Industry Focus

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Indian Wireless

New License Applicants - Sprinters Not Marathon Runners

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- **Interest from non-telcos appears financial** — The recent wave of applications (DLF, Unitech, Parsvnath, Oswal Chemicals) follows lack of clarity on license/spectrum allocation post TRAI recos. It also seems to be a result of opportunities created by proposed M&A norms that 1) do not require spectrum surrender >15Mhz and 2) market share cap of 40%, which is comfortable for M&A involving acquisition of newcomers. Besides, FDI cap will allow local license holders to shop for foreign strategic investors.

- **Full adoption of TRAI recos may face roadblocks** — Our recent interaction with the industry suggests 1) some dilution in the subscriber thresholds and 2) likely delay in policy formulation if the process gets challenged in the courts. This could reduce the spectrum available plus reduce the attractiveness from a timing perspective for aspiring licensees, thus restricting their ability to compete on pricing and coverage with rapidly expanding incumbents.

- **Besides, TRAI recos leave room for only one fresh player, at best** — Even if TRAI recos are implemented in their entirety (which appears unlikely), it leaves room for only 1 additional player besides existing operators in the queue pre-recos (Vodafone, Maxis, RCOM, Idea, Spice). Besides, the timing will be further subject to spectrum release by Defence, which remains unclear despite the recent MoU.

- **Incumbents remain immune in short term – longer-term competition partially factored in** — Near term, market shares will be immune to any adverse regulatory measure as 1) new recos unlikely to be enforced before 3-6 months, 2) incumbents are likely to pursue legal option just to delay the reco implementation and 3) low visibility of an early release of 20-25MHz by Defence. We already factor in some decline in incumbents' share in FY09 (300-400bps for Bharti). Impact on capex will not be material. Reiterate Bharti (BRTI.BO - Rs958.00; 1L) as our top pick with RCOM (RLCM.BO - Rs589.95; 1M), Idea (IDEA.BO - Rs128.20; 1L) and Spice (SPCM.BO - Rs53.45; 1M) as other Buys.

See Appendix A-1 for Analyst Certification and important disclosures.

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TRAI's recos leave room for one additional pan-India operator

TRAI in its new recommendations had proposed to raise the bar of subscriber base by 2-6x for getting additional spectrum in each circle (see Figure 1 above).

Figure 1. TRAI's recommendations for subscriber linked spectrum allocation criteria

Service area	2 x 6.2 MHz	2 X 8 MHz	2 X 10MHz	2 X 12.4MHz	2 X 15 MHz
Delhi / Mumbai	0.5	1.5	2.0	3.0	5.0
Chennia / Kolkata	0.5	1.5	2.0	3.0	5.0
A	0.8	3.0	5.0	8.0	10.0
B	0.8	3.0	5.0	8.0	10.0
C	0.6	2.0	4.0	6.0	8.0

Source: TRAI

Assuming DoT dilutes TRAI's subscriber linked criteria downwards, the incumbents mainly require some additional spectrum by Dec 07 in metros leaving almost the entire 20 MHz to be released by Defence over the next 3-6 months for entry of additional operators.

Lack of clarity on the amount of surplus spectrum and future course of action taken by DoT relating to 1) Amount of spectrum set aside for future growth and 2) eligibility of non-telcos for licenses has resulted in a flurry of applications from both current operators as well as non-telcos namely Unitech, Parsvnath and India Bulls Real Estate so much so that DoT has announced a cut-off date of October 1 for new players to apply for licenses.

Figure 2. Telecom licenses application queue

Company	Status	Service areas	Application date	Priority
Idea	Licence	2	12/5/2005	1
Maxis Aircel	Licence	7	12/5/2005	1
Vodafone Essar	Licence	6	12/5/2005	1
Maxis Aircel	Licence	7	12/14/2005	2
ByCell	Application	5	1/31/2006	3
Tata Tele	Application	3	6/21/2006	4
Idea	Application	9	6/26/2006	5
Spice	Application	20	8/31/2006	6
Swan	Application	14	3/2/2007	7
Cheetah	Application	2	3/7/2007	8
HFCL	Application	21	5/8/2007	9
Parsvnath	Application	22	8/27/2007	10
Oswal Chemicals & Fertilizers	Application	22	27/8/2007	11
BPL Mobile	Application	21	9/1/2007	12
Unitech	Application	22	9/22/2007	13
India Bulls Real Estate	Application	22	9/25/2007	14
DLF	Application	22	9/26/2007	15

Source: Citi Investment Research, media reports

Meanwhile, the Wireless Planning Commission (WPC) has invited comments from the telcos relating to pricing and allocation of spectrum and will be submitting its report in the next few days to the DoT. (Refer to Annexure 1)

Will all new applicants then get spectrum?

The simple answer to this question is "No." There is just not enough spectrum for every new entity that has applied for pan-India licenses, and the worst case scenario will be one additional player beyond those who were already in the queue namely Maxis, Vodafone, Idea, RCOM, etc. Simplistically speaking, dividing the 20MHz spectrum to be vacated by Defence leaves surplus spectrum for one additional non-telco.

1. **Tranche 1 -** Despite tightening the subscriber norms, 2-3 MHz spectrum will still have to be allocated to incumbents though mainly in metros (see Figure 2). This figure will go up if a) subscriber thresholds are diluted and b) if process gets delayed allowing them more time to add requisite subs.

2. **Tranche 2** - 5-6 MHz spectrum may be kept aside by DoT for future growth of GSM incumbents, i.e., for Bharti, Vodafone, etc. Given the difficulty in getting spectrum from Defence, this is likely to be a key demand of the incumbents.

3. **Tranche 3** – As 4.4MHz spectrum needs to be allocated to every new applicant, ~9 MHz will be allocated to the operators already in the queue assuming license application of Vodafone + Maxis equals one pan-India license and Spice + Idea + RCOM equals second pan India license.

4. **Tranche 4** – The above 3 tranches therefore leave surplus spectrum for only one additional player for a pan-India license.

Figure 3. Spectrum availability using New TRAI's recos

	Estimated surplus spectrum as of Dec 07 (Mhz)
Metros	
Delhi	16.6
Mumbai	17.0
Chennai	21.8
Kolkata	24.8
A Circles	
Maharashtra	21.0
Gujarat	23.4
AP	22.2
Karnataka	22.8
Tamil Nadu	24.6
B Circles	
Kerela	26.6
Punjab	26.6
Haryana	30.2
UP(W)	26.6
UP(E)	25.0
Rajasthan	28.4
MP	28.4
WB and Assam	24.0
C circles	
HP	24.0
Bihar	28.4
Orissa	28.4
Assam	30.2
NE	30.2
J&K	34.6

Source: Citi Investment Research, TRAI

Will the additional competition put pressure on Bharti's market share?

Near-term immunity

Near term, Bharti (or Idea for that matter in its existing circles) is likely to remain immune to any adverse regulatory as the new recos are unlikely to be enforced before 3-6 months, and its sub-adds are likely to trend upwards for the next 2-3 quarters. The main reasons for this relate to:

1. The GSM incumbents may pursue legal action if the recos are accepted in toto (and even if they are not), as the longer the delay in implementing the recos, the more difficult it becomes for the aspiring licensees to compete with incumbents on coverage, scale and hence pricing.

2. Besides even if the new recos are implemented earlier than anticipated, there is little visibility of an early release of spectrum by Defence. Despite the MoU between the Defence and Telecom Ministry, timing remains uncertain with some reports suggesting as late as March-09.

Longer-term impact already factored in

Our numbers already factor in a 300-400bps decline in Bharti's FY09 market share, and we do not expect much impact on its capex/min from the new spectrum criteria. From an industry perspective, we believe that the low revenue yields leave little room for disruptive pricing, even though ROCEs remain healthy.

On the flip side, the increased visibility of competition and tougher sub norms would put further pressure on the incumbents to cover as much as quickly as possible. While some of this phenomenon is visible in FY08 as well, it could accelerate in FY09, thus actually implying upside to our FY09 net adds assumption for Bharti, even if the % market share drops lower.

Figure 4. Bharti's market share assumptions

	FY07	FY08E	FY09E	FY10E
Subscribers (000)	37,141	59,921	81,489	100,710
Monthly net additions (000)	1,464	1,898	1,797	1,602
Market share of net additions (%)	25.8%	26.7%	23.7%	22.8%

Source: Citi Investment Research

Why the sudden interest from non-telcos

Though interest by telcos to rush in with their applications post TRAI's recos was expected, what has been surprising is the keen interest shown by non-telcos. Since the recos, 4 major property developers – Parsvnath, Unitech, Indiabulls Real Estate and DLF have applied for licenses. There are 2 main reasons that we can think of:

1. **74% FDI limit** – The FDI stipulates that an overseas entity can have a maximum of 74% direct and indirect stake in a telco. Global telcos like AT&T and France Telecom, which had previously exited from India, have now publicly stated their desire of re-entry and will need a local partner.

2. **New M&A recos favor small acquisitions by incumbents –** TRAI has recommended that the market share of the merged entity should not exceed 40% either in terms of subscribers or revenue base. This reco rules out any merger between the current incumbents save for Idea and Spice, as any other merger between the incumbents results in market share exceeding 40% in at least one of the existing circles. This makes the new players potential M&A targets, as cumulative market share of a greenfield operator is unlikely to exceed 5-10% at best, even after 1-2 years of operation.

   Besides, TRAI has also proposed that the existing cap of 2X15MHz per operator per service area for metros and A circles and 2X12.4MHz per operator per service area in B and C circles applicable for a post merger entity be removed. The removal of cap removes the biggest obstacle in any M&A - surrender of excess spectrum. This potentially can lead to spectrum hoarding with the upstarts setting themselves up to be acquired by the incumbents at a later point of time.

Companies Mentioned

Bharti Airtel

Valuation

Our 12-month forward target price of Rs1,050 is based on core DCF of Rs890 and a towerco option value of Rs157. The core DCF (as on March-08) is based on a WACC of 10.7%, a terminal growth rate of 4% and beta of 0.9. We prefer DCF as our primary valuation methodology because the wireless market will likely continue to see robust growth requiring upfront capex but should generate significant free cash beyond FY09-10E. Our target price (net of towerco value) represents a FY09E P/E of 20.4x, P/CEPS of 13.1x and EV/EBITDA of 11.5x. The imputed target P/E (net of towerco) of 26.3x FY08E is at 30% premium to the broad market P/E (20.0x FY08E at the higher end of our Sensex target of 16,000). This, we believe, is justified by above-average earnings growth, high return parameters, improved earnings visibility and relative insulation from macro risks.

Risks

Our quantitative risk-rating system, which tracks 260-day share price volatility, rates Bharti as Low Risk. We are comfortable attributing a Low Risk rating for the following reasons: 1) Bharti has a track record of profitability and execution; 2) the company's capex plans are fully funded; and 3) SingTel's strategic shareholding leaves us comfortable with execution issues and initiatives. Risks that could prevent the stock from reaching our target price include competition-led tariff pressures, un-remunerative capex, overall market downside, and slower-than-expected execution of the tower sharing initiative.

Reliance Communications

Valuation

Our 12-month forward target price of Rs600 is based upon core business valued at Rs520, towerco option value of Rs60 and Flag's potential value unlocking at Rs20. We value Indian wireless plays on DCF given the back-ended nature of profits and cash flow. For RCOM, however, we use EV/EBITDA in the absence of a detailed balance sheet. Our 12-month target price of Rs520 is based on 9.8x FY09E EV/EBITDA, a 15% discount to Bharti's target multiple (ex- towerco) to reflect the uncertainty on the timing of the GSM rollout and the associated challenges. We expect RCOM's valuation multiples to be determined by Bharti's due to the liquidity overflow from the latter, notwithstanding the risk of technology transition. Meanwhile, higher-than-average earnings growth

(CAGR of 29.6% over FY07-10E) and low sensitivity of wireless demand to interest rates should continue to support premium valuations for the sector.

Risks

Our risk-rating system, which tracks 260-day share price volatility, assigns a High Risk rating to RCOM, but we believe Medium Risk is more appropriate. RCOM has been de-merged from Reliance Industries, and its shareholding at the time of listing mirrored the holding of RIL. The stock is therefore unlikely to have risks that are typical of newly listed companies. Besides, growth in the telecoms sector gives visibility to RCOM's prospects. But we believe its evolving financial history and risks pertaining to GSM overlay warrant a risk rating higher than the Low Risk assigned to Bharti. Downside risks to our target price include smaller-than-expected market share, lower-than-anticipated operating leverage (especially in FY07) due to handset subsidies, cost-overruns n GSM overlay, regulatory and competition risks, un-remunerative capex and delays in the ongoing re-organization and more telecom-related paper.

IDEA Cellular

Valuation

We have set our 12-month target price at Rs140 based on core DCF of Rs128 and an M&A premium of 10%. Though the Aditya Birla Group has ruled out any potential M&A transaction soon, we believe that M&A potential exists in the long run, especially as spectrum constraints hinder new GSM entrants. We prefer DCF as our primary valuation methodology due to the back-ended nature of free cash flows given the new circle roll-outs. Our DCF assumes a WACC of 10.8% at a target debt to capital of 50.0% and terminal growth rate of 4.0% (similar to Bharti). Our DCF is based on explicit forecasts for FY07-16E with a terminal year EBITDA margin at 41.1% (~400bps below Bharti) and capex/sales of ~8% (in line with Bharti). The target price implies an EV/EBITDA of 12.2x, a slight premium to Bharti's target multiples (for the ex-towerco portion of Rs890), which we believe is supported by 1) higher EBITDA growth rates for Idea and 2) liquidity overflow from Bharti's foreign limit constraints

Risks

Our quantitative risk rating system assigns a default Speculative Risk rating to Idea due its trading history of less than 12 months. We see a Low Risk rating as more appropriate due to the higher visibility of Indian wireless growth, Idea's reasonably competitive position, strong parentage and lower financial leverage post-IPO. Operationally, the risks facing Idea are slightly higher than its more established peers given the roll out in new circles. Project cost over-runs, delays in spectrum allocation and hence commercial launches could affect the value accretion opportunity in new circles. Idea will also face competition from established players in new circles and market share gains may be lower than expected. Idea will incur higher capex requirements in the new circles due to the coverage compulsions, which may depress return parameters in the initial years. Any rollout plans beyond 13 circles may also require a fresh equity infusion. These risk factors could impede the stock from reaching our target price.

Spice Communications

Valuation

Our 12-month target price of Rs70 is based on a 15% M&A premium to our core business DCF of Rs61. We prefer DCF as our primary valuation methodology due to the back-ended nature of free cash flows, in the context of coverage ramp-up, especially in Karnataka. Our DCF assumes a WACC of 11% at a target debt to capital of 50.0% and terminal growth rate of 4.0% (similar to Bharti). Our DCF is based on explicit forecasts for CY07-16E with a terminal year EBITDA margin at 35% (~600bps below Idea) and capex/sales of ~8% (in line with Bharti). The target price implies a CY08E EV/EBITDA of 14x (which is 13% premium on pro-rata basis to Bharti's FY09 target ex-towerco), which we believe is supported by significantly higher prospective EBITDA growth rates for Spice. Though Spice rebuffed the moves by Idea pre-IPO, we believe that M&A potential exists in the medium term as access to 900MHz spectrum and its small footprint makes it a good and probably the only M&A candidate, especially with recent relaxation of M&A norms. If the new TRAI spectrum norms are accepted, the opportunity to enter new circles could also justify a premium to the DCF based on its existing two circles.

Risks

Our quantitative risk rating system assigns a default Speculative Risk rating to Spice due its trading history of less than 12 months. We see a Medium Risk rating as more appropriate due to the higher visibility of Indian wireless growth, strong parentage (Telekom Malaysia) and lower financial leverage post-IPO. Spice accumulated significant losses in the past resulting in negative net worth prior to the IPO. It previously defaulted on payments to vendors and debenture holders due to lack of adequate funds and has had qualifications from auditors with respect to its ability to continue operations in absence of access to long-term funds. Going forward, operationally, the risks facing Spice are slightly higher than its more established peers given its smaller scale. Lower-than-expected tenancy in third-party towers and higher capex requirements to increase coverage may depress return parameters. Its equipment sourcing contract with Spice Mobiles Pvt. Ltd, a group company, carries transfer pricing risks as there is lack of clarity on the rationale and cost-plus billing terms. While new circle roll outs are possible if new spectrum norms are accepted by the DoT (as and when the Defence Department releases spectrum), it will be constrained by management bandwidth and may require a fresh equity infusion. These risk factors could impede the stock from reaching our target price.

Annexure 1

Questionnaire from WPC to all telcos

1. How best should radio frequency (RF) spectrum be *valued*, considering that its *value* depends on numerous variables like the spectrum bands involved, technology deployed, investments required and made, types of services offered and demanded, level of competition, etc.?
2. Should the *pricing* of spectrum be based on its *valuation*? Why, or why not?
3. As the *value* of spectrum would change from time to time, what mechanism would you suggest should be adopted to ensure that it gets properly reflected in the *pricing* of the scarce RF spectrum resource?
4. How best should the spectrum be *priced*? Should it be based on formulae, revenue-sharing, auction, or a combination of two or more of these approaches? Please justify your response.
5. In your considered opinion, do the *existing* RF spectrum charges – which are formula based or revenue share – need to be modified to ensure the most effective use of the scarce RF spectrum?
    a. If not, why?
    b. If yes, please give your views in the matter, taking into account the need of arriving at similar levels of charges through different methods?
6. Need and methodology for *differential pricing* of various parts of the RF spectrum (frequency bands), taking into account the *level of demand* (high, medium or low), so as to encourage the spectrum users to move away from highly congested parts of the spectrum?
7. How should the spectrum bands be *classified* so as to use *pricing* as a tool to decongest over-demanded parts of spectrum?
8. Should the *assignment and pricing* of spectrum be based on *different criteria* for metro, urban and rural areas of the country, taking into account the levels of current & potential usage (high, medium or low) and the need to encourage growth of spectrum-usage in rural areas?
    a. If not, why?
    b. If yes, please suggest:
        i. the criteria for such assignment and pricing, and
        ii. the *definitions* of metro, urban and rural areas that should be used.
9. To what extent should the following criteria *affect pricing of spectrum*?
    a. Demand and supply situation?
    b. Socio-economic benefits of the particular *service(s)* for which the spectrum is assigned/ used?
    c. Funds needed to release spectrum for commercial use (*refarming*)?
    d. Revenue needs of the government?
10. In your opinion, what strategies (pricing, *and* other) are most likely to ensure the most effective use of the *latest technologies* so as to achieve efficient and effective use of spectrum in congested areas?
11. What should be the *determining criteria* for initial assignment of spectrum, especially in those bands where it is (or is going to be) particularly scarce in relation to demand?

12. Should the *present practice* of assigning (on the basis of subscriber-base) "additional" spectrum to existing mobile operators (and also its pricing) continue? Give reasons to support your answer.
13. Would you like to suggest any quarterly/ annual spectrum charges for *subscriber-access spectrum* (GSM/ CDMA, for example) for each *service*?
14. **What quarterly/ annual spectrum charges would you suggest for Microwave access & backbone networks? What *criteria* should be adopted for this charging (e.g. per MHz, per KM, etc.)?**

Appendix A-1

Analyst Certification

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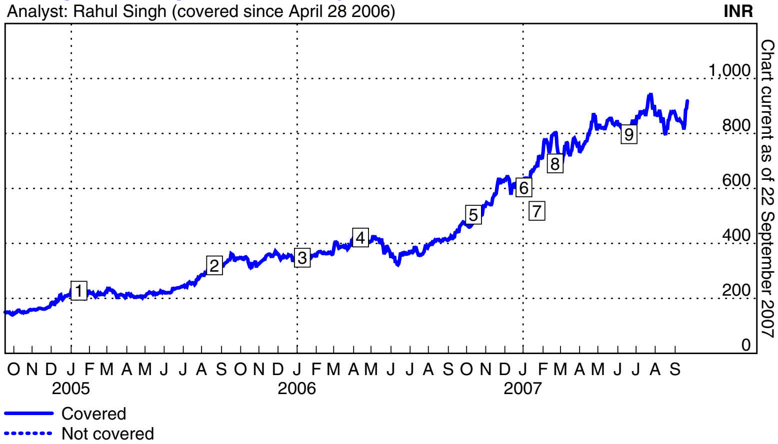
IMPORTANT DISCLOSURES

Bharti Airtel (BRTI.BO)

Ratings and Target Price History - Fundamental Research

Analyst: Rahul Singh (covered since April 28 2006)



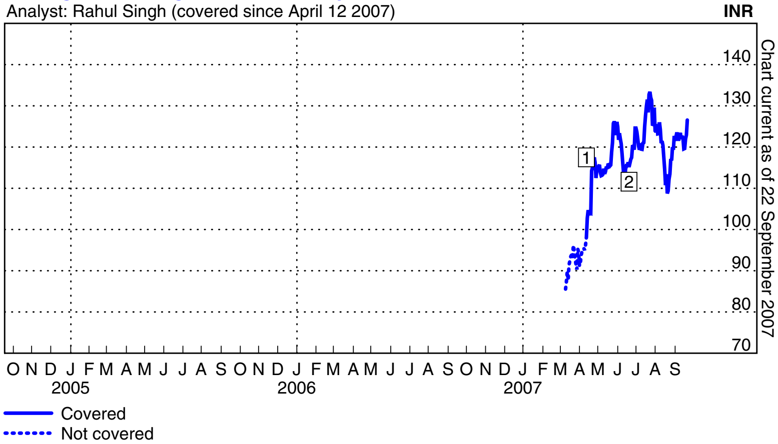
#	Date	Rating	Target Price	Closing Price
1:	14 Jan 05	*1M	*260.00	210.30
2:	22 Aug 05	1M	*400.00	306.10
3:	10 Jan 06	1M	*450.00	339.25
4:	13 Apr 06	1M	*500.00	395.95
5:	12 Oct 06	*1L	*600.00	475.65
6:	2 Jan 07	1L	*750.00	633.00
7:	23 Jan 07	1L	*800.00	689.15
8:	21 Feb 07	1L	*960.00	806.30
9:	20 Jun 07	1L	*1,050.00	824.65

*Indicates change.

IDEA Cellular (IDEA.BO)

Ratings and Target Price History - Fundamental Research

Analyst: Rahul Singh (covered since April 12 2007)



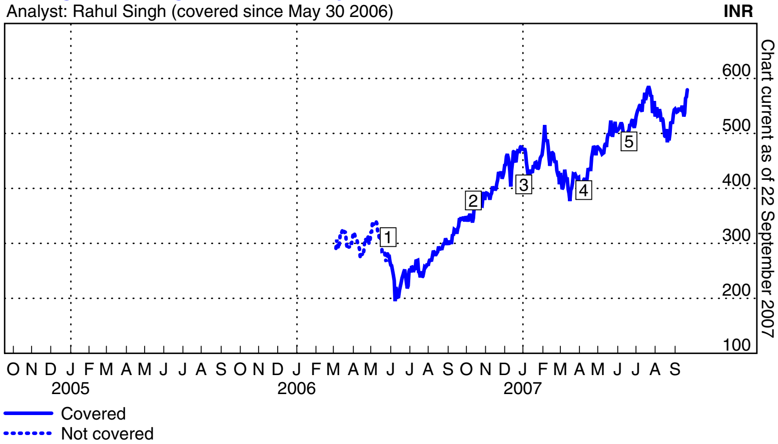
#	Date	Rating	Target Price	Closing Price
1:	12 Apr 07	1L	112.00	98.15
2:	20 Jun 07	1L	*140.00	115.15

*Indicates change.

Reliance Communications (RLCM.BO)

Ratings and Target Price History - Fundamental Research

Analyst: Rahul Singh (covered since May 30 2006)



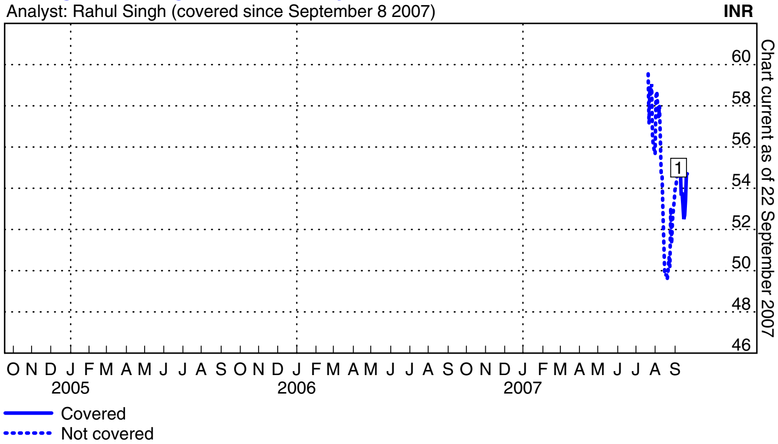
#	Date	Rating	Target Price	Closing Price
1:	29 May 06	1M	360.00	276.25
2:	12 Oct 06	1M	*430.00	345.95
3:	2 Jan 07	1M	*570.00	470.75
4:	9 Apr 07	1M	*510.00	415.60
5:	20 Jun 07	1M	*600.00	505.90

*Indicates change.

Spice Communications (SPCM.BO)

Ratings and Target Price History - Fundamental Research

Analyst: Rahul Singh (covered since September 8 2007)



#	Date	Rating	Target Price	Closing Price
1:	7 Sep 07	1M	70.00	54.95

*Indicates change.

Rahul Singh holds a long position in the shares of Bharti Airtel.

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% of companies in each rating category that are investment banking clients	71%	70%	70%

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