

# India Telecoms

# Key sector takeaways from 4Q results

Operational trends in 40 FY11 (to Mar-11) were strong for Bharti Airtel but mixed for both Idea Cellular and Reliance Communications. We believe the Indian Telecom Sector is better positioned now than it was 6-12 months ago and we expect pricing stability and regulatory clarity to be positive triggers over the next 6-9 months. Bharti and Tulip Telecom are our top picks.

- Operational metrics: Bharti strong; Idea, RCOM mixed: Besides RCOM, which saw only 3% growth in volumes, Bharti, Idea and Vodafone saw strong volume growth (6-9% Q/Q) driving revenue growth. ARPM for the leading GSM telcos declined by 2-3%. Bharti delivered solid volume growth and the lowest ARPM decline, but operational metrics at RCOM, Idea were mixed. Idea delivered the strongest volume growth but also the largest ARPM decline; RCOM had stable ARPM but weak volumes.
- Pricing trends to improve? While 4Q (with ARPMs declining 2-3% Q/Q) saw a reversal of the improving pricing trends, we are encouraged by management commentary around stability in the pricing environment and also by the first datapoint (from Tata Docomo) of increasing tariffs.
- Wireless margins under pressure: Higher network opex and SG&A expenses kept wireless margins under pressure with 1.3-1.6pp Q/Q decline at Bharti, RCOM (Vodafone India saw a 90bp H/H decline). Idea margins were flat Q/Q - the best among the four - however we expect increased margin pressure in 1Q driven by network opex and SG&A.
- **3G update:** With the telcos having rolled out 3G services during 2H FY11, sub numbers per telcos are in the 1.5-2.0m range while the number of cities covered varies from ~40 to 700 due to different "coverage" definitions, in our view. Nevertheless, take-up appears healthy and we believe average usage is 200-250/MB per month. We expect continued take-up of 3G services in FY12 and meaningful contribution to occur in FY13. See our note The Economics of Wireless Data - India Edition, June 1, 2011.
- Early 1Q expectations a soft quarter: Sub numbers for the market are tracking low with a 28% Q/Q decline in the net add rate seen through May. We expect this to result in sluggish volumes and, coupled with continued ARPM pressure, put wireless revenue growth in 1Q under pressure. Furthermore, we expect expenses to remain high in 1Q and the full impact of 3G-related D&A and interest expenses to kick in.

### Valuation and rating summary

|               |           |        | Current | Price  | Upside / | P/E   | (x)   | EV/EBIT | DA (x) | R     | DE    |
|---------------|-----------|--------|---------|--------|----------|-------|-------|---------|--------|-------|-------|
| Company name  | Ticker    | Rating | price   | target | downside | FY12E | FY13E | FY12E   | FY13E  | FY12E | FY13E |
| Bharti Airtel | BHARTI IN | OW     | 382     | 440    | 15%      | 18.7  | 12.5  | 8.0     | 6.0    | 15%   | 19%   |
| RCOM          | RCOM IN   | N      | 88      | 95     | 8%       | 13.3  | 7.3   | 6.3     | 4.9    | 4%    | 7%    |
| Idea Cellular | IDEA IN   | UW     | 75      | 60     | -20%     | 27.5  | 18.6  | 7.1     | 6.1    | 7%    | 10%   |
| Tulip Telecom | TTSL IN   | OW     | 150     | 230    | 53%      | 7.5   | 5.4   | 4.9     | 3.5    | 22%   | 21%   |
| Tata Comm     | TCOM IN   | UW     | 184     | 180    | -2%      | 3.4   | 2.6   | 7.8     | 6.5    | -13%  | -9%   |

Source: Bloomberg and J.P. Morgan estimates. Share prices are as of 22 June 2011

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# Investment conclusions

Our analysis of the 4Q FY11 results from Bharti, Idea Cellular, Reliance Communications and Vodafone (JPM Analyst: Akhil Dattani) suggests the following trends:

- 1. Revenue growth was volume driven as ARPMs continue to decline;
- 2. Volume in turn is subscriber growth driven;
- 3. Pricing trends under pressure in the quarter but management comments pointing toward stability;
- 4. EBITDA margins are under slight pressure due to 3G, MNP and other such costs;
- 5. Capex for 3G is not seeing a step-up, but slight increases are visible.

Overall we believe that the Indian Telecom Sector is better positioned now than it was 6-12 months ago and we expect regulatory clarity and pricing stability to be positive triggers over the next 6-9 months. In the interim it is important to look for strength, and **we prefer Bharti** over RCOM and Idea Cellular. While Idea and RCOM had mixed operational performance (Idea: strong volume but ARPM pressure; RCOM: stable ARPM but weak volumes), Bharti delivered stable growth in 4Q (see Table 1 for more) and we expect it to continue benefiting from its strong market position (~30% revenue market share) as the sector goes through this transition phase.

In this note we also take a quick look at Tulip Telecom and Tata Communications. **Tulip Telecom is our top pick outside of the large wireless players**. The core business continues to show improvement in both revenue growth and margin expansion, while announcements of clients or an investor for the data centre business should be key positive catalysts.

Table 1: Summary table of key wireless trends in 4Q FY11

| Wireless metric | Best performer            | Worst performer       |
|-----------------|---------------------------|-----------------------|
| Net adds        | RCOM: +21% Q/Q            | Idea: +2% Q/Q         |
| Churn           | Vodafone/RCOM at 4%       | Idea: increase to 11% |
| MOU             | Bharti/Vodafone: flat Q/Q | RCOM: -4% Q/Q         |
| Total minutes   | ldea: +9% Q/Q             | RCOM: +3% Q/Q         |
| ARPM            | RCOM: flat Q/Q            | Idea: -3% Q/Q         |
| Revenue growth  | ldea: +6%                 | Vodafone/RCOM at 3%   |
| EBITDA margin   | ldea: stable Q/Q          | RCOM: -1.6pp Q/Q      |

Source: J.P. Morgan estimates.

Please note this is limited to the India wireless business. The universe of telcos included here is Bharti, Vodafone, Idea and RCOM

# Wireless trends in 4Q

## Robust sub adds = key driver for minutes growth

After the rebound in net add numbers in 3Q (qtr-to-Dec), 4Q net adds saw further growth. Vodafone and RCOM both saw  $\sim 20\%$  growth in the net add rate to 3.4 m/month each, surpassing Bharti's 3.2 m/month (See Figures 1 and 2 below). Idea's net adds per month stayed fairly stable Q/Q.

Figure 1: Q/Q net add growth and minutes growth

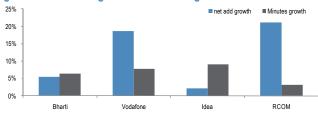
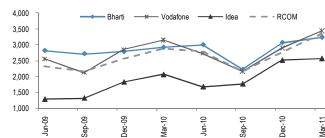


Figure 2: Monthly net add rate ('000s)



Source: Company reports and J.P. Morgan.

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We believe the strong net adds have driven the sequential total minutes growth of 6% at Bharti, 9% at Idea, and 8% at Vodafone. However RCOM lagged the pack with only 3% revenue growth despite seeing the largest uptick in net add growth (+21%). We note that MOUs at Bharti remained flat Q/Q while at Idea they declined 1% and RCOM 4%.

Figure 3: MOU (mins/sub/month) trends

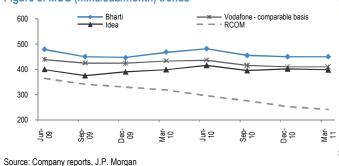
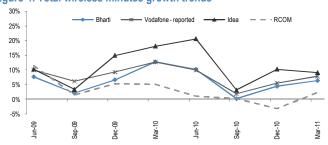


Figure 4: Total wireless minutes growth trends



Source: Company reports, J.P. Morgan

We expect minute volume growth to continue to be hinged to net add momentum as we expect MOUs to remain largely flat to decline slightly. So far for 1Q (through May), the net add rate has been weak with a 28% Q/Q decline. We expect this to result in sluggish minute growth across the telcos.

As of Mar-11 the total number of wireless subs stood at 811.6m with a strong net addition number of 20.2m in the month. Reported wireless penetration is 68% with urban penetration having crossed the 150% mark and rural penetration at 33%.

However we estimate that VLR or active sub penetration is only 48.1% suggesting to us that the penetration driven growth story in India is not done yet. Circles B and C accounted for 61% of the net adds in March vs. 55% in February.

Figure 5: Reported vs. VLR subs and differences in penetration

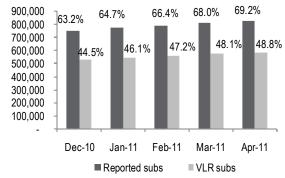
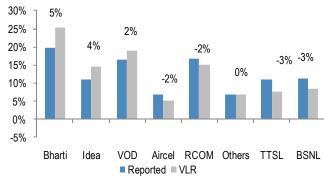


Figure 6: Sub market share: reported vs. VLR data (Mar-11)



Source: COAI, AUSPI, TRAI, J.P. Morgan

Source: TRAI, J.P. Morgan

Figure 7: Bharti, Idea and VOD top the VLR ratio (Mar-11)

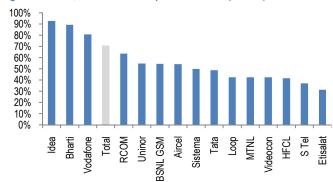
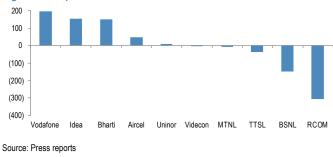


Figure 8: Net port-ins



Source: TRAI, J.P. Morgan

### ARPMs decline – the MNP effect?

Mar-11

Over the past six quarters we have seen sequential ARPM trends improve and in 3Q FY11 (to Dec-10) we saw flat or near flat ARPMs across the telcos (Bharti, Vodafone, RCOM and Idea). (See chart below). However in 4Q, we saw a breakaway from this improving trend as ARPMs came under pressure again. While most telcos maintain that MNP is not a game changer, we believe that the weakness in 4Q was partly related to MNP offers.

Figure 9: ARPM Q/Q declines

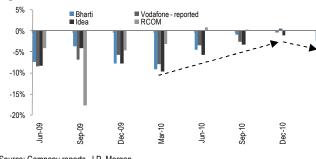
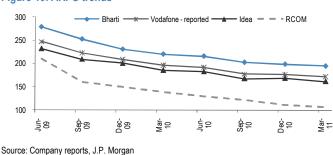


Figure 10: ARPU trends



Source: Company reports, J.P. Morgan

We calculate that Bharti and Idea saw voice ARPM declines of 3.5% and 1.6% vs. the 2.3% and 2.9% reported as headline ARPMs (Idea saw a decline in non-voice revenue). We calculate, VOD India's ARPMs at 41.7 paisa, -2.6% Q/Q. On a reported basis, Bharti's ARPM was 43.2 paisa, -2.3% Q/Q. VOD's ARPU is INR 171, -3% Q/Q. Interestingly, the post-paid ARPU saw a greater decline at -4% Q/Q vs. the -2% Q/Q decline in pre-paid ARPU. RCOM reported ARPM of 43.9 paisa a modest 1% Q/Q decline. RCOM appears to have protected ARPMs (lowest decline) over minutes (lowest growth).

Looking ahead, we expect some ARPM pressure to continue in 1Q; however we are encouraged to see management teams at Bharti, Vodafone, and RCOM state that pricing in the market is stabilizing. Bharti management stressed the point that the competitive intensity in the Indian telecom market is getting rationalized and usage continues to be the revenue driver.

When asked about the competitive intensity in the sector, Idea management stated – like Vodafone and Bharti – that it was on the decline. Economically challenged telcos have slowed down investment, which is easing competition. However, Idea management also stated that the sector continues to have over-capacity and there are challenges in maintaining the rate in the sector.

Another recent development points to a better ARPM picture too – Starting June 16, Tata Docomo raised its rates for new pre-paid customers. Our analysis suggests that the SMS rate increase alone can raise an average monthly bill by ~8-10% but when combined with the NLD rate increase (after year 1), the increase in an average monthly bill can be  $\sim 20\%$ . This is based on assumptions of 200 minutes of outgoing voice usage and 40 SMS/month.

This is the first instance we have seen of a rate increase in the Indian telcos sector since the price war started in 2009. We don't dismiss the possibility of other telcos raising rates too, although we expect the industry to take a measured approach here in order to protect volumes. A trend of higher call rates is positive for the sector overall. We note that back in 2009, Tata Docomo was the first to introduce the "per paisa" billing which was followed by others and drove significant price declines in the industry.

### Margins and capex

Wireless margins were under pressure in 4Q with sequential declines ranging from flat Q/Q to 1.6pp declines. Bharti's wireless margins declined 1.3pp Q/Q to 33.3% while Vodafone experienced a 90bp H/H decline to 25.1%. RCOM's wireless margin declined 1.64pp Q/Q to 27.4% due to higher 3G related SG&A and network expenses. We estimate that Idea's underlying standalone margin (adjusted for one-offs) increased 16bp Q/Q – we note that Idea's network opex did not increase as much as others.

Bharti management commented that its wireless margins were impacted by higher spectrum charges and by Bangladesh operations while Vodafone stated that margins were impacted by higher recurring license fee cost and also regional mix change. We believe MNP and 3G may have driven some degree of pressure too.

For Bharti, we expect a slight recovery in H2 but look for stable Y/Y margins in FY12.

We note Idea's 4Q margins increased 16bp Q/Q, the best among the four telcos. However, we also note that Idea rolled out 3G services very late in Q4 (March 28) and we expect network opex to increase with a lag.

All ex-RCOM see capex ramp

Capex increased in 4Q – for Bharti 4Q capex was Rs19.2B (20% of sales), up 14% from Rs16.9B (18% in 3Q) while for Vodafone, capex for the half was £584MM, 29% of sales vs. £286MM, 15% of sales in 1H FY11. We believe the increase may have been driven by 3G-related investments, end-of-year spend and also catch-up given that the early part of the year was affected by equipment import bans. Idea's capex increased 54% Q/Q to Rs14.6B and capex increased 10pp to 34% of sales from 24%. RCOM was the only of the four telcos to see a capex decline in 4Q, and that too by 66% to Rs5.8B (14% of sales) from Rs16.8B (41% of sales).

## 3G update

All telcos have rolled out their services, but by varying degrees.

• Bharti has launched 3G services in 43 cities in nine circles, and four more are expected to be launched shortly. We believe this is slightly behind schedule, as the earlier indication was for Bharti to launch 3G services across the 13 circles where it has the license by end-FY11. Bharti has ~2MM subs as of end-March 2011. We note that non-voice share of revenue increased to 15.0% in 4Q up from 13.8% in 3Q.

- Vodafone launched 3G services in India in February 2011 and stated that it had 1.5m subs as of Mar-11. VOD has 5.6K 3G sites currently with a target of 12K by year-end.
- Starting on March 28, 2011, Idea has launched 3G services in nine circles (it has licenses in 11) and covers 700 towns. It has 1.55m subs. The company stated that most of its 6,500 NodeBs are collocated with existing 2G sites. Idea plans to expand coverage to 3,200 towns. Idea is investing in billing, provisions, backhaul (fiber connectivity for towers) and IT services to get ready for increases in data usage. According to the company, data volumes in circles where 3G has been launched have increased over 80% (comparing May to February) and the bulk of the increase was due to 3G.
- RCOM is present in 350 towns across the 13 circles where it has 3G licenses. 9000 (~20%) of its towers are 3G enabled. RCOM stated it had 1.7m 3G subs. RCOM has not expensed 3G spectrum and license fee yet this will start in FY12.

Table 2: 3G stats summary

|          | Launched  | 3G subs (mn) | # of circles / cities | # of towers | Implied tower per city |
|----------|-----------|--------------|-----------------------|-------------|------------------------|
| Bharti   | 24-Jan-11 | 2.0          | 9 / 43                | 9,000       | 209                    |
| Vodafone | Feb-11    | 1.5          | NA / NA               | 5,600       | NA                     |
| ldea     | 28-Mar-11 | 1.6          | 9 / 700               | 6,500       | 9                      |
| RCOM     | Dec-10    | 1.7          | 13 / 350              | 9,000       | 26                     |

Most telcos have launched data plans in-line with each other. While we don't expect a price war in data à la voice, we don't dismiss the possibility of more competition in data than we're seeing currently. We note that state-owned BSNL/MTNL, which have had a lead on 3G services offer these at a 30-40% discount to private telcos. Key pricing observations:

- Pricing for pre-paid and post-paid is largely similar across the telcos with a couple of exceptions at lower usage plans;
  - e.g. Idea charges Rs105 for 100MB on pre-paid but Rs100 or Rs5 less on post-paid
- Reliance Communications offers data packages across more price points starting at 100MB unto 21GB/month vs. others;
- Sachet plans with 1 day/ 1 week validity are available starting at Rs7.

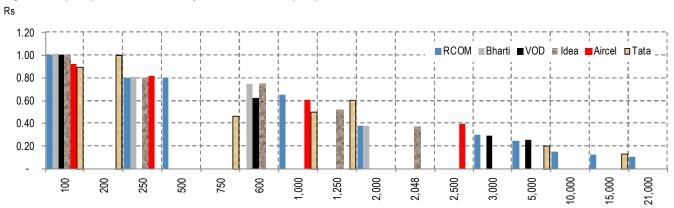
Bharti's indication of "Unlimited" 3G data plans at Rs2,000 (according to Bloomberg) is concerning to us to the extent that it may disrupt the hitherto subdued data pricing indications from private telcos and may add network issues. Developed market operators with unlimited data plans have experienced network congestion.

Figure 11: Implied price/MB from monthly data tariffs – PRE-paid plans

1.20 ■RCOM ■Bharti ■VOD ■Idea ■Aircel ■Tata 1.00 0.80 0.60 0.40 0.20 2,048 5,120 10,000 15,000 21,000 1,000 1,250 2,000 2,500 5,000 9 200 250 450 200 009 750

Source: Company data, Teleguru.in

Figure 12: Implied price/MB from monthly data tariffs – POST-paid plans



Source: Company data, Teleguru.in

Table 3: Small Validity / Sachet plans

|        | MRP | MB included | Validity | Implied price per MB (INR) | Overage charges |
|--------|-----|-------------|----------|----------------------------|-----------------|
| Bharti | 8   | 10          | 1 day    | 0.80                       | 30p / 20 KB     |
| Bharti | 61  | 65          | 3 days   | 0.94                       | 30p / 20 KB     |
| RCOM   | 20  | 25          | 1 day    | 0.80                       | NA              |
| RCOM   | 98  | 125         | 7 days   | 0.78                       | NA              |
| Idea   | 9   | 10          | 1 day    | 0.90                       | 30p / 20KB      |
| ldea   | 55  | 50          | 3 days   | 1.10                       | 30p / 20KB      |
| Aircel | 7   | 8           | 1 days   | 0.88                       | NA              |
| Aircel | 22  | 25          | 3 days   | 0.88                       | NA              |

Source: Company data, Teleguru.in

# **Tulip Telecom**

Tulip Telecom in 4Q delivered sustained revenue growth ( $\pm$ 20% Y/Y) and higher margins once again ( $\pm$ 80bp Q/Q), as the contribution from fiber ramped up nicely to 80% of new orders. With incremental revenue streams (R-APDRP projects, International connectivity, data centre) expected to kick in, we expect these trends to continue, and we forecast 23% revenue growth and 1pp margin expansion to 29.2%. Management expects the 20% revenue growth rate of FY11 to continue in FY12, which we view as slightly conservative.

Please see our note *Tulip Telecom Limited: Another good quarter with positive indications for FY12; reiterate Overweight* published on May 16, 2011 for more details.

# **Tata Communications**

TCOM delivered an in-line set of 4Q results, with the bottom line helped by lower interest expenses. We believe pricing pressure in the global voice (55% on consol revenue) and in the domestic data segments is resulting in only moderate revenue growth. TCOM reported 4Q consolidated revenue growth of 1.7% Q/Q and FY11 growth of 8.2% (FY10: 10.7%). We expect the same to continue and have reduced our FY12/FY13 revenue estimates by 2.4%/3.2%.

We are cognizant of management's focus on profitability in the core business but we await sustained margin improvement here and also expect Neotel, which is behind schedule, to remain a drag over the next year. Of the Rs8.5B net loss in FY11, Rs5.5B (~65%) was due to Neotel. Management commented that Neotel is 12-18 months behind schedule. We expect this to remain a drag of profitability in FY12 and are not convinced that we can see positive EBITDA this year.

Pricing pressure in global voice and India data segments, Neotel being behind schedule and a stretched balance sheet remain concerns. We maintain our Underweight rating. Risks to our view include margin expansion driven by data growth, TTLS stake sake, monetization of surplus land sale, and a quick turnaround at Neotel.

Please see our note *Tata Communications Ltd: Pressures remain on near term profitability; Maintain Underweight* published on May 31, 2011 for more details.

Table 4: Key wireless operational metrics

|                          | 1Q10A   | 2Q10A   | 3Q10A   | 4Q10A   | 1Q11A   | 2Q11A   | 3Q11A   | 4Q11A   |
|--------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                          | Jun-09  | Sep-09  | Dec-09  | Mar-10  | Jun-10  | Sep-10  | Dec-10  | Mar-11  |
| Sub base ('000s)         |         |         |         |         |         |         |         |         |
| Bharti                   | 102,368 | 110,511 | 118,864 | 127,619 | 136,620 | 143,292 | 152,495 | 162,203 |
| Vodafone                 | 76,450  | 82,846  | 91,402  | 100,858 | 109,061 | 115,553 | 124,255 | 134,570 |
| ldea                     | 42,769  | 46,758  | 52,264  | 63.825  | 68.887  | 74,214  | 81,779  | 89,503  |
| RCOM                     | 79,616  | 86,118  | 93,796  | 102,422 | 110,806 | 117,337 | 125,652 | 135,719 |
| Q/Q growth               |         |         |         |         |         |         |         |         |
| Bharti                   | 9%      | 8%      | 8%      | 7%      | 7%      | 5%      | 6%      | 6%      |
| Vodafone                 | 11%     | 8%      | 10%     | 10%     | 8%      | 6%      | 8%      | 8%      |
| Idea                     | 10%     | 9%      | 12%     | 22%     | 8%      | 8%      | 10%     | 9%      |
| RCOM                     | 10%     | 8%      | 9%      | 9%      | 8%      | 6%      | 7%      | 8%      |
| % pre-paid               |         |         |         |         |         |         |         |         |
| Bharti                   | 95%     | 95%     | 95%     | 96%     | 96%     | 96%     | 96%     | 96%     |
| Vodafone                 | 93%     | 93%     | 94%     | 94%     | 95%     | 95%     | 95%     | 95%     |
| Idea                     | 95%     | 95%     | 96%     | 96%     | 96%     | 96%     | 96%     | 96%     |
| RCOM                     | 94%     | 94%     | 95%     | 96%     | 96%     | 96%     | 97%     | 97%     |
| Monthly net adds ('000s) |         |         |         |         |         |         |         |         |
| Bharti                   | 2,815   | 2,715   | 2,784   | 2,918   | 3,000   | 2,224   | 3,068   | 3,236   |
| Vodafone                 | 2,560   | 2,132   | 2,852   | 3,152   | 2,734   | 2,164   | 2,901   | 3,438   |
| Idea                     | 1,293   | 1,330   | 1,835   | 2,071   | 1,687   | 1,776   | 2,522   | 2,575   |
| RCOM                     | 2,317   | 2,167   | 2,559   | 2,875   | 2,795   | 2,177   | 2,772   | 3,355   |
| Q/Q growth               |         |         |         |         |         |         |         |         |
| Bharti                   | 2%      | -4%     | 3%      | 5%      | 3%      | -26%    | 38%     | 5%      |
| Vodafone                 | -2%     | -17%    | 34%     | 11%     | -13%    | -21%    | 34%     | 19%     |
| Idea                     | -17%    | 3%      | 38%     | 13%     | -19%    | 5%      | 42%     | 2%      |
| RCOM                     | -39%    | -6%     | 18%     | 12%     | -3%     | -22%    | 27%     | 21%     |
| Monthly Churn (%)        |         |         |         |         |         |         |         |         |
| Bharti                   | 3%      | 5%      | 6%      | 6%      | 6%      | 6%      | 8%      | 8%      |
| Vodafone                 | 2%      | 3%      | 3%      | 3%      | 3%      | 3%      | 4%      | 4%      |
| Idea                     | 7%      | 7%      | 9%      | 8%      | 8%      | 8%      | 10%     | 11%     |
| RCOM                     | 1%      | 1%      | 2%      | 3%      | 4%      | 4%      | 4%      | 4%      |

Table 5: Key wireless operational metrics... continued

|  | 1Q10A<br>Jun-09 | 2Q10A<br>Sep-09 | 3Q10A<br>Dec-09 | 4Q10A<br>Mar-10 | 1Q11A<br>Jun-10 | 2Q11A<br>Sep-10 | 3Q11A<br>Dec-10 | 4Q11A<br>Mar-11 |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| MOU (mins/sub/month)                             |                 | -               |                 |                 |                 |                 |                 |                 |
| Bharti   | 478             | 450             | 446             | 468             | 480             | 454             | 449             | 449             |
| Vodafone - reported                              | 330             | 319             | 318             | 325             | 327             | 311             | 308             | 307             |
| Vodafone - comparable basis                      | 439             | 425             | 424             | 433             | 436             | 415             | 410             | 410             |
| ldea   | 399             | 375             | 389             | 398             | 415             | 394             | 401             | 397             |
| RCOM   | 365             | 340             | 330             | 318             | 295             | 276             | 251             | 241             |
| Q/Q growth                                       |                 |                 |                 |                 |                 |                 |                 |                 |
| Bharti   | -2%             | -6%             | -1%             | 5%              | 3%              | -5%             | -1%             | 0%              |
| Vodafone - reported                              | -2%             | -3%             | 0%              | 2%              | 1%              | -5%             | -1%             | 0%              |
| Vodafone - comparable basis                      | -2%             | -3%             | 0%              | 2%              | 1%              | -5%             | -1%             | 0%              |
| Idea   | -1%             | -6%             | 4%              | 2%              | 4%              | -5%             | 2%              | -1%             |
| RCOM   | -2%             | -7%             | -3%             | -4%             | -7%             | -6%             | -9%             | -4%             |
| Wireless minutes (mn)                            |                 |                 |                 |                 |                 |                 |                 |                 |
| Bharti   | 140,713         | 143,680         | 153,241         | 172,797         | 190,396         | 190,767         | 199,146         | 211,822         |
| Vodafone - reported                              | 71,775          | 76,135          | 83,172          | 93,735          | 103,029         | 104,878         | 110,623         | 119,295         |
| Vodafone - comparable basis                      | 95,700          | 101,513         | 110,896         | 124,980         | 137,372         | 139,837         | 147,497         | 159,060         |
| Idea   | 48,729          | 50,339          | 57,841          | 68,275          | 82,274          | 84,828          | 93,503          | 101,960         |
|  |                 |                 |                 |                 |                 |                 |                 |                 |
| RCOM   | 83,300          | 84,500          | 89,000          | 93,500          | 94,400          | 94,600          | 91,500          | 94,400          |
| Q/Q growth                                       | •••             | 20/             |                 | 4004            | 100/            | 201             | 407             | 0.404           |
| Bharti   | 8%              | 2%              | 7%              | 13%             | 10%             | 0%              | 4%              | 6.4%            |
| Vodafone - reported                              | 10%             | 6%              | 9%              | 13%             | 10%             | 2%              | 5%              | 7.8%            |
| Vodafone - comparable basis                      | 10%             | 6%              | 9%              | 13%             | 10%             | 2%              | 5%              | 7.8%            |
| Idea   | 10%             | 3%              | 15%             | 18%             | 21%             | 3%              | 10%             | 9%              |
| RCOM   | 11%             | 1%              | 5%              | 5%              | 1%              | 0%              | -3%             | 3%              |
| ARPM (paisa)                                     |                 |                 |                 |                 |                 |                 |                 |                 |
| Bharti   | 58.2            | 56.1            | 51.7            | 47.0            | 44.8            | 44.4            | 44.2            | 43.2            |
| Vodafone - reported                              | 74.8            | 69.7            | 65.6            | 60.5            | 58. <b>4</b>    | 56.9            | 57.1            | 55.7            |
| Vodafone - comparable basis                      | 56.1            | 52.3            | 49.2            | 45.4            | 43.8            | 42.6            | 42.8            | 41.7            |
| Idea   | 58.1            | 55.7            | 51.4            | 46.5            | 43.9            | 42.4            | 41.9            | 40.6            |
| RCOM   | 57.5            | 47.4            | 45.2            | 43.7            | 44.1            | 44.2            | 44.2            | 44.4            |
| Q/Q growth                                       |                 |                 |                 |                 |                 |                 |                 |                 |
| Bharti   | -7%             | -4%             | -8%             | -9%             | -5%             | -1%             | 0%              | -2.3%           |
| Vodafone - reported                              | -8%             | -7%             | -6%             | -8%             | -4%             | -3%             | 0%              | -2.6%           |
| Vodafone - reported  Vodafone - comparable basis | -8%             | -7%             | -6%             | -8%             | -4%             | -3%             | 0%              | -2.6%           |
| Idea   | -8%             | -4%             | -8%             | -10%            | -4 %<br>-6%     | -3%             | -1%             | -3%             |
| RCOM   | -4%             | -4 %<br>-18%    | -5%             | -3%             | 1%              | 0%              | 0%              | 0%              |
| ARPU (INR)                                       |                 |                 |                 |                 |                 |                 |                 |                 |
| Bharti   | 278             | 252             | 230             | 220             | 215             | 202             | 198             | 194             |
| Vodafone   | 247             | 222             | 209             | 197             | 191             | 177             | 176             | 171             |
|  | 232             | 209             | 209             | 185             | 182             | 167             | 168             |                 |
| ldea<br>RCOM                                     | 232<br>210      | 209<br>161      | 200<br>149      | 139             | 130             | 122             | 111             | 161<br>107      |
|  |                 |                 |                 |                 |                 |                 |                 | .01             |
| Q/Q growth<br>Bharti                             | -9%             | -9%             | -9%             | -5%             | -2%             | -6%             | -2%             | -2.0%           |
| Vodafone   | -10%            | -10%            | -6%             | -5%<br>-6%      | -2 %<br>-3%     | -0 %<br>-7%     | -2 %<br>-1%     | -2.0%<br>-2.7%  |
|  | -10%<br>-9%     |                 | -6%<br>-4%      |                 |                 | -7%<br>-8%      |                 |                 |
| Idea   |                 | -10%            |                 | -8%             | -2%             |                 | 1%              | -4%             |
| RCOM   | -6%             | -23%            | -7%             | -7%             | -6%             | -6%             | -9%             | -4%             |

Please note that some datapoints are implied numbers e.g. MOU and ARPM for Vodafone We have estimated Vodafone's metrics adjusting for the difference in minutes comparability

Table 6: Key wireless financial metrics

|                                  | 1Q10A<br>Jun-09 | 2Q10A<br>Sep-09 | 3Q10A<br>Dec-09 | 4Q10A<br>Mar-10 | 1Q11A<br>Jun-10 | 2Q11A<br>Sep-10 | 3Q11A<br>Dec-10 | 4Q11A<br>Mar-11 |
|----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Wireless revenue (INR m / GBP m) | oun os          | ocp os          | DCC-03          | Mui-10          | Vuii-10         | ССР-10          | DC0 10          | With 11         |
| Bharti                           | 84,301          | 82,902          | 80,898          | 83,174          | 88,237          | 88,045          | 91,459          | 94,948          |
| Vodafone (GBP m)                 | 755             | 704             | 767             | 843             | 954             | 899             | 963             | 988             |
| Idea                             | 30,242          | 30,310          | 32,100          | 34,000          | 36,896          | 36,891          | 39,901          | 42,366          |
| RCOM                             | 47,931          | 40,100          | 40,225          | 40,900          | 41,528          | 41,613          | 40,644          | 41,978          |
| Q/Q growth                       |                 |                 |                 |                 |                 |                 |                 |                 |
| Bharti                           | 3%              | -2%             | -2%             | 3%              | 6%              | 0%              | 4%              | 4%              |
| Vodafone (GBP m)                 | -5%             | -7%             | 9%              | 10%             | 13%             | -6%             | 7%              | 3%              |
| ldea                             | 1%              | 0%              | 6%              | 6%              | 9%              | 0%              | 8%              | 6%              |
| RCOM                             | 6%              | -16%            | 0%              | 2%              | 2%              | 0%              | -2%             | 3%              |
| % non-voice                      |                 |                 |                 |                 |                 |                 |                 | .=              |
| Bharti                           | 9%              | 10%             | 11%             | 12%             | 12%             | 13%             | 14%             | 15%             |
| Vodafone                         | 9%              | 9%              | 9%              | 9%              | 10%             | 11%             | 12%             | 12%             |
| Idea                             | 10%             | 11%             | 11%             | 12%             | 13%             | 13%             | 13%             | 12%             |
| RCOM (from TRAI)                 | 36%             | 21%             | 20%             | 22%             | 23%             | 22%             | 22%             | 22%             |
| EBITDA margin (%)                |                 |                 |                 |                 |                 |                 |                 |                 |
| Bharti                           | 40.5%           | 40.2%           | 37.6%           | 36.4%           | 35.9%           | 35.2%           | 34.6%           | 33.3%           |
| Vodafone (Half yearly)           |                 | 24.0%           |                 | 27.6%           |                 | 26.0%           |                 | 25.1%           |
| ldea                             | 26.7%           | 25.3%           | 23.5%           | 25.2%           | 21.5%           | 20.7%           | 20.6%           | 20.7%           |
| RCOM                             | 38.6%           | 32.7%           | 31.2%           | 28.9%           | 28.9%           | 29.1%           | 29.0%           | 27.4%           |
| Sequential change (%)            |                 |                 |                 |                 |                 |                 |                 |                 |
| Bharti                           | 9.0%            | -0.3%           | -2.6%           | -1.2%           | -0.4%           | -0.8%           | -0.5%           | -1.3%           |
| Vodafone (Half yearly)           |                 | -1%             |                 | 4%              |                 | -2%             |                 | -0.9%           |
| ldea                             | 0.8%            | -1.4%           | -1.7%           | 1.7%            | -3.7%           | -0.9%           | -0.1%           | 0.2%            |
| RCOM                             | 1.6%            | -5.8%           | -1.6%           | -2.3%           | 0.0%            | 0.2%            | -0.1%           | -1.6%           |
| Capex (INR m / GBP m)            |                 |                 |                 |                 |                 |                 |                 |                 |
| Bharti                           | 9,257           | 11,464          | 7,743           | 5,794           | 7,071           | 15,590          | 16,877          | 19,221          |
| Vodafone (GBP m)                 |                 | 529             |                 | 324             |                 | 286             |                 | 584             |
| ldea                             | 10,816          | 11,136          | 9,716           | 1,332           | 3,204           | 4,824           | 9,471           | 14,600          |
| RCOM                             | 9,402           | 8,964           | 11,037          | 2,016           | 1,833           | 6,021           | 16,820          | 5,780           |
| Capex/sales                      |                 |                 |                 |                 |                 |                 |                 |                 |
| Bharti                           | 11%             | 14%             | 10%             | 7%              | 8%              | 18%             | 18%             | 20%             |
| Vodafone                         |                 | 36%             |                 | 20%             |                 | 15%             |                 | 29%             |
| Idea                             | 36%             | 37%             | 31%             | 4%              | 9%              | 13%             | 24%             | 34%             |
| RCOM                             | 20%             | 22%             | 27%             | 5%              | 4%              | 14%             | 41%             | 14%             |

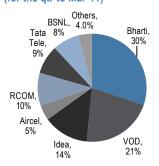
# Quarterly revenue and share trends – TRAI

TRAI released its quarterly gross revenue (GR) and adjusted gross revenue (AGR) for the industry for the quarter to March 2011.

### Key observations

- Wireless industry Gross Revenue grew 3.9% Q/Q to Rs316.6B. We view this as a healthy number especially in light of the 5% growth seen in previous quarter and is in-line with the average growth seen in 4Q over the past two years.
- This was driven by strong growth in Metros and B circles. Among the telcos, Vodafone, BSNL/MTNL and Idea drove the Q/Q growth contributing two-thirds of the total growth.
- According to TRAI data, Bharti's gross revenue was flat Q/Q and its revenue market share declined 1.1pp to 30.1%. According to Bharti's 4Q report, its wireless India and South Asia revenue increased 3.8% Q/Q to Rs94,948MM. We believe the difference is due to certain revenues (non-wireless) being excluded when Bharti reports GR/AGR to TRAI (based on which license fees are calculated) and certain allowable provisions. Bharti's revenue in Delhi and Tamil Nadu declined 10% and 9% while revenue market share declined 3.3pp and 2.2pp Q/Q.
- Idea delivered 6% Q/Q revenue growth and its market share inched up by 20bp to 13.5%
- Vodafone continued to deliver a solid performance with 5% Q/Q revenue growth and market share at 21.4%, +20bp Q/Q.
- Revenue market share of the "other" teclos increased 70bp to 4.0%. This includes Uninor, Videocon, Etisalat, STel, HFCL, Shyam and BPL.

Figure 13: Revenue Market Share (for the qtr to Mar-11)



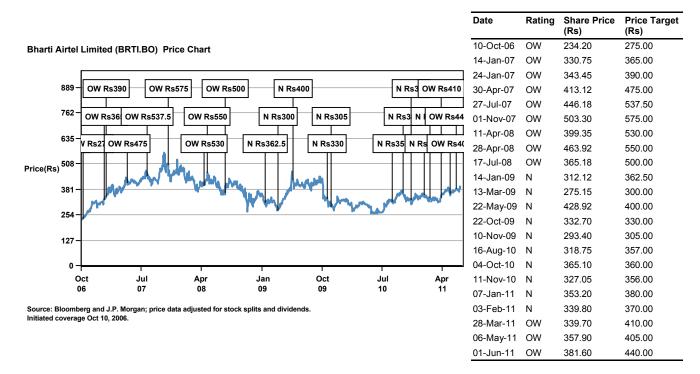
Source: TRAI, J.P. Morgan Based on Gross Revenue

Companies Recommended in This Report (all prices in this report as of market close on 22 June 2011)
Bharti Airtel Limited (BRTI.BO/Rs381.80/Overweight), Idea Cellular Limited (IDEA.BO/Rs74.55/Underweight), Reliance Communications Limited (RLCM.BO/Rs87.75/Neutral), Tata Communications Ltd (TATA.BO/Rs184.40/Underweight), Tulip Telecom Limited (TULP.BO/Rs149.85/Overweight)

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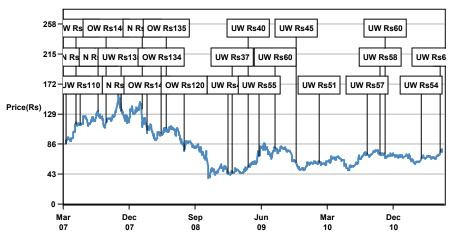
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Price Target

### Idea Cellular Limited (IDEA.BO) Price Chart



Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends. Initiated coverage Mar 12, 2007.

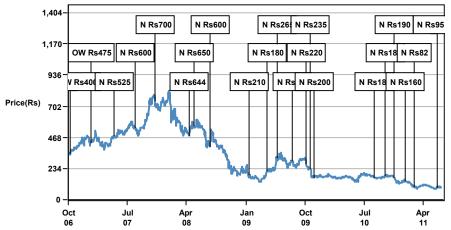
### (Rs) (Rs) 12-Mar-07 Ν 85.55 90.00 25-Apr-07 Ν 114.60 105.00 26-Apr-07 UW 116.25 105.00 10-May-07 UW 114.75 110.00 26-Jul-07 Ν 133.40 140.00 26-Aug-07 OW 117.10 140.00 25-Oct-07 Ν 152.00 140.00 28-Oct-07 UW 133.70 135.00 22-Jan-08 N 136.05 145.00 13-Feb-08 OW 106.25 145.00 10-Apr-08 OW 101.95 134.00 02-May-08 OW 108.55 135.00 17-Jul-08 OW 77.20 120.00 14-Jan-09 UW 43.95 40.00 01-Feb-09 UW 44.70 37.00 07-Apr-09 UW 53.30 40.00 22-May-09 UW 68.80 55.00 28-Jul-09 UW 79.90 60.00 22-Oct-09 UW 60.55 45.00 27-Jan-10 UW 60.30 51.00 16-Aug-10 UW 72.10 57.00 07-Oct-10 UW 72.65 58.00 27-Oct-10 UW 71.60 60.00 28-Mar-11 UW 65.85 54.00 15-Jun-11 UW 74.20 60.00

Date

Rating

Share Price

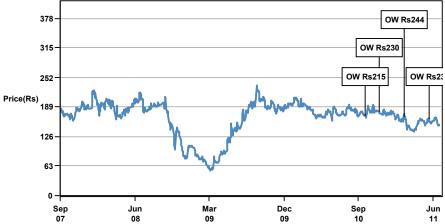
### Reliance Communications Limited (RLCM.BO) Price Chart



Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends. Initiated coverage Oct 10, 2006.

| Date      | Rating | Share Price (Rs) | Price Target (Rs) |
|-----------|--------|------------------|-------------------|
| 10-Oct-06 | OW     | 344.25           | 400.00            |
| 13-Jan-07 | OW     | 429.90           | 475.00            |
| 02-May-07 | N      | 477.10           | 525.00            |
| 08-Aug-07 | N      | 544.15           | 600.00            |
| 06-Nov-07 | N      | 745.40           | 700.00            |
| 10-Apr-08 | N      | 484.40           | 644.00            |
| 04-May-08 | N      | 554.25           | 650.00            |
| 17-Jul-08 | N      | 399.30           | 600.00            |
| 14-Jan-09 | N      | 185.40           | 210.00            |
| 07-Apr-09 | N      | 218.10           | 180.00            |
| 22-May-09 | N      | 315.55           | 265.00            |
| 02-Aug-09 | N      | 289.90           | 250.00            |
| 06-Oct-09 | N      | 268.30           | 220.00            |
| 22-Oct-09 | N      | 231.45           | 235.00            |
| 10-Nov-09 | N      | 168.75           | 200.00            |
| 16-Aug-10 | N      | 163.65           | 188.00            |
| 07-Oct-10 | N      | 178.15           | 182.00            |
| 16-Nov-10 | N      | 168.05           | 190.00            |
| 07-Jan-11 | N      | 139.75           | 160.00            |
| 16-Feb-11 | N      | 99.60            | 82.00             |
| 31-May-11 | N      | 87.55            | 95.00             |

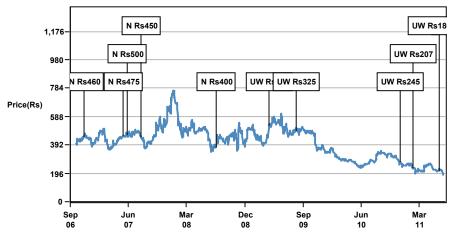
### Tulip Telecom Limited (TULP.BO) Price Chart



| Date      | Rating | Share Price (Rs) | Price Target (Rs) |
|-----------|--------|------------------|-------------------|
| 23-Sep-10 | OW     | 171.00           | 215.00            |
| 16-Nov-10 | OW     | 179.20           | 230.00            |
| 16-Feb-11 | OW     | 168.45           | 244.00            |
| 16-May-11 | OW     | 163.45           | 230.00            |

Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends. Initiated coverage Sep 23, 2010.

### Tata Communications Ltd (TATA.BO) Price Chart



| 06-Nov-06         N         445.05         460.00           10-May-07         N         454.05         475.00           29-May-07         N         461.10         500.00           03-Aug-07         N         448.85         450.00           17-Jul-08         N         374.10         400.00           26-Mar-09         UW         523.15         350.00           29-Jul-09         UW         490.85         325.00           01-Dec-10         UW         276.35         245.00           01-Feb-11         UW         233.05         207.00 | Farget | Price Ta<br>(Rs) | Share Price (Rs) | Rating | Date      |
|---|--------|------------------|------------------|--------|-----------|
| 29-May-07     N     461.10     500.00       03-Aug-07     N     448.85     450.00       17-Jul-08     N     374.10     400.00       26-Mar-09     UW     523.15     350.00       29-Jul-09     UW     490.85     325.00       01-Dec-10     UW     276.35     245.00  |        | 460.00           | 445.05           | N      | 06-Nov-06 |
| 03-Aug-07         N         448.85         450.00           17-Jul-08         N         374.10         400.00           26-Mar-09         UW         523.15         350.00           29-Jul-09         UW         490.85         325.00           01-Dec-10         UW         276.35         245.00  |        | 475.00           | 454.05           | N      | 10-May-07 |
| 17-Jul-08 N 374.10 400.00<br>26-Mar-09 UW 523.15 350.00<br>29-Jul-09 UW 490.85 325.00<br>01-Dec-10 UW 276.35 245.00   |        | 500.00           | 461.10           | N      | 29-May-07 |
| 26-Mar-09 UW 523.15 350.00<br>29-Jul-09 UW 490.85 325.00<br>01-Dec-10 UW 276.35 245.00  |        | 450.00           | 448.85           | N      | 03-Aug-07 |
| 29-Jul-09 UW 490.85 325.00<br>01-Dec-10 UW 276.35 245.00  |        | 400.00           | 374.10           | N      | 17-Jul-08 |
| 01-Dec-10 UW 276.35 245.00  |        | 350.00           | 523.15           | UW     | 26-Mar-09 |
| 2.0.00  |        | 325.00           | 490.85           | UW     | 29-Jul-09 |
| 01-Feb-11 UW 233.05 207.00  |        | 245.00           | 276.35           | UW     | 01-Dec-10 |
|   |        | 207.00           | 233.05           | UW     | 01-Feb-11 |
| 31-May-11 UW 212.30 180.00  |        | 180.00           | 212.30           | UW     | 31-May-11 |

Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends. Initiated coverage Nov 06, 2006.

The chart(s) show J.P. Morgan's continuing coverage of the stocks; the current analysts may or may not have covered it over the entire period.

J.P. Morgan ratings: OW = Overweight, N= Neutral, UW = Underweight

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|---|------------|---------|-------------|
|   | (buy)      | (hold)  | (sell)      |
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| JPMS Equity Research Coverage               | 43%        | 49%     | 8%          |
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