Client Research \* Dec 2008

### 2nd player



Source: TRAI; Kotak Securities - Private Client Research \* Dec 2008

### Idea Cellular: 1 Year Operating Performance

	Dec-07			Dec-08			Market Share Gain (%)	Increase in Rank
	Subscriber Base (Mn)	Market share (%)	Operator Rank	Subscriber Base (Mn)	Market share (%)	Operator Rank		
Delhi	1.91	12.39%	5	2.28	11.4%	5	-0.96%	
A.P.	2.84	15.50%	3	4.60	16.7%	3	1.23%	
Gujarat	2.35	15.34%	3	3.60	16.6%	3	1.27%	
Maharashtra	4.18	22.65%	1	6.79	24.7%	1	2.05%	
Haryana	0.90	15.50%	3	1.44	17.0%	3	1.48%	
Kerela	2.40	22.90%	2	3.94	26.2%	1	3.34%	1
M.P.	2.69	23.47%	2	4.38	23.9%	2	0.46%	
Rajasthan	0.77	6.33%	6	1.16	5.8%	6	-0.48%	
U.P.(E)	0.78	5.23%	6	1.64	7.0%	5	1.77%	1
U.P.(w)	2.18	19.36%	2	3.64	21.4%	2	2.03%	
H.P.	0.06	2.74%	5	0.13	4.1%	5	1.40%	
<b>Older Circles</b>	<b>21.05</b>	<b>15.53%</b>		<b>33.62</b>	<b>16.7%</b>		<b>1.12%</b>	
Mumbai	0.00	0.00		0.33	1.9%	7	1.90%	
Bihar	0.00	0.00		0.27	1.5%	6	1.53%	
<b>Newer Circles</b>	<b>0.00</b>	<b>0.00%</b>		<b>0.59</b>	<b>1.7%</b>		<b>1.71%</b>	
Punjab	0.00	0.00		2.34	17.5%	2	17.53%	
Karnataka	0.00	0.00		1.46	6.9%	5	6.93%	
<b>Spice Circles</b>	<b>0.00</b>	<b>0.00%</b>		<b>3.80</b>	<b>11.0%</b>		<b>11.03%</b>	
<b>Pan-India</b>	<b>21.05</b>	<b>9.01%</b>	<b>6</b>	<b>38.01</b>	<b>11.0%</b>	<b>5</b>	<b>1.95%</b>	<b>1</b>

Source: TRAI ; \* Dec 2008

## SPECTRUM BANDS

Idea, being an incumbent player, holds spectrum in 900 MHz band in seven bigger circles - Maharashtra, A.P., M.P., Gujarat, Haryana, UP (E) & UP (W). With spice acquisition, the company will have spectrum in 900 MHz band in two more circles - Punjab & Karnataka. 900 MHz spectrum is more efficient for the GSM technology as it requires lower tower height (to cover same area) as compared to spectrum in 1800 Mhz band. Effectively, 900 MHz GSM spectrum can support 1000-1200 subs/BTS as compared to 700-800 subs/BTS supported by 1800 MHz GSM spectrum. Hence, 900 MHz spectrum reduces the upfront capex requirements & network opex costs going forward. However, we note that the startup spectrum allotted in all newer circles & any additional spectrum to be allotted going forward would remain in 1800 MHz band.

### Idea Cellular - 2G Spectrum Allocations

Circle	900 MHz	1800 Mhz	Total	Circle	900 MHz	1800 Mhz	Total
<b>A.P.</b>	<b>6.2</b>	<b>1.8</b>	<b>8.0</b>				
Assam	-	4.4	4.4	<b>M.P.</b>	<b>6.2</b>	<b>1.8</b>	<b>8.0</b>
Bihar	-	4.4	4.4	<b>Maharashtra</b>	<b>6.2</b>	<b>3.6</b>	<b>9.8</b>
Chennai	-	4.4	4.4	Mumbai	-	4.4	4.4
Delhi	-	8.0	8.0	North East	-	4.4	4.4
<b>Gujarat</b>	<b>6.2</b>	-	<b>6.2</b>	Orissa	-	4.4	4.4
H.P.	-	4.4	4.4	Punjab*	6.2	1.8	8.0
<b>Haryana</b>	<b>6.2</b>	-	<b>6.2</b>	Rajasthan	-	6.2	6.2
J&K	-	4.4	4.4	T.N.	-	4.4	4.4
<b>Karnataka*</b>	<b>6.2</b>	-	<b>6.2</b>	<b>U.P. (E)</b>	<b>6.2</b>	-	<b>6.2</b>
Kerala	-	8.0	8.0	<b>U.P. (W)</b>	<b>6.2</b>	<b>1.8</b>	<b>8.0</b>
Kolkata	-	4.4	4.4	W.B. & AN	-	4.4	4.4

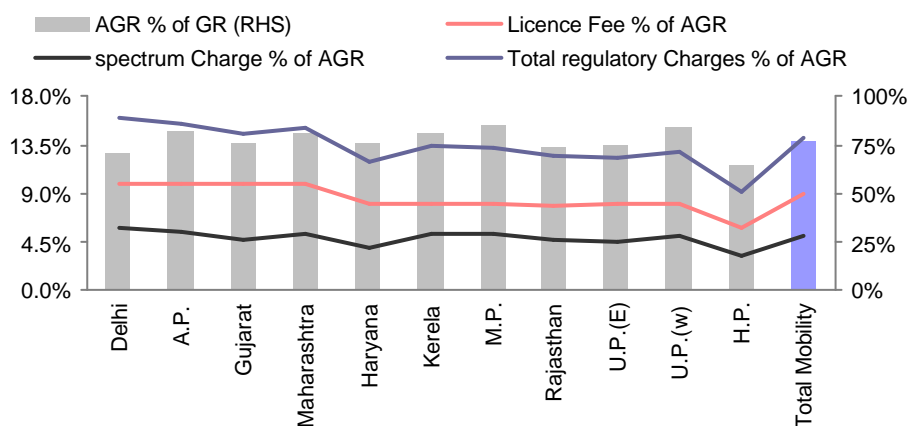
\* Spectrum with Spice Communications

Source: TRAI

## LICENSE FEES & SPECTRUM CHARGES:

Idea has experienced an increase in Licence fees due to expiry of the period of 2% concession in licence fee for 7 service areas where it is the incumbent player. The overall regulatory charges in form of licence fees & spectrum charges amount to as high as 14% of Adjusted Gross Revenues (AGR) for Idea cellular. The charges are still headed northwards as the telecom Ministry ponders increase in spectrum usage charges

### IDEA Cellular: Licence Fees & Spectrum Charges: As % of AGR



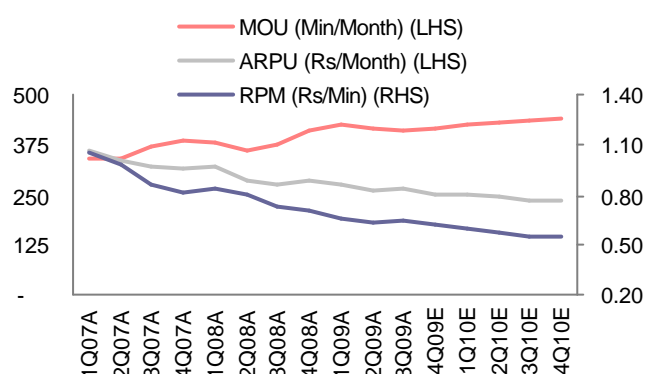
Source: TRAI, Kotak Securities - Private Client Research

## IDEA OPERATING MATRIX

### Declining Tariffs - Expected to continue

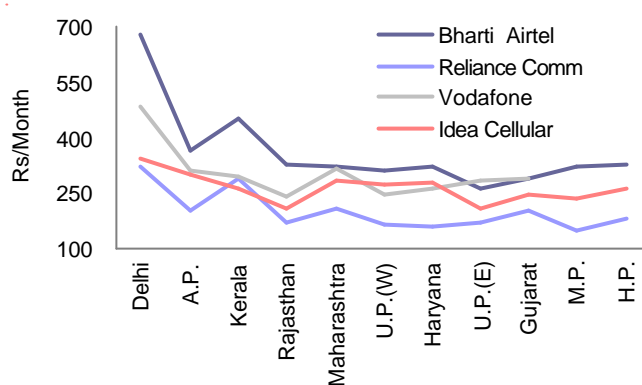
Revenue per Min (RPM) for Idea has fallen in line with the Industry by over 40% from 1.05 Rs/min to 0.65 Rs/Min in last 2 yrs. Although the Minutes of usage (MOUs) have steadily increased for Idea cellular by about 25% from 340 min/month to 410 min/Month in last 2 years, it has been considerably lower than the bigger GSM players - Bharti & Vodafone. The usage elasticity has not helped sustain the ARPU levels which have declined by as much as 23% from Rs.362 / sub to just around Rs.266 / sub. The ARPU levels calculated on the basis of TRAI reported revenues indicates that Idea has a lower ARPU subscriber base than Bharti Airtel & Vodafone in most of the circles where it is operational. We also note that Idea is a pure wireless players and steeper than expected decline in the tariff levels will negatively impact the valuations more so than its peers.

**IDEA Cellular: Elasticity of usage**



Source: TRAI; Kotak Securities - Private Client Research

**IDEA Cellular: Circlewise ARPU comparison**



Source: TRAI; Kotak Securities - Private Client Research

Mobile value added services (like caller ring back tones, music downloads, news, m-commerce, etc) have been picking up steadily for the company & currently contributes 9.5% of the overall wireless ARPUs. Idea has been experiencing high churn rates of 4-5% per month in line with the GSM industry. Although the churn rates have been moderating since a few quarters, we expect the company to continue facing high churn in the wake of new circle launches by existing players, launch of services by new players & implementation of Mobile Number Portability.

### Aggressive Capex Requirements

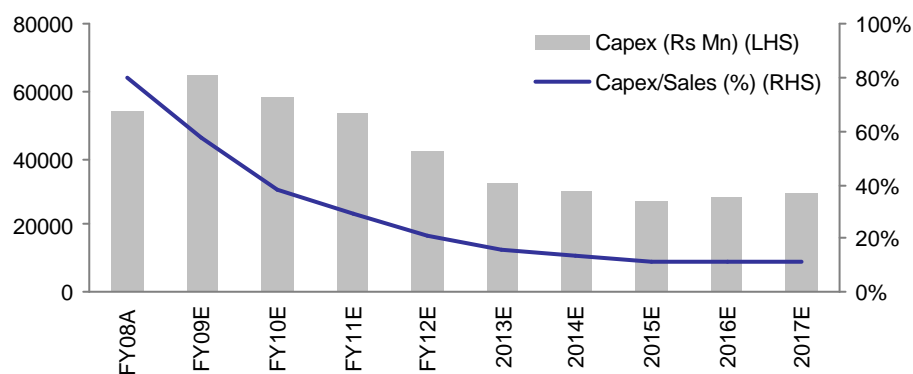
Idea Cellular has shown aggressive capital expenditure of Rs 28 bn & Rs 54 bn in FY07 & FY08 respectively. The Capex/Sales ratio has been as high as 80%. We expect Idea Cellular to continue to incur aggressive capital expenditure for the next two years as it launches operations in newer circles & ramps up its National Long Distance (NLD) operations. We expect the Capex to peak out in 2008-09 and subsequently decrease steadily as a % of sales. The company has guided a capex of around Rs 65 Bn for FY09 (standalone) & a capex of about Rs 60 Bn for FY10 (Incl Spice Communications). Due to regulatory uncertainty over the 3G auction policy, no of slots to be auctioned & auction timelines, we have not included one-time 3G spectrum auction price & subsequent 3G rollouts capex in our estimates. The company management intends to consolidate its position in the fast growing wireless telephony market, but does not indicate any plans to diversify into data / WiMAX businesses as of now.

#### IDEA Cellular: Aggressive capex requirements

	FY08A	FY09E	FY10E	FY11E	FY12E	2013E	2014E	2015E	2016E	2017E
Capex (Rs Mn) (LHS)	54023	64703	58243	53158	41889	32737	30138	27077	28560	29916
Capex/Sales (%) (RHS)	80%	58%	39%	30%	21%	15%	13%	11%	11%	11%
Capex/Sub (Rs)	2,251	1,525	1,002	763	533	379	325	277	281	284
Capex/Min (Rs)	0.63	0.40	0.24	0.17	0.12	0.08	0.07	0.06	0.06	0.06
Capex/Incremental Sub (Rs)	5,408	4,549	3,707	4,619	4,710	4,132	4,729	5,351	7,543	7,915
Capex/Incremental Min (Rs)	1.34	0.88	0.69	0.78	0.84	0.92	0.88	0.98	1.13	1.30

Source: Company, Kotak Securities - Private Client Research

#### IDEA Cellular: Capex Estimates



Source: Company Reports, Kotak Securities - Private Client Research



## **SPICE MERGER**

Idea Cellular has acquired Spice Communications in a three step process: 1) It has already acquired 40.8% from Modi Group at Rs.77.3 /share 2) It made an open offer (along with TMI) at Rs.77.3/Share to minority shareholders to acquire additional 20% Stake 3) It will swap 49 Idea : 100 spice shares to acquire remaining 39.8% stake (49% post open offer) from Telecom Malaysia International (TMI) & Spice shares not tendered in the public offer. With the completion of the above process, spice communications would be delisted from the bourses & merged with Idea Cellular.

Idea also made a preferential allotment of 464.73 million equity shares to Telecom Malaysia at Rs.156.96 /share as a part of the deal representing 14.99% of Idea's equity post dilution.

### **Modi Group Stake:**

Idea has acquired 40.8% stake of spice communications from Modi group at Rs.21.75bn (Rs.77.3/Share). Considering the non-compete fee payment of Rs.5.4 bn, the total payment to Modi group turns out to be Rs.27.2bn.

### **Open Offer:**

Idea & TMI together made an open offer for acquiring additional 20% stake in Spice communications from public shareholders at Rs.77.3 /share. Post the open offer, Idea cellular directly holds 41.09% stake & with its associates holds 49.9% stake in Spice communications. Telecom Malaysia holds around 49% stake & remaining 1.1% is still with minority shareholders. Idea will acquire the remaining stake through share swap & merge Spice communications with itself. The process will take about 6 months as the company awaits DoT approval on spice license demerger proposals.

### **TMI Preferential Allotment:**

Telecom Malaysia has been allotted 464.73 million equity shares representing 14.99% of Idea's equity post dilution at a price of Rs.156.96/share on a preferential basis against receipt of Rs.72.94bn. TMI will further increase the stake in Idea by about 4.3% on account of share swap post open offer. TMI will finally land up with about 19.3% stake in Idea.

### **Deal Valuations**

The acquisition values Spice at Rs.69.4 bn EV (excluding Rs 5.44 bn non-compete fees) and 21X EV/EBITDA, which seems at a hefty premium compared to other listed telcos. As a part of the deal, Telecom Malaysia valued Idea Cellular at an Enterprise value of Rs.524 Bn & 17.6X FY09 EV/EBITDA (Pre Money).

### **Benefits of the Deal**

- The combined entity, with over 40 mn wireless subs has replaced Tata Teleservices as the fifth-largest wireless player in India.
- The acquisition gives Idea Cellular a direct strong foothold in the well penetrated Punjab and Karnataka circles.
- It will lead to significant capex savings for Idea Cellular as spice holds 8MHz in Punjab and 6MHz in Karnataka in 900 MHz band compared to mere 4.4 MHz startup spectrum in the 1800 MHz
- The cash inflow from TMI & Providence had made Idea Cellular virtually a debt free company with enough war-chest ready for network rollouts in newer circles.
- Idea will benefit from the experience of Telecom Malaysia having 3G rollout experience & operational in 10 Asian countries.

## Concerns

Spice Communications lost 0.35 Mn Subscribers in July 2008 & 0.63 Mn subs in August 2008 - cumulative loss of 1 Mn subs (almost 22% of June subscriber base). The massive decline most likely due to the realignment of Spice's customer deactivation practice/criteria to Idea's has been a major concern on value creation from the deal.

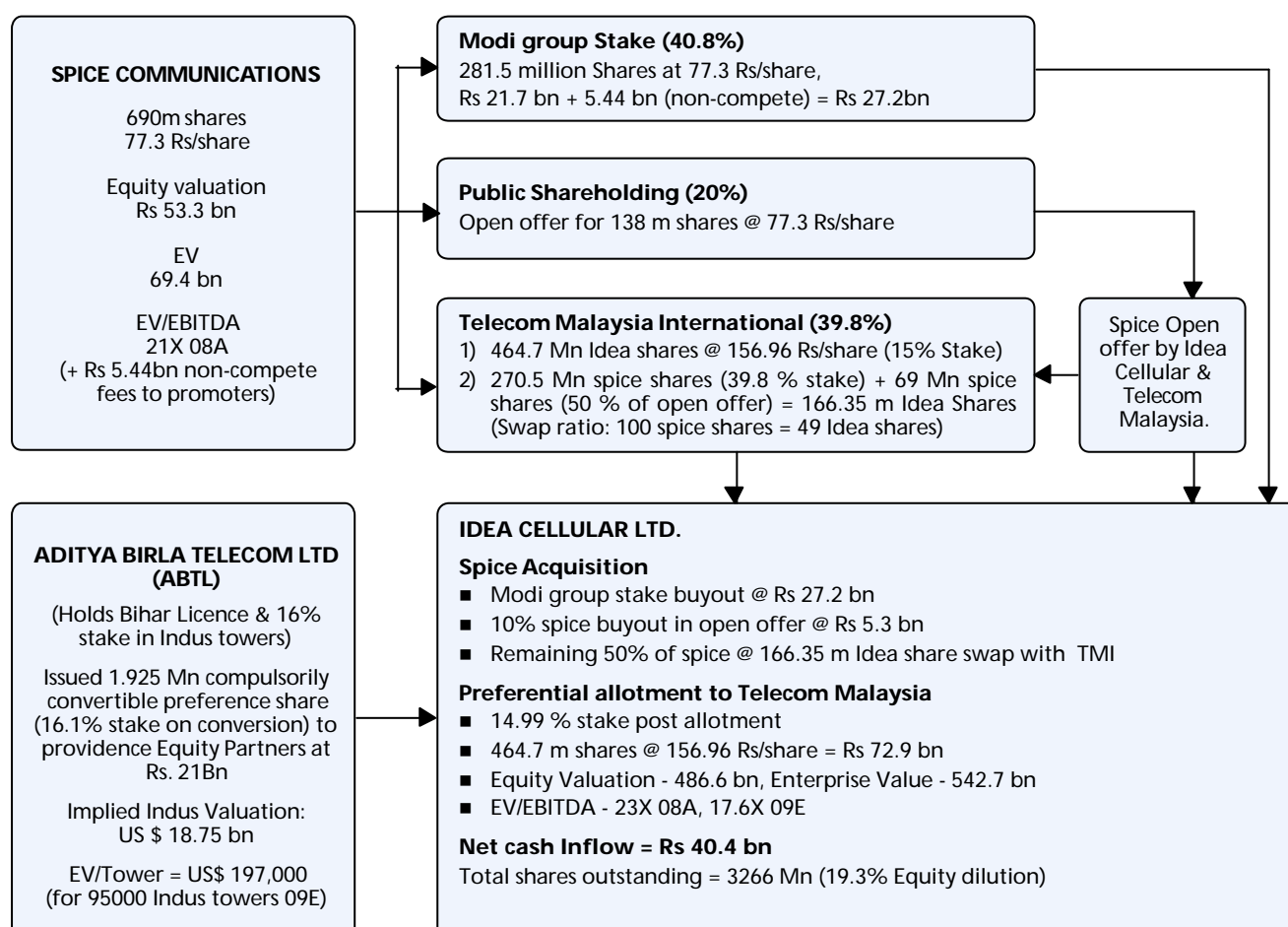
## Regulatory Issues

Idea has been asked to return one of the two licenses it holds in Punjab & Karnataka due to the acquisition without any claim for refunds. Idea may also have to pay spectrum transfer charges as announced by the DoT guidelines on M&A. The quantum of these charges is yet to be known as the government has set up a committee to specify spectrum transfer charges in case of mergers.

## Idea Shareholding

Post the equity infusion from Telecom Malaysia & merger with Spice Communications, Telecom Malaysia will hold about 19.3% stake in Idea Cellular, while the Aditya Birla promoter group stake will come down from 57.7% to around 46.5%.

## Spice Merger & Telecom Malaysia Stake Sale



Source: Company Releases, Kotak Securities - Private Client Research

## **IDEA - PROVIDENCE DEAL**

### **Deal Structure**

In May 2008, Aditya Birla Telecom Limited (ABTL), a 100% subsidiary of Idea Cellular Limited, had announced 20% stake sale to global PE firm Providence Equity Partners for US\$640mn, effectively valuing ABTL at US\$3.2 bn. Subsequently, Idea diluted 16.1% stake in ABTL for Rs 21Bn (same valuation) as the affiliates of Providence did not receive FIPB approval.

ABTL is a holding company which owns the UASL license for the Bihar and Jharkhand circles and holds Idea's 16% stake in Indus towers, the passive infrastructure JV between Idea, Bharti, and Vodafone. The private placement is in form of an issue of 1.925 million compulsorily convertible preference shares representing 16.1% stake post dilution. The investment is to be routed through P5 Asia Holding Investments, registered in Mauritius.

We note that the deal includes only the towers that would be eventually transferred to Indus & not the towers owned by Idea in non-Indus Circles of MP, HP, Bihar, Orissa & some towers in Maharashtra that would be retained by Idea.

### **Valuations**

Assuming a US\$200mn valuation for Idea's Bihar operations (applying EV/Sub of US\$200 to 2010E Idea subscriber base of 1 Million for the Bihar circle) the deal values Idea's 16% stake in Indus towers at US\$3bn. The implied valuation of US\$18.75 bn for Indus Towers (US \$197,000 / tower assuming 95000 Indus towers 2009E) is at a significant premium to our estimates. This values each tower at Rs.8.5mn as compared to the capex of around Rs.3mn (assuming 70:30 mix of GBT & RTT towers)

### **Impact**

In our view, the Providence - ABTL deal is at attractive valuations & provides funds for the aggressive rollout plans in non-Indus circles. However, it rules out the possibility of further stake sales in tower business in near future as Idea would like to hold on a strategic share of Indus towers. Also, value unlocking through the route of initial public offering (IPO) of Indus towers would need one year of audited financial statements. This leaves limited value unlocking potential in near term from tower business.

## LONG DISTANCE BUSINESS

### Mix & Match Strategy

Idea Cellular had obtained National Long Distance (NLD) & ILD service licenses in Sep 2006 and had launched the NLD services using leased fiber capacity initially. Over time Idea has used an optimum mix of 'make' or 'buy' strategy to carry a part of the captive traffic either over its own fiber network or over capacity leased from other NLD providers like Bharti Airtel. On ILD front, the company has recently started direct routing with Dialog of Sri Lanka through the Spice ILD Network.

### Captive NLD Traffic

The Company has ramped up NLD operations rapidly over last 1 year and now carries almost 25% of its captive NLD traffic on its own fiber network. The management plans to increase this to about 30% by the end of FY09 and upwards of 50% later. Assuming 10-12% of subscriber market share for Idea, Idea's NLD segment would soon carry 5-6% of the total NLD traffic of the country on its own network. The company does not have any aggressive plans to carry third party NLD traffic as of now.

### NLD Valuations

Continued momentum in subscriber additions, launch of services in high usage Mumbai circle & other newer circles and increasing NLD affordability would lead to rapid growth in NLD traffic going forward. The capex for NLD segment is expected to be well under \$100 million (Rs 5 bn) as the inter-circle optical fiber is laid on the top of the existing intra-circle fiber network. Lower incremental capex & zero marketing expenses due to assured captive traffic leads to healthy margins for the traffic carried on owned network. We expect the revenue contribution from owned fiber capacity to increase over time resulting in healthy margins of around 30-35% for the NLD business.

We have factored in improvements in consolidated margins owing to captive NLD realizations. However will we value NLD segment separately once the segment stabilizes & starts contributing significantly to the consolidated numbers. Overall, we expect Idea to remain predominantly a wireless operator with Mobility Segment continuing to contribute 90% of consolidated EBITDAs.

#### IDEA Cellular - National Long Distance (NLD) Estimates

	FY10E	FY11E	FY12E	2013E	2014E	2015E	2016E	2017E
Total Mins on Idea Network	237,505	303,915	353,058	387,872	421,415	448,702	473,561	496,278
NLD Mins	33,542	44,979	52,959	58,957	64,898	69,998	74,823	79,405
Mins carried by Captive NLD Network	47%	55%	60%	62%	64%	66%	68%	70%
NLD Revenues	12,744	13,606	17,476	20,104	22,844	25,409	27,984	30,571
NLD Rev as % of Cons Rev	9.6%	8.4%	9.5%	10.2%	10.8%	11.3%	11.8%	12.3%
NLD EBITDA	3,548	3,856	5,040	5,898	6,816	7,709	8,630	9,580
NLD EBITDA Margin	27.8%	28.3%	28.8%	29.3%	29.8%	30.3%	30.8%	31.3%
NLD EBITDA as % of Cons EBITDA	9.6%	8.7%	9.7%	10.1%	10.7%	11.1%	11.5%	12.1%

Source: Kotak Securities - Private Client Research

## 3Q RESULTS: ROBUST TOP-LINE GROWTH, MARGINS TO REMAIN UNDER PRESSURE...

### Idea Cellular (standalone)

Idea had a strong 3Q09 with a top-line of Rs. 26 Bn (+ 13.1% qoq, 52% yoy), EBITDA at Rs 7.1 bn (+18% qoq, 26% yoy) and net profit of Rs. 2.8 Bn (+97% qoq, 19% yoy). The EBITDA margins improved 110 bps qoq, but declined 590 bps yoy to 27.4%. The EBIT margins stood at 14.2% (+100 bps qoq, -580 bps yoy). The tax provision for the quarter was Rs. 3 bn (7% tax rate). The capex for the quarter was Rs 13.6 Bn.

The strong revenue growth has been on the back of robust subscriber growth (12.6% qoq, 63% yoy) & growth in total wireless mins (10.8% qoq, 79% yoy). The company added 3.8 Mn wireless subs in the quarter taking the total subscriber base to 34.2 Mn (9.9% market share, 12.1% net adds share). Total wireless mins stood at 40.2 Bn for the quarter. The MOUs stood at 410 Min/month (-1.7% qoq / + 9% yoy), RPMs at 0.64 Rs/min (+2.4% qoq, -14% yoy) & ARPUs at 266 Rs/Month (+2.1% qoq, -5% yoy). The no of town & villages covered increased from 110,850 to 137,585 (24% qoq, 95% yoy).

The steep fall in EBITDA margins is due to significant increase in network operating costs/ interconnection charges / sales & marketing / general admin costs on account of aggressive network rollouts & launch of operations in Mumbai & Bihar circles. The EBITDA losses in newer circles are expected to rise further as normally they peak in 2nd-3rd quarter after new circle launch. We are also concerned about the MOU decline this quarter post seasonally weak 2Q. The decline could be due to the company efforts to weed out free talk-time plans or impact of economic slowdown.

Overall, the subscriber additions & revenue growth has been encouraging, but remain concerned about the EBITDA impacts from the aggressive network rollouts & planned launch of services in 7 new circles over the next one year.

### Spice Communications

Spice Communications had a muted quarterly performance with revenues as Rs 3.4 bn (+7.5% qoq, 19% yoy) & EBITDA at 0.75 Bn (+60% qoq, -19% yoy). The EBITDA margins stood at 22.2%. The EBITDA growth looks better due to one-time losses booked in the previous 2 quarters on alignment of accounting policies with Idea cellular. The realignment of deactivation norms had lead to a loss of 1 million subscribers for spice in Sep 08 quarter. The subscriber base now stands at 3.8 Mn subs (+5.6% qoq, 0% yoy), MOUs at 494 Min/month (13.8% qoq, 52% yoy), RPMs at 0.56 Rs/Min (-5.4% qoq, 41% yoy) & ARPUs at 279 Rs/Month (+7.7% qoq, -11% yoy). The churn has been as high as 6.3% for prepaid & 5.4% for postpaid subscribers. The overall operating matrix for spice circles is yet to stabilize after the Idea acquisition & subsequently launch of Idea brand in the 2 circles.

The company has booked a one-time loss of Rs 4.8 Bn in 3Q on impairment of license fees paid by spice com in Jan 2008 for 4 additional circles - Delhi, Haryana, Maharashtra and Andhra Pradesh. Idea cellular is already operational in these 4 circles & hence the licenses will be demerged. The consideration received from the demerger & transfer of these overlapping licenses will be paid to the spice shareholders on record before the open offer.

Idea cellular directly holds 41.09% stake in Spice com & consolidates the financials proportionately. We note that Idea along with its associates holds 49.9% stake in spice, Telecom Malaysia holds 49% & remain 1.1% is public holding. The merger process is expected to be completed in 5-6 months. We have used completely consolidated earnings estimates for our valuations (the no of shares outstanding too has been increased to 3265 Mn as per the 49 Idea : 100 spice shares swap ratio)

**Indus Towers**

The management has guided a 400-500 bps EBITDA impact due to transfer of 11000 towers to Indus towers & subsequent rental payments (Opex). This would be partly compensated by lower capex & depreciation & consolidation of 16% stake in Indus towers.

**Capex**

The Company has revised its capex guidance (Ex-spice) downwards from Rs 75-80 Bn in FY09 to Rs 65 Bn. The reduction was mainly due to delay in network rollouts in Orissa & Tamil Nadu. The company further guides a capex of Rs 60 Bn for FY10 (Including Spice Capex, excluding Indus capex). The capex guidance is low even though company aims to launch operations in 7 new circles due to high focus on rental sites. We have not factored in any incremental capex on account of 3G / WiMAX auctions or rollout in our valuations.

**IDEA Cellular - Quarterly Results Analysis**

(Rs mn)	1Q08A	2Q08A	3Q08A	4Q08A	1Q09A	2Q09A	3Q09A	QOQ(%)	YoY(%)	9M 2009	9M 2008	YoY(%)
Gross sales	14,776	15,643	17,103	19,853	21,781	23,037	26,065	13.1%	52.4%	70,882	47,522	49.2%
Interconnection costs	2,396	2,550	2,930	3,445	3,957	4,271	4,903	14.8%	67.3%	13,131	7,876	66.7%
License fee and spectrum charges	1,599	1,551	1,736	1,965	2,446	2,571	2,861	11.3%	64.8%	7,878	4,886	61.2%
Network operating costs	1,896	2,380	2,915	3,263	3,756	4,485	5,475	22.1%	87.8%	13,716	7,191	90.7%
Employee costs	708	878	954	919	1,022	1,323	1,270	-4.0%	33.1%	3,615	2,540	42.3%
Sales & Marketing Expenses	2,283	2,514	2,185	2,613	2,465	3,279	3,309	0.9%	51.4%	9,053	6,982	29.7%
Other Expenses	764	643	688	913	929	1,019	1,040	2.1%	51.2%	2,988	2,095	42.6%
Operating costs	9,646	10,516	11,408	13,118	14,577	16,968	18,911	11.4%	65.8%	50,456	31,570	59.8%
EBITDA	5,130	5,127	5,695	6,735	7,204	6,068	7,154	17.9%	25.6%	20,426	15,952	28.0%
EBITDA margin (%)	34.7%	32.8%	33.3%	33.9%	33.1%	26.3%	27.4%			28.8%	33.6%	
Depreciation and amortization	1,887	2,007	2,277	2,597	2,749	3,032	3,450	13.8%	51.5%	9,230	6,171	49.6%
EBIT	3,243	3,120	3,418	4,138	4,455	3,036	3,705	22.0%	8.4%	11,196	9,781	14.5%
EBIT margin (%)	21.95%	19.95%	19.98%	20.84%	20.45%	13.18%	14.21%			15.8%	20.6%	
Net finance cost	143	641	782	1,206	1,526	1,497	687	-54.1%	-12.1%	3,710	1,566	136.9%
PBT	3,100	2,479	2,636	2,932	2,929	1,540	3,017	96.0%	14.5%	7,486	8,215	-8.9%
Tax Rate (%)	0.52%	11.17%	10.17%	5.63%	10.14%	6.42%	7.00%			7.7%	6.8%	
Tax Expense	16	277	268	165	297	99	177	79.0%	-34.0%	573	561	2.1%
Reported net income	3,084	2,202	2,368	2,767	2,632	1,441	2,840	97.1%	19.9%	6,913	7,654	-9.7%
Net Profit Margin (%)	20.87%	14.08%	13.85%	13.94%	12.08%	6.25%	10.90%			9.8%	16.1%	
EPS	1.17	0.84	0.90	1.05	1.00	0.46	0.92	97%	2.0%	2.38	2.90	-18.1%
Operating Circles	11	11	11	11	11	12	13					
Subscribers (Mn)	16.1	18.7	21.1	24.0	27.2	30.4	34.2	12.6%	62.5%			
Subs Net Adds	2.1	2.5	2.4	3.0	3.2	3.2	3.8	20.2%	61.0%			
Subs Market Share	8.7%	8.9%	9.0%	9.2%	9.5%	9.6%	9.9%					
Subs Net adds share	10.7%	10.5%	9.7%	10.7%	12.4%	11.2%	12.1%					
Market share in 11 old Circles			15.5%	15.9%	16.3%	16.5%	16.7%					
Market share in 2 new Circles						0.6%	1.7%					
Net adds share in 13 circles			17.3%	18.9%	20.8%	17.2%	17.6%					
ARPU (Rs/Month)	320	288	279	287	278	261	266	2.1%	-4.7%			
MOUs (Min/Month)	381	360	377	411	428	417	410	-1.7%	8.8%			
RPM (Rs/Min)	0.84	0.80	0.74	0.70	0.65	0.62	0.64	2.4%	-13.5%			
EPM (Rs/Min)	0.30	0.27	0.25	0.24	0.22	0.17	0.18	6.4%	-29.9%			
VAS revenue (% of ARPU)	8.4%	8.3%	8.0%	8.2%	8.9%	9.8%	9.5%					
Total Mins (Mn)	17,100	18,831	22,457	27,824	33,087	36,315	40,254	10.8%	79.2%			
Towns n Villages Covered	-	55,655	70,556	82,630	90,204	110,850	137,585	24.1%	95.0%			
Manpower	5,638	5,865	5,923	6,107	6,380	6,521	6,670	2.3%	12.6%			
Prepaid Subs % of Total Subs	90.5%	91.8%	92.6%	93.0%	93.7%	94.0%	94.3%					
Post-Paid Churn	4.1%	3.7%	2.9%	2.5%	2.5%	2.5%	2.7%					
Prepaid Churn	4.2%	4.5%	4.9%	4.8%	4.1%	4.0%	4.4%					
Blended Churn	4.2%	4.5%	4.7%	4.6%	4.0%	3.9%	4.3%					
<b>Spice Communications</b>												
Revenues	2548	2650	2861	3097	3253	3159	3396	7.5%	18.7%	9807	8059	21.7%
EBITDA	714	743	927	914	526	472	754	59.6%	-18.7%	1752	2383	-26.5%
EBITDA margin (%)	28.0%	28.0%	32.4%	29.5%	16.2%	15.0%	22.2%					
EBIT	331	340	264	196	-286	-296	-1313	343%	-598%	-1895	934	-303%
EBIT Margin (%)	13.0%	12.8%	9.2%	6.3%	-8.8%	-9.4%	-39.9%					
Net Profit	4	-55	3999	-365	-1365	-810	-7406	814%	-285%	-9580	3947.997	-343%
Net Profit Margin (%)	0%	-2%	140%	-12%	-42%	-26%	-218%					
Subscribers (Mn)	3.17	3.48	3.80	4.21	4.55	3.60	3.80	5.6%	0.1%			
Market share in 2 circles					14.70%	11.20%	11.00%					
Net adds share in 2 circles					15.30%	-85.60%	8.50%					
ARPU (Rs/Month)	317	296	314	296	232	259	279	7.7%	-11.1%			
MOUs (Min/Month)	447	333	325	373	371	434	494	13.8%	51.8%			
RPM (Rs/Min)	0.71	0.89	0.96	0.79	0.63	0.60	0.56	-5.4%	-41.5%			
Post-paid					3.60%	6.20%	5.40%					
Prepaid					3.00%	15.30%	6.30%					
Blended					3.10%	13.90%	6.20%					
VAS revenue (% of ARPU)					8.70%	8.70%	10.90%					
Minutes of Usage					4,894	5,119	5,445					
Towns and Villages Covered							15,466					
Manpower					901	1,167	1,158					

Source: Company



## VALUATIONS

### IDEA Cellular: Snapshot of existing & proposed operations

(Rs mn)	FY10E	FY11E	FY12E	2013E	2014E	2015E	2016E	2017E
<b>11 Older Circles - Delhi, AP, Gujarat, Maharashtra, Haryana, Kerela, MP, UP (W), UP(E), HP &amp; Rajasthan</b>								
Total Subscribers	295	345	384	420	449	473	490	508
Idea Subscribers	48	56	61	66	70	73	75	77
Idea Market Share	16.3%	16.1%	15.9%	15.7%	15.6%	15.4%	15.3%	15.3%
Revenues	125,321	144,075	158,760	167,049	174,736	183,569	191,873	199,509
EBITDA	38,590	44,615	49,543	52,558	55,428	58,706	61,853	64,803
EBITDA Margin	30.8%	31.0%	31.2%	31.5%	31.7%	32.0%	32.2%	32.5%
<b>2 Spice Circles - Punjab &amp; Karnataka</b>								
Total Subscribers	48	54	59	63	66	69	71	73
Idea (Spice) Subscribers	5.5	6.3	6.9	7.4	7.9	8.2	8.5	8.8
Idea Market Share	11.4%	11.6%	11.7%	11.8%	11.9%	11.9%	12.0%	12.0%
Revenues	17,064	19,540	21,430	22,533	23,612	24,863	26,030	27,097
EBITDA	4,196	4,902	5,484	5,879	6,278	6,735	7,181	7,612
EBITDA Margin	24.6%	25.1%	25.6%	26.1%	26.6%	27.1%	27.6%	28.1%
<b>Remaining Circles - Mumbai, Bihar, Tamil Nadu (Including Chennai), Orissa, West Bangal, Kolkata, Assam, Jammu &amp; Kashmir, North East</b>								
Total Subscribers	151	176	198	218	234	248	259	269
Idea Subscribers	4.1	6.6	8.7	10.7	12.4	13.8	14.8	15.9
Idea Market Share	2.7%	3.8%	4.4%	4.9%	5.3%	5.6%	5.7%	5.9%
Revenues	7,531	14,834	20,897	25,570	29,765	33,705	37,103	40,180
EBITDA	(5,885)	(5,016)	(2,048)	957	3,454	5,540	7,286	8,809
EBITDA Margin	-78%	-34%	-10%	4%	12%	16%	20%	22%
<b>Idea Pan India</b>								
Total Subscribers	494	575	640	700	750	790	820	850
Idea Subscribers	58	68	77	84	90	95	99	102
Idea Market Share	11.7%	11.9%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
Revenues	149,916	178,450	201,087	215,153	228,113	242,137	255,005	266,786
EBITDA	36,901	44,501	52,979	59,394	65,160	70,982	76,320	81,223
EBITDA Margin	24.6%	24.9%	26.3%	27.6%	28.6%	29.3%	29.9%	30.4%

Source: Company, Kotak Securities - Private Client Research

### IDEA Cellular - Standalone Estimates (Pre Spice Merger)

(Rs mn)	FY09E	FY10E	FY11E	FY12E	2013E	2014E	2015E	2016E	2017E
Subscriber Base (mn)	38	53	63	72	79	85	90	93	97
Subs Market Share	10.0%	10.7%	11.0%	11.2%	11.3%	11.3%	11.3%	11.4%	11.4%
RPM (Rs/min)	0.63	0.56	0.53	0.52	0.51	0.50	0.50	0.50	0.50
MOU (Min/month)	416	435	436	436	429	428	428	432	436
ARPU (Rs/sub)	263	244	231	227	219	214	214	216	218
Revenues	98,293	133,139	161,075	183,590	197,815	210,707	224,351	236,781	248,139
Revenue Growth	46%	35%	21%	14%	8%	7%	6%	6%	5%
Licence & Spectrum Charges	11,019	14,196	17,255	19,759	21,389	22,888	24,482	25,957	27,326
% of Revenues	11.2%	10.7%	10.7%	10.8%	10.8%	10.9%	10.9%	11.0%	11.0%
Interconnection charges	17,948	23,472	27,672	31,727	34,395	36,093	38,724	40,307	41,651
% of Revenues	18.3%	17.6%	17.2%	17.3%	17.4%	17.1%	17.3%	17.0%	16.8%
Network Operating Costs	19,766	30,798	37,439	41,318	43,123	44,509	45,022	45,141	44,941
% of Revenues	20.1%	23.1%	23.2%	22.5%	21.8%	21.1%	20.1%	19.1%	18.1%
Employee Costs	4,964	6,558	7,735	8,570	9,262	9,757	10,091	10,277	10,452
% of Revenues	5.0%	4.9%	4.8%	4.7%	4.7%	4.6%	4.5%	4.3%	4.2%
Sales & Marketing Costs	12,825	19,282	23,206	26,237	28,934	31,101	32,823	34,112	35,399
% of Revenues	13.0%	14.5%	14.4%	14.3%	14.6%	14.8%	14.6%	14.4%	14.3%
G&A Exp	4,094	6,423	9,044	8,958	6,983	6,659	7,654	10,142	12,716
% of Revenues	4.2%	4.8%	5.6%	4.9%	3.5%	3.2%	3.4%	4.3%	5.1%
EBITDA	27,549	32,202	38,516	46,813	53,521	59,491	65,347	70,637	75,446
EBITDA Margin	28.0%	24.2%	23.9%	25.5%	27.1%	28.2%	29.1%	29.8%	30.4%
Depreciation	12,504	15,621	19,007	22,199	24,703	26,776	28,649	30,460	32,346
Depreciation as % of Gross Block	8.4%	7.2%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Interest Costs	4,536	3,533	5,957	6,945	6,685	5,611	4,072	2,247	273
Tax Expense	724	652	678	1,767	3,320	5,421	7,830	10,241	12,848
PAT	9,785	12,396	12,875	15,903	18,813	21,683	24,796	27,689	29,979
EPS	3.16	4.00	4.15	5.13	6.07	6.99	8.00	8.93	9.67

Source: Kotak Securities - Private Client Research

## CONSOLIDATED VALUATION

We value Idea Cellular at Rs. 156 Bn (48 Rs / share) based on discounted cash flow valuation. We have used a WACC of 12.3% and terminal growth rate of 3.5% for our calculations. The terminal EBITDA margins are expected to be around 30%. We have assumed lower terminal EBITDA margins for the company than Bharti Airtel/Reliance communications as the company is a pure wireless operator and will be a late entrant in at least 9 telecom circles. We value the core business at Rs 105 Bn (32 Rs/Share, WACC 13%, g 3.5%) and 13.5% stake in Indus towers (post dilution due to providence deal) at Rs 52 Bn (16 Rs/share, WACC 10.3%, g 3.5%). We have made projections till FY17 & then applied terminal growth rate for future earnings.

### IDEA Cellular - Core Business Valuation (Ex Indus Towers)

(Rs mn)	FY09E	FY10E	FY11E	FY12E	2013E	2014E	2015E	2016E	2017E
Total Revenues (Post Spice)	111,876	149,916	178,450	201,087	215,153	228,113	242,137	255,005	266,786
Total EBITDA (Post Spice)	29,765	36,901	44,501	52,979	59,394	65,160	70,982	76,320	81,223
Rental & Passthrough Payments	12,582	17,682	22,350	27,072	31,477	36,377	41,177	45,886	50,762
Opex Savings due to tower demerger	9,181	12,428	15,744	18,843	21,742	24,617	27,417	30,176	33,078
Post Indus EBITDA	26,364	31,647	37,896	44,750	49,660	53,400	57,222	60,611	63,539
Post Indus EBITDA Margin	23.6%	21.1%	21.2%	22.3%	23.1%	23.4%	23.6%	23.8%	23.8%
Impact on EBITDA Margin	-3.0%	-3.5%	-3.7%	-4.1%	-4.5%	-5.2%	-5.7%	-6.2%	-6.6%

### Core Business (Ex Indus) DCF Valuation

PAT	9,259	11,660	12,624	14,448	16,099	17,550	19,555	21,470	22,792
Depreciation	13,364	15,305	18,978	22,043	24,369	26,251	27,912	29,518	31,211
Int (1-tax)	3,134	3,866	5,348	5,988	5,398	4,169	2,720	1,228	(162)
Capex	59,976	52,488	48,827	37,163	27,438	25,171	21,876	23,992	24,677
NWC change	9,135	1,837	202	192	183	173	165	157	149
FCFF	(43,353)	(23,495)	(12,080)	5,124	18,245	22,626	28,146	28,067	29,015

### FY10

Total FCFF	152,780								
Less Debt	47,817								
Shareholders' Value	104,963								
No of Shares outstanding	3,266								
<b>Value per share</b>	<b>32</b>								
Idea's Indus stake value / Share	16								
<b>Consolidated Idea Value/Share</b>	<b>48</b>								

Source: Kotak Securities - Private Client Research

**Idea Cellular Consolidated Valuations**

(Rs mn)	FY09E	FY10E	FY11E	FY12E	2013E	2014E	2015E	2016E	2017E
<b>Idea Consolidated DCF Valuation</b>									
Idea + Spice Subs	42	58	68	77	84	90	95	99	102
Overall Market Share	11.1%	11.7%	11.9%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
Revenues	111,876	149,916	178,450	201,087	215,153	228,113	242,137	255,005	266,786
Revenue Growth	42.8%	34.0%	19.0%	12.7%	7.0%	6.0%	6.1%	5.3%	4.6%
EBITDA	29,765	36,901	44,501	52,979	59,394	65,160	70,982	76,320	81,223
<b>EBITDA Margin</b>	<b>26.6%</b>	<b>24.6%</b>	<b>24.9%</b>	<b>26.3%</b>	<b>27.6%</b>	<b>28.6%</b>	<b>29.3%</b>	<b>29.9%</b>	<b>30.4%</b>
Depreciation	16,978	19,157	21,705	25,102	27,801	30,052	32,079	34,033	36,067
EBIT	12,787	12,787	12,787	12,787	12,787	12,787	12,787	12,787	12,787
EBIT Margin	11.4%	11.8%	12.8%	13.9%	14.7%	15.4%	16.1%	16.6%	16.9%
Interest Expense	6,233	7,213	9,829	10,935	10,050	8,470	6,753	4,168	1,351
Tax Expense	664	652	648	1,694	3,231	5,328	7,716	10,292	13,142
Net Profit	5,312	10,586	12,318	15,248	18,312	21,311	24,434	27,827	30,664
Net Profit Margin	4.7%	7.1%	6.9%	7.6%	8.5%	9.3%	10.1%	10.9%	11.5%
<b>EPS</b>	<b>1.63</b>	<b>3.24</b>	<b>3.77</b>	<b>4.67</b>	<b>5.61</b>	<b>6.52</b>	<b>7.48</b>	<b>8.52</b>	<b>9.39</b>
EPS Growth	-58.9%	99.3%	16.4%	23.8%	20.1%	16.4%	14.7%	13.9%	10.2%

**Balance Sheet**

Equity Share Capital	32,658	32,658	32,658	32,658	32,658	32,658	32,658	32,658	32,658
Reserves & Surplus	120,718	120,718	129,577	143,933	160,102	177,673	196,389	216,077	235,978
Laon Funds	97,552	113,864	160,000	140,000	120,000	100,000	100,000	40,000	30,000
<b>Total Liabilities</b>	<b>252,021</b>	<b>268,333</b>	<b>323,169</b>	<b>317,525</b>	<b>313,694</b>	<b>311,265</b>	<b>329,981</b>	<b>289,668</b>	<b>299,569</b>

Gross Block	221,209	283,183	336,963	380,230	414,086	444,541	471,993	500,372	530,122
Depreciation	68,608	87,765	109,470	134,572	162,373	192,425	224,503	258,536	294,603
Net Block	152,602	195,419	227,494	245,658	251,713	252,117	247,489	241,836	235,519
CWIP	10,850	7,118	6,497	5,120	4,001	3,683	3,309	3,491	3,656
Total Fixed Assets	163,451	202,537	233,990	250,778	255,714	255,800	250,799	245,326	239,175
Goodwill	26,276	26,276	26,276	26,276	26,276	26,276	26,276	26,276	26,276
Cash and Bank Balances	54,979	40,954	66,747	44,123	35,173	32,484	56,037	21,041	36,944
Net Current Assets/(Current Liabilities)	(5,883)	(4,046)	(3,844)	(3,652)	(3,469)	(3,296)	(3,131)	(2,974)	(2,826)
Profit & Loss Account (Debit Balance)	13,198	2,612	-	-	-	-	-	-	-
<b>Total Assets</b>	<b>252,021</b>	<b>268,333</b>	<b>323,169</b>	<b>317,525</b>	<b>313,694</b>	<b>311,265</b>	<b>329,981</b>	<b>289,668</b>	<b>299,569</b>

**DCF Valuation**

PAT	5,312	10,586	12,318	15,248	18,312	21,311	24,434	27,827	30,664
Depreciation	16,978	19,157	21,705	25,102	27,801	30,052	32,079	34,033	36,067
Int (1-tax)	5,488	6,853	9,338	9,842	8,543	6,776	5,132	3,043	945
Capex	64,703	58,243	53,158	41,889	32,737	30,138	27,077	28,560	29,916
NWC change	9,135	1,837	202	192	183	173	165	157	149
FCFF	(46,060)	(23,485)	(9,999)	8,110	21,736	27,827	34,403	36,186	37,612
Discounted Value	(41,019)	(18,625)	(7,062)	5,101	12,174	13,881	15,282	14,315	169,253

**FY10**

Total FCFF	229,431								
Less Debt	72,910								
Shareholders' Value	156,521								
No of Shares outstanding	3,266	<b>Sensitivity Analysis</b>			<b>WACC %</b>				
<b>Value per share</b>	<b>48</b>	Terminal Growth %			<b>11.8%</b>	<b>12.3%</b>	<b>12.8%</b>		
<b>Terminal Growth</b>	<b>3.5%</b>	3.0%			50	45	40		
<b>WACC</b>	<b>12.3%</b>	3.5%			54	48	43		
		4.0%			58	51	46		

Source: Kotak Securities - Private Client Research

## Appendix 1: Wireless Subscriber statistics

### Operator-wise Month-end subs

(mn)	Jun 07	Jul	Aug	Sep	Oct	Nov	Dec	Jan 08	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 09
Bharti Airtel	42.7	44.8	46.8	48.9	50.9	53.0	55.2	57.4	59.7	62.0	64.4	66.8	69.4	72.1	74.8	77.5	80.2	82.9	85.7	88.4
Reliance Com	32.1	33.3	34.8	36.3	37.8	39.4	39.8	41.7	44.2	45.8	47.4	49.0	50.8	52.5	54.3	56.0	57.8	59.6	61.3	66.3
Vodafone	30.8	32.4	34.1	35.7	37.2	38.6	39.9	41.1	42.6	44.1	45.8	47.5	49.2	51.0	52.8	54.6	56.7	58.8	60.9	63.3
BSNL	32.1	32.7	33.5	34.1	34.9	35.9	36.8	37.9	38.9	40.8	41.3	41.6	42.0	42.5	43.2	43.9	44.6	45.3	46.2	47.6
Tata Tele	17.3	18.1	18.9	19.5	20.2	21.0	21.7	22.5	23.4	24.3	24.8	25.5	26.3	27.3	28.4	29.3	30.2	31.0	31.8	32.8
Idea Cellular	16.1	17.0	17.9	18.7	19.4	20.2	21.1	22.0	22.9	24.0	25.0	26.1	27.2	28.2	29.3	30.4	31.6	32.8	34.2	36.1
Aircel Cellular	6.8	7.2	7.6	8.0	8.5	9.0	9.4	9.9	10.2	10.6	11.0	11.5	11.9	12.5	13.1	13.9	14.7	15.4	16.1	16.8
Spice Comm	3.2	3.3	3.4	3.5	3.6	3.7	4.6	4.8	4.1	4.2	4.4	4.5	4.5	4.2	3.6	3.6	3.6	3.7	3.8	4.0
MTNL	2.8	2.9	3.0	3.0	3.1	3.1	3.2	3.3	3.4	3.5	3.6	3.6	3.7	3.8	3.9	4.0	4.0	4.1	4.2	4.3
BPL Mobile	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.5	1.7	1.8	1.9	1.9	2.0
HFCL Infotel	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Shyam Telelink	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.4
Total	185.1	193.0	201.3	209.1	217.1	225.5	233.3	242.3	250.9	261.1	269.3	277.9	286.9	296.1	305	315.3	325.7	336.1	346.9	362.3

Source: TRAI

### Operator-wise Month-end Market Share

(%)	Jun 07	Jul	Aug	Sep	Oct	Nov	Dec	Jan 08	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 09
Bharti Airtel	23.1	23.2	23.3	23.4	23.4	23.5	23.6	23.7	23.8	23.7	23.9	24.0	24.2	24.3	24.5	24.6	24.6	24.7	24.7	24.4
Reliance Comm	17.3	17.2	17.3	17.4	17.4	17.5	17.1	17.2	17.6	17.5	17.6	17.6	17.7	17.7	17.8	17.8	17.7	17.7	17.7	18.3
Vodafone-Essar	16.6	16.8	16.9	17.1	17.1	17.1	17.1	17.0	17.0	16.9	17.0	17.1	17.1	17.2	17.3	17.3	17.4	17.5	17.6	17.5
BSNL	17.3	17.0	16.6	16.3	16.1	15.9	15.8	15.7	15.5	15.6	15.3	15.0	14.6	14.4	14.1	13.9	13.7	13.5	13.3	13.1
Tata Teleservices	9.4	9.4	9.4	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.2	9.2	9.2	9.2	9.3	9.3	9.3	9.2	9.2	9.1
Idea Cellular	8.7	8.8	8.9	8.9	8.9	9.0	9.0	9.1	9.1	9.2	9.3	9.4	9.5	9.5	9.6	9.6	9.7	9.8	9.9	10.0
Aircel Cellular Ltd.	3.7	3.7	3.8	3.8	3.9	4.0	4.0	4.1	4.1	4.1	4.1	4.1	4.2	4.2	4.3	4.4	4.5	4.6	4.6	4.6
Spice Comm	1.7	1.7	1.7	1.7	1.6	1.6	2.0	2.0	1.6	1.6	1.6	1.6	1.6	1.4	1.2	1.1	1.1	1.1	1.1	1.1
MTNL	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2
BPL Mobile	0.6	0.6	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
HFCL Infotel	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Shyam Telelink	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: TRAI

### Operator-wise Monthly Net Adds

(mn)	Jun 07	Jul	Aug	Sep	Oct	Nov	Dec	Jan 08	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 09
Bharti Airtel	1.96	2.06	2.05	2.06	2.03	2.05	2.20	2.25	2.25	2.31	2.39	2.46	2.56	2.69	2.70	2.70	2.72	2.72	2.73	2.73
Reliance Comm	1.16	1.18	1.57	1.50	1.51	1.56	0.44	1.91	2.44	1.62	1.62	1.63	1.74	1.75	1.75	1.76	1.76	1.77	1.78	4.95
Vodafone-Essar	1.54	1.69	1.68	1.54	1.53	1.38	1.30	1.28	1.41	1.57	1.65	1.69	1.73	1.76	1.81	1.87	2.08	2.06	2.17	2.41
BSNL	0.38	0.70	0.71	0.67	0.80	1.00	0.88	1.13	0.97	1.89	0.47	0.32	0.38	0.58	0.64	0.69	0.71	0.70	0.95	1.36
Tata Teleservices	0.75	0.76	0.81	0.60	0.71	0.83	0.71	0.80	0.86	0.93	0.44	0.70	0.85	1.00	1.05	0.96	0.83	0.85	0.75	1.03
Idea Cellular	0.86	0.88	0.87	0.80	0.75	0.80	0.83	0.90	0.92	1.13	1.04	1.10	1.05	1.05	1.03	1.10	1.20	1.23	1.40	1.85
Aircel Cellular Ltd.	0.37	0.39	0.46	0.42	0.48	0.50	0.40	0.51	0.25	0.43	0.38	0.50	0.43	0.55	0.65	0.75	0.78	0.72	0.70	0.69
Spice Comm	0.16	0.12	0.11	0.08	0.09	0.09	0.93	0.17	(0.68)	0.13	0.15	0.13	0.05	(0.35)	(0.63)	0.04	0.04	0.07	0.10	0.15
MTNL	0.14	0.07	0.07	0.05	0.06	0.07	0.08	0.07	0.12	0.13	0.03	0.07	0.09	0.10	0.09	0.05	0.07	0.08	0.09	0.11
BPL Mobile	0.01	0.01	0.01	0.05	0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.05	0.06	0.08	0.15	0.14	0.07	0.07	0.06
HFCL Infotel	(0.00)	0.00	0.00	0.01	0.03	0.03	0.03	0.02	0.02	0.01	0.02	0.01	0.02	0.02	0.00	0.00	0.01	0.00	0.00	0.00
Shyam Telelink	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.07	0.08	0.09	0.07
Total	7.34	7.85	8.32	7.79	8.05	8.33	7.82	9.06	8.58	10.15	8.22	8.62	8.95	9.21	9.17	10.06	10.42	10.35	10.82	15.40

Source: TRAI

**Operator wise monthly net additions Share**

(%)	Jun 07	Jul	Aug	Sep	Oct	Nov	Dec	Jan 08	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 09
Bharti Airtel	26.7	26.2	24.6	26.5	25.3	24.7	28.1	24.9	26.2	22.8	29.0	28.5	28.6	29.2	29.5	26.8	26.1	26.3	25.2	17.7
Reliance Comm	15.9	15.0	18.8	19.3	18.8	18.7	5.6	21.0	28.4	15.9	19.7	18.9	19.4	19.0	19.1	17.5	16.9	17.1	16.4	32.1
Vodafone-Essar	21.0	21.5	20.2	19.8	19.0	16.5	16.6	14.1	16.5	15.5	20.1	19.6	19.3	19.1	19.7	18.5	20.0	19.9	20.1	15.6
BSNL	5.2	8.9	8.5	8.6	9.9	12.0	11.2	12.5	11.3	18.6	5.8	3.7	4.2	6.3	7.0	6.9	6.9	6.8	8.8	8.8
Tata Teleservices	10.2	9.7	9.7	7.6	8.8	9.9	9.0	8.8	10.0	9.1	5.4	8.1	9.5	10.9	11.4	9.5	7.9	8.3	6.9	6.7
Idea Cellular	11.7	11.2	10.4	10.3	9.3	9.6	10.6	9.9	10.7	11.1	12.6	12.8	11.8	11.4	11.2	10.9	11.5	11.9	13.0	12.0
Aircel Cellular	5.0	4.9	5.5	5.4	6.0	6.0	5.1	5.6	2.9	4.2	4.6	5.8	4.8	6.0	7.1	7.5	7.5	6.9	6.5	4.5
Spice Communications	2.2	1.5	1.3	1.1	1.1	1.1	11.9	1.9	-7.9	1.2	1.9	1.6	0.6	-3.8	-6.9	0.4	0.4	0.7	0.9	1.0
MTNL	2.0	0.9	0.8	0.6	0.8	0.9	1.0	0.8	1.4	1.3	0.4	0.8	1.0	1.1	1.0	0.5	0.6	0.7	0.8	0.7
BPL Mobile	0.1	0.1	0.1	0.7	0.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7	0.8	1.5	1.4	0.7	0.6	0.4
HFCL Infotel	0.0	0.0	0.0	0.1	0.4	0.3	0.4	0.2	0.3	0.1	0.2	0.1	0.2	0.2	0.0	0.0	0.1	0.0	0.0	0.0
Shyam Telelink	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.7	0.8	0.9	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: TRAI

**Operatorwise Subscriber Growth rates**

(%)	Jun 07	Jul	Aug	Sep	Oct	Nov	Dec	Jan 08	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 09
Bharti Airtel	4.8	4.8	4.6	4.4	4.2	4.0	4.2	4.1	3.9	3.9	3.8	3.8	3.8	3.9	3.7	3.6	3.5	3.4	3.3	3.2
Reliance Comm	3.8	3.7	4.7	4.3	4.2	4.1	1.1	4.8	5.8	3.7	3.5	3.4	3.5	3.4	3.3	3.2	3.1	3.1	2.3	3.3
Vodafone-Essar	5.3	5.5	5.2	4.5	4.3	3.7	3.4	3.2	3.4	3.7	3.7	3.7	3.6	3.6	3.5	3.5	3.8	3.6	3.7	4.0
BSNL	1.2	2.2	2.2	2.0	2.3	2.9	2.4	3.1	2.6	4.8	1.2	0.8	0.9	1.4	1.5	1.6	1.6	1.6	2.1	2.9
Tata Teleservices	4.5	4.4	4.5	3.1	3.6	4.1	3.4	3.7	3.8	4.0	1.8	2.8	3.4	3.8	3.8	3.4	2.8	2.8	2.4	3.2
Idea Cellular	5.6	5.4	5.1	4.5	4.0	4.1	4.1	4.3	4.2	4.9	4.3	4.4	4.0	3.9	3.6	3.8	4.0	3.9	4.3	5.4
Aircel Cellular Ltd.	5.7	5.7	6.4	5.5	6.0	5.9	4.5	5.4	2.5	4.2	3.6	4.6	3.8	4.6	5.2	5.7	5.6	4.9	4.6	4.3
Spice Communications	5.4	3.8	3.3	2.5	2.5	2.6	25.5	3.7	-14.3	3.1	3.6	3.1	1.1	-7.7	-15.1	1.0	1.0	1.9	2.6	4.0
MTNL	5.4	2.6	2.3	1.7	2.0	2.4	2.4	2.3	3.6	3.8	0.9	1.8	2.4	2.6	2.4	1.3	1.7	1.9	2.1	2.6
BPL Mobile	0.5	0.6	0.7	4.7	4.2	1.6	1.5	1.4	1.6	1.5	1.5	1.3	3.5	4.5	5.4	9.7	8.7	4.1	3.5	3.1
HFCL Infotel	0.0	0.6	1.0	5.4	19.5	13.8	14.7	7.1	8.1	2.8	5.8	3.2	5.1	4.6	0.6	0.0	3.7	1.1	1.1	0.8
Shyam Telelink	0.6	0.9	0.8	0.5	0.6	0.3	0.4	1.4	1.8	2.1	0.8	0.4	1.3	5.2	3.4	2.1	59.5	40.7	33.7	18.8
Total	4.1	4.2	4.3	3.9	3.8	3.8	3.5	3.9	3.5	4.0	3.1	3.2	3.2	3.2	3.1	3.3	3.3	3.2	3.2	4.4

Source: TRAI

**Circle-wise Quarter-end subs**

(mn)	Sep'06	Dec'06	Mar'07	Jun'07	Sep'07	Dec'07	Mar'08	Jun'08	Sep'08
Metros	27.9	30.2	31.6	34.1	37.7	41.5	44.8	48.2	52.3
A Circles	46.3	53.5	58.9	65.9	75.1	84.1	94.0	102.5	111.8
B Circles	44.3	52.5	58.8	66.6	75.8	84.8	95.1	105.5	116.7
C Circles	11.2	13.5	15.7	18.3	20.5	23.2	27.2	30.6	34.5
Total	129.5	149.6	165.1	184.9	209.1	233.6	261.1	286.8	315.3

Source: TRAI

**Circle wise Share of Quarterly net adds**

(%)	Sep'06	Dec'06	Mar'07	Jun'07	Sep'07	Dec'07	Mar'08	Jun'08	Sep'08
Metros	12.0	11.7	9.2	12.3	15.1	15.3	12.2	13.1	14.2
A Circle	37.9	36.1	35.1	35.3	37.8	36.9	35.8	33.4	32.6
B Circle	40.5	40.8	41.1	39.5	37.9	36.7	37.5	40.4	39.4
C Circle	9.5	11.4	14.6	13.0	9.2	11.1	14.5	13.1	13.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: TRAI

**Circle-wise Quarter-end Market Shares**

(%)	Sep'06	Dec'06	Mar'07	Jun'07	Sep'07	Dec'07	Mar'08	Jun'08	Sep'08
Metros	22	20	19	18	18	18	17	17	17
A	36	36	36	36	36	36	36	36	35
B	34	35	36	36	36	36	36	37	37
C	9	9	10	10	10	10	10	11	11
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: TRAI

**Circlewise Subscriber Growth Trend**

(%)	Sep'06	Dec'06	Mar'07	Jun'07	Sep'07	Dec'07	Mar'08	Jun'08	Sep'08
Metros	8.1	8.4	4.7	7.7	10.7	10.0	8.1	7.5	8.4
A	16.6	15.7	10.1	11.9	13.9	12.1	11.7	9.1	9.1
B	19.0	18.5	12.1	13.3	13.7	11.9	12.1	10.9	10.7
C	17.4	20.6	16.8	16.3	12.1	13.3	17.1	12.3	12.9
Total	15.5	15.5	10.3	12.0	13.1	11.7	11.8	9.8	9.9

Source: TRAI

## Circlewise operator performances

Telecom Circles		Subscriber Base					Market Share				
		Dec'07	Mar'08	Jun'08	Sep'08	Dec'08	Dec'07	Mar'08	Jun'08	Sep'08	Dec'08
Andhra Pradesh	<b>Bharti Airtel</b>	<b>5.3</b>	<b>6.06</b>	<b>6.77</b>	<b>7.48</b>	<b>8.32</b>	<b>29.1%</b>	<b>29.5%</b>	<b>29.9%</b>	<b>29.8%</b>	<b>30.2%</b>
	Reliance Comm	3.3	3.79	4.16	4.58	4.97	18.2%	18.4%	18.4%	18.3%	18.1%
	Idea Cellular	2.8	3.25	3.70	4.20	4.60	15.5%	15.8%	16.4%	16.8%	16.7%
Assam	<b>Bharti Airtel</b>	<b>0.77</b>	<b>0.90</b>	<b>0.97</b>	<b>1.14</b>	<b>1.31</b>	<b>24.2%</b>	<b>23.0%</b>	<b>22.2%</b>	<b>23.9%</b>	<b>25.0%</b>
	Reliance Comm	0.74	0.93	1.05	1.20	1.34	23.3%	23.7%	24.1%	25.1%	25.7%
	Idea Cellular	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%
Bihar	<b>Bharti Airtel</b>	<b>3.65</b>	<b>4.34</b>	<b>5.13</b>	<b>5.95</b>	<b>6.66</b>	<b>37.2%</b>	<b>37.7%</b>	<b>38.7%</b>	<b>38.9%</b>	<b>37.7%</b>
	Reliance Comm	3.21	3.66	4.21	4.74	5.25	32.7%	31.8%	31.8%	31.0%	29.8%
	Idea Cellular	-	-	-	-	0.27	0.0%	0.0%	0.0%	0.0%	1.5%
Chennai	<b>Bharti Airtel</b>	<b>1.55</b>	<b>1.71</b>	<b>1.87</b>	<b>1.98</b>	<b>2.05</b>	<b>24.1%</b>	<b>24.3%</b>	<b>24.2%</b>	<b>25.1%</b>	<b>23.5%</b>
	Reliance Comm	0.83	0.97	1.18	1.27	1.36	12.9%	13.7%	15.3%	16.1%	15.6%
	Idea Cellular	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%
Delhi	<b>Bharti Airtel</b>	<b>3.71</b>	<b>3.89</b>	<b>4.09</b>	<b>4.25</b>	<b>4.47</b>	<b>24.1%</b>	<b>23.9%</b>	<b>23.4%</b>	<b>22.7%</b>	<b>22.4%</b>
	Reliance Comm	2.24	2.35	2.62	2.88	3.13	14.6%	14.5%	15.0%	15.4%	15.7%
	Idea Cellular	1.91	1.90	2.04	2.19	2.28	12.4%	11.7%	11.7%	11.7%	11.4%
Gujarat	<b>Bharti Airtel</b>	<b>2.29</b>	<b>2.70</b>	<b>3.17</b>	<b>3.55</b>	<b>3.81</b>	<b>15.0%</b>	<b>15.9%</b>	<b>17.0%</b>	<b>17.7%</b>	<b>17.6%</b>
	Reliance Comm	2.28	2.43	2.60	2.80	3.04	14.9%	14.3%	13.9%	13.9%	14.0%
	Idea Cellular	2.35	2.62	3.00	3.22	3.60	15.3%	15.5%	16.1%	16.0%	16.6%
Himachal Pradesh	<b>Bharti Airtel</b>	<b>0.76</b>	<b>0.81</b>	<b>0.81</b>	<b>0.86</b>	<b>0.92</b>	<b>37.0%</b>	<b>35.0%</b>	<b>33.5%</b>	<b>32.2%</b>	<b>30.5%</b>
	<b>Reliance Comm</b>	<b>0.51</b>	<b>0.63</b>	<b>0.72</b>	<b>0.84</b>	<b>0.94</b>	<b>24.9%</b>	<b>27.3%</b>	<b>29.8%</b>	<b>31.3%</b>	<b>31.1%</b>
	Idea Cellular	0.06	0.07	0.09	0.11	0.13	2.7%	3.2%	3.9%	3.9%	4.1%
Haryana	<b>Bharti Airtel</b>	<b>0.94</b>	<b>1.05</b>	<b>1.07</b>	<b>1.13</b>	<b>1.20</b>	<b>16.2%</b>	<b>16.4%</b>	<b>15.4%</b>	<b>14.7%</b>	<b>14.1%</b>
	Reliance Comm	0.76	0.86	1.01	1.14	1.24	13.0%	13.4%	14.5%	14.9%	14.6%
	<b>Idea Cellular</b>	<b>0.90</b>	<b>0.98</b>	<b>1.13</b>	<b>1.28</b>	<b>1.44</b>	<b>15.5%</b>	<b>15.3%</b>	<b>16.1%</b>	<b>16.7%</b>	<b>17.0%</b>
J&K	<b>Bharti Airtel</b>	<b>0.86</b>	<b>1.00</b>	<b>1.16</b>	<b>1.27</b>	<b>1.44</b>	<b>43.8%</b>	<b>45.4%</b>	<b>47.5%</b>	<b>48.0%</b>	<b>48.6%</b>
	Reliance Comm	0.00	0.00	0.00	0.00	0.00	0.0%	0.0%	0.0%	0.0%	0.0%
	Idea Cellular	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%
Karnataka	<b>Bharti Airtel</b>	<b>6.26</b>	<b>6.87</b>	<b>7.62</b>	<b>8.48</b>	<b>9.22</b>	<b>40.2%</b>	<b>40.3%</b>	<b>41.2%</b>	<b>43.2%</b>	<b>43.6%</b>
	Reliance Comm	2.27	2.45	2.75	3.07	3.38	14.5%	14.4%	14.9%	15.7%	16.0%
	Idea Cellular*	1.47	1.64	1.79	1.43	1.46	9.5%	9.6%	9.7%	7.3%	6.9%
Kerala	<b>Bharti Airtel</b>	<b>1.43</b>	<b>1.65</b>	<b>1.73</b>	<b>1.93</b>	<b>2.05</b>	<b>13.6%</b>	<b>14.1%</b>	<b>13.6%</b>	<b>13.7%</b>	<b>13.7%</b>
	Reliance Comm	1.79	2.04	2.21	2.39	2.55	17.1%	17.5%	17.4%	17.0%	17.0%
	<b>Idea Cellular</b>	<b>2.40</b>	<b>2.70</b>	<b>3.12</b>	<b>3.62</b>	<b>3.94</b>	<b>22.9%</b>	<b>23.1%</b>	<b>24.5%</b>	<b>25.9%</b>	<b>26.2%</b>
Kolkata	<b>Bharti Airtel</b>	<b>1.59</b>	<b>1.81</b>	<b>1.87</b>	<b>2.05</b>	<b>2.30</b>	<b>23.0%</b>	<b>23.0%</b>	<b>22.0%</b>	<b>21.8%</b>	<b>22.1%</b>
	<b>Reliance Comm</b>	<b>1.58</b>	<b>1.80</b>	<b>2.02</b>	<b>2.26</b>	<b>2.47</b>	<b>23.0%</b>	<b>22.9%</b>	<b>23.8%</b>	<b>24.0%</b>	<b>23.8%</b>
	Idea Cellular	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%
Madhya Pradesh	<b>Bharti Airtel</b>	<b>2.45</b>	<b>2.77</b>	<b>3.27</b>	<b>3.77</b>	<b>4.21</b>	<b>21.4%</b>	<b>21.0%</b>	<b>22.2%</b>	<b>22.9%</b>	<b>23.0%</b>
	<b>Reliance Comm</b>	<b>3.56</b>	<b>4.03</b>	<b>4.47</b>	<b>5.01</b>	<b>5.63</b>	<b>31.1%</b>	<b>30.5%</b>	<b>30.4%</b>	<b>30.5%</b>	<b>30.7%</b>
	Idea Cellular	2.69	3.23	3.60	4.00	4.38	23.5%	24.5%	24.5%	24.4%	23.9%
Maharashtra	<b>Bharti Airtel</b>	<b>3.74</b>	<b>4.16</b>	<b>4.45</b>	<b>4.79</b>	<b>5.40</b>	<b>20.3%</b>	<b>19.8%</b>	<b>19.4%</b>	<b>19.1%</b>	<b>19.7%</b>
	Reliance Comm	2.65	2.91	3.17	3.41	3.61	14.4%	13.8%	13.8%	13.6%	13.1%
	<b>Idea Cellular</b>	<b>4.18</b>	<b>4.88</b>	<b>5.44</b>	<b>6.00</b>	<b>6.79</b>	<b>22.7%</b>	<b>23.2%</b>	<b>23.7%</b>	<b>24.0%</b>	<b>24.7%</b>
Mumbai	<b>Bharti Airtel</b>	<b>2.31</b>	<b>2.43</b>	<b>2.50</b>	<b>2.62</b>	<b>2.74</b>	<b>18.1%</b>	<b>17.8%</b>	<b>17.3%</b>	<b>16.5%</b>	<b>16.0%</b>
	<b>Reliance Comm</b>	<b>2.60</b>	<b>2.76</b>	<b>3.01</b>	<b>3.26</b>	<b>3.51</b>	<b>20.3%</b>	<b>20.3%</b>	<b>20.8%</b>	<b>20.6%</b>	<b>20.6%</b>
	Idea Cellular	-	-	-	0.10	0.33	0.0%	0.0%	0.0%	0.6%	1.9%
North East	<b>Bharti Airtel</b>	<b>0.39</b>	<b>0.48</b>	<b>0.67</b>	<b>0.71</b>	<b>0.82</b>	<b>21.8%</b>	<b>22.7%</b>	<b>28.7%</b>	<b>28.2%</b>	<b>28.3%</b>
	Reliance Comm	0.27	0.33	0.37	0.41	0.45	15.2%	15.7%	15.8%	16.2%	15.7%
	Idea Cellular	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%
Orissa	<b>Bharti Airtel</b>	<b>1.48</b>	<b>1.71</b>	<b>2.01</b>	<b>2.30</b>	<b>2.62</b>	<b>33.2%</b>	<b>33.0%</b>	<b>34.7%</b>	<b>34.8%</b>	<b>34.9%</b>
	Reliance Comm	1.16	1.40	1.55	1.74	1.94	26.0%	27.1%	26.8%	26.5%	25.7%
	Idea Cellular	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%
Punjab	<b>Bharti Airtel</b>	<b>3.06</b>	<b>3.18</b>	<b>3.26</b>	<b>3.40</b>	<b>3.65</b>	<b>28.5%</b>	<b>27.2%</b>	<b>26.2%</b>	<b>27.4%</b>	<b>27.4%</b>
	Reliance Comm	0.94	1.04	1.15	1.22	1.27	8.8%	8.9%	9.2%	9.8%	9.6%
	Idea Cellular*	2.33	2.57	2.75	2.17	2.34	21.7%	22.0%	22.1%	17.5%	17.5%
Rajasthan	<b>Bharti Airtel</b>	<b>3.31</b>	<b>3.82</b>	<b>4.49</b>	<b>5.40</b>	<b>6.19</b>	<b>27.3%</b>	<b>28.1%</b>	<b>29.5%</b>	<b>30.9%</b>	<b>31.2%</b>
	Reliance Comm	1.50	1.69	1.88	2.09	2.31	12.4%	12.4%	12.4%	12.0%	11.7%
	Idea Cellular	0.77	0.82	0.94	1.03	1.16	6.3%	6.1%	6.2%	5.9%	5.8%
Tamil Nadu	<b>Bharti Airtel</b>	<b>3.58</b>	<b>3.95</b>	<b>4.42</b>	<b>4.96</b>	<b>5.62</b>	<b>21.8%</b>	<b>21.6%</b>	<b>22.3%</b>	<b>22.1%</b>	<b>22.9%</b>
	Reliance Comm	2.38	2.76	2.87	3.07	3.29	14.5%	15.1%	14.5%	13.7%	13.4%
	Idea Cellular	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%
Uttar Pradesh - East	<b>Bharti Airtel</b>	<b>2.65</b>	<b>3.22</b>	<b>4.16</b>	<b>4.84</b>	<b>5.39</b>	<b>17.8%</b>	<b>19.9%</b>	<b>22.3%</b>	<b>23.1%</b>	<b>23.0%</b>
	Reliance Comm	2.65	2.84	3.16	3.53	3.96	17.8%	17.6%	16.9%	16.8%	16.9%
	Idea Cellular	0.78	0.97	1.25	1.39	1.64	5.2%	6.0%	6.7%	6.6%	7.0%
Uttar Pradesh - West	<b>Bharti Airtel</b>	<b>1.38</b>	<b>1.55</b>	<b>1.68</b>	<b>1.90</b>	<b>2.11</b>	<b>12.2%</b>	<b>12.0%</b>	<b>12.0%</b>	<b>12.2%</b>	<b>12.4%</b>
	Reliance Comm	2.04	2.22	2.43	2.68	2.98	18.1%	17.2%	17.3%	17.3%	17.5%
	<b>Idea Cellular</b>	<b>2.18</b>	<b>2.57</b>	<b>2.87</b>	<b>3.23</b>	<b>3.64</b>	<b>19.4%</b>	<b>19.9%</b>	<b>20.4%</b>	<b>20.8%</b>	<b>21.4%</b>
West Bengal	<b>Bharti Airtel</b>	<b>1.67</b>	<b>1.92</b>	<b>2.28</b>	<b>2.72</b>	<b>3.14</b>	<b>20.7%</b>	<b>20.3%</b>	<b>21.2%</b>	<b>22.3%</b>	<b>23.0%</b>
	Reliance Comm	1.68	1.88	2.18	2.46	2.72	20.9%	20.0%	20.3%	20.1%	19.9%
	Idea Cellular	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%
Pan-India	<b>Bharti Airtel</b>	<b>55.16</b>	<b>61.98</b>	<b>69.38</b>	<b>77.48</b>	<b>85.65</b>	<b>23.6%</b>	<b>23.7%</b>	<b>24.2%</b>	<b>24.6%</b>	<b>24.7%</b>
	Reliance Comm	40.96	45.79	50.79	56.05	61.35	17.5%	17.5%	17.7%	17.8%	17.7%
	Idea Cellular	21.05	24.00	27.19	30.38	38.01	9.0%	9.2%	9.5%	9.6%	11.0%

Source: TRAI

## Wireless Subscriber Base Numbers for Jan 2009 (Million Subscribers)

	Bharti Airtel	Reliance Comm	Vodafone Essar	BSNL	Idea Cellular	Tata Tele	Aircel (Maxis)	Spice Comm	MTNL	BPL/Loop	HFCL	Shyam (Sistema)	Total Circle-wise	Circle-wise (%)
	24.40%	18.30%	17.48%	13.13%	11.05%	9.05%	4.63%	0.00%	1.19%	0.55%	0.11%	0.12%		100.0%
<b>Metro Circles</b>														
Chennai	2.09	1.36	1.51	1.06	-	0.44	2.39	-	-	-	-	-	8.84	2.4%
Delhi & NCR	4.57	3.20	3.92	-	2.31	4.43	-	-	2.01	-	-	-	20.44	5.6%
Kolkata	2.40	2.50	2.61	1.28	-	1.47	0.45	-	-	-	-	-	10.70	3.0%
Mumbai	2.76	4.25	4.23	-	0.60	2.20	-	-	2.29	2.01	-	-	18.35	5.1%
<b>Circle A</b>														
Andhra Pradesh	8.59	5.06	3.67	3.15	4.80	3.06	-	-	-	-	-	-	28.33	7.8%
Gujarat	3.93	3.86	7.60	2.56	3.70	1.32	-	-	-	-	-	-	22.97	6.3%
Karnataka	9.60	4.02	3.48	2.44	1.57	1.34	-	-	-	-	-	-	22.46	6.2%
Maharashtra & Goa	5.54	3.86	4.23	3.71	7.04	4.16	-	-	-	-	-	-	28.54	7.9%
Tamil Nadu	5.80	3.46	4.83	3.08	-	0.72	7.44	-	-	-	-	-	25.33	7.0%
<b>Circle B</b>														
Haryana	1.24	1.28	2.08	1.50	1.48	1.25	-	-	-	-	-	-	8.83	2.4%
Kerala	2.11	2.61	2.90	2.96	4.08	0.76	-	-	-	-	-	-	15.42	4.3%
MP & Chhattisgarh	4.33	5.80	0.18	2.94	4.63	1.19	-	-	-	-	-	-	19.06	5.3%
Punjab	3.71	1.31	2.08	2.67	2.38	1.30	-	-	-	-	0.39	-	13.83	3.8%
Rajasthan	6.41	2.97	4.74	2.99	1.20	2.44	-	-	-	-	-	0.43	21.19	5.8%
Uttar Pradesh (E)	5.55	4.71	6.09	5.60	1.80	1.43	-	-	-	-	-	-	25.18	7.0%
UP (W) & Uttranchal	2.20	3.08	4.09	2.47	3.75	2.02	-	-	-	-	-	-	17.61	4.9%
West Bengal/A&N islands	3.32	2.78	4.35	1.81	-	0.89	1.05	-	-	-	-	-	14.21	3.9%
<b>Circle C</b>														
Assam	1.35	1.40	0.09	0.90	-	0.03	1.60	-	-	-	-	-	5.37	1.5%
Bihar & Jharkhand	6.85	5.36	0.33	2.65	0.53	1.57	1.31	-	-	-	-	-	18.59	5.1%
Himachal Pradesh	0.94	0.98	0.02	0.80	0.13	0.13	0.12	-	-	-	-	-	3.12	0.9%
J&K	1.52	0.00	-	0.93	-	0.02	0.67	-	-	-	-	-	3.14	0.9%
North East	0.84	0.47	0.07	0.68	-	0.01	0.94	-	-	-	-	-	3.00	0.8%
Orissa	2.71	1.97	0.23	1.43	-	0.63	0.81	-	-	-	-	-	7.78	2.1%
Total Wireless Subscribers	88.38	66.30	63.34	47.58	40.02	32.79	16.76	-	4.30	2.01	0.39	0.43	362.29	100.0%

Source: TRAI; Kotak Securities - Private Client Research

## 2G Spectrum allocations (in MHz)

	Chennai	Delhi	Kolkata	Mumbai	AP.	Gujarat	Karnataka	Maharashtra	T.N.	Haryana	Kerala	M.P.	Punjab	Rajasthan	U.P. (E)	U.P. (W)	W.B. & AN	Assam	Bihar	HP.	J&K	North East	Orissa	
Bharti Airtel	8.6	10.0	8.0	9.2	7.8	6.2	9.8	6.2	8.2	6.2	6.2	6.2	7.8	6.2	6.2	6.2	6.2	6.2	8.0	6.2	6.2	6.2	4.4	8.0
Reliance CDMA	5.0	5.0	5.0	5.0	5.0	3.8	5.0	5.0	5.0	3.8	5.0	5.0	3.8	3.8	5.0	5.0	3.8	2.5	5.0	2.5	2.5	2.5	2.5	3.8
Reliance GSM	4.4	4.4	6.2	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	6.2	4.4	4.4	4.4	4.4	6.2	6.2	8.0	6.2	4.4	4.4	6.2	6.2
Vodafone Essar	8.0	10.0	9.8	10.0	6.2	9.8	8.0	6.2	6.2	6.2	6.2	4.4	6.2	6.2	8.0	6.2	6.2	4.4	4.4	4.4	4.4	4.4	4.4	4.4
BSNL / MTNL GSM	8.0	8.0	6.2	8.0	8.0	7.4	8.0	8.0	8.0	6.2	8.0	6.2	6.2	8.0	8.0	6.2	6.2	6.2	8.0	6.2	8.0	6.2	6.2	6.2
BSNL / MTNL CDMA	2.5	3.8	2.5	5.0	2.5	2.5	2.5	2.5	2.5	3.8	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Idea Cellular (+Spice)	4.4	8.0	4.4	4.4	8.0	6.2	6.2	9.8	4.4	6.2	8.0	8.0	7.8	6.2	6.2	8.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Tata Tele CDMA	3.8	5.0	3.8	5.0	5.0	3.8	3.8	5.0	2.5	3.8	3.8	2.5	3.8	3.8	3.8	3.8	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Tata Tele GSM	4.4		4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Aircel (Maxis)	8.6	4.4	4.4	4.4	4.4	4.4	4.4	4.4	9.8	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	6.2	4.4	4.4	4.4	4.4	4.4	4.4
BPL/Loop Telecom	4.4		4.4	10.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Shyam (Sistema)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	5.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Unitech	4.4		4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Datacom (Videocon)	4.4		4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Swan (Etisalat)	4.4			4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4		4.4	4.4	4.4	4.4								
S Tel																		4.4	4.4	4.4	4.4	4.4	4.4	4.4
HFCL Infotel													2.5											
Total	77.8	61.1	70.4	85.5	75.8	72.9	76.6	76.0	75.5	68.1	74.2	65.5	73.8	72.4	73.0	73.0	62.5	65.6	71.7	63.8	63.8	62.0	66.9	

Source: Trai, Media Reports, Kotak Securities - Private Client Research; Note: Blue coloured - existing operations; Red coloured - announced / expected spectrum allocations



## Appendix 2: Direct to home (DTH) estimates

### Direct to Home (DTH) Estimates:

	FY08A	FY09E	FY10E	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E
Population Estimate	1,146	1,163	1,180	1,198	1,216	1,234	1,252	1,271	1,290	1,309
Population Growth		1.47%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%	1.49%
Total HHs (m)	222	226	231	236	240	245	250	255	260	265
Growth (%)		2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
TV HHs (m)	120	126	132	139	146	153	161	169	177	186
Growth (%)		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
TV Penetration (%)	54%	56%	57%	59%	61%	62%	64%	66%	68%	70%
C&S (incl. pay DTH) HHs (m)	71	77	83	89	97	103	110	115	121	127
Growth (%)		8%	8%	8%	8%	7%	6%	5%	5%	5%
C&S as a % of total HHs (%)	32%	34%	36%	38%	40%	42%	44%	45%	46%	48%
C&S as a % of TV HHs (%)	59%	61%	63%	64%	66%	68%	68%	68%	68%	68%
Analogue cable HHs (m)	62.1	58.5	52.6	48.0	44.4	41.7	40.5	40.5	41.8	43.8
Growth (%)		(3.6)	(6.0)	(4.5)	(3.6)	(2.7)	(1.2)	(0.0)	1.3	2.1
Share of TV HHs (%)	52%	46%	40%	35%	30%	27%	25%	24%	24%	24%
Share of C&S HHs (%)	87%	76%	63%	54%	46%	40%	37%	35%	35%	35%
Digital cable HHs (m)	3.7	6.7	10.6	14.1	17.1	19.7	22.1	23.8	25.3	26.5
Growth (%)		81%	59%	32%	22%	15%	12%	8%	6%	5%
Share of TV HHs (%)	3.1%	5.3%	8.0%	10.1%	11.8%	12.9%	13.7%	14.1%	14.3%	14.3%
Share of C&S HHs (%)	5.2%	8.7%	12.8%	15.7%	17.7%	19.1%	20.1%	20.7%	20.9%	20.9%
DTH HHs (m)	5.2	11.5	18.6	25.2	31.5	37.1	41.6	44.9	47.6	50.0
Growth (%)		121%	62%	35%	25%	18%	12%	8%	6%	5%
Share of TV HHs (%)	4.3%	9.1%	14.1%	18.1%	21.6%	24.2%	25.9%	26.6%	26.9%	26.9%
Share of C&S HHs (%)	7.3%	15.0%	22.5%	28.1%	32.6%	35.9%	37.9%	39.0%	39.4%	39.4%
DTH as a % of total HHs(%)	2.3%	5.1%	8.1%	10.7%	13.1%	15.2%	16.6%	17.6%	18.3%	18.8%
IPTV HHs (Mn)	-	-	1.0	2.2	3.6	4.8	5.4	5.9	6.2	6.5
Growth (%)			121%	62%	25%	18%	12%	8%	6%	5%
Share of TV HHs (%)			0.8%	1.6%	2.5%	3.2%	3.4%	3.5%	3.5%	3.5%
Share of C&S HHs (%)			1.2%	2.5%	3.7%	4.7%	4.9%	5.1%	5.1%	5.1%
Market share in C&S HHs (%)										
Analogue cable (%)	87.5%	76.3%	63.4%	53.7%	46.0%	40.3%	37.0%	35.2%	34.5%	34.5%
Digital cable (%)	5.2%	8.7%	12.8%	15.7%	17.7%	19.1%	20.1%	20.7%	20.9%	20.9%
DTH (%)	7.3%	15.0%	22.5%	28.1%	32.6%	35.9%	37.9%	39.0%	39.4%	39.4%
IPTV (%)	0.0%	0.0%	1.2%	2.5%	3.7%	4.7%	4.9%	5.1%	5.1%	5.1%
Total DTH HHs (Mn)	5.2	11.5	18.6	25.2	31.5	37.1	41.6	44.9	47.6	50.0
Industry net additions (Mn)		6.3	7.1	6.5	6.3	5.7	4.5	3.3	2.7	2.4
Subscriber Nos (Mn)										
Dish TV	3.1	4.5	6.3	7.9	9.5	10.9	12.0	12.9	13.5	14.1
Tata Sky	1.7	3.3	4.7	6.0	7.3	8.4	9.3	10.0	10.5	11.0
Relaince Big TV	-	1.0	2.8	4.4	6.0	7.4	8.5	9.4	10.0	10.6
Bharti Airtel	-	0.5	1.6	2.6	3.5	4.3	5.0	5.5	5.9	6.3
Sun TV	0.4	2.2	3.3	4.3	5.2	6.0	6.7	7.2	7.6	8.0
Total	5.2	11.5	18.6	25.2	31.5	37.1	41.6	44.9	47.6	50.0
Net Additions (Mn)										
Dish TV	1.2	1.4	1.8	1.6	1.6	1.4	1.1	0.8	0.7	0.6
Tata Sky	1.0	1.6	1.4	1.3	1.3	1.1	0.9	0.7	0.5	0.5
Relaince Big TV	-	1.0	1.8	1.6	1.6	1.4	1.1	0.8	0.7	0.6
Bharti Airtel	-	0.5	1.1	1.0	0.9	0.8	0.7	0.5	0.4	0.4
Sun TV	0.4	1.8	1.1	1.0	0.9	0.8	0.7	0.5	0.4	0.4
Subscriber Market Share (%)										
Dish TV	59.6%	39.1%	33.7%	31.5%	30.2%	29.4%	28.9%	28.6%	28.4%	28.3%
Tata Sky	32.7%	28.7%	25.4%	24.0%	23.2%	22.7%	22.4%	22.2%	22.1%	22.0%
Relaince Big TV		8.7%	14.9%	17.6%	19.0%	20.0%	20.5%	20.8%	21.1%	21.2%
Bharti Airtel		4.3%	8.4%	10.1%	11.1%	11.7%	12.1%	12.3%	12.4%	12.5%
Sun TV	7.7%	19.1%	17.5%	16.9%	16.5%	16.3%	16.1%	16.1%	16.0%	16.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Net Adds Share (%)										
Dish TV		22%	25%	25%	25%	25%	25%	25%	25%	25%
Tata Sky		25%	20%	20%	20%	20%	20%	20%	20%	20%
Relaince Big TV		16%	25%	25%	25%	25%	25%	25%	25%	25%
Bharti Airtel		8%	15%	15%	15%	15%	15%	15%	15%	15%
Sun TV		29%	15%	15%	15%	15%	15%	15%	15%	15%
Total		100.0	100%	100%	100%	100%	100%	100%	100%	100%

Source: Company, Kotak Securities - Private Client Research

## Appendix 3: Non-Mobile Service offerings

### Wholesale Voice services

Voice Termination Service	VTS provides voice call completion services consistently to anywhere in the world.
Home Country Direct	Toll-free numbers are granted for customers traveling abroad to call their home country.
International Toll Free Service (ITFS)	It allows users to receive toll-free calls from across the world.
Managed Calling Cards Solution	It is a customizable, turnkey and cost-effective calling cards solution.
ISDN	It provides high-quality, high-speed, clear channel data solution that delivers data connectivity and is ideal for video conferencing applications.

### Carrier Data Business:

Global Transmission Services	It provides dedicated high-speed connections between the global points of presence over which they can transport voice, data, facsimile, messaging and video conferencing.
IP Transit Service.	It connects the customers across the world using the global IP backbone & communication nodes
Content Delivery Network Service	It is a system of computers networked together across the Internet content (especially large media content) to end-users.

### Enterprise Data Business:

International Private Leased Circuits ("IPLCs")	It international dedicated connectivity for customers who need reliable, 24-hour communications from a fixed point in one country to a fixed point in another
National Private Leased Circuits ("NPLCs")	It's a dedicated point-to-point domestic leased lines for customers who need reliable, secure and dedicated connectivity between their offices across a particular country, such as India.
Internet Leased Line Circuits	These are a high speed, flexible bandwidth solutions that provide constant internet access. It is an economical solution for data transfer applications which are not security and delay sensitive.
Data Center Infrastructure and Application Services	It helps customers outsource their mission-critical systems operation through system collocation, server hosting, storage, and application hosting to Data Centers across the world
Virtual Private Network (VPN) Services	A VPN refers to a network that is connected to the Internet, but uses encryption to scramble all the data sent through the Internet so the entire network is "virtually" private. Multiprotocol Label Switching (MPLS) is a standards-approved technology for speeding up network traffic flow and making it easier to manage the VPN Network
Television Uplinking	It provides international and domestic relay of television programs and news services via satellite and fiber on a contractual basis as well as on an on-demand basis to various media customers
Transponder Lease Services	It provides transponder capacity to media broadcasters and government institutions for the purpose of broadcasting and other services
Hosted Contacted Center	It provides a range of Contact Center Services hosted in the global network
Business Messaging and Collaboration	It provides messaging with security, archiving/storage, and associated collaboration applications
Business Audio and Web Conferencing	It provides global audio and web conferencing services to facilitate communications amongst globally dispersed teams and audiences
Telepresence Virtual Meeting Room Services	It provides worldwide virtual meeting room services for an enterprise's private Telepresence networks and also a network of Telepresence public rooms

### Retail Services:

DSL Net Access	It provides Internet access using Digital Subscriber Line (DSL) technology, which provides bandwidth of up to 22 Mbps
Net Access using Wi-Fi	It provides Wi-Fi, or Wireless Fidelity, for internet access at speeds that are almost ten times faster than a regular dial-up connection.
Internet Telephony	It offers voice telephony over the Internet using Voice over Internet Protocol ("VoIP") , including enhanced features like flexibility in billing and plans and superior voice quality
Net Access through Cybercafe	By purchasing prepaid value cards, customers can access the Internet at the retail outlets & cybercafés
Gateway Internet Access Services	It offers an enhanced integrated retail Internet service combining multiple services like net telephony and value added services, to customers who are typically households and small offices

Source: Company Reports, Kotak Securities - Private Client Research

## Appendix 4: Mobile Virtual Network Operators: Time Ripe for Differentiated Services

An MVNO provides mobile voice & data services but does not have its own licensed frequency spectrum, nor does it necessarily have the infrastructure required to provide mobile services. They purchase bulk airtime (Mins of traffic) through commercial arrangements with MNOs & leverage their own brand & differentiation strategies to resell these mins to the target end-consumer segments. TRAI has recommended allowing MVNOs in Indian Telecom market and DoT expected to announce the final MVNO policy soon.

### Types of MVNOs:

- Discount MVNOs attempt to target the low end consumers with price differentiation.
- Lifestyle MVNOs target specific niche market segments with differentiated value added services.
- Advertising-funded MVNOs build revenues from advertising & giving a set amount of free voice / text / content.
- Ethnic MVNOs target ethnic communities by providing inexpensive calls to their home country.
- Youth focused MVNOs, low cost international MVNOs, brand extension MVNOs, subprime credit MVNOs and network carrier MVNOs all target specific segments to differentiate from competitors.

### Need For MVNOs:

- Due to the vast territory of each licence area, diverse customer demographics & various Value Added Services, it becomes difficult for an MNO to serve niche and far away customers. MVNOs may help the MNOs to widen their market & efficiently use its existing infrastructure.
- With 3G spectrum allocation, most of the MNOs would have enough excess capacity at least until usage of high bandwidth data applications really picks up. Regional players (2G as well as 3G) will be able to provide pan-India services by being an MVNO in the remaining circles.
- The margin pressures will force the new entrants & less successful telcos to accept the MVNO route to target specific segments of the market & improve utilization of resources.

### Benefits of MVNOs:

- An MVNO can identify and serve niche segments such as children, students, the elderly or people with disabilities, travelers or business classes like stock markets.
- An airline, retail/hotel chain, FMCG, sporting goods or Entertainment Company or a popular beverage brand can leverage its brand appeal with certain segments to cross-sell mobile services.
- An MVNO with a strong retail chain may be able to address the issues of customer acquisition and customer care more effectively & can provide several niche value added services like booking and delivery of tickets (air, rail, cinema etc.)
- Services organizations like the railways, public sector banks, or post can drive telecom penetration and subscriber base growth in non-urban areas.
- Specialized MVNOs with tie-ups with global content providers can accelerate 3G usage, facilitate faster 3G rollouts & hence ensure healthy return on investments for 3G Operators.

**List of MNO / MVNO in different countries:**

Sr. No.	Country	Number of MNO	Number of MVNO
1	Australia	4	22
2	France	4	10
3	Germany	4	29
4	Malaysia	1	4
5	Netherlands	7	39
6	Pakistan	7	5
7	Philippines	8	1
8	Singapore	3	1
9	United Kingdom	5	25
10	United States	13	60
11	Norway	2	16

Source: TRAI

**MVNO Models**

While some MVNOs operate their own core network infrastructure including switching, Home Location Register (HLR), billing, customer care, value added services platforms and intelligent network systems, other MVNOs simply repackage network operators' services and issue their own SIM cards by relying almost completely on the host network's facilities with a little product differentiation.

**TRAI Recommendations:**

- The commercial model covering the nature of relationship including the arrangement/agreement between MNO and MVNO shall be left to the market forces.
- MNO should pay spectrum charges also on the revenue of MVNO(s) or all the payments made by MVNO(s) to MNO, whichever is higher.
- The subscribers of MVNO(s) should be counted towards parent MNO for the purpose of spectrum allotment in bands where subscriber based criterion is applicable for spectrum allotment.
- There should not be any limit to the number of MVNOs attached to a MNO. However a MVNO cannot get attached to more than one MNO in the same service area.
- In any service area, an equity holder, having 10% or more equity in a MVNO cannot hold 10% or more equity in another MVNO / MNO.
- Merger of a MVNO with the parent MNO or another MVNO parented to the same MNO may be permitted but not between MVNOs parented to different MNOs in a service area.
- The duration of license for MVNO should be 20 years and renewable.
- Entry Fees: Rs. 50 Mn for Metros and Category 'A', Rs. 30 Mn for Category 'B' and Rs. 10 Mn for Category 'C'.

**Impact on MNOs:**

- Foreign players who succeed in getting 3G spectrum in some circles will be able to provide pan-India services by being an MVNO in other circles.
- State run BSNL & MTNL may be able to extend mobile services to market segment with which they have not had much success previously.
- CDMA Players Reliance Communications & Tata Teleservices who plan to have pan-India dual technology network will be benefited due to lower operating costs & better network utilizations.
- New entrants would be able to garner market share faster by partnering MVNOs with established brand & distribution networks.
- Regional players like Idea & Aircel too would be benefited as they enter newer circles where the pickup could be slower otherwise.
- Established players like Bharti & Vodafone may be benefited due economies of scale & effective product bundling and cross selling.
- As the net realizations of MVNOs are expected to be lower than MNOs, they are not expected to compete significantly on the price front.
- However the entry of successful global MVNOs & established Indian Brands into the sector can lead cannibalization of the MNOs market shares.
- The entry of MVNOs could coincide with MNP implementation resulting in increased customer churn, customer acquisition & servicing costs & hence reduced profitability for the industry as a whole.



## Appendix 5: WiMAX – A Promising Platform

WiMAX (worldwide Interoperability for Microwave Access) is a promising technology that combines VoIP services and broadband data services with high-speed Internet access & provides connectivity in various forms ranging from point-to-point links to full mobile cellular-type access.

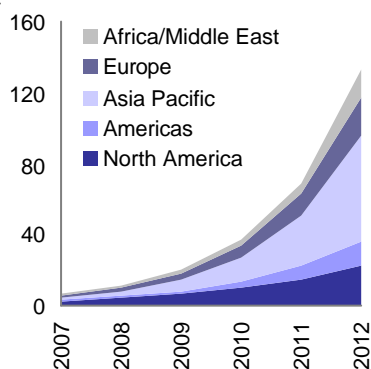
### WiMAX Vs 3G

WiMAX is predominantly for high speed point-to-point wireless broadband services while 3G technology is a backward compatible mobile services platform designed to deliver high bandwidth data services along with the traditional voice services. Although WiMax can provide similar voice services as 3G, it still has to establish itself as global standard with availability of low cost WiMAX-enabled handsets and roaming-related issues still being worked out. On the other hand, 3G technology is being vastly adopted world over & enjoys high economies of scale.

### WiMAX potential

Considering that wired technologies like DSL & cable broadband have not been able to provide adequate last mile connectivity in non metro cities & rural India, WiMAX appears to be a strong, cost-effective & scalable alternative. India has an abysmally low broadband subscriber base of 5.45 Mn subs as compared to government's ambitious 20 Mn target by 2010. We think that India is uniquely positioned to leverage on the WiMAX revolution due to sustained government efforts to boost broadband penetration & lack of wired infrastructure. According to WiMAX forum, Asia pacific countries like India that has skipped the wire-line revolution is expected to lead the global community in WiMAX adoption.

WiMAX Subscriber Forecast (mn subs)



Source: WiMAX Forum

### Guidelines for Auction of Spectrum for Broadband Wireless Access - BWA (WiMAX) services:

- The reserve price shall be 50% of the 3G reserve price i.e. Rs 10 bn for pan-India spectrum. The Finance Ministry wants to yet again double the reserve price to ensure healthy realizations from the scarce spectrum. However, the final decision is yet to be taken by the cabinet committee of economic affairs (CCEA)/ Group of Ministers (GoM).
- Eligibility: Any person who holds a USAL, who fulfils the eligibility criteria for obtaining a UASL or who holds a ISP licence category 'A' or 'B'.
- Spectrum shall be auctioned in the 2.5 GHz & 2.3 GHz bands (2 blocks in each band) for broadband data as well as voice services (as against only data services earlier).
- Each successful bidder can get 20 MHz. One block of 20 MHz shall be reserved for to BSNL/MTNL.
- The grant of licence shall be for a period of 15 years.
- The annual spectrum fee would be 1% of the adjusted gross revenue post the one-year moratorium.
- Spectrum in 700 MHz and 3.3-3.6 GHz bands shall be auctioned as and when it becomes available.

### Impact of Auction Guidelines

With DoT deciding to allow WiMAX operators to offer voice services, WiMAX would become third wireless platform to offer voice services after GSM & CDMA. Voice Over Internet Protocol (VOIP) based telephony on WiMAX platform could further bring down the overall tariff levels negatively impacting the existing 2G & potential 3G operators. However, with voice business expected to get commoditized, WiMAX provides an attractive opportunity for the telcos to boost their broadband data revenues & become truly integrated players. Tata Communications, Reliance Communications and BSNL/MTNL are already betting big on the emerging technology.

## Appendix 6: Mobile Number Portability (MNP) - A level playing field...

Mobile Number Portability enables subscribers to retain their existing telephone numbers when they switch from one service provider to another or from one technology to another of the same service provider. According to the new timeline, the last date for the submission of bids for being the MNP Clearing House Administrators (MCHAs) will be February 6 and the winner will be announced on March 5. If the latest timeline is followed, customers can expect to access this facility in the second half of 2009. It is learnt that five players - Telcordia, NeuStar, Syniverse and IBC, and CDoT are in the fray to become the centralized operators.

### Guidelines for MNP Implementation:

- MNP is to be implemented in all Metro & Category 'A' service areas within 6 month and nationwide within 1 year of award of the licence.
- MNP Zones: The whole country is divided into 2 MNP Zones consisting of 11 Licensed Service Areas each with 2 Metro service areas in each zone.

### MNP Zones

Zone - 1 Service Areas	Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Maharashtra, Punjab, Rajasthan, UP(E), Delhi & Mumbai
Zone - 2 Service Areas	AP, Assam, Bihar, Karnataka, Kerala, Madhya Pradesh, North East, Orissa, Tamil Nadu including Chennai, West Bengal, Kolkata

Source: DoT

- There shall be only one MCHA licence in both MNP Zones & each will be allotted to different bidders.
- The duration of MCHA licence shall be for a period of 10 years including exclusivity for 5 years.
- No MCHA licensee will have any equity in any of the telecom service provider Company in India. Similarly, any telecom service provider will not have any equity in MCHA licensee Company.
- The one time entry fee is Rs 10 Mn & annual Licence fees would be 1% of AGR after 2 yr moratorium.

### Impact on Telecom Operators:

- The well-entrenched players with extensive coverage like Bharti & BSNL would get a chance to port subscribers from ailing telcos & smaller regional operators.
- Operators like Idea & Vodafone who are expanding pan-India, the new entrants like Datacom and Unitech & the MVNOs planning to enter Indian telecom space will get a chance to attract customers with differentiated offerings, better Quality of Service (QoS) and congestion free networks.
- Tata Tele (GSM) and Rcom (GSM) would be able to port GSM subscribers while the handset compulsions would limit churn on their existing CDMA subscriber bases.
- There could be significant shifts in market shares depending on whether the PSUs BSNL/MTNL can implement their aggressive ramp-up plans & solve the capacity crunch before the MNP implementation.
- Costs of business and network upgrades to support MNP as well as subsidizing one-time porting fees would further dent the margins of the mobile operators
- Overall, Increased sales, marketing & customer servicing costs to retain the customers would negatively impact the margins of all the telecom players.



## Appendix 7: Other Regulatory Developments

### Long Distance Calling Cards

DoT has recently permitted all existing national and international long distance carriers like Gail, Powergrid, RailTel, Sify, Tulip Telecom, AT&T, British Telecom, France Telecom, Cable and Wireless and Verizon to market their products directly to the consumer in the form of pre-paid calling cards. The move will open up new revenue stream for the NLD players, but negatively impact most existing service providers due to further rationalization of long distance tariffs. However, the success of calling cards regime will depend on the willingness of the existing telcos to sign interconnection agreements.

### Reduction in Termination Charges

Termination rates of 0.30 Rs/min are paid currently by the telecom operator on whose network the call originates to the operator on whose network it ends. DoT has asked TRAI to review these charges on a priority basis & have suggested bringing the ceiling of 0.30 Rs/min down to 0.10 Rs/min. TRAI had fixed termination charges on cost basis for both fixed and mobile services at the same rate of Rs 0.30 per min in 2003. Costs seems have reduced significantly due to increase in wireless subs from a mere 13 m in 2003 to about 350 m & increase in MOUs from around 325 min/month to 460 min/month. TRAI is examining various methods & global practices to calculate fresh termination charges and has floated a consultation paper for public discussions before giving its recommendations. A lower termination rate will benefit the new operators as their net outgo to existing operators with 350 million subscribers will reduce. Although the operators may not pass on the cuts in termination charges completely, it may facilitate further tariff cuts impacting the profitability of existing telcos, typically pure wireless players like Idea cellular.

### Net Telephony

Net telephony enables subscribers to make voice calls using any internet enabled device like PC/laptop, GPRS enabled/3G cell phones or even IP enabled fixed line. TRAI has made recommendations to permit unrestricted net telephony to ISPs, without imposing any additional entry fee or licence charges, in an attempt to boost the paltry broadband penetration in the country & making call rates more affordable. The proposals are yet to be ratified by the DoT. While traditional STD operators have to pay for carrying a call from one part of the country to another, net telephony operators use the Internet bandwidth for routing the calls. Again net telephony users can simply plug in laptop or an IP phone to Internet and receive and make calls from anywhere without paying any roaming charges. This could bring down the International call rates to 1-2 Rs/Min from the around 7 Rs/Min, STD rates to less than half a rupee & make Local calls virtually free and thereby significantly impact the traditional voice business of all telecom operators. However, India's ultra low penetration (just 5.45 Mn broadband subscribers, 12.5 Mn Internet subscribers) are major hurdles for the rapid adoption of net telephony in the country.

### Overall impact on Long Distance Tariffs

TRAI's move for introduction of calling card services by NLD players coupled with the introduction of internet telephony and reduction in termination charges may adversely impact the bottom lines of all service providers. It could result in a 30% to 70% reduction in long-distance revenues that contribute over 20% to the wireless revenues currently. Since most service providers already have the long distance infrastructure in place, the above regulatory changes would force the operators to do away with distance as well as duration-based tariff regimes. They will be forced to move to a flat charge system with large scale bundling of free local and long distance minutes.

### Reduction in Regulatory Fees (As % of AGR):

There has been a longstanding demand from the telecom industry to reduce the license fees which are one of the highest in the world (as high as 18-26% + Goods & Service Tax). The DoT has recently announced a 2% reduction in USO levy for 95% coverage in non-metro circle. Finmin has also recently reduced the service tax to 10%. However, the regulatory charges need to come down even further to make the tariffs more affordable. We expect limited positive developments here in near term due to widening fiscal deficit in recent times.

#### Regulatory Fees Comparison:

	Pakistan	Sri Lanka	China	India
Regulatory Charges	% age of Revenue	% age	% age of revenue	% age of revenue
Service tax, GST	GST	VAT	3%	10% + GST
License Fee	0.5% +0.5% R&D	0.3% Turnover + 1% of Capital Invested	NIL	6-10%
Spectrum Charges	Cost Recovery	~1.1% of Turnover	-0.5%	2-6%
USO	1.50%	Nil (Only on ISD Calls)	Nil	Included in license Fees
Total Regulatory Charges	2.5% + GST+ Cost recovery	1.3% of Turnover + 1% inv +VAT	~ 0.5% + 3% (Tax)	18% ~ 26% + GST

Source: COAI, Source: Kotak Securities - Private Client Research

### Reduction is USO Levy

In Oct 2008, DoT announced a reduction in USO Levy from 5% of AGR to 3% for the operators that achieve 95% coverage of development blocks. The reduction would be only for non-metro service circles & would be applicable from April 2009. The license fees will change from 10%-10%-8%-6% to 10%-8%-6%-4% for Metro, A circles, B circles & C circles respectively post 95% coverage. Although more clarity is awaited on the definition of the development blocks, we think the step would benefit the established incumbents like Bharti (85% coverage by FY09) & Rcom (90% coverage on CDMA platform) in near future, improving their wireless EBITDA margins. The decision would help accelerate rural network rollouts & lower regulatory charges which are one of the highest globally.

### Annual Spectrum Usage Charge

The table below presents the rates of recurring spectrum usage charges as a percentage of AGR that has being levied on the GSM & CDMA service providers. TRAI had recommended higher spectrum usage charges in Aug 2007. DoT has proposed to increase the annual spectrum usage charges across the board stating TRAI recommendations did not address the spectrum range of 4.4-8 MHz which contributes to the bulk of the customer reference. With TRAI accepting the DoT proposal, we expect DoT to get the cabinet committee approval anytime soon.

#### Annual spectrum Usage Charges

Amount of Spectrum	Current Rate (% of AGR)	TRAI Recommendation	DOT Proposal
Upto 2x4.4 MHz/2x5MHz	2%	2%	3%
Upto 2 x 6.2 MHz	3%	3%	4%
Upto 2 x 8 MHz	4%	4%	5%
Upto 2 x 10 MHz	4%	5%	6%
Upto 2 x 12.5 MHz	5%	6%	7%
Upto 2 x 15 MHz	6%	7%	8%
Beyond 15 MHz	-	8%	9%

Source: TRAI

### One time Spectrum Enhancement Charge:

TRAI had proposed a onetime spectrum enhancement charge for the GSM players holding spectrum beyond 10 MHz. DoT had responded with a proposal to levy the onetime charges beyond 6.2 MHz mentioned in the cellular licenses. The GSM players may have to cough up as much as Rs 80 Cr/MHz for Metro & A Circles, Rs 40 Cr/MHz for B Circles & Rs. 20Cr/MHz for C Circles amounting to over Rs 1100 Cr for each MHz additional spectrum. An alternative proposal is to charge Rs 266 Cr flat fee for each additional unit of spectrum irrespective of circle (entry fee Rs 1651 Cr divided by 6.2 MHz & using prime lending rate to take care of time value of money). However, the Finance Ministry & CDMA players have been demanding the one time spectrum charges of Rs 1312 Cr for each unit of spectrum above 4.4 MHz start-up spectrum ((Rs1651Cr/4.4MHz = Rs 375 Cr/MHz) \* 3.5 times increase in AGR since 2001). The issue has been a matter of intense debate between the GSM & CDMA players in recent times & any aggressive charges can have a major negative impact on GSM operators who have been holding spectrum upto 10-12MHz in certain circles.

### One-time 2G licence renewal fee

The DoT has proposed a renewal fee of Rs 825.5 Cr for 10 years extension of pan-India 2G licence. The figure is arrived by pro-rating the Rs1651 Cr entry fee charged in 2001 for 20 years for the fourth GSM licence. However, the Finance Ministry wants to revise the entry fee as well as the licence fee considering the rapid growth in teledensity & telecom revenues in last 7-8 years. While the DoT plans to auction 3G licences for 20 years duration, the 2G licences of most of the incumbents are expected to start expiring in 5-7 years making the licence renewal issue critical. The DoT is yet to decide whether to extend the 2G licence tenure of the existing operators that bag 3G licence so that both the licences have the same tenure or to deal with the matter separately.

### Merger & Acquisition Guidelines

DoT had announced much stricter Merger & Acquisition guidelines in April 2008 effectively ruling out consolidation in near term. The key takeaways were as follows:

- Market share of merged entity can't be more than 40% either in terms of subscribers or Adjusted Gross Revenues (AGR). There should be minimum 4 operators in each circle.
- 3-year Moratorium: DoT would allow merger only after completion of 3 years from the effective date of the licences. This will ensure that the new licenses meet their rollout obligations before they have an option to merge operations. However, they can sell stakes in the company to strategic investors.
- Excess Spectrum: The merged entity will have to meet the prevailing spectrum allocation criterion separately for GSM & CDMA technologies within a period of 3 months from date of approval of merger. In case it does not meet the criteria, it will have to surrender the excess spectrum, failing which the applicable rate of spectrum charge shall be doubled every 3 months.
- Spectrum enhancement charge (which is yet to be decided & may be charged beyond 10 MHz GSM & 5 MHz CDMA spectrum) shall be charged as applicable.
- Spectrum transfer charge too shall be charged by DoT on transfer of spectrum & is yet to be decided.

### Intra-Circle Roaming guidelines

In June 2008, DoT issued an amendment to the licence conditions permitting intra-circle roaming. The amendment has following implications:

- The new entrants will now be able to provide deeper coverage at lower upfront capex costs. However, the margins may be lower due to higher intra-circle roaming charges.
- Operators like Idea & Aircel will now be able to rollout services faster in newer circles and thereby participate in the high monthly subscriber net adds/churn. They will also be able to share their idle capacity & improve network utilization. On the other hand, it will open up a new revenue stream for established players like Bharti & BSNL with have extensive nationwide coverage.
- The new entrants may like to build towers in high usage areas & enter a roaming pact with incumbents in low usage areas affecting the Independent tower companies.
- TRAI had objected the decision on the grounds that it could dilute the roll-out obligations of new entrants & create a situation where the spectrum with the new operators will lie unused while spectrum of the existing operators will be used heavily, thereby, effecting the quality of services.

### Spectrum Sharing

Spectrum or radio frequency is a scarce resource and is considered as the lifeline of mobile services. The government had been considering allowing spectrum sharing between the mobile operators. Although the discussions are on a backburner due to the upcoming 3G auctions, it may create win-win situation for both existing as well as new telecom players going forward. The existing operators who have been facing a spectrum crunch due to spiraling subscriber base & increased minutes of usage would then be able to use spare spectrum with newer operators with lower subscriber bases. This would reduce the immediate capex requirements and improve the quality of service. The new operators, who have been allotted only 4.4 Mhz startup spectrum, will have higher shared spectrum band decreasing the upfront capex for initial network rollout. Again sharing the idle spectrum with the spectrum starving incumbents, will give them greater bargaining power to clinch passive infrastructure sharing deals.

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