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3G bidding likely scenario

Base Case-	Bull Case -	Bear Case -
2x-2.5x	1.5 -2x	above 2.5x
reserve	reserve price	reserve
price		price
70.0-87.5	52.5-70.00	>87.5

Operator-wise positioning of 3G Etisalat DB; Aircel Idea Tata Tele Stel Stel Videocon

Need

Likely overbidding zone

Absolute Stock Performance (%) 6M 12M 6.7 67.3 Sensex 5.1 Telecom Index 10.5 (10.0)(2.6)Bharti Airtel 9.5 (4.1)(3.2)Reliance Comm. (27.9)8.5 (17.0)Idea Cellular 7.4 7.7 21.4

India Telecom

3G - the way forward or a spoil-sport?

- Bharti Airtel (Bharti) & Vodafone Essar (Vodafone) to bid aggressively: With just three slots available for Third Generation (3G) services in most of the circles, we expect Bharti & Vodafone to go all out while bidding for it. This is because not having 3G would be a deterrent to their brand perception. Idea Cellular (Idea) & Aircel are expected to bid aggressively only in their incumbent circles. Reliance Communication (RComm) & Tata Teleservices will be the dark horses in the 3G bidding game as they have already incurred significant capex while laying their recent GSM network However, they would not like the other GSM incumbents to have a head-start in 3G as well.
- Strategy of hedging 3G by bidding in Broadband Wireless Association (BWA) seems fair: Telcos are looking to hedge their risk of not getting 3G spectrum by bidding for BWA auctions as well. This strategy seems to be good, with BWA providing wider bandwidths of 2X10MHz Vs 2X5MHz in 3G and is a much promising technology for delivering applications with high bandwidth.
- New applications & services to buoy revenues: Wireless tariffs are already nearing the bottom and now the focus has shifted to value added services (VAS) to increase revenues. The initial focus is towards Short Message Service (SMS) and then progressing to other data services like Ring-tones, Sports update, Music and M-commerce. Multimedia Messaging Service (MMS) and other 3G services will become common by mid-2011. After looking at the MMS experience in Japan and South Korea, we believe that Asian countries will soon be the leaders in 3G-MMS.
- Long-term value driver with short-term overhang: We expect 3G to be initially used for voice by incumbents and expect a gradual pick-up of MMS and data services with scaling of subscribers. With 2G spectrum no longer getting allocated by DOT, it makes strategic sense for the existing 2G incumbents to bid for 3G spectrum and concentrate on data applications. However, with limited slots available for 3G auctions, overbidding is expected to take the cost of 3G spectrum in excess of 2.15 times of base price of Rs35bn. New revenue streams would cushion the drop in ARPUs. However, overall pressure on domestic tariffs is expected to continue. Higher flow-outs of cash on 3G auctions, mounting pressure on domestic wireless revenues and higher network operating costs are expected to keep the telecom stocks in a trading range over the next couple of quarters. We maintain our *Negative* stance on the sector with a 'Reduce' rating.

Key Financials

	CMP	J _		EPS (Rs)		EPS		PER (x)		EV	//EBITDA (x	<u>:</u>)
(Rs)	(Rs)		FY10E	FY11E	FY12E	CAGR 10-12 (%)	FY10E	FY11E	FY12E	FY10E	FY11E	FY12E
Bharti Airtel	321	Reduce	23.5	20.3	20.6	(6.5)	13.6	15.8	15.6	7.9	7.7	7.0
Reliance Comm.	178	Reduce	20.5	13.5	17.0	(31.3)	8.7	13.2	10.7	7.0	7.1	6.0
Idea Cellular	67	Reduce	2.5	2.2	1.6	(18.8)	27.3	30.8	41.4	7.9	7.9	7.5

Source: Company Data, PL Research

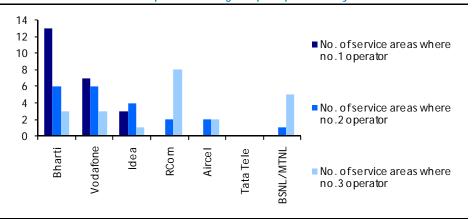


Bharti & Vodafone to bid aggressively to support their brand perception. Idea & Aircel are expected to bid selectively amongst circles with dominant revenue market shares. RComm & Tata Teleservices are the wild cards in the 3G auction.

High chances of bidding to get aggressive

Bharti & Vodafone figure amongst 38 service areas where they are ranked amongst the top three service providers on revenue market share. We expect them to participate in the bidding process rather aggressively considering strong balance sheets and superior subscriber profile.

No. of service areas where placed amongst top 3 operators by revenues



Source: TRAI, PL Research

Telcos rank by revenues across geographies - Bharti & Vodafone reaping the incumbency advantage

	RComm	Aircel	Bharti	_ <u>Vodafone</u> _	Idea	Tata Tele	BSNL/MTNL
Delhi	3	7	1	2	4	5	6
Mumbai	3	7	2	1	5	4	6
Kolkatta	3	6	2	1	7	4	5
Maharashtra	5	7	2	3	1	4	6
Gujarat	4	7	2	1	3	6	5
Andhra Pradesh	5	7	1	3	2	6	4
Karnataka	3	7	1	2	6	4	5
TamilNadu	5	3	1	2	7	6	4
Kerala	5	7	3	2	1	6	4
Punjab	5	7	1	3	2	6	4
Haryana	6	7	3	1	2	5	4
UP (East)	4	7	2	1	5	6	3
UP (West)	4	7	3	2	1	6	5
Rajasthan	4	7	1	2	5	6	3
MP	3	7	1	6	2	5	4
West Bengal	3	5	2	1	7	6	4
Himachal Pradesh	3	6	1	1	5	7	4
Bihar	2	7	1	6	4	5	3
Orissa	2	5	1	6	7	4	3
Assam	3	2	1	5	7	6	4
North East	4	2	1	5	7	6	3
Jammu & Kashmir	4	3 !	1	5	7	6	2

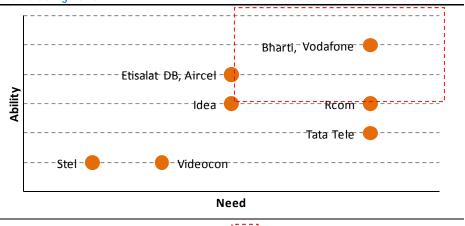
Source: TRAI



Motivations to bid aggressively - Operator wise

	Brand value dilution without 3G services						
	Opportunity & financial value associated with 3G Spectrum						
Bharti Airtel	3G to help offer distinguishing services & help in retaining subscribers, post MNP						
bildi ti Ali tei	To help sustain & improve revenue market share amidst rising competition						
	Recent 2G spectrum (4.4 Mhz) auction at Rs16.5bn, valued by international operators between Rs60-100bn						
	Facing 2G spectrum constraints in many circles						
	Brand value dilution without 3G services						
Vodafone Essar	3G to help offer distinguishing services & help in retaining subscribers, post MNP						
vouarone Essai	Global experience to help launch new product & services on 3G platform						
	Facing 2G spectrum constraints in many circles						
	Incumbent operator in 10 service areas						
Idea Cellular	Wireless business - the sole revenue earner						
	High probability of customer churn, post MNP, without 3G services						
	Almost 20% of revenues contributed by the non-voice segment						
Aircel	Has raised US\$1.8bn by hiving-off tower assets to GTL Infra						
	Spectrum entitlement in 3G & BWA would help unlock value during IPO (expected over 12-18 months)						
D. II	Has a pan-India 3G ready infrastructure set-up						
Reliance Comm.	Struggling to up the revenue market share due to its late entry into GSM operations						
COMMIN.	To tap the subscriber churn, post MNP, by offering 3G services at lower costs						
.	Strong foreign partner in the form of DoCoMo to help offer innovative products & services on 3G platform						
Tata Teleservices	3G to help in raising revenue market share						
1010301 11003	Tata Tele (Mah) operating in Mumbai & Maharashtra has raised Rs12bn by hiving-off its tower assets						

Operator-wise positioning of 3G bidding - Bharti & Vodafone fall in the over-bidding zone $\,$



Source: PL Research Likely overbidding zone



Tata Teleservices to be the dark horse in the bidding process

Though Tata Teleservices does not feature amongst the top three operators in a single service area, we expect Tata to bid aggressively in the Metros & A Circles, primarily citing a strong 3G partner in the form of NTT Docomo and recent fund raised (Rs11bn) by offloading the Tower portfolio in TTML (Tata Teleservices Maharashtra).

We believe that telecom stocks have been trading 'stable-to-positive' due to foreign telcos opting out from 3G bidding. Had the case been the other way round, one could have seen significant overbidding and would have been a spoil-sport for the entire sector.

Bidding scenario analysis

We feel that the 3G bids will garner significant interest from all the telcos and would result in over-bidding by 2.5x-3.5x the reserve base price of Rs3.2bn per circle in the 7 circles (Metros & A Circles) which include Delhi, Mumbai, Maharashtra, Gujarat, AP, Karnataka & TamilNadu.

In all likelihood, 3G bids for a pan-India presence would exceed Rs87.5bn

(Rs bn)

Service Area	No. of Circles	Reserve price per circle	Total Reserve Price	Base Case- 2x-2.5x	Bull Case - 1.5 -2x reserve price	Bear Case - above 2.5x reserve price
Delhi, Mumbai, Maharashtra, Gujarat, AP, Karnataka & TamilNadu	7	3.2	22.4	44.8-56.0	33.6-44.8	56
Kolkatta, Kerala, Punjab, Haryana, UP (East), UP (West), Rajasthan, MP, West Bengal	9	1.2	10.8	21.6-27.0	16.2-21.6	27
HP, Bihar, Orissa, Assam, North East & J&K	6	0.3	1.8	3.6-4.5	2.7-3.6	4.5
Total			35.0	70.0-87.5	52.5-70.00	87.5
Probability				35%	20%	45%

Source: DOT, PL Research

Stock performance in the short term hinges on 3G bidding prices

	Bharti	Rcom	Idea
Base case: Pan-India 3G Spectrum bid at Rs70-87.5bn	Neutral	Neutral	Neutral
Bear case: Pan-India 3G Spectrum bid above Rs87.5bn	Negative	Negative	Negative
Bull case: Pan-India 3G Spectrum bid between Rs52.7-70bn	Positive	Positive	Positive

Source: PL Research



Bidding process to last for a couple of weeks

We expect the bidding process to last for atleast a couple of weeks, assuming 7-9 clock rounds on a daily basis. Metros like Mumbai & Delhi can see 50-60 rounds of bidding and spectrum auction price in excess of Rs10bn.

Clock Round scheduling and extensions

- Default timetable for clock rounds
 - Clock round start times Monday-Saturday, between 09.00 19.30
 - Minimum round length of 20 minutes
 - Minimum time between rounds of 20 minutes
- Given this, bidders will have the ability to extend rounds
 - Extension budget of four hours held by each bidder
 - Extension budget reduced in 10-minute intervals
 - Bidders can extend any one clock round by a maximum of one hour

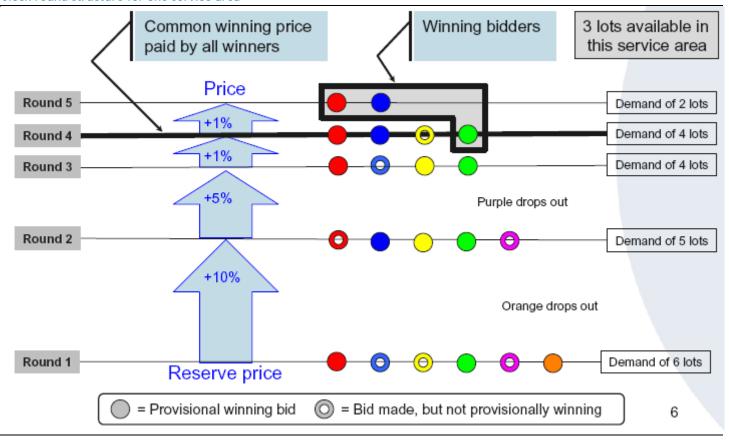
Proportionate price increment rule for 3G Auction

Excess Demand	Price increment as a percentage of previous Clock round price
Negative	0%
0	1%
1	1%
2	5%
3 or more	10%

Source: DOT, PL Research



Clock round structure for one service area



Source: DOT, PL Research

Example of a Clock round

Clock Round	Clock Round price	Bids Submitted by	Provisional winning bidders & bids	Provisional winning price	Excess demand	Price increment (%)
1	320	A,B,C,D,E,F	F(320), B(320), A(320)	320	3	10%
2	352	A,B,D,C	B(352), D(352), C(352)	352	1	5%
3	369.6	A,F,E	F(369.6), A(369.6), E(369.6)	369.6	0	2%
4	376.99	B,D	B(376.99), D(376.99), F(369.60)	369.6	-1	0%
5	376.99	F,E	F(376.99),E(376.99), B(376.99)	376.99	1	5%
6	395.84	E	E(395.84), B(376.99), D(376.99)	376.99	-2	0%
7	395.84	F,D	F(395.84), D(395.84), E(395.84)	395.84	0	2%
8	403.76	F	F(403.76), E(395.84), D(395.84)	395.84	-2	0%
9	403.76	E,B	E(403.76), B(403.76), F(403.76)	403.76	0	No further price increments

Source: DOT, PL Research



3G & BWA auctions to garner in excess of Rs 420bn

Telcos are looking to hedge their risk of not getting 3G spectrum by bidding for BWA auctions as well. The strategy seems to be good, with BWA providing wider bandwidths of 2X10MHz Vs 2X5MHz in 3G and is a much promising technology for delivering applications with high bandwidth.

With just three slots available for 3G auctions and nine interested bidders, we expect the govt. to garner in excess of ~Rs320bn from the 3G auctions, almost 2.15x the base price. Similarly, Govt. is auctioning just two slots in BWA and interested parties are 11. BWA auctions have garnered higher interest from both, Telcos and ISPs, due to lower base price and an offset strategy to be used by telcos if they don't secure a slot in 3G auctions. We expect BWA auctions to garner in excess of ~Rs100bn (we have considered four slots of 3G and three slots of BWA, including the BSNL/MTNL slot already allotted while calculating net proceeds from auction)

With DOT no longer allocating spectrum in 2G, all the major telcos are depending on the access to 3G spectrum for addressing spectrum congestion issues. We believe that the initial 3G deployment would be voice-centric followed by introduction of new data applications as device price reduces and with sizable subscriber base on the 3G platform.

Three slots available in each circle for 3G auction

(Rs M)

Service Area	No. of Circles	Reserve price per circle	Total Reserve Price	Required deposit per service Area	No. of eligibility points associated with a block
Delhi, Mumbai, Maharashtra, Gujarat, AP, Karnataka & TamilNadu	7	3200	22400	400	32
Kolkatta, Kerala, Punjab, Haryana, UP (East), UP (West), Rajasthan, MP, West Bengal	9	1200	10800	200	12
HP, Bihar, Orissa, Assam, North East & J&K	6	300	1800	75	3
Total	22		35000	5050	350

Source: DOT, PL Research

*Punjab, WB, Bihar & Orissa have 4 slots for auction

BWA spectrum will be used to deploy WiMAX for both, fixed and portable broadband connectivity, using 802.16e as against 802.16d, due to lower CPE costs and a larger vendor ecosystem. In urban areas, WiMAX is expected to be used for both, fixed residential and enterprise broadband access. In the rural areas, WiMAX is expected to be used to provide connectivity to CSCs, education institutes and health centres. We expect BWA auctions to garner ~Rs100bn.



Two slots available in each circle for the BWA auction

(Rs M)

Service Area	No. of Circles	Reserve price per circle	Total Reserve Price	Required deposit per service Area	No. of eligibility points associated with a block
Delhi, Mumbai, Maharashtra, Gujarat, AP, Karnataka & TamilNadu	7	1600	11200	200	32
Kolkatta, Kerala, Punjab, Haryana, UP (East), UP (West), Rajasthan, MP, West Bengal	9	600	5400	100	12
HP, Bihar, Orissa, Assam, North East & J&K	6	150	900	37	3
Total	22		17500	2530	350

Source: DOT, PL Research

Of the total nine telecom companies that applied for pre-qualification, six (Bharti, Vodafone, RComm, Tata, Idea & Aircel) have been found eligible to bid for pan-India 3G spectrum when the auction opens on April 9, 2010. S Tel, Videocon & Etisalat DB have also pre-qualified but can only bid for individual circles.

Applicants for 3G & BWA - Six Telcos have filed applications for both

3G Bidders	BWA Bidders
Bharti Airtel	Bharti Airtel
Vodafone Essar	Vodafone Essar
ldea Cellular	ldea Cellular
RComm	Reliance Wimax
Tata Teleservices	Tata Comm
Aircel	Aircel
S Tel	Qualcomm
Videocon Tele	Augere
Etisalat DB	Spice Internet
	Tikona Digital
	Infotel Broadband

Source: PL Research



Bidder's eligibility dependent on earnest money deposited

Of the total applicants that applied for pre-qualification, six (Bharti, Vodafone, RComm, Tata, Idea & Aircel) have been found eligible to bid for pan-India 3G and BWA spectrum when the auction opens on April 9, 2010. All the six companies have deposited Rs7.6bn for 3G and BWA auction process and have earned the maximum permissible eligibility points of 350.

3G & BWA

3G			BW	A	
Name of the Bidder	Earnest Money Deposit (Rs bn)	Initial Eligibility Points	Name of the Bidder	Earnest Money Deposit (Rs bn)	Initial Eligibility Points
Aircel, Bharti, Idea, Reliance Wimax, Tata Tele & Vodafone Essar	5.1	350	Aircel, Bharti. Idea, Infotel Broadband Services, Qualcomm, Reliance Wimax, Tata Comm. & Vodafone	2.5	350
Etisalat DB Telecom	4.3	311	Tikona Digital Networks	1.6	248
S Tel	0.4	18	Augere (Mauritius)	0.7	102
Videocon Telecommunications	0.2	12	Spice Internet Service Provider	0.4	64

Source: DOT, PL Research



Annexure

Auction Timetable

Last date for submission of Applications	19-Mar-10
Publication of ownership details of Applicants	23-Mar-10
Bidder Ownership Compliance Certificate	26-Mar-10
Pre-qualification of Bidders	30-Mar-10
Mock Auction	5-6 April 2010
Start of the 3G Auction	09-Apr-10

Start of the BWA Auction 2 days from the day of close of the 3G Auction
Payment of the Successful Bid Amount within 10 calendar days of the close of the relevant Auction

Earnest money deposits and associated eligibility points for 3G Auction

Deposit (Rs m)	Resulting initial eligibility						
=	-	1,275	99	2,550	198	3,800	284
75	3	1,350	102	2,600	204	3,875	287
150	6	1,400	108	2,675	207	3,950	290
200	12	1,475	111	2,750	210	4,000	296
275	15	1,550	114	2,800	224	4,075	299
350	18	1,600	128	2,875	227	4,150	302
400	32	1,675	131	2,950	230	4,200	308
475	35	1,750	134	3,000	236	4,275	311
550	38	1,800	140	3,075	239	4,350	314
600	44	1,875	143	3,150	242	4,400	320
675	47	1,950	146	3,200	248	4,475	323
750	50	2,000	160	3,275	251	4,550	326
800	64	2,075	163	3,350	254	4,600	332
875	67	2,150	166	3,400	260	4,675	335
950	70	2,200	172	3,475	263	4,750	338
1,000	76	2,275	175	3,550	266	4,825	341
1,075	79	2,350	178	3,600	272	4,900	344
1,150	82	2,400	192	3,675	275	4,975	347
1,200	96	2,475	195	3,750	278	5,050	350

Source: DOT, PL Research



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PL's Recommendation Nomenclature

Reduce : Underperformance to Sensex over 12-months Sell : Over 15% underperformance to Sensex over 12-months

Trading Buy : Over 10% absolute upside in 1-month Trading Sell : Over 10% absolute decline in 1-month

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