Emkay Research

24 December 2007

Sector: Telecommunications

| Bharti | Buy |
|---|---|
| Price | Target |
| Rs915 | Rs1334 |

| RCom | Buy |
|---|---|
| Price | Target |
| Rs707 | Rs878 |

| Idea | Accumulate |
|---|---|
| Price | Target |
| Rs129 | Rs153 |

Sector Performance

Bharti Airtel

| (%) | 1M | 3M | 6M | 12M |
|---|---|---|---|---|
| Absolute | 0 | 2 | 11 | 50 |
| Rel. to Sensex | 1 | (15) | (21) | 7 |

Reliance Communications

| (%) | 1M | 3M | 6M | 12M |
|---|---|---|---|---|
| Absolute | 0 | 26 | 37 | 59 |
| Rel. to Sensex | 1 | 9 | 5 | 16 |

Idea Cellular

| (%) | 1M | 3M | 6M | 12M |
|---|---|---|---|---|
| Absolute | 3 | 5 | 12 | NA |
| Rel. to Sensex | 4 | (12) | (20) | NA |

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# Telecom Sector

Sector update

## Regulatory issues form dark clouds

**Over the last couple of months, there has been lot of disturbance in the telecom sector due to the regulatory issues on spectrum allocation, resulting in the gross under performance of the overall telecom sector viz. a viz. the broad indices. While we await regulatory developments on a day-to-day basis, we believe that the sector would continue to under perform the broad markets due to the regulatory uncertainties, till the time the spectrum issues are resolved. We expect that the DoT would find a more liberal way than the TRAI recommendations for spectrum allocation and thus maintain balance among existing operators. Irrespective of whether TEC or TRAI or any other criteria is implemented, it would lead to an entry of few new players in the industry, which we believe would not have material impact on the companies under our coverage. Although we expect underperformance of the sector in the short-term due to the regulatory overhang, the robust subscriber additions and extremely strong earnings visibility reinforce our long-term positive view on the sector. We maintain BUY on Bharti Airtel & RCOM and ACCUMULATE on Idea Cellular.**

### The scene so far…

After the TRAI recommendations on subscriber based spectrum allocation criteria were widely opposed by the major GSM operators and the COAI, the DoT appointed TEC to study and report a fair methodology for spectrum allocation. But the TEC after its study reported even more stringent norms for spectrum allocation, which were again widely opposed by the GSM operators. While the GSM operators have demanded additional spectrum, the CDMA operators, have supported the TEC recommendations requesting the DoT to get excess spectrum refunded from the GSM operators and encourage fresh competition in the sector. In the mean while, the DoT has allowed the UAS license holders to offer services under both CDMA and GSM technologies by payment of additional license fees. Not withstanding their eagerness for spectrum, Bharti Airtel and Idea Cellular had both shown interest in auction of the 2G spectrum, which has been rejected by the telecom ministry. Based on media and industry sources, we understand that the DoT had tried to arrive at a compromise formula by adopting the TRAI recommendations over TEC, which was opposed by GSM operators. While we await further regulatory developments, we believe that the DoT would find a more liberal way than TRAI recommendations for spectrum allocation resulting in a balance among major existing operators.

### Entry by few new players cannot be ruled out

Irrespective of whether the TEC or the TRAI or any other criteria is implemented, it would lead to an increase in the number of players in the industry and hence further rise in the already intensely competitive mobile telecom market in India. Under any circumstance, an entry by a minimum of 4 new entrants including the existing operators wanting to expand in newer circles cannot be ruled out. We believe that further increase in competition would not impact the players such as Bharti Airtel who have strong brand, superior execution capability and extensive network coverage. Other players RCOM and Idea Cellular would end up receiving spectrum, which would enable to enhance their presence in newer circles. We thus do not foresee any material impact on the market share of the companies under our coverage.

### Short term pressures exist, long term view unchanged

Although the current levels of valuations provide an attractive investment opportunity in the sector, we believe that the regulatory uncertainty would only result in underperformance of the sector viz. a viz. the broad indices. While the short-term pressures due to regulatory uncertainty exist, the strong earnings and cash flow visibility of the companies under our coverage reinforce our long-term bullish view on the sector. We maintain our BUY rating on Bharti Airtel & Reliance Communication and ACCUMULATE rating on Idea Cellular.

## Spectrum allocation criterion

### Existing subscriber based spectrum allocation criteria:

| GSM | | | | | | CDMA | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Service area | 2x6.2 Mhz | 2x8 Mhz | 2x10 Mhz | 2x12.4 Mhz | 2x15 Mhz | Service area | 2x3.75 Mhz | 2x5 Mhz | 2x6.25 Mhz | 2x7.5 Mhz |
| Delhi/ Mumbai | 0.3 | 0.6 | 1 | 1.6 | 2.1 | Delhi/ Mumbai | 0.3 | 1 | 1.6 | 2.1 |
| Chennai/ Kolkata | 0.2 | 0.4 | 0.6 | 1 | 1.3 | Chennai/ Kolkata | 0.2 | 0.6 | 1 | 1.3 |
| Category A | 0.4 | 0.8 | 1.4 | 2 | 2.6 | Category A | 0.4 | 1.2 | 2 | 2.6 |
| Category B | 0.3 | 0.6 | 1 | 1.6 | 2.1 | Category B | 0.3 | 1 | 1.6 | 2.1 |
| Category C | 0.2 | 0.4 | 0.6 | 0.9 | 1.2 | Category C | 0.15 | 0.5 | 0.9 | 1.2 |

*Source: TRAI, Emkay research*

### TRAI recommended subscriber linked spectrum allocation criteria

| GSM | | | | | | CDMA | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Service area | 2x6.2 Mhz | 2x8 Mhz | 2x10 Mhz | 2x12.4 Mhz | 2x15 Mhz | Service area | 2x3.75 Mhz | 2x5 Mhz | 2x6.25 Mhz | 2x7.5 Mhz |
| Delhi/ Mumbai | 0.5 | 1.5 | 2 | 3 | 5 | Delhi/ Mumbai | 0.5 | 2 | 3 | 5 |
| Chennai/ Kolkata | 0.5 | 1.5 | 2 | 3 | 5 | Chennai/ Kolkata | 0.5 | 2 | 3 | 5 |
| Category A | 0.8 | 3 | 5 | 8 | 10 | Category A | 0.8 | 5 | 8 | 10 |
| Category B | 0.8 | 3 | 5 | 8 | 10 | Category B | 0.8 | 5 | 8 | 10 |
| Category C | 0.6 | 2 | 4 | 6 | 8 | Category C | 0.6 | 4 | 6 | 8 |

*Source: TRAI, Emkay research*

### TEC recommendation for spectrum allocation

| Service area | 2x4.4 MHz | 2x6.2 MHz | 2x8.0 MHz | 2x10.0 MHz | 2x12.4 MHz |
|---|---|---|---|---|---|
| Delhi | 0.6 | 2.0 | 3.5 | 4.9 | 6.3 |
| Mumbai | 0.8 | 2.4 | 4.2 | 5.9 | 7.6 |
| Kolkata | 0.7 | 2.1 | 3.6 | 5.1 | 6.6 |
| Chennai | 0.6 | 1.8 | 3.1 | 4.4 | 5.6 |
| Andhra Pradesh | 1.4 | 4.2 | 7.3 | 10.3 | 13.4 |
| Gujarat + Daman Diu | 1.3 | 3.9 | 6.9 | 9.7 | 12.5 |
| Karnataka | 1.0 | 3.0 | 5.3 | 7.4 | 9.5 |
| Maharashtra | 1.4 | 4.3 | 7.5 | 10.5 | 13.6 |
| Tamilnadu | 1.2 | 3.7 | 6.4 | 9.0 | 11.7 |
| Haryana | 0.4 | 1.2 | 2.2 | 3.0 | 3.9 |
| Kerala | 0.8 | 2.6 | 4.5 | 6.3 | 8.1 |
| MP & Chhatisgarh | 1.3 | 4.0 | 7.0 | 9.8 | 12.7 |
| Punjab | 0.8 | 2.6 | 4.5 | 6.4 | 8.3 |
| Rajasthan | 1.1 | 3.2 | 5.6 | 7.9 | 10.2 |
| UP (East) | 1.3 | 4.1 | 7.2 | 10.1 | 13.1 |
| UP (West) | 1.1 | 3.3 | 5.7 | 8.1 | 10.4 |
| West Bengal | 1.0 | 3.1 | 5.5 | 7.7 | 10.0 |
| Assam | 1.1 | 3.3 | 5.8 | 8.2 | 10.6 |
| Bihar & Jharkhand | 1.2 | 3.7 | 6.4 | 9.0 | 11.7 |
| Himachal Pradesh | 0.2 | 0.7 | 1.2 | 1.7 | 2.2 |
| Jammu & Kashmir | 0.3 | 0.8 | 1.4 | 2.0 | 2.5 |
| North East-I & II | 0.6 | 2.0 | 3.5 | 4.9 | 6.3 |
| Orissa | 1.0 | 3.2 | 5.5 | 7.8 | 10.0 |

*Source: TEC, Emkay research*

1) Assuming the **TRAI recommendations** are accepted and the existing operators get / refund additional spectrum as per the TRAI recommended subscriber linked spectrum allocation criteria

| Service area | Bharti Airtel | | | Vodafone-Essar | | | Idea Cellular | | | RCOM - GSM | | | Spectrum to / from existing operators |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Held | Eligible | diff | Held | Eligible | diff | Held | Eligible | diff | Held | Eligible | diff | |
| DELHI | 10 | 12.4 | 2.4 | 10 | 12.4 | 2.4 | 8 | 8 | 0 | | | | **4.8** |
| MUMBAI | 9.2 | 10 | 0.8 | 10 | 12.4 | 2.4 | | | | | | | -0.6 |
| CHENNAI | 8 | 8 | 0 | 8 | 6.2 | -1.8 | | | | | | | -1.8 |
| KOLKATTA | 8 | 8 | 0 | 8 | 8 | 0 | | | | 6.2 | 4.4 | -1.8 | -1.8 |
| KARNATAKA | 10 | 10 | 0 | 8 | 6.2 | -1.8 | | | | | | | -1.8 |
| ANDHRA PRADESH | 8.8 | 10 | 1.2 | 6.2 | 6.2 | 0 | 8 | 6.2 | -1.8 | | | | -0.6 |
| GUJARAT | 6.2 | 6.2 | 0 | 10 | 10 | 0 | 6.2 | 6.2 | 0 | | | | 0 |
| MAHARASHTRA | 6.2 | 8 | 1.8 | 6.2 | 6.2 | 0 | 10 | 8 | -2 | | | | -0.2 |
| TAMILNADU | 6.2 | 8 | 1.8 | 6.2 | 6.2 | 0 | | | | | | | -0.2 |
| KERALA | 6.2 | 6.2 | 0 | 6.2 | 6.2 | 0 | 8 | 6.2 | -1.8 | | | | -1.8 |
| PUNJAB | 8 | 8 | 0 | 6.2 | 6.2 | 0 | | | | | | | -1.8 |
| HARYANA | 6.2 | 6.2 | 0 | 6.2 | 6.2 | 0 | 6.2 | 6.2 | 0 | | | | 0 |
| RAJASTHAN | 6.2 | 8 | 1.8 | 6.2 | 6.2 | 0 | 6.2 | 4.4 | -1.8 | | | | 0 |
| MADHYA PRADESH | 6.2 | 6.2 | 0 | | | | 8 | 6.2 | -1.8 | 6.2 | 6.2 | 0 | -1.8 |
| UP (EAST) | 6.2 | 6.2 | 0 | 8 | 8 | 0 | 6.2 | 4.4 | -1.8 | | | | -1.8 |
| UP (WEST) | 6.2 | 6.2 | 0 | 6.2 | 6.2 | 0 | 8 | 6.2 | -1.8 | | | | -1.8 |
| WEST BENGAL | 4.4 | 6.2 | 1.8 | 4.4 | 6.2 | 1.8 | | | | 6.2 | 4.4 | -1.8 | **1.8** |
| HIMACHAL PRADESH | 6.2 | 8 | 1.8 | | | | 4.4 | 4.4 | 0 | 6.2 | 4.4 | -1.8 | 0 |
| BIHAR | 8 | 8 | 0 | | | | | | | 8 | 6.2 | -1.8 | -1.8 |
| ORISSA | 8 | 6.2 | -1.8 | | | | | | | 6.2 | 6.2 | 0 | -1.8 |
| ASSAM | 6.2 | 6.2 | 0 | | | | | | | 6.2 | 6.2 | 0 | **1.8** |
| NORTH EAST | 4.4 | 4.4 | 0 | | | | | | | 6.2 | 4.4 | -1.8 | -1.8 |
| JAMMU & KASHMIR | 6.2 | 6.2 | 0 | | | | | | | | | | 0 |

*Source: TRAI, Emkay research*

As per the TRAI recommendations, the major GSM operators would be eligible for additional spectrum in only 3 circles - Delhi (4.8Mhz), West Bengal (1.8Mhz) and Assam (1.8Mhz), while in the rest of the circles the existing operators will have to refund the excess spectrum.

1-a) If the **TRAI recommendations are implemented** and the existing operators **refund the excess spectrum**, then the start-up spectrum can be allotted to 2-4 new players apart from Idea, Aircel, Vodafone and RCOM who are ahead in the queue.

| Service area | Expected Spectrum | To existing operators | Spectrum for new entrants | No of new entrants | Idea | Aircel | Vodafone | RCOM | Spectrum for new players | Potential new players |
|---|---|---|---|---|---|---|---|---|---|---|
| DELHI | 25 | 4.8 | 20.2 | 4 | | 4.4 | | 4.4 | 11.4 | 2 |
| MUMBAI | 25 | -0.6 | 25.6 | 5 | 4.4 | 4.4 | | 4.4 | 12.4 | 2 |
| CHENNAI | 25 | -1.8 | 26.8 | 6 | 4.4 | | | 4.4 | 18 | 4 |
| KOLKATTA | 25 | -1.8 | 26.8 | 6 | 4.4 | 4.4 | | | 18 | 4 |
| KARNATAKA | 25 | -1.8 | 26.8 | 6 | 4.4 | 4.4 | | 4.4 | 13.6 | 3 |
| ANDHRA PRADESH | 25 | -0.6 | 25.6 | 5 | | 4.4 | | 4.4 | 16.8 | 3 |
| GUJARAT | 25 | 0 | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| MAHARASHTRA | 25 | -0.2 | 25.2 | 5 | | 4.4 | | 4.4 | 16.4 | 3 |
| TAMILNADU | 25 | -0.2 | 25.2 | 5 | 4.4 | | | 4.4 | 16.4 | 3 |
| KERALA | 25 | -1.8 | 26.8 | 6 | | 4.4 | | 4.4 | 18 | 4 |
| PUNJAB | 25 | -1.8 | 26.8 | 6 | 4.4 | 4.4 | | 4.4 | 13.6 | 3 |
| HARYANA | 25 | 0 | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| RAJASTHAN | 25 | 0 | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| MADHYA PRADESH | 25 | -1.8 | 26.8 | 6 | | 4.4 | 4.4 | | 18 | 4 |
| UP (EAST) | 25 | -1.8 | 26.8 | 6 | | 4.4 | | 4.4 | 18 | 4 |
| UP (WEST) | 25 | -1.8 | 26.8 | 6 | | 4.4 | | 4.4 | 18 | 4 |
| WEST BENGAL | 25 | 1.8 | 23.2 | 5 | 4.4 | | | 4.4 | 14.4 | 3 |
| HIMACHAL PRADESH | 25 | 0 | 25 | 5 | | | 4.4 | | 20.6 | 4 |
| BIHAR | 25 | -1.8 | 26.8 | 6 | 4.4 | | 4.4 | | 18 | 4 |
| ORISSA | 25 | -1.8 | 26.8 | 6 | 4.4 | | 4.4 | | 18 | 4 |
| ASSAM | 25 | 1.8 | 23.2 | 5 | 4.4 | | 4.4 | | 14.4 | 3 |
| NORTH EAST | 25 | -1.8 | 26.8 | 6 | 4.4 | | 4.4 | | 18 | 4 |
| JAMMU & KASHMIR | 25 | 0 | 25 | 5 | 4.4 | | 4.4 | 4.4 | 11.8 | 2 |

*Source: Emkay research*

1-b) If the **TRAI recommendations are implemented** and the existing operators **do not refund excess spectrum**, then the start-up spectrum can be allotted to 2-3 new players apart from Idea, Aircel, Vodafone and RCOM who are ahead in the queue.

| Service area | Expected Spectrum | To existing operators | Spectrum for new entrants | No of new entrants | Idea | Aircel | Vodafone | RCOM | Spectrum for new players | Potential new players |
|---|---|---|---|---|---|---|---|---|---|---|
| DELHI | 25 | 4.8 | 20.2 | 4 | | 4.4 | | 4.4 | 11.4 | 2 |
| MUMBAI | 25 | 0 | 25 | 5 | 4.4 | 4.4 | | 4.4 | 11.8 | 2 |
| CHENNAI | 25 | 0 | 25 | 5 | 4.4 | | | 4.4 | 16.2 | 3 |
| KOLKATTA | 25 | 0 | 25 | 5 | 4.4 | 4.4 | | | 16.2 | 3 |
| KARNATAKA | 25 | 0 | 25 | 5 | 4.4 | 4.4 | | 4.4 | 11.8 | 2 |
| ANDHRA PRADESH | 25 | 0 | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| GUJARAT | 25 | 0 | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| MAHARASHTRA | 25 | 0 | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| TAMILNADU | 25 | 0 | 25 | 5 | 4.4 | | | 4.4 | 16.2 | 3 |
| KERALA | 25 | 0 | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| PUNJAB | 25 | 0 | 25 | 5 | 4.4 | 4.4 | | 4.4 | 11.8 | 2 |
| HARYANA | 25 | 0 | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| RAJASTHAN | 25 | 0 | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| MADHYA PRADESH | 25 | 0 | 25 | 5 | | 4.4 | 4.4 | | 16.2 | 3 |
| UP (EAST) | 25 | 0 | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| UP (WEST) | 25 | 0 | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| WEST BENGAL | 25 | 1.8 | 23.2 | 5 | 4.4 | | | 4.4 | 14.4 | 3 |
| HIMACHAL PRADESH | 25 | 0 | 25 | 5 | | | 4.4 | | 20.6 | 4 |
| BIHAR | 25 | 0 | 25 | 5 | 4.4 | | 4.4 | | 16.2 | 3 |
| ORISSA | 25 | 0 | 25 | 5 | 4.4 | | 4.4 | | 16.2 | 3 |
| ASSAM | 25 | 1.8 | 23.2 | 5 | 4.4 | | 4.4 | | 14.4 | 3 |
| NORTH EAST | 25 | 0 | 25 | 5 | 4.4 | | 4.4 | | 16.2 | 3 |
| JAMMU & KASHMIR | 25 | 0 | 25 | 5 | 4.4 | | 4.4 | 4.4 | 11.8 | 2 |

*Source: Emkay research*

If the DoT allots a start-up spectrum of 6.2Mhz instead of 4.4Mhz, as claimed by RCOM, then there would be hardly 1-2 new entrants in each service area. Also if the DoT reserves some spectrum surrendered by the defense for future use, it would further reduce the scope for newer entrants in the industry.

2) Assuming the **TEC recommendations** are accepted and the existing operators refund additional spectrum as per the TRAI recommended subscriber linked spectrum allocation criteria

| | Bharti Airtel | | | Vodafone-Essar | | | Idea Cellular | | | RCOM - GSM | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Service area | Held | Eligible | diff | Held | Eligible | diff | Held | Eligible | diff | Held | Eligible | diff | refund |
| DELHI | 10 | 8 | -2 | 10 | 6.2 | -3.8 | 8 | 4.4 | -3.6 | | | | -9.4 |
| MUMBAI | 9.2 | 4.4 | -4.8 | 10 | 6.2 | -3.8 | | | | | | | -14.2 |
| CHENNAI | 8 | 4.4 | -3.6 | 8 | 4.4 | -3.6 | | | | | | | -10.8 |
| KOLKATTA | 8 | 4.4 | -3.6 | 8 | 4.4 | -3.6 | | | | 6.2 | 4.4 | -1.8 | -9 |
| KARNATAKA | 10 | 8 | -2 | 8 | 4.4 | -3.6 | | | | | | | -7.4 |
| ANDHRA PRADESH | 8.8 | 6.2 | -2.6 | 6.2 | 4.4 | -1.8 | 8 | 4.4 | -3.6 | | | | -8 |
| GUJARAT | 6.2 | 4.4 | -1.8 | 10 | 6.2 | -3.8 | 6.2 | 4.4 | -1.8 | | | | -7.4 |
| MAHARASHTRA | 6.2 | 4.4 | -1.8 | 6.2 | 4.4 | -1.8 | 10 | 4.4 | -5.6 | | | | -9.2 |
| TAMILNADU | 6.2 | 4.4 | -1.8 | 6.2 | 4.4 | -1.8 | | | | | | | -7.4 |
| KERALA | 6.2 | 4.4 | -1.8 | 6.2 | 4.4 | -1.8 | 8 | 4.4 | -3.6 | | | | -7.2 |
| PUNJAB | 8 | 6.2 | -1.8 | 6.2 | 4.4 | -1.8 | | | | | | | -7.2 |
| HARYANA | 6.2 | 4.4 | -1.8 | 6.2 | 4.4 | -1.8 | 6.2 | 4.4 | -1.8 | | | | -5.4 |
| RAJASTHAN | 6.2 | 4.4 | -1.8 | 6.2 | 4.4 | -1.8 | 6.2 | 4.4 | -1.8 | | | | -5.4 |
| MADHYA PRADESH | 6.2 | 4.4 | -1.8 | | | | 8 | 4.4 | -3.6 | 6.2 | 4.4 | -1.8 | -7.2 |
| UP (EAST) | 6.2 | 4.4 | -1.8 | 8 | 4.4 | -3.6 | 6.2 | 4.4 | -1.8 | | | | -7.2 |
| UP (WEST) | 6.2 | 4.4 | -1.8 | 6.2 | 4.4 | -1.8 | 8 | 4.4 | -3.6 | | | | -7.2 |
| WEST BENGAL | 4.4 | 4.4 | 0 | 4.4 | 4.4 | 0 | | | | 6.2 | 4.4 | -1.8 | -1.8 |
| HIMACHAL PRADESH | 6.2 | 6.2 | 0 | | | | 4.4 | 4.4 | 0 | 6.2 | 4.4 | -1.8 | -1.8 |
| BIHAR | 8 | 4.4 | -3.6 | | | | | | | 8 | 4.4 | -3.6 | -7.2 |
| ORISSA | 8 | 4.4 | -3.6 | | | | | | | 6.2 | 4.4 | -1.8 | -5.4 |
| ASSAM | 6.2 | 4.4 | -1.8 | | | | | | | 6.2 | 4.4 | -1.8 | -3.6 |
| NORTH EAST | 4.4 | 4.4 | 0 | | | | | | | 6.2 | 4.4 | -1.8 | -1.8 |
| JAMMU & KASHMIR | 6.2 | 6.2 | 0 | | | | | | | | | | 0 |

*Source: TRAI,Emkay research*

If the TEC recommendations are implemented, the existing GSM operators will not be allotted any additional spectrum in the near term unless the subscriber base meets the set criteria. On the contrary, the existing GSM operators will have to refund upto 14Mhz of spectrum, which could be used by the DoT to accommodate more players resulting into excessive competition.

2-a) If the **TEC recommendations are accepted** and the **existing operators refund the excess spectrum,** the start-up spectrum of 4.4Mhz can be allotted to 5-8 new entrants and 4-5 new players over and above Idea cellular, Aircel, Vodafone and RCOM.

| Service area | Exp. Spec | To existing operators | Spectrum for new entrants | No of new entrants | Idea | Aircel | Vodafone | RCOM | Spectrum for new players | No of new players |
|---|---|---|---|---|---|---|---|---|---|---|
| DELHI | 25 | -9.4 | 34.4 | 7 | | 4.4 | | 4.4 | 25.6 | 5 |
| MUMBAI | 25 | -14.2 | 39.2 | 8 | 4.4 | 4.4 | | 4.4 | 26 | 5 |
| CHENNAI | 25 | -10.8 | 35.8 | 8 | 4.4 | | | 4.4 | 27 | 6 |
| KOLKATTA | 25 | -9 | 34 | 7 | 4.4 | 4.4 | | | 25.2 | 5 |
| KARNATAKA | 25 | -7.4 | 32.4 | 7 | 4.4 | 4.4 | | 4.4 | 19.2 | 4 |
| ANDHRA PRADESH | 25 | -8 | 33 | 7 | | 4.4 | | 4.4 | 24.2 | 5 |
| GUJARAT | 25 | -7.4 | 32.4 | 7 | | 4.4 | | 4.4 | 23.6 | 5 |
| MAHARASHTRA | 25 | -9.2 | 34.2 | 7 | | 4.4 | | 4.4 | 25.4 | 5 |
| TAMILNADU | 25 | -7.4 | 32.4 | 7 | 4.4 | | | 4.4 | 23.6 | 5 |
| KERALA | 25 | -7.2 | 32.2 | 7 | | 4.4 | | 4.4 | 23.4 | 5 |
| PUNJAB | 25 | -7.2 | 32.2 | 7 | 4.4 | 4.4 | | 4.4 | 19 | 4 |
| HARYANA | 25 | -5.4 | 30.4 | 6 | | 4.4 | | 4.4 | 21.6 | 4 |
| RAJASTHAN | 25 | -5.4 | 30.4 | 6 | | 4.4 | | 4.4 | 21.6 | 4 |
| MADHYA PRADESH | 25 | -7.2 | 32.2 | 7 | | 4.4 | 4.4 | | 23.4 | 5 |
| UP (EAST) | 25 | -7.2 | 32.2 | 7 | | 4.4 | | 4.4 | 23.4 | 5 |
| UP (WEST) | 25 | -7.2 | 32.2 | 7 | | 4.4 | | 4.4 | 23.4 | 5 |
| WEST BENGAL | 25 | -1.8 | 26.8 | 6 | 4.4 | | | 4.4 | 18 | 4 |
| HIMACHAL PRADESH | 25 | -1.8 | 26.8 | 6 | | | 4.4 | | 22.4 | 5 |
| BIHAR | 25 | -7.2 | 32.2 | 7 | 4.4 | | 4.4 | | 23.4 | 5 |
| ORISSA | 25 | -5.4 | 30.4 | 6 | 4.4 | | 4.4 | | 21.6 | 4 |
| ASSAM | 25 | -3.6 | 28.6 | 6 | 4.4 | | 4.4 | | 19.8 | 4 |
| NORTH EAST | 25 | -1.8 | 26.8 | 6 | 4.4 | | 4.4 | | 18 | 4 |
| JAMMU & KASHMIR | 25 | 0 | 25 | 5 | 4.4 | | 4.4 | 4.4 | 11.8 | 2 |

*Source: Emkay research*

2-b) If the **TEC recommendations are accepted** and the existing operators are **exempted from refund of excess spectrum** then the start-up spectrum of 4.4Mhz can be allotted to 2-3 new players over and above Idea cellular, Aircel, Vodafone and RCOM.

| Service area | Spectrum for new entrants | No of new entrants | Idea | Aircel | Vodafone | RCOM | Spectrum for new players | Potential new players |
|---|---|---|---|---|---|---|---|---|
| DELHI | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| MUMBAI | 25 | 5 | 4.4 | 4.4 | | 4.4 | 11.8 | 2 |
| CHENNAI | 25 | 5 | 4.4 | | | 4.4 | 16.2 | 3 |
| KOLKATTA | 25 | 5 | 4.4 | 4.4 | | | 16.2 | 3 |
| KARNATAKA | 25 | 5 | 4.4 | 4.4 | | 4.4 | 11.8 | 2 |
| ANDHRA PRADESH | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| GUJARAT | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| MAHARASHTRA | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| TAMILNADU | 25 | 5 | 4.4 | | | 4.4 | 16.2 | 3 |
| KERALA | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| PUNJAB | 25 | 5 | 4.4 | 4.4 | | 4.4 | 11.8 | 2 |
| HARYANA | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| RAJASTHAN | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| MADHYA PRADESH | 25 | 5 | | 4.4 | 4.4 | | 16.2 | 3 |
| UP (EAST) | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| UP (WEST) | 25 | 5 | | 4.4 | | 4.4 | 16.2 | 3 |
| WEST BENGAL | 25 | 5 | 4.4 | | | 4.4 | 16.2 | 3 |
| HIMACHAL PRADESH | 25 | 5 | | | 4.4 | | 20.6 | 4 |
| BIHAR | 25 | 5 | 4.4 | | 4.4 | | 16.2 | 3 |
| ORISSA | 25 | 5 | 4.4 | | 4.4 | | 16.2 | 3 |
| ASSAM | 25 | 5 | 4.4 | | 4.4 | | 16.2 | 3 |
| NORTH EAST | 25 | 5 | 4.4 | | 4.4 | | 16.2 | 3 |
| JAMMU & KASHMIR | 25 | 5 | 4.4 | | 4.4 | 4.4 | 11.8 | 2 |

*Source: Emkay research*

### What action will the DoT take?

With all round debates and tussles from all over the industry, the final decision from the DoT is only likely to get delayed as it would have to work out the most scientific methodology for spectrum allocation and importantly a balancing one. While DoT is under the process of examining and analyzing various options for spectrum allocation, we understand that an entry by 3-4 new entrants including the existing operators wanting to expand their presence cannot be ruled out.

- If the TRAI recommendations are implemented, it would result in Bharti and Vodafone getting around 2Mhz of spectrum in few circles (refer table 1). It would also lead to a potential entry by 4-6 new entrants across all the circles including the existing operators wanting to expand to newer circles.
- If the TEC recommendations are implemented, it would result in refund of spectrum by almost all the existing GSM operators and a potential entry by 6-8 new entrants in the industry. If the existing players are exempted from refund of spectrum, it could result in a potential entry by ~5 new players in the industry.
- If a minimum of 6.2Mhz of spectrum is allotted for start-up as sought by RCOM, the potential new entrants would reduce to 3-4 players.

We understand from the media reports and the industry sources that the DoT had offered a compromise formula under which the TRAI recommendations would be accepted over the more stringent TEC recommendations, which were however rejected by major GSM operators. In another development, Bharti Airtel and Idea Cellular have expressed their interest in auction of 2G spectrum, but the same has been rejected by the telecom ministry.

While we await fresh developments on the spectrum issues, we believe that the DoT would find a more liberal way than the TRAI recommendations for spectrum allocation, which would balance out the impact among the existing operators. Auctioning of spectrum as an auction cannot be ruled out.

### Impact to companies under coverage

Irrespective of TEC or TRAI recommendation being implemented, it would be **positive for RCOM** as it is at the receiving end and would receive fresh GSM spectrum in the circles not currently present into. The fresh allotment of spectrum to RCOM is definitive but could only be delayed due to the regulatory overhang.

Although Idea Cellular might get impacted due to delay or refund of additional spectrum, the regulatory issues once resolved, would result in allotment of fresh spectrum to Idea Cellular in the newer circles thus enabling the company to become a pan India operator. Overall we view the spectrum issue to be **neutral for Idea Cellular**.

If the **TEC recommendations are implemented, it would be largely negative for Bharti Airtel** as it will not only have to refund excess spectrum but would also not get additional spectrum in the near future in most of the circles. The **TRAI recommendations would also be slightly negative for Bharti Airtel** as it would not get substantial additional spectrum, which could result in higher capex. We also note the fact that Bharti Airtel has doubled the subscriber base over the last 12 months without receipt of any additional spectrum and without impacting its quality of service.

While DoT's offer of implementing TRAI recommendations over TEC has already been rejected by the major GSM operators, we believe that DoT would find a more liberal way than the TRAI recommendations and balance out the impact among major operators. Whatever is the outcome of the long delayed spectrum issue, an increase in the number of players and hence the competition cannot be ruled out.

### Increase in competitive intensity cannot be ruled out

Irrespective of whether the TEC or the TRAI recommendations are accepted, it would lead to an increase in the number of players in the industry and hence further rise in the already intensely competitive mobile telecom market in India. Under any circumstance, an entry by a minimum of 4 new entrants including the existing operators wanting to expand in newer circles cannot be ruled out.

We believe that further increase in competition would not impact the players like Bharti Airtel who have a strong brand, superior execution capability and extensive network coverage. Over the last couple of years, Aircel and Idea Cellular have expanded their footprint in newer circles which although has increased competition but hasn't resulted in market share loss for players like Bharti Airtel.

**Bharti's market share behavior on entry of new competition**

| Circle | | | Market share of Bharti Airtel | | | | Change from the |
|---|---|---|---|---|---|---|---|
| | New player | Service launch | On launch | Mar-06 | Mar-07 | Nov-07 | time of launch |
| West Bengal | Aircel | Oct-05 | 18.7% | 13.6% | 16.0% | 20.8% | 2.0% |
| Assam | Aircel | Oct-05 | 18.1% | 21.7% | 26.5% | 25.5% | 7.4% |
| North East | Aircel | Oct-05 | 5.8% | 10.2% | 23.3% | 22.4% | 16.6% |
| Orissa | Aircel | Oct-05 | 24.2% | 28.8% | 31.1% | 33.8% | 9.6% |
| J&K | Aircel | Dec-05 | 36.7% | 33.0% | 37.5% | 44.9% | 8.2% |
| Bihar | Aircel | Jan-07 | 30.5% | 28.8% | 31.1% | 33.8% | 3.3% |
| HP | Aircel | Jan-07 | 41.0% | 51.4% | 38.8% | 38.3% | -2.7% |
| HP | IDEA | Mar-06 | 51.4% | 51.4% | 38.8% | 38.3% | -13.1% |
| Rajasthan | IDEA | Mar-06 | 26.9% | 26.9% | 23.1% | 27.2% | 0.3% |
| UP (east) | IDEA | Mar-06 | 11.3% | 11.3% | 15.9% | 17.5% | 6.2% |

*Source: TRAI, industry, Emkay research*

### Recommendation

Although the current level of valuations provide an attractive investment opportunity in the sector, we believe that the ongoing tussle over spectrum allocation and the regulatory uncertainty would only result in underperformance of the sector viz. a viz. the broader markets. While the net additions and the earnings visibility continues to remain strong, the stocks would likely under perform the markets till the time the regulatory issues are resolved. However, we continue to maintain our long-term positive view on the sector due to the attractive business model along with robust earnings and cash flow visibility.

We continue to maintain our BUY recommendation on Bharti Airtel (Target Rs1334) and RCOM (Target Rs878) and ACCUMULATE on Idea Cellular (Target Rs153).

**Valuation table**

| Companies | Bharti Airtel | | | | Reliance Communications | | | | Idea Cellular | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | FY07 | FY08E | FY09E | FY10E | FY07 | FY08E | FY09E | FY10E | FY07 | FY08E | FY09E | FY10E |
| **Per share data** | | | | | | | | | | | | |
| EPS | 22.7 | 35.8 | 49.2 | 61.4 | 15.5 | 21.2 | 29.5 | 38.6 | 1.9 | 3.2 | 4.6 | 6.4 |
| CEPS | 35.9 | 54.1 | 73.9 | 91.1 | 27.5 | 37.3 | 50.0 | 62.5 | 4.5 | 7.3 | 10.6 | 13.9 |
| BVPS | 71.5 | 107.3 | 156.6 | 218.0 | 99.7 | 120.4 | 148.4 | 184.0 | 15.2 | 18.4 | 23.0 | 29.4 |
| **Valuations** | | | | | | | | | | | | |
| PER | 40.3 | 25.5 | 18.6 | 14.9 | 45.7 | 33.4 | 24.0 | 18.3 | 67.5 | 40.5 | 27.8 | 20.2 |
| CPER | 25.5 | 16.9 | 12.4 | 10.0 | 25.7 | 19.0 | 14.1 | 11.3 | 28.9 | 17.7 | 12.2 | 9.3 |
| P/BV | 12.8 | 8.5 | 5.8 | 4.2 | 7.1 | 5.9 | 4.8 | 3.8 | 8.5 | 7.0 | 5.6 | 4.4 |
| EV/Sales | 9.6 | 6.4 | 4.7 | 3.9 | 10.1 | 7.2 | 5.4 | 4.4 | 8.3 | 5.4 | 3.7 | 3.0 |
| EV/EBIDTA | 24.0 | 15.3 | 11.2 | 9.2 | 25.6 | 17.3 | 12.8 | 10.4 | 24.9 | 16.1 | 11.0 | 8.4 |

*Source: TRAI, industry, Emkay research*

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