



# **Telecom Regulatory Authority of India**

# The Indian Telecom Services Performance Indicators

October - December, 2014

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# Snapshot

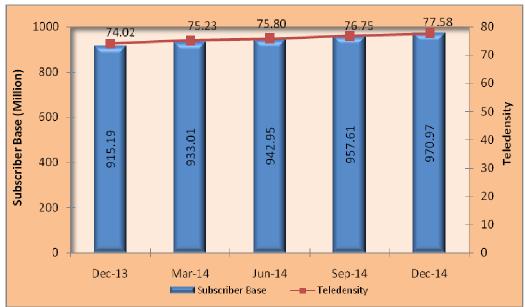
| Total Subscribers   970.97 Million   % change over the previous quarter   1.40%   Urban Subscribers   572.29 Million   Rural Subscribers   398.68 Million   Rural Subscribers   398.68 Million   Market share of Private Operators   89.16%   Market share of PSU Operators   10.84%   Teledensity   77.58   Urban Teledensity   148.06   Rural Teledensity   46.09  | (Data As on 31st December, 2014)         |                |
|--|--|----------------|
| 1.40%   1.40   | Telecom Subscribers (Wireless +Wireline) |                |
| Urban Subscribers   572.29 Million   | Total Subscribers                        | 970.97 Million |
| Rural Subscribers   398.68 Million   | % change over the previous quarter       | 1.40%          |
| Market share of Private Operators         89.16%           Market share of PSU Operators         10.84%           Teledensity         77.58           Urban Teledensity         148.06           Rural Teledensity         46.09           Wireless Subscribers         943.97 Million           % change over the previous quarter         1.48%           Urban Subscribers         550.64 Million           Rural Subscribers         393.34 Million           GSM Subscribers         890.78 Million           CDMA Subscribers         53.19 Million           Market share of Private Operators         91.01%           Market share of PSU Operators         8.99%           Tele-density         75.43           Urban Tele-density         45.47           Wireline Subscribers         27.00 Million           % change over the previous quarter         -1.48%           Urban Subscribers         27.00 Million           % change over the previous quarter         -1.48%           Urban Subscribers         21.66 Million           Market share of Private Operators         5.34 Million           Market share of Private Operators         75.76%           Tele-density         24.24%           Market share of PS   | Urban Subscribers                        | 572.29 Million |
| Market share of PSU Operators   10.84%   77.58   148.06   | Rural Subscribers                        | 398.68 Million |
| Teledensity  | Market share of Private Operators        | 89.16%         |
| Wireless Subscribers  Total Wireless Subscribers  Purban Subscribers  GSM Subscribers  GDMA Subscribers  GSM Subscribers  GSM Subscribers  GSM Subscribers  GSM Subscribers  GSM Subscribers  GSM Subscribers  GEle-density  GSM Subscribers  GEle-density  GSM Subscribers  GRUFB Tele-density  GRUFB Subscribers  GRUFB Subscriber | Market share of PSU Operators            | 10.84%         |
| Wireless Subscribers         46.09           Wireless Subscribers         943.97 Million           % change over the previous quarter         1.48%           Urban Subscribers         550.64 Million           Rural Subscribers         393.34 Million           GSM Subscribers         890.78 Million           CDMA Subscribers         53.19 Million           Market share of Private Operators         91.01%           Market share of PSU Operators         8.99%           Tele-density         75.43           Urban Tele-density         142.46           Rural Tele-density         45.47           Wireline Subscribers         27.00 Million           % change over the previous quarter         -1.48%           Urban Subscribers         21.66 Million           Rural Subscribers         5.34 Million           Market share of Private Operators         75.76%           Market share of PSU Operators         75.76%           Tele-density         2.16           Urban Tele-density         5.60           Rural Tele-density         5.60           Rural Tele-density         5.60           Rural Tele-density         5.60   | Teledensity                              | 77.58          |
| Wireless Subscribers         943.97 Million           % change over the previous quarter         1.48%           Urban Subscribers         550.64 Million           Rural Subscribers         393.34 Million           GSM Subscribers         890.78 Million           CDMA Subscribers         53.19 Million           Market share of Private Operators         91.01%           Market share of PSU Operators         8.99%           Tele-density         75.43           Urban Tele-density         142.46           Rural Tele-density         45.47           Wireline Subscribers         27.00 Million           % change over the previous quarter         -1.48%           Urban Subscribers         21.66 Million           Rural Subscribers         5.34 Million           Market share of Private Operators         24.24%           Market share of PSU Operators         75.76%           Tele-density         2.16           Urban Tele-density         5.60           Rural Tele-density         5.60           Rural Tele-density         5.86,087  | Urban Teledensity                        | 148.06         |
| Total Wireless Subscribers 943.97 Million % change over the previous quarter Urban Subscribers 550.64 Million Rural Subscribers 393.34 Million GSM Subscribers 890.78 Million CDMA Subscribers 53.19 Million Market share of Private Operators 91.01% Market share of PSU Operators 8.99% Tele-density 75.43 Urban Tele-density 142.46 Rural Tele-density 45.47  Wireline Subscribers Total Wireline Subscribers 27.00 Million % change over the previous quarter -1.48% Urban Subscribers 21.66 Million Rural Subscribers 5.34 Million Market share of PSU Operators 5.34 Million Market share of Private Operators 5.34 Million Market share of Private Operators 75.76% Market share of PSU Operators 75.76% Market share of PSU Operators 75.76% Tele-density 2.16 Urban Tele-density 5.60 Rural Tele-density 5.60 Rural Tele-density 5.86,087   | Rural Teledensity                        | 46.09          |
| % change over the previous quarter Urban Subscribers S50.64 Million Rural Subscribers GSM Subscribers B90.78 Million CDMA Subscribers S31.9 Million CDMA Subscribers S3.19 Million Market share of Private Operators Market share of PSU Operators Tele-density Tele-density Total Wireline Subscribers Total Wireline Subscribers Total Wireline Subscribers Urban Subscribers Turban Subscribers Total Subscribers Tot | Wireless Subscribers                     |                |
| Urban Subscribers 550.64 Million Rural Subscribers 393.34 Million GSM Subscribers 890.78 Million CDMA Subscribers 53.19 Million Market share of Private Operators 91.01% Market share of PSU Operators 8.99% Tele-density 75.43 Urban Tele-density 142.46 Rural Tele-density 45.47 Wireline Subscribers Total Wireline Subscribers 27.00 Million % change over the previous quarter -1.48% Urban Subscribers 21.66 Million Rural Subscribers 5.34 Million Rural Subscribers 5.34 Million Market share of Private Operators 24.24% Market share of PSU Operators 75.76% Tele-density 2.16 Urban Tele-density 5.60 Rural Tele-density 5.60 Rural Tele-density 0.62 No. of Village Public Telephones (VPT)  | Total Wireless Subscribers               | 943.97 Million |
| Rural Subscribers 393.34 Million GSM Subscribers 890.78 Million CDMA Subscribers 53.19 Million Market share of Private Operators 91.01% Market share of PSU Operators 8.99% Tele-density 75.43 Urban Tele-density 142.46 Rural Tele-density 45.47 Wireline Subscribers Total Wireline Subscribers 27.00 Million % change over the previous quarter -1.48% Urban Subscribers 21.66 Million Rural Subscribers 5.34 Million Market share of Private Operators 5.34 Million Market share of PSU Operators 75.76% Market share of PSU Operators 75.76% Tele-density 2.16 Urban Tele-density 5.60 Rural Tele-density 5.86,087  | % change over the previous quarter       | 1.48%          |
| GSM Subscribers 890.78 Million CDMA Subscribers 53.19 Million Market share of Private Operators 91.01% Market share of PSU Operators 8.99% Tele-density 75.43 Urban Tele-density 142.46 Rural Tele-density 45.47 Wireline Subscribers Total Wireline Subscribers 27.00 Million % change over the previous quarter -1.48% Urban Subscribers 21.66 Million Rural Subscribers 5.34 Million Rural Subscribers 5.34 Million Market share of Private Operators 24.24% Market share of PSU Operators 75.76% Tele-density 2.16 Urban Tele-density 5.60 Rural Tele-density 5.60 Rural Tele-density 0.62 No. of Village Public Telephones (VPT) 5,86,087   | Urban Subscribers                        | 550.64 Million |
| CDMA Subscribers 53.19 Million  Market share of Private Operators 91.01%  Market share of PSU Operators 8.99%  Tele-density 75.43  Urban Tele-density 142.46  Rural Tele-density 45.47  Wireline Subscribers  Total Wireline Subscribers 27.00 Million % change over the previous quarter -1.48%  Urban Subscribers 21.66 Million Rural Subscribers 5.34 Million  Rural Subscribers 75.76%  Market share of PSU Operators 75.76%  Market share of PSU Operators 75.76%  Tele-density 2.16  Urban Tele-density 5.60  Rural Tele-density 5.60  Rural Tele-density 5.86,087   | Rural Subscribers                        | 393.34 Million |
| Market share of Private Operators 8.99%  Market share of PSU Operators 8.99%  Tele-density 75.43  Urban Tele-density 142.46  Rural Tele-density 45.47  Wireline Subscribers  Total Wireline Subscribers 27.00 Million % change over the previous quarter -1.48%  Urban Subscribers 21.66 Million Rural Subscribers 5.34 Million Market share of Private Operators 75.76%  Market share of PSU Operators 75.76%  Tele-density 2.16  Urban Tele-density 5.60  Rural Tele-density 5.60  Rural Tele-density 0.62  No. of Village Public Telephones (VPT) 5,86,087  | GSM Subscribers                          | 890.78 Million |
| Market share of PSU Operators Tele-density Tele-density Tele-density Tele-density Tele-density Total Tele-density Total Wireline Subscribers Total Wireline Subscribers Total Wireline  | CDMA Subscribers                         | 53.19 Million  |
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| Rural Tele-density 45.47  Wireline Subscribers  Total Wireline Subscribers 27.00 Million % change over the previous quarter -1.48%  Urban Subscribers 21.66 Million Rural Subscribers 5.34 Million Rural Subscribers 24.24%  Market share of Private Operators 24.24%  Market share of PSU Operators 75.76% Tele-density 2.16 Urban Tele-density 5.60  Rural Tele-density 5.60  Rural Tele-density 0.62  No. of Village Public Telephones (VPT) 5,86,087   | Tele-density                             | 75.43          |
| Wireline Subscribers  Total Wireline Subscribers  27.00 Million % change over the previous quarter  -1.48%  Urban Subscribers  21.66 Million Rural Subscribers  5.34 Million  Market share of Private Operators  Market share of PSU Operators  Tele-density  2.16  Urban Tele-density  5.60  Rural Tele-density  0.62  No. of Village Public Telephones (VPT)   | Urban Tele-density                       | 142.46         |
| Total Wireline Subscribers 27.00 Million % change over the previous quarter -1.48%  Urban Subscribers 21.66 Million Rural Subscribers 5.34 Million Market share of Private Operators 24.24%  Market share of PSU Operators 75.76%  Tele-density 2.16  Urban Tele-density 5.60  Rural Tele-density 0.62  No. of Village Public Telephones (VPT) 5,86,087  | Rural Tele-density                       | 45.47          |
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| Urban Subscribers 21.66 Million Rural Subscribers 5.34 Million Market share of Private Operators 24.24% Market share of PSU Operators 75.76% Tele-density 2.16 Urban Tele-density 5.60 Rural Tele-density 0.62 No. of Village Public Telephones (VPT) 5,86,087   | Total Wireline Subscribers               | 27.00 Million  |
| Rural Subscribers 5.34 Million  Market share of Private Operators 24.24%  Market share of PSU Operators 75.76%  Tele-density 2.16  Urban Tele-density 5.60  Rural Tele-density 0.62  No. of Village Public Telephones (VPT) 5,86,087   | % change over the previous quarter       | -1.48%         |
| Market share of Private Operators 24.24%  Market share of PSU Operators 75.76%  Tele-density 2.16  Urban Tele-density 5.60  Rural Tele-density 0.62  No. of Village Public Telephones (VPT) 5,86,087   | Urban Subscribers                        | 21.66 Million  |
| Market share of PSU Operators 75.76% Tele-density 2.16 Urban Tele-density 5.60 Rural Tele-density 0.62 No. of Village Public Telephones (VPT) 5,86,087   | Rural Subscribers                        | 5.34 Million   |
| Tele-density 2.16 Urban Tele-density 5.60 Rural Tele-density 0.62 No. of Village Public Telephones (VPT) 5,86,087  | Market share of Private Operators        | 24.24%         |
| Urban Tele-density 5.60  Rural Tele-density 0.62  No. of Village Public Telephones (VPT) 5,86,087  | Market share of PSU Operators            | 75.76%         |
| Rural Tele-density 0.62  No. of Village Public Telephones (VPT) 5,86,087   | Tele-density                             | 2.16           |
| No. of Village Public Telephones (VPT) 5,86,087  | Urban Tele-density                       | 5.60           |
|  | Rural Tele-density                       | 0.62           |
| No. of Public Call Office (PCO) 7,79,241   | No. of Village Public Telephones (VPT)   | 5,86,087       |
|  | No. of Public Call Office (PCO)          | 7,79,241       |

| Internet/Broadband Subscribers   |                |
|--|----------------|
| Total Internet Subscribers   | 267.39 Million |
| Narrowband subscribers   | 181.65 Million |
| Broadband subscribers  | 85.74 Million  |
| Wired Internet Subscribers   | 18.86 Million  |
| Wireless Internet Subscribers  | 248.53 Million |
| Urban Internet Subscribers   | 175.21 Million |
| Rural Internet Subscribers   | 92.18 Million  |
| Total Internet Subscribers per 100 population                                | 21.37          |
| Urban Internet Subscribers per 100 population                                | 45.33          |
| Rural Internet Subscribers per 100 population                                | 10.66          |
| Broadcasting & Cable Services  | 10.00          |
| No. of private satellite TV channels registered with Ministry                |                |
| of I&B   | 826            |
| Number of private FM Radio Stations  | 243            |
| Registered DTH Subscribers   | 73.06 Million  |
| Active DTH Subscribers   | 40.54 Million  |
| Telecom Financial Data (QE Dec-14)   |                |
| Gross Revenue(GR) during the quarter   | ₹ 63955 Crore  |
| % change in GR over the previous quarter                                     | 2.41%          |
| Adjusted Gross Revenue (AGR) during the quarter                              | ₹ 43591 Crore  |
| % change in AGR over the previous quarter                                    | 0.84%          |
| Share of Public sector undertaking's in Access AGR                           | 9.8%           |
| Monthly Average Revenue Per User (ARPU) for Access Services                  | ₹119           |
| Revenue & Usage Parameters (QE Dec-14)                                       |                |
| Monthly ARPU GSM Full Mobility Service                                       | ₹118           |
| Monthly ARPU CDMA Full Mobility Service                                      | ₹ 109          |
| Minutes of Usage (MOU) per subscriber per month GSM Full<br>Mobility Service | 376 Minutes    |
| Minutes of Usage (MOU) per subscriber per month CDMA Full Mobility Service   | 262 Minutes    |
| Total Outgoing Minutes of Usage for Internet Telephony                       | 245 Million    |
| Data Usage of Mobile Users (for the QE Dec-14)                               |                |
| Data Usage per subscriber per month - GSM                                    | 79.73 MB       |
| Data Usage per subscriber per month - CDMA                                   | 251.93 MB      |
| Data Usage per subscriber per month – Total(GSM+CDMA)                        | 89.43 MB       |

### **Executive Summary**

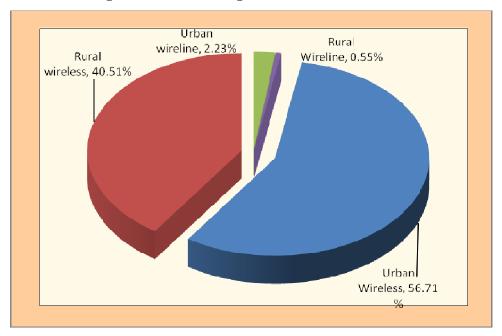
1. The number of telephone subscribers in India increased from 957.61 million at the end of Sep-14 to 970.97 million at the end of Dec-14, registering a growth of 1.40% over the previous quarter. This reflects year-on-year (Y-O-Y) growth of 6.09% over the same quarter of last year. The overall Tele-density in India increased from 76.75 as on 30th Sep-14 to 77.58 as on 31st Dec-14.

Trends in Telephone subscribers and Teledensity in India



- 2. Subscription in Urban Areas increased from 569.56 million at the end of Sep-14 to 572.29 million at the end of Dec-14, however Urban Tele-density slightly declined from 148.07 to 148.06. Rural subscription increased from 388.05 million to 398.68 million, and Rural Tele-density also increased from 44.96 to 46.09.
- 3. Out of total subscription, the share of the Rural areas increased from 40.52% at the end of Sep-14 to 41.06% at the end of Dec-14.

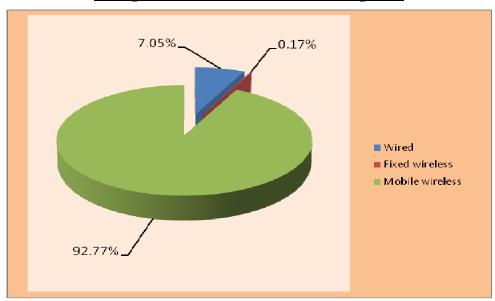
#### **Composition of Telephone Subscribers**



- 4. With a net addition of 13.77 million subscribers during the quarter, total wireless(GSM+CDMA) subscriber base increased from 930.20 million at the end of Sep-14 to 943.97 million at the end of Dec-14, registering a growth rate of 1.48% over the previous quarter. The year-on-year (Y-O-Y) growth rate of wireless subscribers for Dec-14 is 6.51%.
- 5. Wireless Tele-density increased from 74.55 at the end of Sep-14 to 75.43 at the end of Dec-14.
- 6. Wireline subscriber base further declined from 27.41 million at the end of Sep-14 to 27.00 million at the end of Dec-14, registering a decline of 1.48%. The year-on-year (Y-O-Y) decline rate of wireline subscribers for Dec-14 is 6.56%.
- 7. Wireline Tele-density declined from 2.20 at the end of Sep-14 to 2.16 at the end of Dec-14.

8. Total number of Internet subscribers has increased from 254.40 million at the end of Sep-14 to 267.39 million at the end of Dec-14, there has been a quarterly growth rate of 5.11%. Out of which Wired Internet subscribers are 18.86 million and Wireless Internet subscribers are 248.53 million.



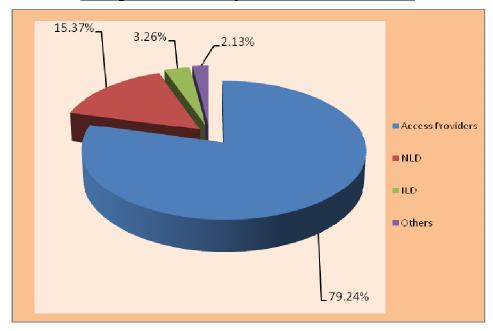


- 9. Number of Broadband Internet subscribers increased from 75.73 million at the end of Sep-14 to 85.74 million at the end of Dec-14 with quarter growth rate of 13.21%.
- 10. The number of Narrowband Internet subscribers has increased from 178.67 million at the end of Sep-14 to 181.65 million at the end of Dec-14 with quarterly growth rate of 1.67%.
- 11. Monthly Average Revenue Per User (ARPU) for GSM service increased by 2.35%, from ₹116 in QE Sep-14 to ₹118 in QE Dec-14, whereas Y-O-Y increased by 5.80%.

- 12. Prepaid ARPU for GSM service per month increased from ₹101 in QE Sep-14 to ₹103 in QE Dec-14, and Postpaid ARPU per month increased from ₹459 in QE Sep-14 to ₹466 in QE Dec-14.
- 13. On an all India average, the overall MOU per subscriber per month for GSM service is 376 for QE Dec-14 remained almost at the same level as in the previous quarter.
- 14. Prepaid MOU per subscriber for GSM service increased from 351 in QE Sep-14 to 352 in QE Dec-14, whereas postpaid MOUs decreased from 954 in QE Sep-14 to 933 in QE Dec-14.
- 15. Monthly ARPU for CDMA full mobility service decreased by 1.49%, from ₹110 in QE Sep-14 to ₹109 in QE Dec-14. ARPU for CDMA has increased by 4.8% on Y-O-Y basis in this quarter.
- 16. The total MOU for CDMA per subscriber per month decreased by 1.91%, from 267 in QE Sep-14 to 262 QE Dec-14. The outgoing MOUs decreased from 141 in QE Sep-14 to 139 in QE Dec-14 and incoming MOUs also decreased from 126 in QE Sep-14 to 123 in QE Dec-14.
- 17. Gross Revenue (GR) and Adjusted Gross Revenue (AGR) of Telecom Service Sector for the QE Dec-14 has been ₹63955 Crore and ₹43591 Crore respectively. GR and AGR increased by 2.41% and 0.84% respectively in this quarter as compared to previous quarter.
- 18. The year-on-year (Y-O-Y) growth in GR and AGR over the same quarter in last year has been 9.54% and 10.15% respectively.

- 19. Pass-through charges accounted 31.84% of the GR for the quarter ending Dec-14. The quarterly and the year-on-year (Y-O-Y) growth rates of pass-through charges for QE Dec-14 are 5.97% and 8.26% respectively.
- 20. The License Fee increased from 3459 Crore for the QE Sep-14 to 3489 Crore for the QE Dec-14. The quarterly and the year-on-year (Y-O-Y) growth rates of license fee are 0.86% and 10.14% respectively in this quarter.
- 21. Access services contributed 79.24% of the total Adjusted Gross Revenue of telecom services. In Access services, Gross Revenue (GR), Adjusted Gross Revenue(AGR), License Fee, Spectrum Usage Charges(SUC) and Pass Through Charges increased by 2.41%, 0.84%, 0.86%, 4.31% and 5.97% respectively in QE Dec-14.
- 22. Monthly Average Revenue per User (ARPU) for Access Services based on AGR increased from ₹118.20 in QE Sep-14 to ₹119.48 in QE Dec-14.

#### **Composition of Adjusted Gross Revenue**



23. The performance of 2G wireless service providers in terms of QoS during the quarter vis-à-vis that in previous quarter is depicted as under:

| Parameters showing Improvement in QoS  | Parameters showing deterioration in QoS   |  |  |
|--|---|--|--|
| Call Set-up Success Rate (within licensee's own network)   | BTSs Accumulated downtime<br>(not available for service)  |  |  |
| <ul><li>SDCCH/ Paging Channel Congestion</li><li>TCH Congestion</li></ul>  | • Connection with good voice quality  |  |  |
| <ul> <li>Call Drop Rate</li> <li>Worst affected cells having more than 3% TCH drop (call drop) rate</li> </ul>   | <ul> <li>Point of Interconnection (POI)         Congestion (No. of POIs not meeting benchmark) (averaged over a period of quarter)     </li> </ul>  |  |  |
| • Resolution of billing/ charging/ validity complaints (100% within 6 weeks)   | Metering and billing credibility     Postpaid   |  |  |
| <ul> <li>Period of applying credit/ waiver/<br/>adjustment to customer's account<br/>from the date of resolution of<br/>complaints</li> <li>Accessibility of call centre/ customer<br/>care</li> </ul> | <ul> <li>Metering and billing credibility - Prepaid</li> <li>Resolution of billing/charging/ credit &amp; validity complaints (98% within 4 weeks)</li> <li>%age of calls answered by the operators (voice to voice)</li> </ul> |  |  |
| <ul> <li>%age requests for Termination/<br/>Closure of service complied within 7<br/>days</li> <li>Time taken for refund of deposits after<br/>closures.</li> </ul>                                    | within 90 sec   |  |  |

24. The performance of 3G wireless service providers in terms of QoS during the quarter vis-à-vis that in previous quarter is depicted as under:

| Parameters showing<br>Improvement in QoS   | Parameters showing deterioration in QoS   |
|--|---|
| <ul> <li>Call Set-up Success Rate (within licensee's own network)</li> <li>Point of Interconnection (POI)</li> </ul> | <ul> <li>Node-B's Accumulated downtime (not available for service) (%age)</li> <li>SDCCH/ Paging Channel and RRC Congestion (%age)</li> </ul> |
| Congestion   | • TCH and Circuit Switched RAB Congestion (%age)  |

25. The performance of wireline service providers in terms of QoS during the quarter vis-à-vis that in previous quarter is depicted as under:

| Parameters showing Improvement in QoS   | Parameters showing deterioration in QoS   |
|---|---|
| • Fault incidences per 100 subscriber/ month  | • % Fault repaired by 5 days (for urban areas)  |
| % Fault repaired by next working day for urban areas  | Point of Interconnection (POI)     Congestion (No. of POIs not meeting benchmark)                         |
| <ul> <li>Mean Time to Repair (MTTR)</li> <li>Metering &amp; billing credibility -<br/>Postpaid</li> </ul> | Accessibility of call centre/<br>customer care  |
| Resolution of billing/charging/<br>credit & validity complaints   | <ul><li>Termination/closure of service</li><li>Time taken for refund of deposits after closures</li></ul> |

26. A total of 826 private satellite TV channels have been permitted by the Ministry of Information and Broadcasting (MIB) as on 31st December 2014. There are a total of 245 Pay channels as reported by broadcasters as on 31.01.2015 and these details have been uploaded on TRAI's website along with the names of the respective broadcasters.

- 27. In Non-CAS areas, the maximum number of TV channels being carried in a digital form by any of the reporting MSOs is 398, while in conventional analogue form, the maximum number of channels being carried by any of the reporting MSOs is 100.
- 28. Apart from All India Radio, Prasar Bharati a public broadcaster, there are 243 operational private FM Radio stations as on 31st December, 2014. The information therein is as received from MIB.
- 29. At present, apart from free DTH service of Doordarshan of Prasar Bharati a public broadcaster, there are 6 private DTH Operators. All these private DTH Operators are offering pay DTH services. As per the information submitted by the DTH operator through quarterly PMR for DTH services, total number of registered subscribers and active subscribers being served by these six private DTH operators, as reported to TRAI, are 73.06 million & 40.54, million respectively as on 31st December 2014.

# Trends at a Glance

# A. Access Service (Wireline + Wireless)

|                                 | QE Dec<br>2013 | QE Mar<br>2014 | QE Jun<br>2014 | QE Sep<br>2014 | QE Dec<br>2014 | %age<br>change<br>over Dec-<br>2013 | %age<br>change<br>over Mar-<br>2014 | %age<br>change<br>over Jun-<br>2014 | %age<br>change<br>over Sep-<br>2014 |  |
|---------------------------------|----------------|----------------|----------------|----------------|----------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--|
|                                 |                |                |                |                |                | (12<br>months)                      | (9<br>months)                       | (6<br>months)                       | (3<br>months)                       |  |
| 1) Subscriber Base (in million) |                |                |                |                |                |                                     |                                     |                                     |                                     |  |
| Wireline                        | 28.89          | 28.50          | 28.03          | 27.41          | 27.00          | -6.56%                              | -5.26%                              | -3.66%                              | -1.48%                              |  |
| Wireless                        | 886.30         | 904.51         | 914.92         | 930.20         | 943.97         | 6.51%                               | 4.36%                               | 3.17%                               | 1.48%                               |  |
| Total                           | 915.19         | 933.01         | 942.95         | 957.61         | 970.97         | 6.09%                               | 4.07%                               | 2.97%                               | 1.40%                               |  |
| Rural                           | 365.79         | 377.73         | 383.18         | 388.05         | 398.68         | 8.99%                               | 5.55%                               | 4.05%                               | 2.74%                               |  |
| Urban                           | 549.40         | 555.28         | 559.77         | 569.56         | 572.29         | 4.17%                               | 3.06%                               | 2.24%                               | 0.48%                               |  |
| 2) Teledensi                    | ty             |                |                |                |                |                                     |                                     |                                     |                                     |  |
| Wireline                        | 2.34           | 2.30           | 2.25           | 2.20           | 2.16           | -7.69%                              | -6.07%                              | -4.24%                              | -1.78%                              |  |
| Wireless                        | 71.69          | 72.94          | 73.55          | 74.55          | 75.43          | 5.22%                               | 3.42%                               | 2.55%                               | 1.17%                               |  |
| Total                           | 74.02          | 75.23          | 75.80          | 76.75          | 77.58          | 4.81%                               | 3.13%                               | 2.35%                               | 1.09%                               |  |
| Rural                           | 42.67          | 43.96          | 44.50          | 44.96          | 46.09          | 8.02%                               | 4.85%                               | 3.59%                               | 2.51%                               |  |
| Urban                           | 144.95         | 145.78         | 146.24         | 148.07         | 148.06         | 2.15%                               | 1.57%                               | 1.25%                               | -0.01%                              |  |
| 3) Service Pr                   | ovider wise    | Subscrib       | ers Base       | (in Million    | )              |                                     |                                     |                                     |                                     |  |
| Bharti                          | 201.76         | 208.75         | 212.60         | 214.92         | 220.60         | 9.34%                               | 5.68%                               | 3.76%                               | 2.64%                               |  |
| Vodafone                        | 160.46         | 166.62         | 169.96         | 173.92         | 178.75         | 11.40%                              | 7.28%                               | 5.17%                               | 2.78%                               |  |
| Idea                            | 128.69         | 135.79         | 139.01         | 143.56         | 150.54         | 16.98%                              | 10.86%                              | 8.29%                               | 4.86%                               |  |
| Reliance                        | 118.48         | 112.13         | 110.06         | 111.32         | 107.48         | -9.29%                              | -4.15%                              | -2.35%                              | -3.44%                              |  |
| BSNL                            | 115.23         | 113.14         | 107.50         | 104.09         | 98.32          | -14.68%                             | -13.10%                             | -8.54%                              | -5.54%                              |  |
| Aircel                          | 66.91          | 70.15          | 73.07          | 75.85          | 78.67          | 17.58%                              | 12.15%                              | 7.67%                               | 3.72%                               |  |
| Tata                            | 64.78          | 64.55          | 64.44          | 65.84          | 67.78          | 4.64%                               | 5.01%                               | 5.19%                               | 2.95%                               |  |
| Telewings                       | 32.78          | 35.61          | 39.31          | 41.82          | 43.63          | 33.10%                              | 22.54%                              | 10.98%                              | 4.34%                               |  |
| Sistema                         | 9.86           | 9.09           | 9.21           | 9.19           | 9.04           | -8.39%                              | -0.63%                              | -1.89%                              | -1.64%                              |  |
| MTNL                            | 7.13           | 6.91           | 6.90           | 6.93           | 6.97           | -2.23%                              | 0.84%                               | 1.12%                               | 0.64%                               |  |
| Videocon                        | 3.97           | 4.99           | 5.55           | 5.94           | 6.45           | 62.55%                              | 29.38%                              | 16.26%                              | 8.59%                               |  |
| Quadrant                        | 2.16           | 2.39           | 2.50           | 2.66           | 2.74           | 26.44%                              | 14.45%                              | 9.57%                               | 2.94%                               |  |
| Loop                            | 2.98           | 2.90           | 2.84           | 1.58           | -              | -                                   | -                                   | -                                   | -                                   |  |
| Total                           | 915.19         | 933.01         | 942.95         | 957.61         | 970.97         | 6.09%                               | 4.07%                               | 2.97%                               | 1.40%                               |  |

## **B.** Internet Services

|  | QE Dec<br>2013 | QE Mar<br>2014 | QE Jun<br>2014 | QE Sep<br>2014 | QE Dec<br>2014 | %age change over Dec- 2013 (12 months) | %age change over Mar- 2014 (9 months) | %age change over Jun- 2014 (6 months) | %age change over Sep- 2014 (3 months) |
|--|----------------|----------------|----------------|----------------|----------------|--|---------------------------------------|---------------------------------------|---------------------------------------|
| 1) Subscriber's E  | Base (in n     | nillion)       |                |                |                |  |                                       |                                       |                                       |
| A. Wired<br>Internet<br>Subscribers                                      | 18.33          | 18.50          | 18.55          | 18.70          | 18.86          | 2.90%                                  | 1.98%                                 | 1.71%                                 | 0.89%                                 |
| B. Wireless Internet Subscribers   | 220.38         | 233.09         | 240.60         | 235.70         | 248.53         | 12.77%                                 | 6.62%                                 | 3.30%                                 | 5.44%                                 |
| i. Mobile Wireless<br>(Mobile & Dongle)                                  | 219.92         | 232.66         | 240.14         | 235.24         | 248.06         | 12.80%                                 | 6.62%                                 | 3.30%                                 | 5.45%                                 |
| ii. Fixed Wireless<br>(Wi-Fi, Wi-Max,<br>Point-to-Point<br>Radio & VSAT) | 0.46           | 0.44           | 0.46           | 0.46           | 0.46           | 0.73%                                  | 5.68%                                 | 0.41%                                 | 1.02%                                 |
| Total Internet<br>Subscribers  | 238.71         | 251.59         | 259.14         | 254.40         | 267.39         | 12.01%                                 | 6.28%                                 | 3.18%                                 | 5.11%                                 |
| 2) No. of Internet<br>Subs per 100<br>Population                         | 19.31          | 20.29          | 20.83          | 20.39          | 21.37          | 10.66%                                 | 5.32%                                 | 2.56%                                 | 4.79%                                 |

# C. Usage and Revenue for Full Mobility Services

| 1. Traffic (MOU) (minutes of use/subscriber/month) |                          |        |        |        |        |        |        |        |        |
|--|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| i) GSM   | 379                      | 389    | 390    | 376    | 376    | -0.76% | -3.14% | -3.54% | 0.08%  |
| ii) CDMA   | 272                      | 272    | 283    | 267    | 262    | -3.54% | -3.54% | -7.39% | -1.91% |
| 2) ARPU (Rs./su                                    | 2) ARPU (Rs./sub/ month) |        |        |        |        |        |        |        |        |
| i) GSM   | 111.94                   | 113.44 | 118.94 | 115.72 | 118.44 | 5.80%  | 4.40%  | -0.42% | 2.35%  |
| ii) CDMA   | 103.60                   | 104.98 | 111.51 | 110.25 | 108.61 | 4.83%  | 3.46%  | -2.60% | -1.49% |

## D. Telecom Financial Data

|  | QE Dec<br>2013 | QE Mar<br>2014 | QE Jun<br>2014 | QE Sep<br>2014 | QE Dec<br>2014 | %age change over Dec- 2013 (12 months) | %age change over Mar- 2014 (9 months) | %age change over Jun- 2014 (6 months) | %age change over Sep- 2014 (3 months) |
|--|----------------|----------------|----------------|----------------|----------------|--|---------------------------------------|---------------------------------------|---------------------------------------|
| 1. Telecom Sect                                  | or             |                |                |                |                |  |                                       |                                       |                                       |
| i) Gross Revenue<br>(Rs. in Crores)              | 58385.39       | 60716.21       | 62919.19       | 62446.66       | 63954.67       | 9.54%                                  | 5.33%                                 | 1.65%                                 | 2.41%                                 |
| ii) Adjusted Gross<br>Revenue (Rs. in<br>Crores) | 39574.99       | 41016.13       | 43851.85       | 43229.38       | 43590.57       | 10.15%                                 | 6.28%                                 | -0.60%                                | 0.84%                                 |
| 2. Access Servic                                 | es             |                |                |                |                |  |                                       |                                       |                                       |
| Adjusted Gross<br>Revenue (Rs. in<br>Crores)     | 31406.54       | 31922.39       | 34416.53       | 33669.47       | 34541.96       | 9.98%                                  | 8.21%                                 | 0.36%                                 | 2.59%                                 |
| ARPU per month (AGR/ Average subscribers/3)      | 115.70         | 115.28         | 122.39         | 118.20         | 119.48         | 3.27%                                  | 3.64%                                 | -2.38%                                | 1.08%                                 |

#### Introduction

This Report presents the Key Parameters and growth trends for the Telecom Services in India for the quarter ending December, 2014. It provides a broad perspective on the Telecom Services to serve as a reference document for various stakeholders, research agencies and analysts. Chapter-1 depicts the growth pattern, in terms of Subscriber base and Tele-density of Wireline, Wireless, Internet and Value Added Services(VAS). Chapter-2 covers the key revenue and usage parameters. Chapter-3 gives the financial and accounting data. Chapter-4 covers performance of various telecom service providers in terms of QoS. The information relating to Cable TV, DTH & Radio Broadcast services is provided in Chapter-5.

2. The Report has been prepared based on the information furnished by the Service Providers. It is also available on TRAI's website (www.trai.gov.in). Any suggestion pertaining to this report may please be addressed to Advisor(F&EA-I), TRAI on Tel. +91-11-23230752, Fax. +91-11-23236650 and e-mail: vinod.kotwal@nic.in.

# Chapter 1: Subscription Data

<sup>•</sup> In this report, Tele-density is based on the population projections from census data published by the Office of Registrar General & Census Commissioner of India.

## Section A: Access Service - An Overview

1.1 The number of telephone subscribers in India increased from 957.61 million at the end of Sep-14 to 970.97 million at the end of Dec-14, registering a growth of 1.40% over the previous quarter. This reflects year-on-year (Y-O-Y) growth of 6.09% over the same quarter of last year. The overall Tele-density in India increased to 77.58 at the end of Dec-14 from 76.75 at the end of the previous quarter.

75.80 1000 75.23 76.75 80 74.02 70 800 Subscriber Base (Million) 60 50 600 970.97 942.95 933.01 40 400 30 20 200 10 0 Dec-13 Mar-14 Jun-14 Sep-14 Dec-14 Subscriber Base —■— Teledensity

Chart 1.1: Trends in Telephone Subscribers and Tele-density in India

Table 1.1: Subscriber Base & Tele-density - Rural & Urban

| Quarter | Subscriber Ba | Tele-density |       |        |
|---------|---------------|--------------|-------|--------|
| ending  | Rural         | Urban        | Rural | Urban  |
| Dec-13  | 365.79        | 549.40       | 42.67 | 144.95 |
| Mar-14  | 377.73        | 555.28       | 43.96 | 145.78 |
| Jun-14  | 383.18        | 559.77       | 44.50 | 146.24 |
| Sep-14  | 388.05        | 569.56       | 44.96 | 148.07 |
| Dec-14  | 398.68        | 572.29       | 46.09 | 148.06 |

- 1.2 Subscription in Urban Areas increased from 569.56 million at the end of Sep-14 to 572.29 million at the end of Dec-14, however the Urban Tele-density slightly declined from 148.07 to 148.06 during the quarter.
- 1.3 Rural subscription increased from 388.05 million to 398.68 million and the Rural Tele-density also increased from 44.96 to 46.09 during the quarter.
- 1.4 The year-on-year (Y-O-Y) growth rate of Rural and Urban Teledensity from Dec-13 to Dec-14 is 8.02% and 2.15% respectively.

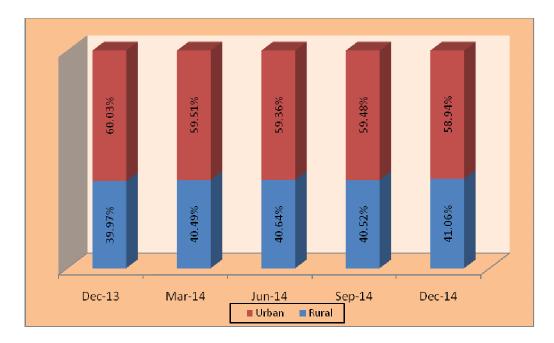


Chart 1.2: Market Share - Rural & Urban

1.5 Share of rural areas in total subscription has increased from 40.52% at the end of Sep-14 to 41.06% at the end of Dec-14. The year-on-year (Y-O-Y) growth of the market share in the rural areas for Dec-14 is 2.73%.

Chart 1.3: Composition of Access subscription - Wireline & Wireless

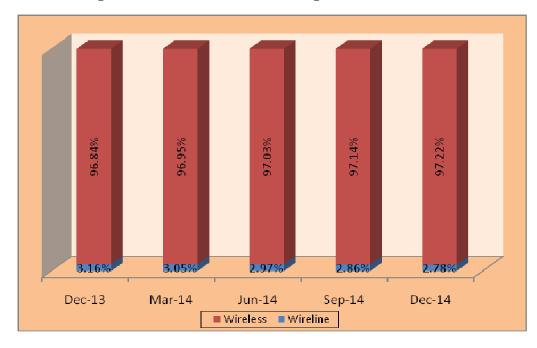


Chart 1.4: Composition of Telephone Subscribers at the end of the quarter

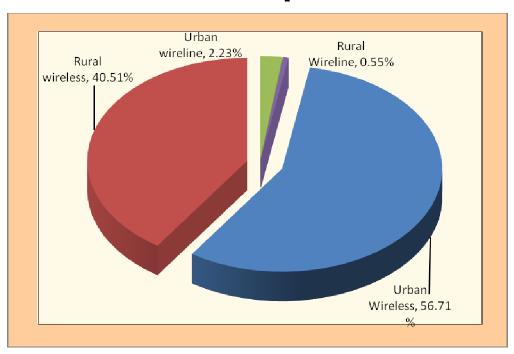


Table 1.2: Service Area wise Access (Wireless+Wireline) Subscriber base

| Service Area         | Subscribers (million) |        |                  |                      |  |  |  |  |
|----------------------|-----------------------|--------|------------------|----------------------|--|--|--|--|
|                      | Sep-14                | Dec-14 | Net<br>Additions | Rate of<br>Growth(%) |  |  |  |  |
| Andhra Pradesh       | 70.82                 | 72.47  | 1.65             | 2.34                 |  |  |  |  |
| Assam                | 16.09                 | 16.61  | 0.52             | 3.26                 |  |  |  |  |
| Bihar                | 64.46                 | 65.49  | 1.03             | 1.60                 |  |  |  |  |
| Delhi                | 47.45                 | 48.48  | 1.03             | 2.17                 |  |  |  |  |
| Gujarat              | 58.33                 | 58.36  | 0.04             | 0.07                 |  |  |  |  |
| Haryana              | 21.61                 | 22.18  | 0.57             | 2.62                 |  |  |  |  |
| Himachal Pradesh     | 7.68                  | 7.85   | 0.17             | 2.25                 |  |  |  |  |
| Jammu & Kashmir      | 8.56                  | 9.04   | 0.48             | 5.58                 |  |  |  |  |
| Karnataka            | 57.98                 | 59.45  | 1.46             | 2.52                 |  |  |  |  |
| Kerala               | 34.03                 | 33.82  | -0.21            | -0.62                |  |  |  |  |
| Madhya Pradesh       | 58.01                 | 59.98  | 1.97             | 3.40                 |  |  |  |  |
| Maharashtra          | 77.00                 | 77.02  | 0.02             | 0.03                 |  |  |  |  |
| Mumbai               | 33.61                 | 33.09  | -0.52            | -1.55                |  |  |  |  |
| North East           | 9.89                  | 10.39  | 0.51             | 5.12                 |  |  |  |  |
| Orissa               | 26.63                 | 27.45  | 0.82             | 3.09                 |  |  |  |  |
| Punjab               | 31.48                 | 32.07  | 0.59             | 1.87                 |  |  |  |  |
| Rajasthan            | 54.51                 | 53.98  | -0.53            | -0.97                |  |  |  |  |
| T.N. (incl. Chennai) | 80.84                 | 82.56  | 1.71             | 2.12                 |  |  |  |  |
| U.P.(E)              | 79.82                 | 80.66  | 0.84             | 1.05                 |  |  |  |  |
| U.P.(W)              | 50.12                 | 51.05  | 0.93             | 1.85                 |  |  |  |  |
| Kolkata              | 23.02                 | 22.98  | -0.04            | -0.16                |  |  |  |  |
| West Bengal          | 45.66                 | 45.97  | 0.31             | 0.67                 |  |  |  |  |
| All India            | 957.61                | 970.97 | 13.36            | 1.40                 |  |  |  |  |

1.6 During the quarter, J&K Circle has recorded the highest growth rate of 5.58% followed by North East (5.12%). Kerala, Mumbai, Rajasthan and Kolkata Circles recorded decline in subscriber base during the quarter ending Dec-14.

Table 1.3: Service Area wise Rural-Urban Subscribers - Dec-14

| Service Area         | Subscribers (million) |        |        |                    |  |  |
|----------------------|-----------------------|--------|--------|--------------------|--|--|
|                      | Total                 | Rural  | Urban  | % of Rural<br>Subs |  |  |
| Andhra Pradesh       | 72.47                 | 30.47  | 42.01  | 42.04              |  |  |
| Assam                | 16.61                 | 10.08  | 6.53   | 60.68              |  |  |
| Bihar                | 65.49                 | 35.61  | 29.89  | 54.37              |  |  |
| Delhi                | 48.48                 | 2.33   | 46.14  | 4.81               |  |  |
| Gujarat              | 58.36                 | 21.41  | 36.95  | 36.69              |  |  |
| Haryana              | 22.18                 | 10.22  | 11.96  | 46.07              |  |  |
| Himachal Pradesh     | 7.85                  | 5.11   | 2.75   | 64.99              |  |  |
| Jammu & Kashmir      | 9.04                  | 4.59   | 4.45   | 50.81              |  |  |
| Karnataka            | 59.45                 | 17.96  | 41.48  | 30.21              |  |  |
| Kerala               | 33.82                 | 17.72  | 16.10  | 52.40              |  |  |
| Madhya Pradesh       | 59.98                 | 25.83  | 34.15  | 43.07              |  |  |
| Maharashtra          | 77.02                 | 36.97  | 40.06  | 47.99              |  |  |
| Mumbai               | 33.09                 | 0.53   | 32.56  | 1.60               |  |  |
| North East           | 10.39                 | 5.08   | 5.31   | 48.89              |  |  |
| Orissa               | 27.45                 | 14.85  | 12.60  | 54.11              |  |  |
| Punjab               | 32.07                 | 12.24  | 19.83  | 38.18              |  |  |
| Rajasthan            | 53.98                 | 27.55  | 26.43  | 51.04              |  |  |
| T.N. (incl. Chennai) | 82.56                 | 23.39  | 59.17  | 28.33              |  |  |
| U.P.(E)              | 80.66                 | 40.49  | 40.18  | 50.19              |  |  |
| U.P.(W)              | 51.05                 | 24.05  | 27.00  | 47.11              |  |  |
| Kolkata              | 22.98                 | 1.68   | 21.30  | 7.32               |  |  |
| West Bengal          | 45.97                 | 30.52  | 15.45  | 66.39              |  |  |
| All India            | 970.97                | 398.68 | 572.29 | 41.06              |  |  |

Chart 1.5: Trend of Net Addition in Telephone Subscription



1.7 The net addition in telephone subscribers is 13.36 million in QE Dec-14 as against the net addition of 14.66 million in QE Sep-14.

Table 1.4: Service Area wise Teledensity

|                     | As on 30             | ) <sup>th</sup> Septemb | er, 2014             | As on 31st December, 2014 |                      |                      |  |
|---------------------|----------------------|-------------------------|----------------------|---------------------------|----------------------|----------------------|--|
| Service Area        | Rural<br>Teledensity | Urban<br>Teledensity    | Total<br>Teledensity | Rural<br>Teledensity      | Urban<br>Teledensity | Total<br>Teledensity |  |
| Andhra<br>Pradesh   | 47.41                | 168.16                  | 81.06                | 48.25                     | 172.12               | 82.78                |  |
| Assam               | 36.15                | 126.67                  | 50.41                | 37.41                     | 129.05               | 51.90                |  |
| Bihar               | 29.98                | 158.55                  | 47.66                | 30.43                     | 160.15               | 48.28                |  |
| Delhi               | -                    | -                       | 232.22               | -                         | -                    | 235.57               |  |
| Gujarat             | 59.82                | 140.72                  | 93.34                | 58.41                     | 142.00               | 93.11                |  |
| Haryana             | 58.76                | 119.62                  | 80.31                | 58.68                     | 124.61               | 82.11                |  |
| Himachal<br>Pradesh | 80.41                | 333.19                  | 109.55               | 82.14                     | 338.50               | 111.78               |  |
| J&K                 | 46.02                | 132.93                  | 69.98                | 51.71                     | 131.23               | 73.67                |  |
| Karnataka           | 44.62                | 173.84                  | 94.20                | 47.30                     | 174.86               | 96.35                |  |
| Kerala              | 65.77                | 184.65                  | 95.96                | 66.87                     | 178.55               | 95.21                |  |

|                         | As on 30             | Oth Septemb          | er, 2014             | As on 31st December, 2014 |                      |                      |  |
|-------------------------|----------------------|----------------------|----------------------|---------------------------|----------------------|----------------------|--|
| Service Area            | Rural<br>Teledensity | Urban<br>Teledensity | Total<br>Teledensity | Rural<br>Teledensity      | Urban<br>Teledensity | Total<br>Teledensity |  |
| Madhya<br>Pradesh       | 33.34                | 120.62               | 57.04                | 34.77                     | 123.02               | 58.77                |  |
| Maharashtra*<br>Mumbai* | 57.98                | 129.49               | 92.20                | 59.86                     | 125.84               | 91.49                |  |
| North East              | 44.43                | 155.43               | 72.00                | 49.14                     | 154.94               | 75.48                |  |
| Orissa                  | 41.52                | 167.05               | 63.41                | 42.78                     | 171.17               | 65.24                |  |
| Punjab                  | 68.52                | 149.72               | 103.49               | 70.67                     | 150.42               | 105.13               |  |
| Rajasthan               | 49.68                | 159.67               | 76.18                | 50.56                     | 152.71               | 75.18                |  |
| T.N. (incl<br>Chennai)  | 76.76                | 141.77               | 114.71               | 80.08                     | 143.00               | 116.96               |  |
| U.P.(E)*<br>U.P.(W)*    | 36.25                | 132.47               | 58.09                | 37.19                     | 131.59               | 58.65                |  |
| Kolkata*<br>W.B.*       | 47.35                | 138.32               | 73.40                | 48.13                     | 136.76               | 73.53                |  |
| All India               | 44.96                | 148.07               | 76.75                | 46.09                     | 148.06               | 77.58                |  |

<sup>\*</sup> Population data/projections are available state-wise only.

#### Notes:

- 1. Tele-density figures are derived from the subscriber data provided by the operators and the population projections, for Urban and Rural areas, of the country, published by the Office of the Registrar General & Census Commissioner, India.
- 2. Delhi Service area, apart from the State of Delhi, includes wireless subscribers of the areas served by the local exchanges of Ghaziabad & Noida (in UP) and Gurgaon & Faridabad (in Haryana).
- 1.8 Himachal Pradesh has the highest Rural Tele-density of 82.14, followed by Tamil Nadu (80.08). Bihar continues to have the lowest Rural Tele-density of 30.43, followed by Madhya Pradesh (34.77).

Table 1.5: Growth/Decline in Subscribers

| Sami a                  | Subscri | ber base ( | millions)        | Rate of       | Market                 | Market<br>Share<br>Dec-14<br>(%) |  |
|-------------------------|---------|------------|------------------|---------------|------------------------|----------------------------------|--|
| Service<br>Provider     | Sep-14  | Dec-14     | Net<br>Additions | Growth<br>(%) | Share<br>Sep-14<br>(%) |                                  |  |
| Bharti                  | 214.92  | 220.60     | 5.68             | 2.64          | 22.44                  | 22.72                            |  |
| Vodafone                | 173.92  | 178.75     | 4.83             | 2.78          | 18.16                  | 18.41                            |  |
| IDEA                    | 143.56  | 150.54     | 6.98             | 4.86          | 14.99                  | 15.50                            |  |
| Reliance Comm.<br>Group | 111.32  | 107.48     | -3.83            | -3.44         | 11.62                  | 11.07                            |  |
| BSNL                    | 104.09  | 98.32      | -5.77            | -5.54         | 10.87                  | 10.13                            |  |
| Aircel                  | 75.85   | 78.67      | 2.82             | 3.72          | 7.92                   | 8.10                             |  |
| Tata                    | 65.84   | 67.78      | 1.94             | 2.95          | 6.88                   | 6.98                             |  |
| Telewings               | 41.82   | 43.63      | 1.82             | 4.34          | 4.37                   | 4.49                             |  |
| Sistema                 | 9.19    | 9.04       | -0.15            | -1.64         | 0.96                   | 0.93                             |  |
| MTNL                    | 6.93    | 6.97       | 0.04             | 0.64          | 0.72                   | 0.72                             |  |
| Videocon                | 5.94    | 6.45       | 0.51             | 8.59          | 0.62                   | 0.66                             |  |
| Quadrant                | 2.66    | 2.74       | 0.08             | 2.94          | 0.28                   | 0.28                             |  |
| Loop Mobile*            | 1.58    | _          | -1.58            | -             | 0.17                   |                                  |  |
| Total                   | 957.61  | 970.97     | 13.36            | 1.40          | 100                    | 100                              |  |

<sup>\*</sup>License of M/s Loop Mobile expired in September, 2014

1.9 Bharti is the leading operator in access segment in terms of number of subscribers. During the quarter, Idea recorded the highest net addition of 6.98 million subscribers followed by Bharti (5.68 million). BSNL recorded the highest net decline of 5.77 million subscribers during this quarter.

Table 1.6: Market Share of the operators in total rural subscriber base – Q.E. Dec-14

| Service Provider        | No. of Total<br>Subscribers<br>(in millions) | No. of Rural<br>Subscribers<br>(in millions) | Percentage<br>of Rural<br>subscribers | Market share<br>of Rural<br>subscribers (%) |
|-------------------------|--|--|---------------------------------------|---|
| Bharti                  | 220.60                                       | 101.25                                       | 45.90                                 | 25.40                                       |
| Vodafone                | 178.75                                       | 93.79  | 52.47                                 | 23.53                                       |
| IDEA                    | 150.54                                       | 83.25  | 55.31                                 | 20.88                                       |
| BSNL                    | 98.32  | 33.11  | 33.68                                 | 8.30  |
| Aircel                  | 78.67  | 27.84  | 35.38                                 | 6.98  |
| Reliance Comm.<br>Group | 107.48                                       | 26.70  | 24.84                                 | 6.70  |
| Tata                    | 67.78  | 16.97  | 25.04                                 | 4.26  |
| Telewings               | 43.63  | 13.66  | 31.30                                 | 3.43  |
| Sistema                 | 9.04   | 2.04   | 22.55                                 | 0.51  |
| Quadrant                | 2.74   | 0.06   | 2.25                                  | 0.02  |
| Videocon                | 6.45   | -  | 0.00                                  | 0.00  |
| MTNL                    | 6.97   | -  | 0.00                                  | 0.00  |
| Total                   | 970.97                                       | 398.68                                       | 41.06                                 | 100   |

1.10 IDEA continues to be the service provider with highest proportion of rural subscribers (55.31%), followed by Vodafone (52.47%) to their total subscribers.

#### Section B: Wireless Service

Table 1.7: List of Cellular Mobile (GSM & CDMA) Service Providers currently providing service [As on 31st December, 2014]

| Sl.No. | Service Provider                               | Area of Operation   |
|--------|--|---|
| 1      | Bharti   | All India   |
| 2      | Aircel Group                                   | All India   |
| 3      | Reliance Communications                        | All India (except Assam & NE)   |
| 4      | Reliance Telecom Ltd                           | Kolkata, MP, WB, HP, Bihar, Orissa,<br>Assam & NE   |
| 5      | Vodafone                                       | All India   |
| 6      | Tata Teleservices                              | All India except Assam, NE & J&K  |
| 7      | IDEA   | All India   |
| 8      | Sistema Shyam Telelink                         | Delhi, Kolkata, Gujarat, Karnataka,<br>Tamil Nadu (incl. Chennai), Kerala, UP(W),<br>Rajasthan & W.B. |
| 9      | BSNL   | All India (except Delhi & Mumbai)   |
| 10     | MTNL   | Delhi & Mumbai  |
| 11     | Quadrant                                       | Punjab  |
| 12     | Telewings Communications<br>Services Pvt. Ltd. | MH, Gujarat, AP, UP(W), UP(E), Bihar  |
| 13     | Videocon<br>Telecommunications Ltd             | Gujarat, Haryana, UP(W)*, UP(E)*, MP,<br>Bihar*   |

<sup>\*</sup> M/s Videocon has no subscriber in UP(W), UP(E) and Bihar service areas as on 31.12.2014.

- 1.11 Complete list of licensed Cellular (GSM & CDMA) Service providers as on 31st December, 2014 is at Annexure -1.1
- 1.12 Total Wireless (GSM+CDMA) subscriber base increased from 930.20 million at the end of Sep-14 to 943.97 million at the end of Dec-14, thereby showing a gowth rate of 1.48%. During this quarter, net addition of 13.77 million subscribers was recorded. The year-on-year (Y-O-Y) growth of wireless subscribers is 6.51% for Q.E. Dec-14.

1.13 Wireless Teledensity increased from 74.55 at the end of Sep-14 to 75.43 at the end of Dec-14.

1000 80 73.55 74.55 72.94 71.69 70 Subscriber Base (Million) 60 50 943.97 930.20 904.51 914.92 40 886.30 30 20 10 0 Dec-13 Mar-14 Jun-14 Sep-14 Dec-14 ■Subscriber Base Teledensity

Chart 1.6: Wireless Subscriber Base and Teledensity

Table 1.8: Wireless Subscriber Base & Tele-density - Rural & Urban

| Quarter ending | Subscriber E | Tele-density |       |        |
|----------------|--------------|--------------|-------|--------|
|                | Rural        | Urban        | Rural | Urban  |
| Dec-13         | 359.67       | 526.63       | 41.95 | 138.94 |
| Mar-14         | 371.78       | 532.73       | 43.27 | 139.86 |
| Jun-14         | 377.36       | 537.56       | 43.82 | 140.44 |
| Sep-14         | 382.50       | 547.70       | 44.32 | 142.39 |
| Dec-14         | 393.34       | 550.64       | 45.47 | 142.46 |

- 1.14 The Rural Wireless subscribers increased from 382.50 million at the end of Sep-14 to 393.34 million at the end of Dec-14.
- 1.15 Rural subscription increased at the rate of 1.36% in QE Sep-14 as against the growth rate of 2.83% in QE Dec-14. Urban subscription increased at the rate of 0.54% as against the growth rate of 1.89% in the previous quarter.
- 1.16 The share of rural wireless subscription increased from 41.12% to 41.67% in total wireless subscription in this quarter.

Chart 1.7: Wireless Market Share - Rural & Urban

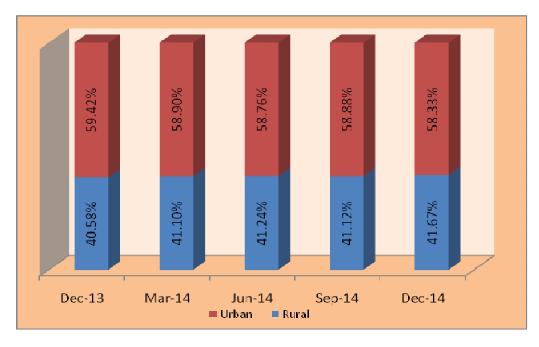


Table 1.9: Growth in Wireless Subscriber base

| Service                 | Subscr | iber Base | (millions)       | Rate of       | Market              | Market              |
|-------------------------|--------|-----------|------------------|---------------|---------------------|---------------------|
| Provider                | Sep-14 | Dec-14    | Net<br>Additions | Growth<br>(%) | Share<br>Sep-14 (%) | Share<br>Dec-14 (%) |
| Bharti                  | 211.55 | 217.22    | 5.66             | 2.68          | 22.74               | 23.01               |
| Vodafone                | 173.85 | 178.68    | 4.83             | 2.78          | 18.69               | 18.93               |
| IDEA                    | 143.56 | 150.54    | 6.98             | 4.86          | 15.43               | 15.95               |
| Reliance<br>Comm. Group | 110.12 | 106.29    | -3.83            | -3.48         | 11.84               | 11.26               |
| BSNL                    | 86.72  | 81.38     | -5.33            | -6.15         | 9.32                | 8.62                |
| Aircel                  | 75.85  | 78.67     | 2.82             | 3.72          | 8.15                | 8.33                |
| Tata                    | 64.25  | 66.17     | 1.92             | 2.99          | 6.91                | 7.01                |
| Telewings               | 41.82  | 43.63     | 1.82             | 4.34          | 4.50                | 4.62                |
| Sistema                 | 9.13   | 8.98      | -0.15            | -1.65         | 0.98                | 0.95                |
| Videocon                | 5.94   | 6.45      | 0.51             | 8.59          | 0.64                | 0.68                |
| MTNL                    | 3.40   | 3.45      | 0.05             | 1.57          | 0.37                | 0.37                |
| Quadrant                | 2.43   | 2.51      | 0.08             | 3.18          | 0.26                | 0.27                |
| Loop                    | 1.58   | -         | -1.58            | -             | 0.17                | -                   |
| Total                   | 930.20 | 943.97    | 13.77            | 1.48          | _                   | -                   |

- 1.17 Bharti remains the leading operator with 217.22 million subscribers at the end of Dec-14, followed by Vodafone (178.68 million) and Idea (150.54 million).
- 1.18 In terms of net additions during the quarter ending Dec-14, Idea (6.98 million) has added the highest number of subscribers, followed by Bharti (5.66 million). BSNL has shown the maximum net decline of 5.33 million wireless subscribers during this quarter.

Table 1.10: Service Area wise Wireless Subscriber base

| Service Area         | Subscriber base (in million) |        |                  |                    |  |  |  |
|----------------------|------------------------------|--------|------------------|--------------------|--|--|--|
|                      | Sep-14                       | Dec-14 | Net<br>Additions | Rate of change (%) |  |  |  |
| Andhra Pradesh       | 68.86                        | 70.56  | 1.70             | 2.46               |  |  |  |
| Assam                | 15.91                        | 16.43  | 0.53             | 3.31               |  |  |  |
| Bihar                | 64.08                        | 65.12  | 1.04             | 1.62               |  |  |  |
| Delhi                | 44.33                        | 45.35  | 1.02             | 2.30               |  |  |  |
| Gujarat              | 56.73                        | 56.80  | 0.07             | 0.12               |  |  |  |
| Haryana              | 21.13                        | 21.75  | 0.61             | 2.90               |  |  |  |
| Himachal Pradesh     | 7.44                         | 7.63   | 0.18             | 2.44               |  |  |  |
| Jammu & Kashmir      | 8.40                         | 8.88   | 0.48             | 5.73               |  |  |  |
| Karnataka            | 55.72                        | 57.18  | 1.46             | 2.62               |  |  |  |
| Kerala               | 31.26                        | 31.13  | -0.13            | -0.41              |  |  |  |
| Madhya Pradesh       | 56.91                        | 58.88  | 1.97             | 3.46               |  |  |  |
| Maharashtra          | 74.79                        | 74.87  | 0.08             | 0.11               |  |  |  |
| Mumbai               | 30.57                        | 30.05  | -0.52            | -1.69              |  |  |  |
| North East           | 9.75                         | 10.26  | 0.51             | 5.21               |  |  |  |
| Orissa               | 26.29                        | 27.12  | 0.82             | 3.14               |  |  |  |
| Punjab               | 30.31                        | 30.92  | 0.61             | 2.01               |  |  |  |
| Rajasthan            | 53.63                        | 53.13  | -0.50            | -0.93              |  |  |  |
| T.N. (incl. Chennai) | 78.02                        | 79.76  | 1.74             | 2.23               |  |  |  |
| U.P.(E)              | 79.28                        | 80.14  | 0.86             | 1.09               |  |  |  |
| U.P.(W)              | 49.61                        | 50.54  | 0.94             | 1.89               |  |  |  |
| Kolkata              | 21.98                        | 21.96  | -0.02            | -0.10              |  |  |  |
| West Bengal          | 45.19                        | 45.51  | 0.32             | 0.71               |  |  |  |
| All India            | 930.20                       | 943.97 | 13.77            | 1.48               |  |  |  |

Table 1.11: Service Area wise Wireless Rural-Urban Subscriber base

| Service Area         | Subscriber base (in million) – Dec-14 |        |        |                           |  |  |  |
|----------------------|---------------------------------------|--------|--------|---------------------------|--|--|--|
|                      | Total                                 | Rural  | Urban  | % of Rural<br>Subscribers |  |  |  |
| Andhra Pradesh       | 70.56                                 | 29.98  | 40.57  | 42.49                     |  |  |  |
| Assam                | 16.43                                 | 10.05  | 6.39   | 61.14                     |  |  |  |
| Bihar                | 65.12                                 | 35.50  | 29.62  | 54.52                     |  |  |  |
| Delhi                | 45.35                                 | 2.33   | 43.02  | 5.15                      |  |  |  |
| Gujarat              | 56.80                                 | 21.11  | 35.69  | 37.16                     |  |  |  |
| Haryana              | 21.75                                 | 10.10  | 11.64  | 46.45                     |  |  |  |
| Himachal Pradesh     | 7.63                                  | 4.94   | 2.69   | 64.79                     |  |  |  |
| Jammu & Kashmir      | 8.88                                  | 4.56   | 4.32   | 51.39                     |  |  |  |
| Karnataka            | 57.18                                 | 17.68  | 39.50  | 30.92                     |  |  |  |
| Kerala               | 31.13                                 | 15.96  | 15.17  | 51.27                     |  |  |  |
| Madhya Pradesh       | 58.88                                 | 25.67  | 33.20  | 43.61                     |  |  |  |
| Maharashtra          | 74.87                                 | 36.49  | 38.38  | 48.74                     |  |  |  |
| Mumbai               | 30.05                                 | 0.53   | 29.52  | 1.77                      |  |  |  |
| North East           | 10.26                                 | 5.05   | 5.21   | 49.21                     |  |  |  |
| Orissa               | 27.12                                 | 14.77  | 12.35  | 54.45                     |  |  |  |
| Punjab               | 30.92                                 | 11.94  | 18.98  | 38.62                     |  |  |  |
| Rajasthan            | 53.13                                 | 27.37  | 25.76  | 51.51                     |  |  |  |
| T.N. (incl. Chennai) | 79.76                                 | 22.91  | 56.85  | 28.73                     |  |  |  |
| U.P.(E)              | 80.14                                 | 40.40  | 39.74  | 50.42                     |  |  |  |
| U.P.(W)              | 50.54                                 | 23.98  | 26.56  | 47.45                     |  |  |  |
| Kolkata              | 21.96                                 | 1.68   | 20.28  | 7.66                      |  |  |  |
| West Bengal          | 45.51                                 | 30.31  | 15.20  | 66.60                     |  |  |  |
| All India            | 943.97                                | 393.34 | 550.64 | 41.67                     |  |  |  |

Table 1.12: Service Area wise Wireless Tele-density

|                          | As on 3     | 30 <sup>th</sup> Septemb | er, 2014    | As on 31st December, 2014 |             |                    |  |
|--------------------------|-------------|--------------------------|-------------|---------------------------|-------------|--------------------|--|
| Service Area             | Rural       | Urban                    | Total       | Rural                     | Urban       | Total              |  |
|                          | Teledensity | Teledensity              | Teledensity | Teledensity               | Teledensity | <b>Teledensity</b> |  |
| Andhra<br>Pradesh        | 46.61       | 162.18                   | 78.82       | 47.49                     | 166.25      | 80.60              |  |
| Assam                    | 36.03       | 123.75                   | 49.85       | 37.29                     | 126.19      | 51.34              |  |
| Bihar                    | 29.89       | 157.10                   | 47.38       | 30.34                     | 158.71      | 48.00              |  |
| Delhi                    | -           | -                        | 216.98      | -                         | =           | 220.40             |  |
| Gujarat                  | 58.95       | 135.76                   | 90.78       | 57.58                     | 137.15      | 90.61              |  |
| Haryana                  | 57.99       | 116.00                   | 78.53       | 58.02                     | 121.30      | 80.51              |  |
| Himachal<br>Pradesh      | 77.63       | 325.03                   | 106.15      | 79.49                     | 330.53      | 108.51             |  |
| Jammu &<br>Kashmir       | 45.70       | 129.02                   | 68.67       | 51.40                     | 127.42      | 72.40              |  |
| Karnataka                | 43.84       | 165.52                   | 90.52       | 46.55                     | 166.49      | 92.67              |  |
| Kerala                   | 58.90       | 174.12                   | 88.16       | 60.24                     | 168.29      | 87.66              |  |
| Madhya<br>Pradesh        | 33.13       | 117.20                   | 55.96       | 34.55                     | 119.62      | 57.69              |  |
| Maharashtra*<br>Mumbai*  | 57.16       | 121.21                   | 87.81       | 59.09                     | 117.66      | 87.18              |  |
| North East               | 44.12       | 152.54                   | 71.05       | 48.84                     | 152.08      | 74.54              |  |
| Orissa                   | 41.26       | 163.67                   | 62.61       | 42.53                     | 167.82      | 64.44              |  |
| Punjab                   | 66.71       | 143.16                   | 99.64       | 68.93                     | 143.98      | 101.36             |  |
| Rajasthan                | 49.33       | 155.69                   | 74.95       | 50.22                     | 148.83      | 73.99              |  |
| T.N. (incl.<br>Chennai)  | 75.12       | 136.08                   | 110.71      | 78.46                     | 137.37      | 113.00             |  |
| U.P.(E)*<br>U.P.(W)*     | 36.16       | 130.69                   | 57.62       | 37.11                     | 129.86      | 58.19              |  |
| Kolkata*<br>West Bengal* | 47.02       | 133.51                   | 71.79       | 47.82                     | 132.04      | 71.95              |  |
| All India                | 44.32       | 142.39                   | 74.55       | 45.47                     | 142.46      | 75.43              |  |

<sup>\*</sup> Population data/projections are available state-wise only.

#### Notes:

- 1. Teledensity figures are derived from the subscriber data provided by the operators and the population projections, for Urban and Rural areas, of the country, published by the Office of the Registrar General & Census Commissioner, India.
- 2. Delhi service area, apart from the State of Delhi, includes the areas served by the local exchanges of Ghaziabad & Noida (in UP) and Gurgaon & Faridabad (in Haryana).

Table 1.13: Rural Wireless Subscriber base and Market Share

| Service Provider        | Subscribers<br>at the end<br>of Dec-14 | Rural Subscribers<br>(in millions) |        | % of Rural subscribers in total |        | Market Share of<br>Rural<br>Subscribers (%) |        |
|-------------------------|--|------------------------------------|--------|---------------------------------|--------|---|--------|
|                         | (in millions)                          | Sep-14                             | Dec-14 | Sep-14                          | Dec-14 | Sep-14                                      | Dec-14 |
| Bharti                  | 217.22                                 | 97.45                              | 101.25 | 46.07                           | 46.61  | 25.48                                       | 25.74  |
| Vodafone                | 178.68                                 | 91.86                              | 93.79  | 52.84                           | 52.49  | 24.02                                       | 23.85  |
| IDEA                    | 150.54                                 | 78.23                              | 83.25  | 54.49                           | 55.31  | 20.45                                       | 21.17  |
| BSNL                    | 81.38                                  | 29.14                              | 27.83  | 33.60                           | 34.19  | 7.62  | 7.07   |
| Reliance Comm.<br>Group | 106.29                                 | 27.38                              | 26.70  | 24.87                           | 25.12  | 7.16  | 6.79   |
| Aircel                  | 78.67                                  | 26.81                              | 27.84  | 35.34                           | 35.38  | 7.01  | 7.08   |
| Tata                    | 66.17                                  | 16.26                              | 16.92  | 25.31                           | 25.58  | 4.25  | 4.30   |
| Telewings               | 43.63                                  | 13.19                              | 13.66  | 31.55                           | 31.30  | 3.45  | 3.47   |
| Sistema                 | 8.98                                   | 2.11                               | 2.03   | 23.14                           | 22.58  | 0.55  | 0.52   |
| Quadrant                | 2.51                                   | 0.06                               | 0.06   | 2.42                            | 2.45   | 0.02  | 0.02   |
| Videocon                | 6.45                                   | 0.00                               | 0.00   | 0.00                            | 0.00   | 0.00  | 0.00   |
| MTNL                    | 3.45                                   | 0.00                               | 0.00   | 0.00                            | 0.00   | 0.00  | 0.00   |
| Total                   | 943.97                                 | 382.50                             | 393.34 | 41.12                           | 41.67  | 100   | 100    |

1.19 Detailed table on service provider wise subscriber base in each service area is at Annexure-1.2.

Chart 1.8: Wireless Subscription: GSM vs CDMA



1.20 At the end of Dec-14, GSM subscribers constituted 94.36% share of the wireless market.

#### **GSM Services**

1.21 The GSM subscribers were 890.78 million at the end of Dec-14 as against 876.15 million at the quarter ending Sep-14, showing a quarterly growth of 1.67%. Bharti with 217.22 million subscribers continues to be the largest GSM mobile operator, followed by Vodafone (178.68 million).

Table 1.14: Group-wise Market Share (in terms of subscription) within GSM Service

|                         | Sep-14                                |                        | Dec-14                                |                        |                            |
|-------------------------|---------------------------------------|------------------------|---------------------------------------|------------------------|----------------------------|
| Service<br>Provider     | No of<br>Subscribers<br>(in millions) | Market<br>Share<br>(%) | No of<br>Subscribers<br>(in millions) | Market<br>Share<br>(%) | Net Additions (in million) |
| Bharti                  | 211.55                                | 24.15                  | 217.22                                | 24.38                  | 5.66                       |
| Vodafone                | 173.85                                | 19.84                  | 178.68                                | 20.06                  | 4.83                       |
| Idea                    | 143.56                                | 16.39                  | 150.54                                | 16.90                  | 6.98                       |
| BSNL                    | 84.61                                 | 9.66                   | 79.34                                 | 8.91                   | -5.27                      |
| Reliance Comm.<br>Group | 82.61                                 | 9.43                   | 79.03                                 | 8.87                   | -3.59                      |
| Aircel                  | 75.85                                 | 8.66                   | 78.67                                 | 8.83                   | 2.82                       |
| Tata                    | 49.04                                 | 5.60                   | 51.36                                 | 5.77                   | 2.32                       |
| Telewings               | 41.82                                 | 4.77                   | 43.63                                 | 4.90                   | 1.82                       |
| Videocon                | 5.94                                  | 0.68                   | 6.45                                  | 0.72                   | 0.51                       |
| MTNL                    | 3.31                                  | 0.38                   | 3.36                                  | 0.38                   | 0.05                       |
| Loop                    | 1.58                                  | 0.18                   | 0.00                                  |                        | -1.58                      |
| Quadrant                | 2.43                                  | 0.28                   | 2.51                                  | 0.28                   | 0.08                       |
| Total                   | 876.15                                | 100                    | 890.78                                | 100                    | 14.62                      |

1.22 There has been a net increase of 14.62 million GSM subscribers during the quarter ending Dec-14.

#### **CDMA Services**

1.23 The CDMA subscriber base further declined from 54.05 million at the end of Sep-14 to 53.19 million at the end of Dec-14, thereby showing a decline rate of 1.58%. Reliance Communications Group with 27.27 million subscribers continues to be the largest CDMA mobile operator.

Table 1.15: Market Share (in terms of subscription) within CDMA Service

| Service Provider        | Sep-14                               |                     | Dec-14                               |                     | Net                                  |
|-------------------------|--------------------------------------|---------------------|--------------------------------------|---------------------|--------------------------------------|
|                         | No of<br>Subscribers<br>(in million) | Market<br>Share (%) | No of<br>Subscribers<br>(in million) | Market<br>Share (%) | Addition/<br>Decline<br>(in million) |
| Reliance Comm.<br>Group | 27.51                                | 50.90               | 27.27                                | 51.26               | -0.24                                |
| Tata                    | 15.21                                | 28.14               | 14.81                                | 27.84               | -0.40                                |
| Sistema                 | 9.13                                 | 16.89               | 8.98                                 | 16.88               | -0.15                                |
| BSNL                    | 2.11                                 | 3.90                | 2.04                                 | 3.84                | -0.06                                |
| MTNL                    | 0.09                                 | 0.17                | 0.09                                 | 0.17                | -0.0005                              |
| Quadrant                | 0.002                                | 0.004               | 0.002                                | 0.003               | -0.0001                              |
| Total                   | 54.05                                | 100                 | 53.19                                | 100                 | -0.85                                |

- 1.24 There has been a net decline of 0.85 million CDMA subscribers during the quarter ending Dec-14.
- 1.25 In terms of net additions during the quarter, all the service providers recorded decline in their CDMA subscriber base.

#### **Section C: Wireline Service**

Table 1.16: Service Providers providing Wireline Service

[As on 31st December, 2014]

| Sl. No. | Name of the Service<br>Provider                       | Area of Operation  |
|---------|---|--|
| 1       | BSNL  | All India except Delhi & Mumbai  |
| 2       | MTNL  | Delhi & Mumbai   |
| 3       | Bharti Airtel Ltd                                     | Andhra Pradesh, Delhi, Gujarat, Haryana,<br>Madhya Pradesh & Chhatisgarh,<br>Maharashtra, Mumbai, Punjab, Tamil Nadu<br>(incl. Chennai), Karnataka, Kerala, Kolkata,<br>Rajasthan, UP(East) and UP(West) |
| 4       | Tata Teleservices Ltd. & Tata Teleservices (Mah) Ltd. | All India except N.E., Assam and J&K   |
| 5       | Quadrant Televentures<br>Ltd. (HFCL)                  | Punjab   |
| 6       | Sistema Shyam Telelink<br>Ltd.                        | Rajasthan  |
| 7       | Reliance<br>Communications Ltd.                       | All India except Assam & North-East  |
| 8       | Vodafone  | All India except J&K   |

- 1.26 Total Wireline subscriber base declined from 27.41 million at the end of Sep-14 to 27.00 million at the end of Dec-14 with quarterly declining rate of 1.48%. Overall Wireline Teledensity is 2.16 at the end of this quarter as against 2.20 of the previous quarter.
- 1.27 Rural subscriber base has shown decline of 3.75%, from 5.55 Million at the end of Sep-14 to 5.34 Million at the end of Dec-14. During the same period, Urban subscription also recorded decline of 0.90%, from 21.85 million to 21.66 million.

Chart 1.9: Wireline Subscriber Base and Teledensity

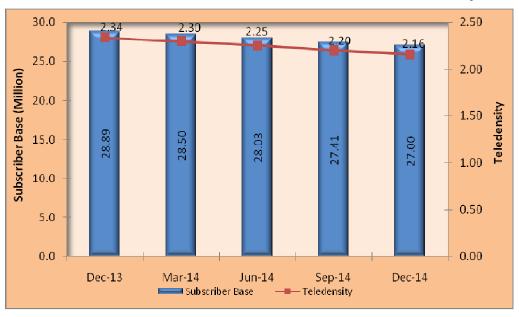


Table 1.17: Wireline Subscriber Base & Tele-density - Rural & Urban

| Quarter ending | Subscriber Base (million) |       | Teled | ensity |
|----------------|---------------------------|-------|-------|--------|
|                | Rural                     | Urban | Rural | Urban  |
| Dec-13         | 6.12                      | 22.77 | 0.71  | 6.01   |
| Mar-14         | 5.96                      | 22.53 | 0.69  | 5.91   |
| Jun-14         | 5.81                      | 22.21 | 0.68  | 5.80   |
| Sep-14         | 5.55                      | 21.85 | 0.64  | 5.68   |
| Dec-14         | 5.34                      | 21.66 | 0.62  | 5.60   |

Table 1.18: Service Provider wise Subscriber base (Rural - Urban)

| Service  | Subscribe | r Base (mil | lion) Dec-14 | Share of Rural   |
|----------|-----------|-------------|--------------|------------------|
| Provider | Rural     | Urban       | Total        | subscription (%) |
| BSNL     | 5.28      | 11.65       | 16.93        | 31.20            |
| MTNL     | -         | 3.52        | 3.52         |                  |
| Bharti   | -         | 3.39        | 3.39         |                  |
| Reliance | 0.002     | 1.18        | 1.19         | 0.17             |
| Tata     | 0.05      | 1.57        | 1.61         | 3.02             |
| Quadrant | -         | 0.22        | 0.22         |                  |
| Sistema  | 0.01      | 0.05        | 0.05         | 17.74            |
| Vodafone | _         | 0.08        | 0.08         |                  |
| Total    | 5.34      | 21.66       | 27.00        | 19.79            |

Chart 1.10: Composition of Wireline Subscriber base - Rural & Urban

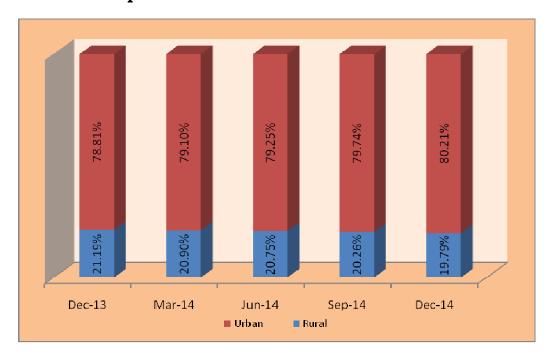


Table 1.19: Service Provider wise growth in Subscriber base

| Service<br>Provider | Subscr | iber Base              | (million) | Rate of change | Market<br>share- | Market<br>share- |
|---------------------|--------|------------------------|-----------|----------------|------------------|------------------|
| Frovider            | Sep-14 | Dec-14 Net<br>Addition |           |                |                  | Dec-14 (%)       |
| BSNL                | 17.37  | 16.93                  | -0.436    | -2.51          | 63.38%           | 62.71            |
| MTNL                | 3.53   | 3.52                   | -0.009    | -0.24          | 12.88%           | 13.04            |
| Bharti              | 3.37   | 3.39                   | 0.017     | 0.50           | 12.30%           | 12.55            |
| Tata                | 1.59   | 1.61                   | 0.024     | 1.49           | 5.81%            | 5.98             |
| Reliance            | 1.19   | 1.19                   | -0.005    | -0.42          | 4.35%            | 4.39             |
| Quadrant            | 0.22   | 0.22                   | 0.001     | 0.37           | 0.82%            | 0.83             |
| Sistema             | 0.06   | 0.05                   | -0.001    | -1.37          | 0.20%            | 0.20             |
| Vodafone            | 0.07   | 0.08                   | 0.004     | 4.89           | 0.26%            | 0.28             |
| Total               | 27.41  | 27.00                  | -0.406    | -1.48          | 100              | 100              |

1.28 Detailed table on service provider wise subscriber base in each service area is at Annexure-1.3.

Table 1.20: Service Area wise Wireline Subscriber base & Net Additions (in million)

| Service Area         | Sep-14 | Dec-14 | Net Additions<br>(in million) | Rate of<br>Change (%) |
|----------------------|--------|--------|-------------------------------|-----------------------|
| Andhra Pradesh       | 1.96   | 1.92   | -0.042                        | -2.16                 |
| Assam                | 0.18   | 0.18   | -0.002                        | -1.30                 |
| Bihar                | 0.38   | 0.37   | -0.003                        | -0.74                 |
| Delhi                | 3.11   | 3.12   | 0.009                         | 0.28                  |
| Gujarat              | 1.60   | 1.57   | -0.031                        | -1.96                 |
| Haryana              | 0.48   | 0.43   | -0.046                        | -9.65                 |
| Himachal Pradesh     | 0.24   | 0.23   | -0.009                        | -3.77                 |
| Jammu & Kashmir      | 0.16   | 0.16   | -0.004                        | -2.43                 |
| Karnataka            | 2.26   | 2.27   | 0.005                         | 0.21                  |
| Kerala               | 2.77   | 2.68   | -0.084                        | -3.03                 |
| Madhya Pradesh       | 1.10   | 1.10   | -0.002                        | -0.15                 |
| Maharashtra          | 2.22   | 2.16   | -0.061                        | -2.74                 |
| Mumbai               | 3.04   | 3.04   | -0.005                        | -0.16                 |
| North East           | 0.13   | 0.13   | -0.001                        | -1.06                 |
| Orissa               | 0.34   | 0.34   | -0.001                        | -0.33                 |
| Punjab               | 1.17   | 1.15   | -0.023                        | -1.92                 |
| Rajasthan            | 0.88   | 0.85   | -0.026                        | -2.94                 |
| T.N. (incl. Chennai) | 2.82   | 2.80   | -0.022                        | -0.80                 |
| U.P.(E)              | 0.55   | 0.53   | -0.020                        | -3.68                 |
| U.P.(W)              | 0.51   | 0.51   | -0.008                        | -1.58                 |
| Kolkata              | 1.03   | 1.02   | -0.014                        | -1.39                 |
| W.B.                 | 0.47   | 0.46   | -0.014                        | -3.02                 |
| All India            | 27.41  | 27.00  | -0.406                        | -1.48                 |

1.29 All service areas except Delhi and Karnataka showed decline in wireline subsribers during the quarter Dec-14.

Table 1.21: Service Area wise Wireline Rural-Urban Subscriber Base- Dec-14 (in million)

| Service Area         | Total Subs | Rural<br>Subs | Urban<br>Subs | % of Rural<br>Subs |
|----------------------|------------|---------------|---------------|--------------------|
| Andhra Pradesh       | 1.92       | 0.48          | 1.43          | 25.22              |
| Assam                | 0.18       | 0.03          | 0.15          | 18.50              |
| Bihar                | 0.37       | 0.11          | 0.27          | 28.27              |
| Delhi                | 3.12       | 0.00          | 3.12          | 0.00               |
| Gujarat              | 1.57       | 0.31          | 1.26          | 19.52              |
| Haryana              | 0.43       | 0.12          | 0.32          | 26.64              |
| Himachal Pradesh     | 0.23       | 0.16          | 0.06          | 71.80              |
| Jammu & Kashmir      | 0.16       | 0.03          | 0.13          | 17.52              |
| Karnataka            | 2.27       | 0.28          | 1.98          | 12.48              |
| Kerala               | 2.68       | 1.76          | 0.92          | 65.52              |
| Madhya Pradesh       | 1.10       | 0.16          | 0.94          | 14.26              |
| Maharashtra          | 2.16       | 0.48          | 1.68          | 22.25              |
| Mumbai               | 3.04       | 0.00          | 3.04          | 0.00               |
| North East           | 0.13       | 0.03          | 0.10          | 23.71              |
| Orissa               | 0.34       | 0.09          | 0.25          | 26.51              |
| Punjab               | 1.15       | 0.30          | 0.85          | 26.22              |
| Rajasthan            | 0.85       | 0.18          | 0.67          | 21.39              |
| T.N. (incl. Chennai) | 2.80       | 0.47          | 2.33          | 16.91              |
| U.P.(E)              | 0.53       | 0.08          | 0.44          | 16.01              |
| U.P.(W)              | 0.51       | 0.06          | 0.44          | 12.38              |
| Kolkata              | 1.02       | 0.00          | 1.02          | 0.00               |
| W.B.                 | 0.46       | 0.21          | 0.25          | 45.33              |
| All India            | 27.00      | 5.34          | 21.66         | 19.79              |

Table 1.22: Service Area wise Wireline Teledensity

|                               | As on 3              | Oth Septemb          | er, 2014             | As on 31st December, 2014 |                      |                      |  |
|-------------------------------|----------------------|----------------------|----------------------|---------------------------|----------------------|----------------------|--|
| Service Area                  | Rural<br>Teledensity | Urban<br>Teledensity | Total<br>Teledensity | Rural<br>Teledensity      | Urban<br>Teledensity | Total<br>Feledensity |  |
| Andhra<br>Pradesh             | 0.80                 | 5.98                 | 2.24                 | 0.77                      | 5.87                 | 2.19                 |  |
| Assam                         | 0.12                 | 2.93                 | 0.57                 | 0.12                      | 2.87                 | 0.56                 |  |
| Bihar                         | 0.09                 | 1.45                 | 0.28                 | 0.09                      | 1.44                 | 0.28                 |  |
| Delhi                         | -                    | -                    | 15.24                | -                         | -                    | 15.18                |  |
| Gujarat                       | 0.87                 | 4.95                 | 2.56                 | 0.84                      | 4.85                 | 2.50                 |  |
| Haryana                       | 0.77                 | 3.62                 | 1.78                 | 0.66                      | 3.30                 | 1.60                 |  |
| Himachal<br>Pradesh           | 2.78                 | 8.16                 | 3.40                 | 2.65                      | 7.97                 | 3.27                 |  |
| Jammu &<br>Kashmir            | 0.32                 | 3.92                 | 1.31                 | 0.31                      | 3.81                 | 1.28                 |  |
| Karnataka                     | 0.78                 | 8.33                 | 3.68                 | 0.74                      | 8.36                 | 3.67                 |  |
| Kerala                        | 6.87                 | 10.52                | 7.80                 | 6.63                      | 10.26                | 7.55                 |  |
| Madhya<br>Pradesh             | 0.21                 | 3.42                 | 1.08                 | 0.21                      | 3.40                 | 1.08                 |  |
| Maharashtra*<br>Mumbai*       | 0.81                 | 8.28                 | 4.39                 | 0.77                      | 8.17                 | 4.32                 |  |
| North East                    | 0.31                 | 2.89                 | 0.95                 | 0.30                      | 2.87                 | 0.94                 |  |
| Orissa                        | 0.26                 | 3.38                 | 0.80                 | 0.26                      | 3.35                 | 0.80                 |  |
| Punjab                        | 1.81                 | 6.56                 | 3.86                 | 1.74                      | 6.44                 | 3.77                 |  |
| Rajasthan                     | 0.36                 | 3.97                 | 1.23                 | 0.33                      | 3.87                 | 1.19                 |  |
| Tamil Nadu<br>(incl. Chennai) | 1.64                 | 5.69                 | 4.00                 | 1.62                      | 5.62                 | 3.97                 |  |
| U.P.(E)*                      | 0.09                 | 1.78                 | 0.47                 | 0.08                      | 1.73                 | 0.46                 |  |
| U.P.(W)*                      | _                    |                      |                      | _                         |                      |                      |  |
| Kolkata*                      | 0.32                 | 4.81                 | 1.61                 | 0.31                      | 4.73                 | 1.58                 |  |
| W.B.* All India               | 0.64                 | 5.68                 | 2.20                 | 0.62                      | 5.60                 | 2.16                 |  |

<sup>\*</sup> Population data/projections are available state-wise only

Note: Teledensity figures are derived from the subscriber data provided by the operators and the population projections, for Urban and Rural areas, of the country, published by the Office of the Registrar General & Census Commissioner, India.

### **Public Call Offices (PCO)**

1.30 Total number of PCOs in the country at the end of Dec-14 is 7.79 lakh as compared to 8.54 lakh at the end of Sep-14, showing a decline of 0.74 lakh PCOs. Detailed table is at Annexure -1.4.

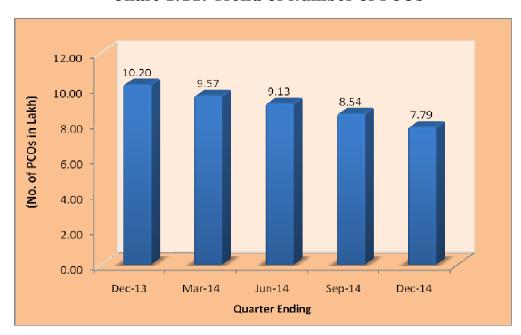


Chart 1.11: Trend of Number of PCOs

Table 1.23: Rate of change & Market share of PCOs

| Service  | Sep-14    | Dec-14    | Rate of change | Market share (%) |
|----------|-----------|-----------|----------------|------------------|
| Provider | (in lakh) | (in lakh) | (%)            | (Dec-14)         |
| BSNL     | 5.51      | 4.94      | -10.41         | 63.35            |
| MTNL     | 1.40      | 1.39      | -0.62          | 17.87            |
| Bharti   | 0.24      | 0.23      | -5.24          | 2.96             |
| Quadrant | 0.03      | 0.03      | -4.95          | 0.35             |
| Sistema  | 0.12      | 0.11      | -10.91         | 1.35             |
| Tata     | 0.63      | 0.56      | -11.83         | 7.14             |
| Reliance | 0.60      | 0.54      | -10.09         | 6.98             |
| Vodafone | -         | _         | -              | -                |
| Total    | 8.54      | 7.79      | -8.73          | 100              |

1.31 Number of PCOs continued show declining trend. This quarter has recorded a decline of 8.73%. The year-on-year (Y-O-Y) decline rate over the same quarter of the last year is 23.57%.

### Village Public Telephones (VPTs)

- 1.32 There are 5,93,731 inhabited villages in India as per census 2001. At the end of the quarter, 98.71% of the total inhabited villages in India have been connected by VPT.
- 1.33 The number of VPTs decreased from 5,87,269 at the end of Sep-14 to 5,86,087 at the end of Dec-14.
- 1.34 BSNL (5,81,288) has 99.18% market share of total VPTs followed by Sistema (3010) with 0.51%. Detailed table is at Annexure -1.5.

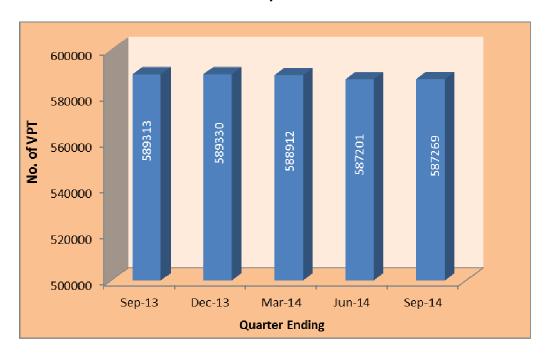


Chart 1.12: Growth/decline Trend in VPTs

### **Section D: Internet Service**

1.35 The report summarized information submitted by 131 operators. It is divided into three parts. **Part-I** consists of information of Internet service (both narrowband and broadband), **Part-II** consists of broadband service and **Part-III** covers narrowband service.

### Part-I: Internet Service (broadband + narrowband)

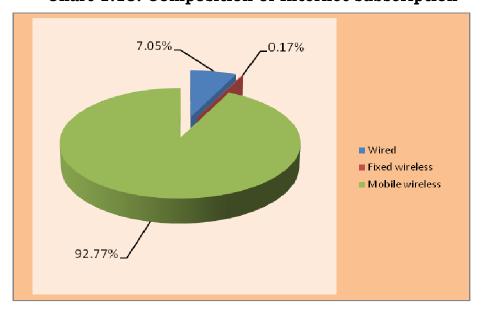
- 1.36 As per reports received from operators, total number of internet subscribers increased from 254.40 million at the end of Sep-14 to 267.39 million at the end of Dec-14 with quarterly growth rate of 5.11%.
- 1.37 Wired Internet subscribers increased from 18.70 million at the end of Sep-14 to 18.86 million at the end of Dec-14 with quarterly growth of 0.89%, whereas Wireless Internet subscribers increased from 235.70 million at the end of Sep-14 to 248.53 million at the end of Dec-14 with quarterly growth rate of 5.44%.
- 1.38 Number of Broadband subscribers increased from 75.73 million at the end of Sep-14 to 85.74 million at the end of Dec-14. The number of Narrowband subscribers also increased from 178.67 million at the end of Sep-14 to 181.65 million at the end of Dec-14.

Table 1.24: Trend of Internet subscriber base

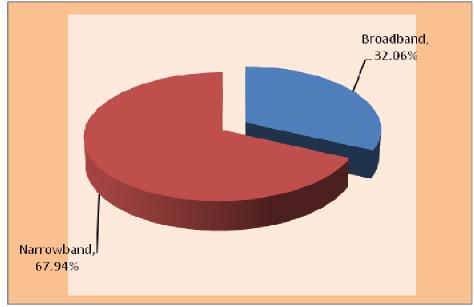
|            | Mode of Access |        |  |                                       |        |        |               |        |        |        |  |  |
|------------|----------------|--------|--|---------------------------------------|--------|--------|---------------|--------|--------|--------|--|--|
|            |                |        |  |                                       | Wir    | eless  |               |        |        |        |  |  |
| Segment    | Wi             | red    | Fixed Wireless (Wi-Fi, Wi-Max, Radio & VSAT)  Mobile Wireless (Phone + Dongle)  Wireless |                                       |        |        | To<br>Subsc   |        |        |        |  |  |
|            | Sep-14         | Dec-14 | Sep-14   | Dec-14                                | Sep-14 | Dec-14 | Sep-14        | Dec-14 | Sep-14 | Dec-14 |  |  |
| Broadband  | 15.13          | 15.32  | 0.42   | 0.43                                  | 60.18  | 69.99  | 60.60         | 70.42  | 75.73  | 85.74  |  |  |
| Narrowband | 3.57           | 3.54   | 0.04   | 0.04                                  | 175.06 | 178.08 | 175.10 178.12 |        | 178.67 | 181.65 |  |  |
| Total      | 18.70          | 18.86  | 0.46   | 0.46 0.47 235.24 248.06 235.70 248.53 |        |        |               | 254.40 | 267.39 |        |  |  |

1.39 The following charts present the composition of Internet Subscribers by mode of access and composition of Broadband & Narrowband subscription.

Chart 1.13: Composition of Internet subscription







1.40 The urban/rural break up of internet subscribers are as per the following table.

Table 1.25: Break up of Rural-Urban internet subscriber base

[Subscribers in Millions]

| Telecom Service  | Narro | wband | Broad | dband | Total |       |  |
|------------------|-------|-------|-------|-------|-------|-------|--|
| Area             | Rural | Urban | Rural | Urban | Rural | Urban |  |
| Andhra Pradesh   | 5.85  | 7.20  | 1.73  | 5.03  | 7.58  | 12.23 |  |
| Assam            | 2.04  | 1.59  | 0.40  | 0.71  | 2.44  | 2.30  |  |
| Bihar            | 5.97  | 5.21  | 0.97  | 1.74  | 6.93  | 6.95  |  |
| Delhi            | 1.09  | 7.80  | 0.26  | 8.14  | 1.35  | 15.94 |  |
| Gujarat          | 4.81  | 6.91  | 1.17  | 4.79  | 5.99  | 11.70 |  |
| Haryana          | 2.33  | 2.00  | 0.51  | 1.07  | 2.85  | 3.07  |  |
| Himachal Pradesh | 1.02  | 0.70  | 0.37  | 0.28  | 1.39  | 0.98  |  |
| Jammu & Kashmir  | 1.48  | 0.91  | 0.28  | 0.41  | 1.76  | 1.32  |  |
| Karnataka        | 3.12  | 7.47  | 1.31  | 5.27  | 4.43  | 12.74 |  |
| Kerala           | 3.26  | 3.70  | 1.97  | 3.38  | 5.23  | 7.08  |  |
| Kolkata          | 0.87  | 3.56  | 0.19  | 2.30  | 1.06  | 5.86  |  |
| Madhya Pradesh   | 4.29  | 5.98  | 0.31  | 3.25  | 4.60  | 9.24  |  |

| Telecom Service Area | Narro | wband  | Broad | iband | Total |        |  |
|----------------------|-------|--------|-------|-------|-------|--------|--|
| Telecom Service Area | Rural | Urban  | Rural | Urban | Rural | Urban  |  |
| Maharashtra          | 6.48  | 9.74   | 1.64  | 6.24  | 8.13  | 15.98  |  |
| Mumbai               | 0.74  | 5.76   | 0.12  | 6.66  | 0.86  | 12.42  |  |
| North East           | 1.26  | 1.18   | 0.34  | 0.51  | 1.60  | 1.69   |  |
| Orissa               | 2.01  | 2.46   | 0.35  | 1.03  | 2.36  | 3.49   |  |
| Punjab               | 4.02  | 4.50   | 0.47  | 2.12  | 4.49  | 6.62   |  |
| Rajasthan            | 4.69  | 5.95   | 1.28  | 2.44  | 5.97  | 8.39   |  |
| Tamil Nadu           | 4.16  | 9.07   | 1.95  | 6.92  | 6.10  | 16.00  |  |
| UP (East)            | 7.13  | 6.69   | 0.73  | 2.02  | 7.85  | 8.71   |  |
| UP (West)            | 3.72  | 5.01   | 0.67  | 2.17  | 4.39  | 7.18   |  |
| West Bengal          | 3.89  | 4.04   | 0.92  | 1.30  | 4.81  | 5.34   |  |
| T-4-1                | 74.23 | 107.43 | 17.95 | 67.78 | 92.18 | 175.21 |  |
| Total                | 18    | 181.65 |       | .74   | 26    | 7.39   |  |

Table 1.26: Internet Subscriber Base and Market Share of top 10 Service Providers – Dec-14

| S.No | ISP                             | Subs      | Share (%) |
|------|---------------------------------|-----------|-----------|
| 1    | Bharti                          | 69018899  | 25.81%    |
| 2    | Vodafone                        | 59140008  | 22.12%    |
| 3    | Idea                            | 34163242  | 12.78%    |
| 4    | BSNL                            | 33631637  | 12.58%    |
| 5    | Reliance Communication<br>Group | 31566837  | 11.81%    |
| 6    | Aircel                          | 17825555  | 6.67%     |
| 7    | Telewings                       | 10636210  | 3.98%     |
| 8    | Tata Group                      | 2866406   | 1.07%     |
| 9    | MTNL                            | 1872395   | 0.70%     |
| 10   | Sistema Shyam                   | 1616329   | 0.60%     |
|      | Total of Top 10 ISPs            | 262337518 | 98.11%    |
|      | Others                          | 5052524   | 1.89%     |
|      | Grand Total                     | 267390042 | 100.00%   |

- 1.41 Bharti holds the top position with 25.81% of market share of internet subscribers followed by Vodafone with 22.12%. Top 10 Service Providers together hold 98.11% of total internet subscriber base. Detailed table of all the service providers is available at Annexure-1.6.
- 1.42 The following chart depicts the subscriber base of top ten ISPs in the QE Dec-14.

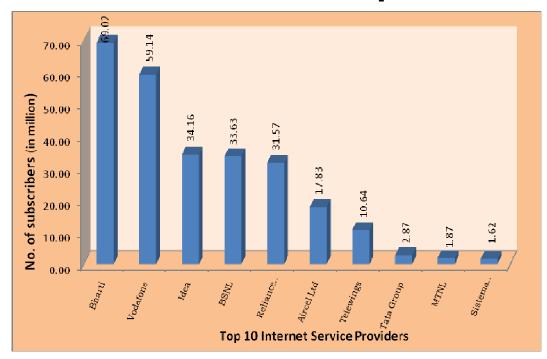
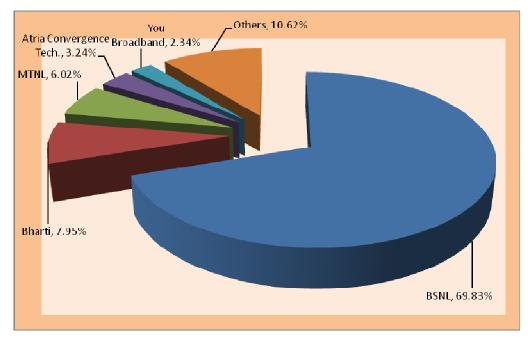


Chart 1.15: Subscriber base of top ten ISPs

1.43 In wired internet segment, BSNL holds 69.83% market share with 13.17 million subscribers, followed by Bharti with 1.50 million subscribers. Total number of wired internet subscriber is 18.86 million at the end of Dec-14.

Chart 1.16: Composition of Wired Internet subscribers



1.44 In wireless internet segment, Bharti holds 27.17% market share with 67.52 million subscribers followed by Vodafone (59.13 million internet subscribers).

Chart 1.17: Composition of Wireless Internet subscription

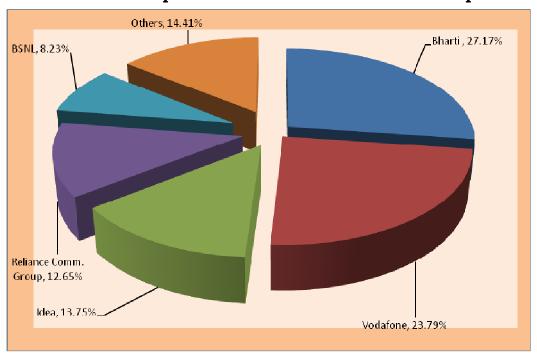


Chart 1.18: Technology trend for Wireless Internet Access - Dec-14

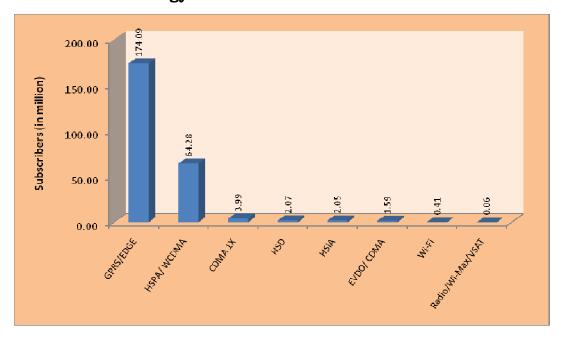
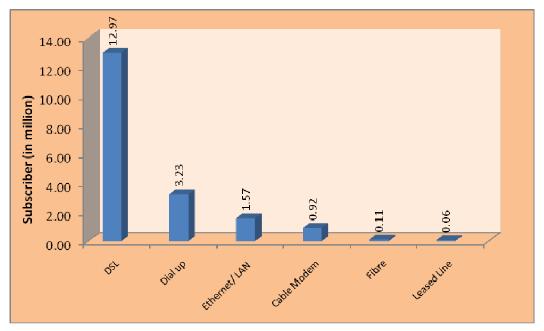


Chart 1.19: Technology trend for Wired Internet Access - Dec-14



1.45 Top five service areas in terms of internet subscriptions (wired + wireless) are Maharashtra (24.10 million), Tamil Nadu including Chennai (22.10 million), Andhra Pradesh (19.82 million), Gujarat (17.69 million) and Delhi (17.28 million).

Table 1.27: Service Area wise number of Internet Subscribers per 100 population

| Service Area                  | Interne | et Subscrib<br>million) | ers (in | Internet subscribers per 100 population |        |       |  |
|-------------------------------|---------|-------------------------|---------|---|--------|-------|--|
|                               | Rural   | Urban                   | Total   | Rural                                   | Urban  | Total |  |
| Andhra Pradesh                | 7.58    | 12.23                   | 19.82   | 12.01                                   | 50.11  | 22.68 |  |
| Assam                         | 2.44    | 2.30                    | 4.74    | 9.06                                    | 45.43  | 14.85 |  |
| Bihar                         | 6.93    | 6.95                    | 13.88   | 5.92                                    | 37.25  | 10.26 |  |
| Delhi                         | -       | -                       | 17.28   | ı                                       | -      | 84.59 |  |
| Gujarat                       | 5.99    | 11.70                   | 17.69   | 16.34                                   | 44.98  | 28.32 |  |
| Haryana                       | 2.85    | 3.07                    | 5.92    | 16.36                                   | 31.96  | 21.98 |  |
| Himachal<br>Pradesh           | 1.39    | 0.98                    | 2.37    | 22.38                                   | 120.14 | 33.75 |  |
| J & K                         | 1.76    | 1.32                    | 3.08    | 19.82                                   | 38.91  | 25.17 |  |
| Karnataka                     | 4.43    | 12.74                   | 17.17   | 11.66                                   | 53.69  | 27.89 |  |
| Kerala                        | 5.23    | 7.08                    | 12.31   | 19.72                                   | 78.57  | 34.71 |  |
| Madhya Pradesh                | 4.60    | 9.24                    | 13.84   | 6.19                                    | 33.27  | 13.60 |  |
| Maharashtra*                  | 8.13    | 15.98                   | 24.10   | 14 24                                   | 49.20  | 31.15 |  |
| Mumbai*                       | 0.86    | 12.42                   | 13.27   | 14.34                                   | 49.20  | 31.13 |  |
| North East                    | 1.60    | 1.69                    | 3.29    | 15.50                                   | 49.30  | 23.98 |  |
| Orissa                        | 2.36    | 3.49                    | 5.86    | 6.81                                    | 47.46  | 13.95 |  |
| Punjab                        | 4.49    | 6.62                    | 11.11   | 25.93                                   | 50.21  | 36.52 |  |
| Rajasthan                     | 5.97    | 8.39                    | 14.36   | 10.96                                   | 48.44  | 20.07 |  |
| Tamil Nadu (incl.<br>Chennai) | 6.10    | 16.00                   | 22.10   | 20.90                                   | 38.65  | 31.36 |  |
| UP (East)*                    | 7.85    | 8.71                    | 16.57   | 7.06                                    | 31.13  | 12.58 |  |
| UP (West)*                    | 4.39    | 7.18                    | 11.57   | 1.00                                    | 31.13  | 14.30 |  |
| Kolkata*                      | 1.06    | 5.86                    | 6.92    | 8.77                                    | 41.70  | 18.25 |  |
| West Bengal*                  | 4.81    | 5.34                    | 10.15   | 0.11                                    | 41.70  | 10.23 |  |
| Total                         | 92.18   | 175.21                  | 267.39  | 10.66                                   | 45.33  | 21.37 |  |

<sup>\*</sup> Population data/projections are available state-wise only.

### Notes:

1. No. of total internet subscribers per 100 population is derived from the subscriber data provided by the operators and the population projections of the country, published by the Office of the Registrar General & Census Commissioner, India.

### **ISP Connectivity**

1.46 The International Internet bandwidth owned by various ISPs is reported to be 1295 GB during the quarter ending Dec-14 as compared to 1409 GB during the previous quarter.

### **Internet Telephony**

1.47 As per the report available with the TRAI from 19 ISPs providing Internet Telephony services, the total outgoing minutes of usage for internet telephony decreased from 302 million during the Q.E. Sep-14 to 245 million during the Q.E. Dec-14. List of these Internet Telephony Service providers is available at Annexure-1.7.

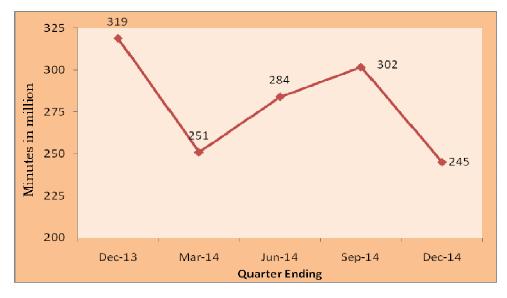


Chart 1.20: Trends in MOU for Internet Telephony

### Part-II: Broadband Service (Download Speed >=512 Kbps)

1.48 As per information received from service providers, the total number of broadband subscribers increased from 75.73 million at the end of Sep-14 to 85.74 million at the end of Dec-14. Out of which wired broadband subscribers are 15.32 million and wireless broadband subscribers are 70.42 million.

- 1.49 Top five broadband (wired+wireless) service providers in term of subscribers are Bharti (19.19 million), BSNL (18.90 million), Vodafone (16.65 million), Idea (12.95 million) and Reliance Communications Group (7.11 million).
- 1.50 In wired broadband segment, BSNL holds 65.14% market share with 9.98 million subscribers followed by Bharti with 1.41 million and MTNL with 1.13 million subscribers.
- 1.51 In wireless broadband segment, Bharti holds 25.25% market share with 17.78 million subscribers followed by Vodafone with 16.64 million and Idea Cellular with 12.95 million subscribers.
- 1.52 Top five service areas in respect of broadband subscriptions are Tamil Nadu including Chennai (8.87 million), Delhi (8.40 million), Maharashtra (7.88 million), Mumbai (6.78 million) and Andhra Pradesh (6.76 million).

Fixed
Wireless, 0.50%

Wireless (dongle + phone), 81.63%

Chart 1.21: Composition of Broadband subscription – Technology wise

1.53 Mobile Device Users (dongle + phone) constitute 81.63% of total broadband subscribers.

### Part-III: Narrowband Service (Download Speed <512 Kbps)

- 1.54 As reported by the service providers, total number of narrowband subscribers increased from 178.67 million at the end of Sep-14 to 181.65 million at the end of Dec-14. Out of which Wired Narrowband subscribers are 3.54 million and Wireless Narrowband subscribers are 178.12 million.
- 1.55 The top five narrowband (wired + wireless) service providers in term of subscriber base are Bharti (49.83 million), Vodafone (42.49 million), Reliance Communications Group (24.46 million), Idea Cellular (21.21 million) and Aircel (15.68 million).
- 1.56 In wired narrowband segment, BSNL holds 90.13% market share with 3.19 million subscribers followed by Bharti (0.09 million) and Tata (0.07 million).
- 1.57 In wireless narrowband segment, Bharti holds 27.93% market share with 49.74 million subscribers followed by Vodafone (42.49 million) and Reliance Communications Group (24.44 million).

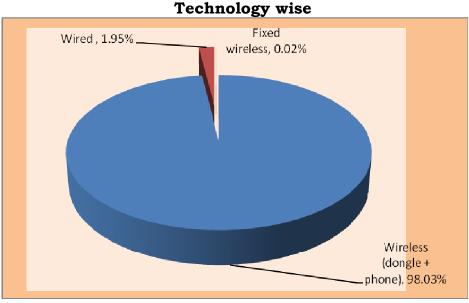


Chart 1.22: Composition of Narrowband subscription – Technology wise

### Section E: Other Value Added Services - PMRTS & VSAT

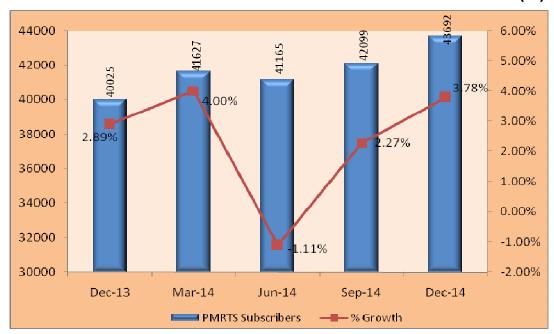
## Public Mobile Radio Trunk Services (PMRTS)

1.58 The subscriber base of PMRTS increased from 42,099 at the end of Sep-14 to 43,692 at the end of Dec-14 with quarterly growth rate of 3.78%.

Table 1.28: PMRTS Subscriber base - Service Provider wise

| Sr.<br>No. | Name of the Service<br>Provider                      | Subscriber<br>Base as on<br>30.09.2014 | Subscriber<br>Base as on<br>31.12.2014 | %age<br>Growth in<br>Subscribers | %age in Market<br>Share as on<br>31.12.2014 |
|------------|--|--|--|----------------------------------|---|
| 1          | Arya Omnitalk<br>Radio Trunking<br>Services Pvt.Ltd. | 34104                                  | 39887                                  | 16.96                            | 91.29                                       |
| 2          | Procall Ltd.   | 4490                                   | 1605                                   | -64.25                           | 3.67  |
| 3          | QuickCall  | 2413                                   | 2064                                   | -14.46                           | 4.72  |
| 4          | Smartalk Pvt Ltd.                                    | 691                                    | 31                                     | -95.51                           | 0.07  |
| 5          | Bhilwara Telenet<br>Services Pvt.Ltd.                | 401                                    | 105                                    | -73.82                           | 0.24  |
|            | Total  | 42099                                  | 43692                                  | 3.78                             | 100   |

Chart 1.23: Number of PMRTS subscribers & Rate of Growth (%)



1.59 Detailed table on Service Area wise subscriber base of PMRTS is available at Annexure-1.8.

### **Very Small Aperture Terminal (VSAT)**

1.60 The total number of VSAT subscribers increased from 2,25,602 at the end of Sep-14 to 2,30,231 at the end of Dec-14. Net addition during the quarter has been 4,629 at the quarterly growth rate of 2.05%.

Table 1.29: VSAT Service Providers currently providing service & their subscriber base

| Sr. | Name of Service Providers                                    | Subscriber<br>Quarter | base at the ending | %age<br>Growth | Market<br>Share (%) |  |
|-----|--|-----------------------|--------------------|----------------|---------------------|--|
| NO  |  | Sep-14                | Dec-14             | Growth         | Dec-14              |  |
| 1   | Hughes Communications Ltd.                                   | 96024                 | 98867              | 2.96           | 42.94               |  |
| 2   | Bharti Airtel Limited,                                       | 53911                 | 54716              | 1.49           | 23.77               |  |
| 3   | Tatanet Services   | 32251                 | 32343              | 0.29           | 14.05               |  |
| 4   | HCL Comnet   | 20507                 | 20468              | -0.19          | 8.89                |  |
| 5   | BSNL   | 16414                 | 17031              | 3.76           | 7.40                |  |
| 6   | Infotel Satcom   | 1625                  | 1628               | 0.18           | 0.71                |  |
| 7   | Essel Shyam  | 374                   | 374                | 0.00           | 0.16                |  |
| 8   | Infinium India Ltd.  | 2546                  | 2721               | 6.87           | 1.18                |  |
| 9   | National Informatics Centre<br>Services Incorporated (NICSI) | 1950                  | 2083               | 6.82           | 0.90                |  |
|     | Total  | 225602                | 230231             | 2.05           | 100                 |  |

1.61 Hughes Communication Limited continues to be the market leader with subscriber base of 98,867.

1.62 Infinium India Ltd has recorded maximum growth rate of 6.87% followed by NICSI with 6.82%, whereas HCL Comnet has registered negative growth in VSAT subscribers in this quarter.

Chart 1.24: Number of VSAT Subscribers & Rate of Growth (%)



# Chapter 2: Revenue and Usage

<sup>•</sup> For all the parameters, Metros indicate data for Delhi, Mumbai & Kolkata. Data for Chennai service area has been included in Circle A, as part of TN.

ARPU arrived after adjusting interconnect usage charges and roaming settlement charges.

<sup>•</sup> The data contained in the section A & B covers the licensees, who have been providing service during the entire period from 1<sup>st</sup> October, 2014 to 31<sup>st</sup> December, 2014 in the various service areas.

### **Section A: GSM Service**

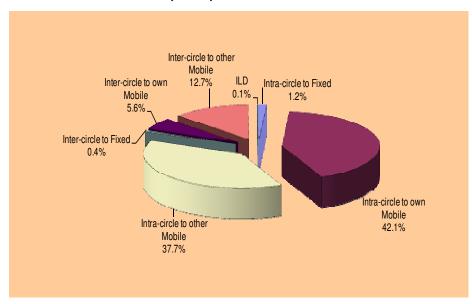
Table 2.1: Key Indicators - GSM Service

| Parameter                                    | Q.E.<br>Dec-14 | Q.E.<br>Sep-14 | Q.E.<br>Dec-13 | QoQ %age<br>change over<br>Sep-14 | YoY %age<br>change over<br>Dec-13 |
|--|----------------|----------------|----------------|-----------------------------------|-----------------------------------|
| Subscriber Base# (million)                   | 890.31         | 875.86         | 823.23         | 1.65                              | 8.15                              |
| Share of Prepaid (%)                         | 95.71          | 95.80          | 95.99          | -0.09                             | -0.29                             |
| Incoming MOU* per subscriber per month       | 194            | 194            | 195            | 0.02                              | -0.35                             |
| Outgoing MOU* per<br>subscriber per month    | 182            | 182            | 184            | 0.14                              | -1.20                             |
| No. of Outgoing SMS per subscriber per month | 25             | 24             | 28             | 3.97                              | -11.68                            |
| Average Revenue Per<br>User (ARPU) per month | 118            | 116            | 112            | 2.35                              | 5.80                              |

<sup>#</sup> The subscriber figures are as on the last day of the respective quarters

2.1 The following chart presents % break-up of outgoing minutes from Home Service Area (HSA) in the QE Dec-14.

Chart 2.1: Break-up of Outgoing minutes from Home Service
Area (HSA) - GSM Service



<sup>\*</sup> Minutes of Usage

2.2 The following chart depicts prepaid subscribers as a % of total subscribers as on the last day of the respective quarters for various categories of circles.

100% 98.14% 95.15% 90% 95.80% 98. 97.63% 87.10% 80% 70% 60% All India Circle A Circle B Circle C Metros □Sep-14 ■Dec-14

Chart 2.2: Proportion of prepaid subscribers - GSM Service

Note: Based on subscriber figures as on the last day of the quarter.

- 2.3 Market share of prepaid segment declined from 95.80% at the end of Sep-14 to 95.71% at the end of Dec-14.
- 2.4 The ARPU per month (all India, blended) increased from Rs.116 in Q.E. Sep-14 to Rs.118 in Q.E. Dec-14. The following table presents the ARPU per month for various categories of circles and various platforms for payment viz. post-paid and pre-paid.

Table 2.2: Monthly ARPU - GSM Service

| Circle Category | ARPU per month in Q.E. December, 2014 (in Rs) |          |         |  |  |  |
|-----------------|---|----------|---------|--|--|--|
| Circle Category | Post-paid                                     | Pre-paid | Blended |  |  |  |
| Circle A        | 456   | 109      | 126     |  |  |  |
| Circle B        | 445   | 98       | 107     |  |  |  |
| Circle C        | 470   | 97       | 104     |  |  |  |
| Metros          | 495   | 109      | 160     |  |  |  |
| All India       | 466   | 103      | 118     |  |  |  |
| All private SPs | 472   | 104      | 120     |  |  |  |
| BSNL/MTNL       | 407   | 91       | 104     |  |  |  |

- 2.5 The ARPU per month for pre-paid segment increased from Rs.101 in QE Sep-14 to Rs.103 in QE Dec-14 and the ARPU per month for post-paid segment also increased from Rs.459 in QE Sep-14 to Rs.466 in QE Dec-14.
- 2.6 The following table presents the composition of ARPU per month in the Q.E. Dec-14.

Table 2.3: Composition of ARPU per month - GSM Service

| S.<br>No. | Item   | Revenue (excl.<br>service tax) per<br>subscriber per<br>month (in Rs.) | % share of total revenue from subscribers |
|-----------|--|--|---|
| 1         | Usage from Home Service Area                       |  |   |
| 1.1.      | Rental Revenue                                     | 20.91  | 16.1                                      |
| 1.2.      | Revenue from calls                                 | 68.24  | 52.6                                      |
| 1.3.      | Revenue from SMS                                   | 3.70   | 2.9                                       |
| 1.4.      | Revenue from data usage                            | 22.19  | 17.1                                      |
| 1.5.      | Revenue from other VAS                             | 5.29   | 4.1                                       |
| 1.6.      | Other revenue                                      | 2.17   | 1.7                                       |
| 2         | Usage outside Home Service Area                    |  |   |
| 2.1.      | Revenue from outroamers                            | 7.29   | 5.6                                       |
| 3         | Total revenue from subscribers (1+2)               | 129.80   | 100                                       |
| 4         | Net inter-operator settlement charges receivable * | -11.36   |   |
| 5         | Net Revenue (ARPU) per month(3+4)                  | 118.44   |   |

<sup>\*</sup> includes Interconnect Usages Charges and roaming settlement charges

- 2.7 From the above table, it may be seen that the net inter-operator settlement charges payable (Rs.11.36) accounts for 8.75% of the total revenue from subscribers.
- 2.8 Revenue from data usage from home service area increased from Rs.20.48 per subscriber per month in the QE Sep-14 to Rs.22.19 in the QE Dec-14.
- 2.9 On an all India average, the overall minutes of usage (MOU) per subscriber per month at 376 for QE Dec-14 remained almost same level as in the previous quarter.

2.10 The following table presents the total MOU (usage from, and outside, the home service area) per subscriber per month for various categories of circles.

Table 2.4: MOU per subscriber per month - GSM Service

|                    | MOU per subscriber per month |                 |              |                 |                 |              |                 |                 |              |
|--------------------|------------------------------|-----------------|--------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|
|                    | Pos                          | tpaid           |              | Prepaid         |                 |              | Blended         |                 |              |
| Circle<br>category | Outgoing<br>MOU              | Incoming<br>MOU | Total<br>MOU | Outgoing<br>MOU | Incoming<br>MOU | Total<br>MOU | Outgoing<br>MOU | Incoming<br>MOU | Total<br>MOU |
| Circle A           | 566                          | 405             | 971          | 164             | 167             | 331          | 184             | 179             | 363          |
| Circle B           | 560                          | 375             | 934          | 159             | 192             | 351          | 168             | 196             | 365          |
| Circle C           | 526                          | 370             | 897          | 174             | 225             | 399          | 180             | 228             | 408          |
| Metro              | 530                          | 356             | 886          | 193             | 170             | 363          | 237             | 194             | 431          |
| All India          | 552                          | 381             | 933          | 166             | 186             | 352          | 182             | 194             | 376          |

Note: MOU indicates total usage i.e. usage from and outside HSA

- 2.11 The overall ratio of incoming MOU and outgoing MOUs for the QE Dec-14 is 52:48.
- 2.12 No. of outgoing SMS per subscriber per month decreased from 24 in Q.E. Sep-14 to 25 in Q.E. Dec-14. The following table presents the outgoing SMS usage (usage from, and outside, the home service area) per subscriber per month for various categories of circles and various platforms for payment viz. post-paid and pre-paid.

Table 2.5: No. of Outgoing SMS per subscriber per month - GSM Service

| Circle    | Outgoing SMS per subscriber month |         |         |  |  |  |  |
|-----------|-----------------------------------|---------|---------|--|--|--|--|
| category  | Postpaid                          | Prepaid | Blended |  |  |  |  |
| Circle A  | 74                                | 31      | 33      |  |  |  |  |
| Circle B  | 59                                | 19      | 20      |  |  |  |  |
| Circle C  | 39                                | 15      | 15      |  |  |  |  |
| Metro     | 58                                | 26      | 30      |  |  |  |  |
| All India | 64                                | 23      | 25      |  |  |  |  |

Note: No. of Outgoing SMS indicate total usage i.e. usage from and outside HSA

Chart 2.3: Minutes of Usage by Out-roamers as a % of Total Minutes of Usage

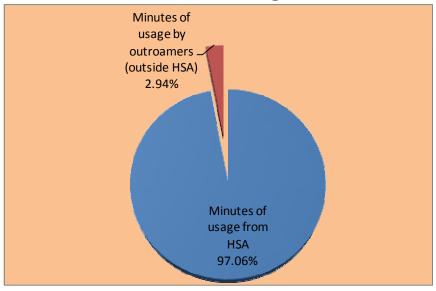
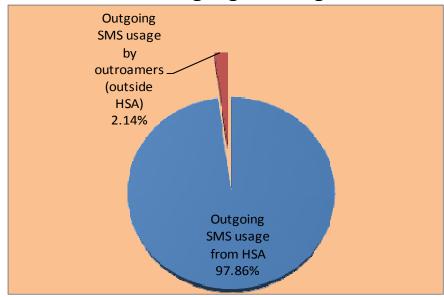


Chart 2.4: Outgoing SMS Usage by Out-roamers as a % of Total No. of Outgoing SMS Usage



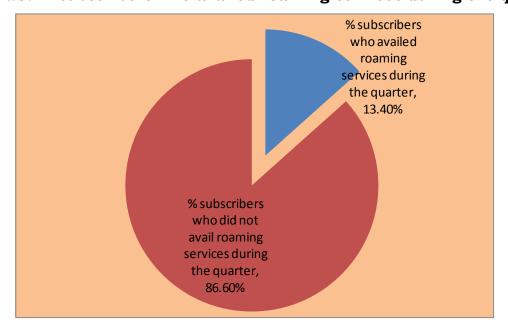
2.13 The following table presents the percentage break-up of outgoing minutes of usage from home service area between various categories of termination networks.

Table 2.6: %Break-up of Outgoing minutes from Home Service Area (HSA)

| Circle<br>Category | % Intra-<br>circle to<br>wireline | % Intra-<br>circle to<br>own<br>wireless | % Intra-<br>circle to<br>other<br>wireless | % Intercircle to wireline | % Intercircle to own wireless | % Intercircle to other wireless | %<br>ILD |
|--------------------|-----------------------------------|--|--|---------------------------|-------------------------------|---------------------------------|----------|
| Circle A           | 1.37                              | 39.50                                    | 42.30                                      | 0.31                      | 4.73                          | 11.67                           | 0.13     |
| Circle B           | 0.89                              | 45.98                                    | 36.97                                      | 0.41                      | 5.05                          | 10.59                           | 0.10     |
| Circle C           | 1.06                              | 52.55                                    | 31.59                                      | 0.72                      | 4.69                          | 9.34                            | 0.05     |
| Metros             | 1.87                              | 25.19                                    | 33.78                                      | 0.63                      | 11.34                         | 26.88                           | 0.31     |
| All India          | 1.20                              | 42.12                                    | 37.75                                      | 0.45                      | 5.62                          | 12.73                           | 0.13     |

2.14 The chart given below presents the percentage of subscribers who availed roaming services (out-roamers) during the quarter ending Dec-14.

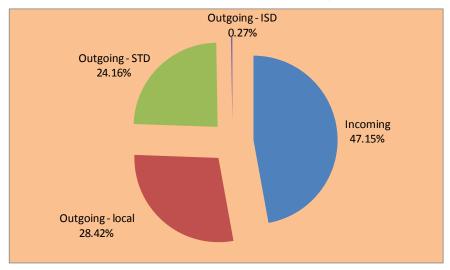
Chart 2.5: % subscribers who availed roaming services during the quarter



2.15 The usage pattern of out-roamers i.e. usage from outside the home service area shows that incoming minutes accounts for 47.15% of the total minutes of usage by out-roamers as against 46.95% in the previous quarter.

2.16 The chart given below presents the break-up of minutes of usage of out-roamers during the Q.E. Dec-14.

Chart 2.6: % Break-up of minutes of usage of outroamers (usage from outside the Home Service Area)



# Average Subscriber outgo\* per Outgoing Minute for usage from Home Service Area (HSA)

2.17 The tariff plans are of bundled nature and the trade-off is generally between monthly fixed charges and variable (call) charges. Therefore, average subscriber outgo per outgoing minute for usage from Home Service Area (HSA) as defined below would be a realistic indicator of average tariff.

Average Subscriber Outgo per Outgoing Minute for usage from HSA = Rental revenue + revenue from outgoing calls from HSA

No. of outgoing minutes from HSA

Table 2.7: Average subscriber outgo per outgoing minute from HSA - GSM Service

(₹ per minute)

| Circle<br>Category | Postpaid | Prepaid | Blended |
|--------------------|----------|---------|---------|
| Circle A           | 0.56     | 0.52    | 0.53    |
| Circle B           | 0.55     | 0.48    | 0.48    |
| Circle C           | 0.60     | 0.44    | 0.45    |
| Metros             | 0.65     | 0.54    | 0.57    |
| All India          | 0.58     | 0.50    | 0.51    |

2.18 All India average subscriber outgo per outgoing minute increased from ₹ 0.50 in the QE Sep-14 to ₹ 0.51 in the QE Dec-14.

Table 2.8: Trends of Key Parameters - GSM Service

| Parameter  | Dec-13 | Mar-14 | Jun-14 | Sep-14 | Dec-14 |
|--|--------|--------|--------|--------|--------|
| 1. ARPU (₹ Per month)  | 112    | 113    | 119    | 116    | 118    |
| 2. MOU per subscriber per month                              | 379    | 389    | 390    | 376    | 376    |
| 3. Outgoing MOU per subscriber per month                     |        |        |        |        |        |
| 3.1 Local (Intra-circle)                                     | 147    | 151    | 153    | 146    | 146    |
| 3.2 NLD (inter-circle)                                       | 37     | 37     | 36     | 36     | 36     |
| 3.3 ILD  | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    |
| 4. No. of Outgoing SMS per subscriber per month              | 28     | 27     | 25     | 24     | 25     |
| 5. Average subscriber Outgo per outgoing minute from HSA (₹) | 0.51   | 0.50   | 0.51   | 0.50   | 0.51   |

2.19 Service Area wise statistics are available at Annexure-2.1.

# Section B: CDMA - Full Mobility Service

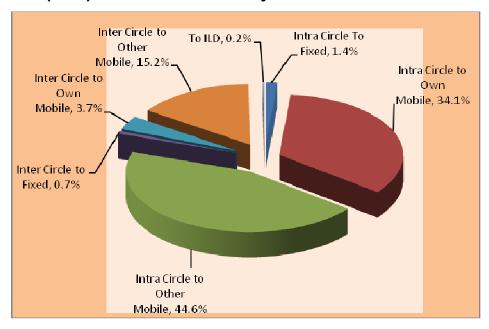
Table 2.9: Key Indicators - CDMA Full Mobility Service

| Parameters                                   | QE<br>Dec-14 | QE<br>Sep-14 | QE<br>Dec-13 | QoQ<br>change<br>(%) | YoY<br>change<br>(%) |
|--|--------------|--------------|--------------|----------------------|----------------------|
| Subscriber Base in<br>Millions*              | 43.06        | 43.63        | 50.69        | -1.29                | -15.0                |
| Share of Prepaid (%)                         | 88.9%        | 88.8%        | 89.9%        | 0.02                 | -1.1                 |
| Incoming MOUs per subscriber per month       | 122.55       | 126.46       | 130.25       | -3.09                | -5.9                 |
| Outgoing MOUs per subscriber per month       | 139.43       | 140.63       | 141.35       | -0.85                | -1.4                 |
| No. of Outgoing SMS per subscriber per month | 16.42        | 16.19        | 17.04        | 1.41                 | -3.7                 |
| ARPU (Rs. per month)                         | 108.61       | 110.25       | 103.60       | -1.49                | 4.8                  |

<sup>\*</sup> The subscriber figures are as on last day of the quarter.

2.20 The following chart depicts % break-up of outgoing minutes from home service area (HSA).

Chart 2.7: % Break-up of Outgoing Minutes from Home Service Area (HSA) - CDMA Full Mobility Service



2.21 The following chart depicts prepaid subscribers as a % of total subscribers as on the last day of the respective quarters for various categories of circles.

95.00% - 88.868 - 66.50 - 66.5

Chart 2.8: Proportion of prepaid subscribers – CDMA Full Mobility Service

- 2.22 Market share of Prepaid segment increased from 88.84% in QE Sep-14 to 88.86% in QE Dec-14.
- 2.23 The following table presents the ARPU per month for various categories of circles and various platforms for payment viz. postpaid and prepaid.

Table 2.10: Monthly ARPU - CDMA Full Mobility Service (₹ per month)

| Circle category | Postpaid | Prepaid | Blended<br>ARPU |
|-----------------|----------|---------|-----------------|
| Circle A        | 472      | 74      | 135             |
| Circle B        | 417      | 55      | 78              |
| Circle C        | 442      | 55      | 73              |
| Metro           | 529      | 62      | 130             |
| All India       | 482      | 62      | 109             |

- 2.24 The All India blended Average Revenue Per User (ARPU) per month has shown a decrease of 1.49% from Rs.110.25 in QE Sep-14 to Rs.108.61 in QE Dec-14.
- 2.25 ARPU for Prepaid service decreased by 3.23% from Rs.64.15 in QE Sep-14 to Rs.62.08 in QE Dec-14. ARPU for Postpaid service increased by 0.23% from Rs.480.89 in QE Sep-14 to Rs.481.99 in QE Dec-14.

Table 2.11: Composition of ARPU per month- CDMA Full Mobility Service

| S.<br>No. | Item  | Revenue (excl.<br>service tax) per<br>subscriber per<br>month (in Rs.) | % Share of total revenue from subscribers |  |  |  |
|-----------|---|--|---|--|--|--|
| 1         | Usage from Home Service Area                      |  |   |  |  |  |
| 1.1       | Rental Revenue                                    | 22.87  | 18.82                                     |  |  |  |
| 1.2       | Revenue from Calls                                | 42.20  | 34.72                                     |  |  |  |
| 1.3       | Revenue from SMS                                  | 3.00   | 2.47                                      |  |  |  |
| 1.4       | Revenue from data usage                           | 45.11  | 37.11                                     |  |  |  |
| 1.5       | Revenue from other VAS                            | 2.70   | 2.22                                      |  |  |  |
| 1.6       | Other Revenue                                     | 3.42   | 2.82                                      |  |  |  |
| 2         | Usage Outside Home Service Area                   |  |   |  |  |  |
| 2.1       | Revenue from Out-roamers                          | 2.26   | 1.86                                      |  |  |  |
| 3         | Total Revenue from<br>Subscribers (1+2)           | 121.57   | 100                                       |  |  |  |
| 4         | Net inter-operator settlement charges receivable* | -12.96   |   |  |  |  |
| 5         | Net Revenue (ARPU) (3+4)                          | 108.61   |   |  |  |  |

<sup>\*</sup> Includes Interconnect Usage Charges and roaming settlement charges

2.26 From the above table, it may be seen that the net inter-operator settlement charges payable (Rs.12.96) accounts for 10.66% of total revenue from subscribers.

- 2.27 The total MOUs per subscriber per month decreased by 1.91%, from 267 in QE Sep-14 to 262 in QE Dec-14. The outgoing MOUs decreased by 0.85% and incoming MOUs decreased by 3.09% during this quarter.
- 2.28 Prepaid and postpaid MOUs per subscriber per month decreased by 1.58% and 3.56% respectively in this quarter. No. of Outgoing SMS per subscriber per month has increased by 1.41%, from 16.19 in Sep-14 to 16.42 in QE Dec-14.

Table 2.12: MOU per subscriber per month - CDMA Full Mobility Service

| MOU per subscriber per month |                 |                 |              |                 |                 |              |                 |                 |              |
|------------------------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|
| Circle                       | Postpaid        |                 |              | Prepaid         |                 |              | Blended         |                 |              |
| category                     | Outgoing<br>MOU | Incoming<br>MOU | Total<br>MOU | Outgoing<br>MOU | Incoming<br>MOU | Total<br>MOU | Outgoing<br>MOU | Incoming<br>MOU | Total<br>MOU |
| Circle A                     | 246             | 114             | 360          | 120             | 117             | 237          | 139             | 117             | 255          |
| Circle B                     | 343             | 165             | 508          | 134             | 137             | 271          | 147             | 139             | 286          |
| Circle C                     | 429             | 296             | 725          | 104             | 140             | 244          | 119             | 148             | 267          |
| Metro                        | 239             | 120             | 360          | 119             | 98              | 217          | 137             | 102             | 238          |
| All India                    | 268             | 133             | 401          | 123             | 121             | 245          | 139             | 123             | 262          |

Note: MOU indicate total usage i.e. usage from and outside HSA

Table 2.13: No. of Outgoing SMS per subscriber per month – CDMA Full Mobility Service

| Circle    | No. of Outgoing SMS per subscriber month |         |         |  |  |  |
|-----------|--|---------|---------|--|--|--|
| category  | Postpaid                                 | Prepaid | Blended |  |  |  |
| Circle A  | 12                                       | 21      | 20      |  |  |  |
| Circle B  | 12                                       | 15      | 15      |  |  |  |
| Circle C  | 11                                       | 10      | 10      |  |  |  |
| Metro     | 14                                       | 17      | 17      |  |  |  |
| All India | 13                                       | 17      | 16      |  |  |  |

Note: SMS indicate total usage i.e. usage from and outside HSA

Chart 2.9: Minutes of usage by out-roamers as a percentage of total minutes of usage

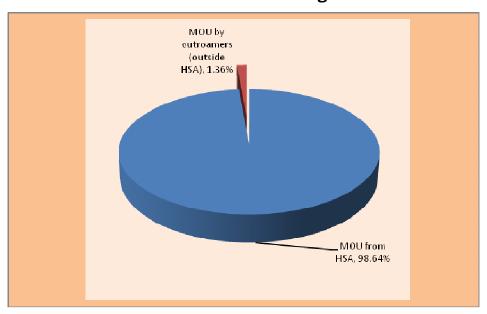


Table 2.14: %Break-up of Outgoing minutes from Home Service Area (HSA) - CDMA Full Mobility Service

| Circle    | Intra<br>Circle To<br>Wireline<br>(%) | Intra<br>Circle to<br>Own<br>Wireless<br>(%) | Intra<br>Circle to<br>Other<br>Wireless<br>(%) | Inter<br>Circle to<br>Wireline<br>(%) | Inter<br>Circle to<br>Own<br>Wireless<br>(%) | Inter<br>Circle to<br>Other<br>Wireless<br>(%) | ILD<br>(%) |
|-----------|---------------------------------------|--|--|---------------------------------------|--|--|------------|
| Circle A  | 1.9                                   | 29.1   | 56.5   | 0.7                                   | 2.3  | 9.0  | 0.4        |
| Circle B  | 0.8                                   | 41.1   | 44.0   | 0.6                                   | 3.5  | 9.9  | 0.1        |
| Circle C  | 1.8                                   | 42.7   | 28.4   | 1.8                                   | 4.9  | 20.4   | 0.1        |
| Metro     | 1.4                                   | 34.1   | 44.6   | 0.7                                   | 3.7  | 15.2   | 0.2        |
| All India | 1.4                                   | 34.1   | 44.6   | 0.7                                   | 3.7  | 15.2   | 0.2        |

2.29 The chart given below presents the percentage of subscribers who availed roaming services (out-roamers) during the quarter.

Chart 2.10: Percentage of subscribers who availed roaming service during the quarter

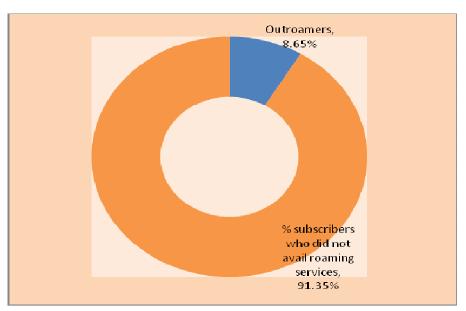


Chart 2.11: Percentage breakup of minutes of usage of Out-roamers (usage from outside the Home Service Area)

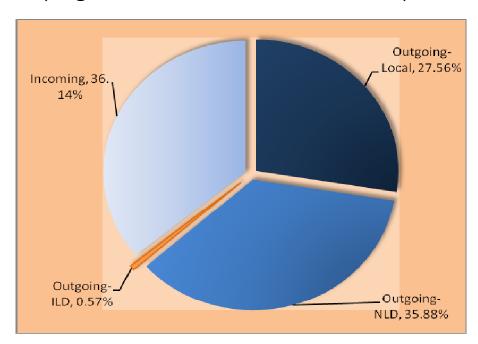


Table 2.15: Average subscriber outgo per outgoing minute from HSA - CDMA Full Mobility Service

[₹ Per min]

| Circle Category | Postpaid | Prepaid | Blended |
|-----------------|----------|---------|---------|
| Circle A        | 0.90     | 0.39    | 0.52    |
| Circle B        | 0.64     | 0.30    | 0.35    |
| Circle C        | 0.78     | 0.45    | 0.51    |
| Metros          | 1.01     | 0.43    | 0.58    |
| All India       | 0.87     | 0.37    | 0.47    |

Average Subscriber Outgo per Outgoing Minute for usage from HSA = Rental revenue + revenue from outgoing calls from HSA

No. of outgoing minutes from HSA

Table 2.16: Trends of Key Parameters - CDMA Full Mobility Service

| Parameter  | Dec-13                                   | Mar-14 | Jun-14 | Sep-14 | Dec-14 |  |  |
|--|--|--------|--------|--------|--------|--|--|
| 1. ARPU (₹ Per month)  | 104                                      | 105    | 112    | 110    | 109    |  |  |
| 2. MOU per subscriber per month                              | 272                                      | 275    | 283    | 267    | 262    |  |  |
| 3. Outgoing MOU per subscriber                               | 3. Outgoing MOU per subscriber per month |        |        |        |        |  |  |
| 3.1 Local (Intra-circle)                                     | 112                                      | 112    | 115    | 110    | 110    |  |  |
| 3.2 NLD (inter-circle)                                       | 26                                       | 28     | 28     | 28     | 27     |  |  |
| 3.3 ILD  | 0.25                                     | 0.28   | 0.31   | 0.34   | 0.32   |  |  |
| 4. Outgoing SMS per subscriber per month                     | 17                                       | 17     | 17     | 16     | 16     |  |  |
| 5. Average subscriber Outgo per outgoing minute from HSA (₹) | 0.48                                     | 0.47   | 0.48   | 0.47   | 0.47   |  |  |

2.30 Service Area wise statistics are available at Annexure-2.2.

# Chapter 3: Financial Data of Telecom Service Sector

Table 3.1: Gross Revenue (GR), Adjusted Gross Revenue (AGR), License Fee (LF) & Spectrum Charges

| Particulars                     | QE Dec-13<br>(₹ in Crore) | QE Sep-14<br>(₹ in Crore) | QE Dec-14<br>(₹ in Crore) | Q-O-Q<br>% Change<br>Over Sep-14 | Y-O-Y<br>% Change<br>over Dec-13 |
|---------------------------------|---------------------------|---------------------------|---------------------------|----------------------------------|----------------------------------|
| Gross Revenue<br>(GR)           | 58385                     | 62447                     | 63955                     | 2.41                             | 9.54                             |
| Adjusted Gross<br>Revenue (AGR) | 39575                     | 43229                     | 43591                     | 0.84                             | 10.15                            |
| Pass Through<br>(GR-AGR)        | 18810                     | 19217                     | 20364                     | 5.97                             | 8.26                             |
| License Fee                     | 3168                      | 3459                      | 3489                      | 0.86                             | 10.14                            |
| Spectrum Usage<br>Charges       | 1585                      | 1683                      | 1756                      | 4.31                             | 10.82                            |

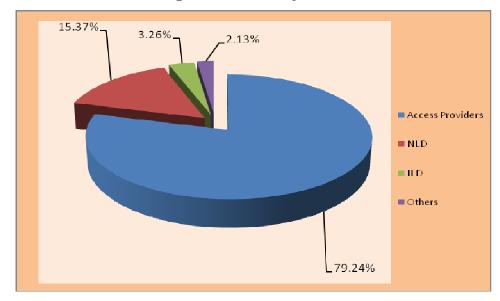
- 3.1 Gross Revenue(GR) and Adjusted Gross Revenue(AGR) increased by 2.41% and 0.84% respectively in the QE Dec-14.
- 3.2 Pass through increased by 5.97% in the QE Dec-14, and on annual basis it has increased by 8.26%.
- 3.3 Pass-through charges as % Gross Revenue: 31.84% in QE Dec-14 as against 30.77% in the previous quarter.

Table 3.2: Service-wise Gross Revenue, Adjusted Gross Revenue, License Fee and Spectrum Charges

(₹ in Crore)

| Service             | GR    | AGR   | LF   | Spectrum<br>Charges |
|---------------------|-------|-------|------|---------------------|
| Access<br>Providers | 48339 | 34542 | 2765 | 1753                |
| NLD                 | 8829  | 6701  | 536  | -                   |
| ILD                 | 3695  | 1419  | 114  | -                   |
| Others              | 3093  | 927   | 74   | 3                   |
| Total               | 63955 | 43591 | 3489 | 1756                |

Chart 3.1: Composition of Adjusted Gross Revenue



- 3.4 Access services contributed 79.24% to the total Adjusted Gross Revenue (AGR) of telecom services. In Access services, Gross Revenue, Adjusted Gross Revenue (AGR), License Fee, Spectrum Usage Charges and Pass Through Charges increased by 3.63%, 2.59%, 2.61%, 3.90% and 6.34% respectively in QE Dec-14.
- 3.5 Monthly ARPU based on AGR for Access services increased from ₹118.20 for Q.E. Sep-14 to ₹119.47 for Q.E. Dec-14. Chart below shows the trend in ARPU.

Chart 3.2: Trend in ARPU per month for Access Services



Table 3.3: Access Services - Service Provider wise Adjusted Gross Revenue

(₹ in Crore)

| Service Providers    | QE Dec-14 | QE Sep-14 | % Change |
|----------------------|-----------|-----------|----------|
| Bharti               | 10300.39  | 9862.74   | 4.44%    |
| Vodafone             | 7683.36   | 7260.54   | 5.82%    |
| Idea                 | 5999.48   | 5612.18   | 6.90%    |
| BSNL                 | 2752.75   | 3218.01   | -14.46%  |
| Tata                 | 2395.85   | 2365.58   | 1.28%    |
| Reliance             | 1859.91   | 1787.42   | 4.06%    |
| Aircel               | 1854.99   | 1845.76   | 0.50%    |
| Telewings            | 725.98    | 676.32    | 7.34%    |
| MTNL                 | 619.04    | 652.17    | -5.08%   |
| Sistema Shyam        | 285.99    | 266.28    | 7.40%    |
| Quadrant             | 36.29     | 25.27     | 43.63%   |
| Videocon             | 27.92     | 34.40     | -18.82%  |
| Loop*                |           | 62.80     |          |
| Grand Total (Access) | 34541.96  | 33669.47  | 2.59%    |

<sup>\*</sup>License of M/s Loop has been expired in November, 2014.

3.6 Public Sector Undertakings' share in the Access AGR of telecom services is 9.76% in the QE Dec-14.

Table 3.4: Category-wise share in Access Services Adjusted Gross Revenue (AGR)

| Category | Access AGR for QE Dec-14 (Rs. in crore) | %age share of AGR |
|----------|---|-------------------|
| Metro    | 5345.36                                 | 15.88             |
| A        | 13012.30                                | 38.65             |
| В        | 11412.31                                | 33.90             |
| С        | 3899.50                                 | 11.58             |
| Total    | 33669.47                                | 100.00            |

#### Notes:

- 1. Source: Figures are un-audited and as submitted by the Operators.
- 2. The figures have been regrouped wherever considered necessary for analysis purpose.
- 3. The Spectrum usage charges (mostly) are now reported on "Payment for the current Quarter" basis. However, some operators are reporting on payment basis or on estimate basis on projected AGR for next quarter.
- 4. Metro area includes Delhi, Mumbai and Kolkata only. Chennai is clubbed with Tamilnadu.

# Chapter 4: Quality of Service (QoS)

#### Section A: Quality of Service Performance of Wireless Service Providers

Part-I: 2G Wireless Services

Table 4.1: QoS Summary - 2G Wireless Service

|           | Parameters  |           | No. of CMTS Licensees not Meeting<br>the Benchmarks |                      |                                  |                      |  |
|-----------|---|-----------|---|----------------------|----------------------------------|----------------------|--|
| S.<br>No. |   | Benchmark | Quarter<br>Septemb                                  |                      | Quarter Ending<br>December, 2014 |                      |  |
|           |   |           | Out Of<br>183<br>(Nos.)                             | Out Of<br>183<br>(%) | Out Of<br>183<br>(Nos.)          | Out Of<br>183<br>(%) |  |
| I.        | Network Related Parameters  |           |   |                      |                                  |                      |  |
| 1         | Network Availability  |           |   |                      |                                  |                      |  |
| (i)       | BTSs Accumulated downtime (not available for service)   | ≤ 2%      | 9   | 4.92%                | 10                               | 5.46%                |  |
| (ii)      | Worst affected BTSs due to downtime   | ≤ 2%      | 13  | 7.10%                | 13                               | 7.10%                |  |
| 2         | Connection Establishment (Accessibility)  |           |   |                      |                                  |                      |  |
| (i)       | Call Set-up Success Rate (within licensee's own network)  | ≥ 95%     | 4   | 2.19%                | 2                                | 1.09%                |  |
| (ii)      | SDCCH/ Paging Chl.<br>Congestion  | ≤ 1%      | 7   | 3.83%                | 4                                | 2.19%                |  |
| (iii)     | TCH Congestion  | ≤ 2%      | 7   | 3.83%                | 6                                | 3.28%                |  |
| 3         | Connection Maintenance (Retain ability)   |           |   |                      |                                  |                      |  |
| (i)       | Call Drop Rate  | ≤ 2%      | 6   | 3.28%                | 5                                | 2.73%                |  |
| (ii)      | Worst affected cells having<br>more than 3% TCH drop (call<br>drop) rate  | ≤ 3%      | 27  | 14.75%               | 25                               | 13.66%               |  |
| (iii)     | Connection with good voice quality  | ≥ 95%     | 8   | 4.37%                | 9                                | 4.92%                |  |
| 4         | Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter) | ≤ 0.5%    | 3   | 1.64%                | 4                                | 2.19%                |  |

|       |  |   | No. of CMTS Licensees not Meeting<br>the Benchmarks |                      |                                   |                      |  |
|-------|--|---|---|----------------------|-----------------------------------|----------------------|--|
| S.    | Parameters   | Benchmark   | Quarter<br>Septemb                                  |                      | Quarter Ending,<br>December, 2014 |                      |  |
| 110.  | Customer Comice Ouglitu  |   | Out Of<br>183<br>(Nos.)                             | Out Of<br>183<br>(%) | Out Of<br>183<br>(Nos.)           | Out Of<br>183<br>(%) |  |
| II.   | Customer Service Quality Parameters  |   |   |                      |                                   |                      |  |
| 5     | Metering and Billing   |   |   |                      |                                   |                      |  |
| (i)   | Metering and billing credibility - post paid   | ≤ 0.1%  | 6   | 3.28%                | 8                                 | 4.37%                |  |
| (ii)  | Metering and billing credibility - pre paid  | ≤ 0.1%  | 3   | 1.64%                | 9                                 | 4.92%                |  |
| (iii) | Resolution of billing/charging/validity complaints   | 100% within<br>4 weeks                            | 10  | 5.46%                | Parameter deleted                 |                      |  |
|       | Resolution of billing/charging/validity complaints   | 98% within<br>4 weeks                             | 1   | 0.55%                | 4                                 | 2.19%                |  |
|       | Resolution of billing/charging/validity complaints   | 100% within<br>6 weeks                            | 6   | 3.28%                | 1                                 | 0.55%                |  |
| (iv)  | Period of applying credit/<br>waiver/ adjustment to<br>customer's account from the<br>date of resolution of complaints | within 1<br>week of<br>resolution of<br>complaint | 12  | 6.56%                | 1                                 | 0.55%                |  |
| 6     | Response time to the customer for assistance   | -   |   |                      |                                   |                      |  |
| (i)   | Accessibility of call centre/<br>customer care   | ≥ 95%   | 15  | 8.20%                | 11                                | 6.01%                |  |
| (ii)  | %age of calls answered by the operators (voice to voice) within 60 seconds   | ≥ 90%   | 21  | 11.48%               | Parameter deleted                 |                      |  |
|       | %age of calls answered by the operators (voice to voice) within 90 seconds   | ≥ 95%   | 47  | 25.68%               | 66                                | 36.07%               |  |
| 7     | Termination / closure of service   |   |   |                      |                                   |                      |  |
| (i)   | %age requests for Termination / Closure of service complied within 7 days  | 100% within<br>7 days                             | 13  | 7.10%                | 2                                 | 1.09%                |  |
| (ii)  | Time taken for refund of deposits after closures   | 100% within<br>60 days                            | 20  | 10.93%               | 8                                 | 4.37%                |  |

- 4.1 The performance has improved in this quarter as compared to the previous quarter in respect of the following parameters:
  - a. Call Set-up Success Rate (within licensee's own network)
  - b. SDCCH/Paging Channel and Congestion
  - c. TCH Congestion
  - d. Call Drop Rate
  - e. Worst affected cells having more than 3% TCH drop (call drop) rate
  - f. Resolution of billing/ charging/ validity complaints (100% within 6 weeks)
  - g. Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution of complaints
  - h. Accessibility of call centre/ customer care
  - i. %age requests for Termination / Closure of service complied within 7 days.
  - j. Time taken for refund of deposits after closure
- 4.2 The performance has deteriorated in this quarter as compared to the previous quarter in respect of the following parameters:
  - a. BTSs Accumulated downtime (not available for service)
  - b. Connection with good voice quality
  - c. Point of Interconnection (POI) Congestion (No. of PoIs not meeting benchmark) (Average over a period of quarter)
  - d. Metering and billing credibility post paid
  - e. Metering and billing credibility pre paid
  - f. Resolution of billing /charging/ validity complaints (98% within 4 weeks)
  - g. %age of calls answered by the operators (voice to voice) within 90 sec

Table 4.2: Parameter wise Analysis of Non-compliance of QoS Benchmarks for 2G Wireless Service Providers

| Parameter                                     | Benchmark     | Service<br>Provider | Service<br>Area | Performance |
|---|---------------|---------------------|-----------------|-------------|
|   |               |                     | ASM             | 4.26        |
|   |               |                     | ВН              | 4.90        |
|   |               | Aircel              | J&K             | 2.54        |
|   |               |                     | NE              | 8.69        |
| BTSs Accumulated downtime (not                | ≤ 2%          |                     | OR              | 2.01        |
| available for service) (%age)                 | ≥ <i>∠</i> 70 |                     | ASM             | 2.51        |
|   |               |                     | BH              | 14.65       |
|   |               | BSNL                | KOL             | 5.44        |
|   |               |                     | NE              | 4.29        |
|   |               |                     | WB              | 3.05        |
|   |               |                     | ASM             | 21.87       |
|   |               |                     | ВН              | 29.34       |
|   |               |                     | CHN             | 2.18        |
|   |               | Aircel              | J&K             | 17.02       |
| Worst affected BTSs due to<br>downtime (%age) |               |                     | NE              | 43.59       |
|   |               |                     | OR              | 8.54        |
|   | ≤ 2%          |                     | WB              | 7.81        |
|   |               | BSNL                | ASM             | 5.05        |
|   |               |                     | BH              | 21.55       |
|   |               |                     | KOL             | 23.56       |
|   |               |                     | NE              | 14.59       |
|   |               |                     | WB              | 15.96       |
|   |               | Vodafone            | J&K             | 3.11        |
| Call Set-up Success Rate (within              | > 050/        | A : 1               | ВН              | 93.64       |
| licensee's own network)                       | ≥ 95%         | Aircel              | J&K             | 94.16       |
|   |               | Aircel              | J&K             | 1.26        |
| SDCCH/ Paging Chl. Congestion                 | . 10/         |                     | NE              | 2.49        |
| (%age)  | ≤ 1%          | DOM                 | NE              | 3.46        |
|   |               | BSNL                | WB              | 1.57        |
|   |               |                     | ASM             | 2.88        |
|   |               | A · 1               | ВН              | 5.91        |
| morr o  | . 20/         | Aircel              | J&K             | 5.35        |
| TCH Congestion (%age)                         | ≤ 2%          |                     | NE              | 3.11        |
|   |               | BSNL                | NE              | 4.42        |
|   |               | Vodafone            | J&K             | 2.04        |
|   |               |                     | HR              | 5.17        |
| Coll Dans Data (0/ con)                       | - O0/         | Aircel              | NE              | 2.22        |
| Call Drop Rate (%age)                         | ≤ 2%          | DOMI                | ASM             | 2.12        |
|   |               | BSNL                | BH              | 3.23        |

| Parameter  | Benchmark | Service<br>Provider | Service<br>Area | Performance |
|--|-----------|---------------------|-----------------|-------------|
|  |           |                     | NE              | 4.61        |
|  |           |                     | AP              | 4.67        |
|  |           |                     | ASM             | 17.09       |
|  |           |                     | BH              | 12.47       |
|  |           |                     | CHN             | 7.83        |
|  |           |                     | DLI             | 6.06        |
|  |           |                     | HP              | 12.71       |
|  |           |                     | HR              | 6.09        |
| Worst affected cells having more                   |           |                     | J&K             | 14.00       |
| than 3% TCH drop                                   |           | A:1                 | KOL             | 3.19        |
|  |           | Aircel              | KTK             | 7.58        |
|  |           |                     | MBI             | 6.22        |
|  |           |                     | MH              | 3.77        |
|  | ≤ 3%      |                     | NE              | 23.05       |
|  |           |                     | OR              | 9.33        |
|  |           |                     | PB              | 3.17        |
|  |           |                     | TN              | 7.22        |
|  |           |                     | UPE             | 3.09        |
| Worst affected cells having more                   |           |                     | WB              | 11.42       |
| than 3% TCH drop                                   |           | BSNL                | ASM             | 4.66        |
|  |           |                     | BH              | 10.43       |
|  |           |                     | NE              | 14.61       |
|  |           |                     | PB              | 19.46       |
|  |           |                     | WB              | 7.88        |
|  |           | Vodafone            | DLI             | 3.92        |
|  |           |                     | UPE             | 3.35        |
|  |           | Aircel              | ASM             | 89.54       |
|  |           |                     | J&K             | 93.44       |
|  |           |                     | NE              | 92.88       |
|  |           |                     | ASM             | 93.47       |
| Connection with good voice quality                 | ≥ 95%     | BSNL                | MP              | 80.66       |
|  |           |                     | NE              | 92.39       |
|  |           |                     | ВН              | 93.23       |
|  |           | Telewings           | UPE             | 92.49       |
|  |           |                     | UPW             | 94.61       |
| Point of Interconnection (POI)                     |           | DOM                 | HR              | 1           |
| Congestion (No. of POIs not meeting the benchmark) | - O F0/   | BSNL                | PB              | 1           |
|  | ≤ 0.5%    | Loop                | MBI             | 9           |
| (Averaged over a period of quarter)                |           | Vodafone            | UPE             | 3           |
| Metering and billing credibility -                 | . 0. 10/  | 7.1                 | AP              | 0.20        |
| post paid  | ≤ 0.1%    | Idea                | DLI             | 0.16        |

| Parameter   | Benchmark                                      | Service<br>Provider | Service<br>Area | Performance |
|---|--|---------------------|-----------------|-------------|
|   |  |                     | GUJ             | 0.12        |
|   |  |                     | HR              | 0.15        |
|   |  |                     | KR              | 0.18        |
|   |  |                     | MH              | 0.18        |
|   |  | Vodafone            | ASM             | 0.30        |
|   |  |                     | NE              | 0.22        |
|   |  | BSNL                | WB              | 0.24        |
|   |  | Idea                | ASM             | 0.24        |
|   |  | luea                | NE              | 0.17        |
| 36  |  | Telewings           | BH              | 0.29        |
| Metering and billing credibility - pre paid   | ≤ 0.1%   |                     | AP              | 0.11        |
| paid  |  |                     | KTK             | 0.19        |
|   |  | Vodafone            | MP              | 0.15        |
|   |  |                     | NE              | 0.14        |
|   |  |                     | RJ              | 0.11        |
|   | 100% within 6<br>weeks                         | Airtel              | DLI             | 99.99       |
| Resolution of billing/charging  | 98% within 4<br>weeks                          | BSNL                | BH              | 95.01       |
| complaints  |  |                     | NE              | 80.50       |
| complaints  |  |                     | RJ              | 62.72       |
|   |  |                     | UPW             | 82.50       |
| Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution of complaints | within 1 week<br>of resolution of<br>complaint | Idea                | AP              | 99.49       |
|   |  |                     | ASM             | 88.77       |
|   |  |                     | BH              | 89.90       |
|   |  |                     | DLI             | 93.41       |
|   |  | Aircel              | J&K             | 92.07       |
| A 11 11 4 6 11 4 7  |  | Aircei              | KOL             | 64.09       |
| Accessibility of call centre/<br>customer care  | ≥ 95%  |                     | OR              | 56.90       |
| customer care   |  |                     | RJ              | 87.80       |
|   |  |                     | WB              | 31.49       |
|   |  |                     | AP              | 91.00       |
|   |  | BSNL                | MP              | 49.00       |
|   |  |                     | UPE             | 90.70       |
|   |  |                     | ASM             | 90.81       |
|   |  | Aircel              | KOL             | 94.88       |
|   |  |                     | MH              | 68.53       |
|   |  | A 1                 | DLI             | 87.43       |
|   |  | Airtel              | J&K             | 94.69       |
|   |  | BSNL                | AP              | 76.00       |

| Parameter  | Benchmark | Service<br>Provider | Service<br>Area | Performance |
|--|-----------|---------------------|-----------------|-------------|
|  |           |                     | ASM             | 77.73       |
|  | ≥ 95%     |                     | CHN             | 73.00       |
| Dercenters of calls answered by the                                      |           |                     | HP              | 89.62       |
| Percentage of calls answered by the operators (voice to voice) within 90 | 2 93%     |                     | HR              | 61.34       |
| seconds  |           |                     | J&K             | 50.00       |
|  |           |                     | KOL             | 94.00       |
|  |           |                     | KR              | 66.6        |
|  |           |                     | KTK             | 90.38       |
|  |           |                     | NE              | 86.50       |
|  |           |                     | PB              | 49.31       |
|  |           |                     | TN              | 92.00       |
|  |           |                     | UPE             | 92.89       |
|  |           |                     | WB              | 88.06       |
|  |           | MTS                 | TN              | 93.20       |
|  |           |                     | AP              | 90.20       |
|  |           |                     | BH              | 93.63       |
|  |           | RCOM CDMA           | CHN             | 94.62       |
|  |           |                     | GUJ             | 89.03       |
|  |           |                     | KTK             | 92.67       |
|  |           |                     | MBI             | 69.20       |
|  |           |                     | MH              | 71.28       |
|  |           |                     | UPE             | 94.58       |
|  |           |                     | AP              | 90.62       |
|  | . 050/    |                     | CHN             | 90.56       |
| Percentage of calls answered by the                                      | ≥ 95%     |                     | GUJ             | 73.12       |
| operators (voice to voice) within 90                                     |           |                     | HR              | 93.09       |
| seconds  |           | DOOM COM            | KR              | 89.08       |
|  |           | RCOM GSM            | KTK             | 91.18       |
|  |           |                     | MBI             | 67.73       |
|  |           |                     | MH              | 71.96       |
|  |           |                     | PB              | 92.96       |
|  |           |                     | UPW             | 93.79       |
|  |           |                     | ASM             | 66.02       |
|  |           |                     | BH              | 90.20       |
|  |           |                     | HP              | 91.70       |
|  |           | RTL                 | KOL             | 93.16       |
|  |           |                     | MP              | 91.54       |
|  |           |                     | NE              | 86.90       |
|  |           |                     | OR              | 88.94       |
|  |           |                     | AP              | 92.66       |
|  |           | TATA CDMA           | ВН              | 91.65       |

| Parameter  | Benchmark          | Service<br>Provider | Service<br>Area | Performance |
|--|--------------------|---------------------|-----------------|-------------|
|  |                    |                     | KOL             | 92.94       |
|  |                    |                     | KTK             | 90.20       |
|  |                    |                     | MBI             | 94.42       |
|  |                    |                     | MP              | 94.78       |
|  |                    |                     | AP              | 85.05       |
|  |                    |                     | BH              | 94.08       |
|  |                    |                     | GUJ             | 92.93       |
|  |                    |                     | KOL             | 87.18       |
|  |                    |                     | KR              | 90.76       |
|  |                    |                     | KTK             | 75.23       |
|  |                    | TATA GSM            | MBI             | 89.88       |
|  |                    |                     | MH              | 93.32       |
|  |                    |                     | MP              | 91.52       |
|  |                    |                     | PB              | 86.64       |
|  |                    |                     | TN              | 92.60       |
|  |                    |                     | UPW             | 94.35       |
|  |                    |                     | WB              | 86.18       |
|  |                    | Telewings           | GUJ             | 90.38       |
|  |                    | Vodafone            | KTK             | 92.42       |
| %age requests for Termination / Closure of service complied within 7 | 100% within 7 days | Aircel              | ASM             | 99.39       |
| days   | -                  | MTNL GSM            | MBI             | 99.98       |
|  |                    | Idea                | MH              | 99.52       |
|  |                    |                     | AP              | 99.57       |
|  |                    |                     | DLI             | 99.83       |
| Time taken for refund of deposits                                    | 100% within        |                     | GUJ             | 98.94       |
| after closures   | 60 days            | TATA CDMA           | KOL             | 98.81       |
|  |                    |                     | KTK             | 99.80       |
|  |                    |                     | TN              | 99.06       |
|  |                    |                     | UPE             | 98.81       |

4.3 The detailed table on Service Provider wise performance of QoS parameters for Wireless 2G Services is available at Annexure-4.1.

#### Part-II: 3G Wireless Services

4.4 The summary of performance of 3G service providers (excluding BSNL) who have not met the benchmarks in this quarter is given in below table.

Table 4.3: QoS Summary - 3G Wireless Service

|                                       |                          |  |           |                        | of CMTS<br>eting the    |                                     |                        |
|---------------------------------------|--------------------------|--|-----------|------------------------|-------------------------|-------------------------------------|------------------------|
| S.<br>No.                             | Pa                       | Parameters   |           | Sept                   | Ending,<br>ember<br>014 | Quarter Ending,<br>December<br>2014 |                        |
|                                       |                          |  |           | Out of<br>94<br>(Nos.) | Out of<br>94<br>(in %)  | Out Of<br>94<br>(Nos.)              | Out of<br>94<br>(in %) |
| 1                                     | Network<br>Availability  | Node-B's Accumulated downtime (not available for service) (%age)   | ≤ 2%      | 6                      | 6.38%                   | 7                                   | 7.45%                  |
|                                       |                          | Worst affected Node-B's due to downtime (%age)   | ≤ 2%      | 11                     | 11.70%                  | 11                                  | 11.70%                 |
|                                       | Connection               | Call Set-up Success Rate (within licensee's own network)   | ≥ 95%     | 2                      | 2.13%                   | 1                                   | 1.06%                  |
| Establishment (Accessibility)         |                          | SDCCH/Paging Channel<br>and RRC Congestion<br>(%age)   | ≤ 1%      | 3                      | 3.19%                   | 4                                   | 4.26%                  |
|                                       |                          | TCH and Circuit<br>Switched RAB<br>Congestion (%age)   | ≤ 2%      | 1                      | 1.06%                   | 2                                   | 2.13%                  |
|                                       |                          | Call Drop and Circuit<br>Switched Voice Drop<br>Rate: (%age)   | ≤ 2%      | 0                      | 0                       | 0                                   | 0                      |
| Connection Maintenance (Retainability |                          | Worst affected cells having more than 3% TCH drop (call drop) and Circuit Switched Voice Drop Rate:-CBBH | ≤ 3%      | 15                     | 15.96%                  | 15                                  | 15.96%                 |
|                                       |                          | Connections with good<br>voice quality and Circuit<br>Switch Voice Quality<br>(CSV quality)              | ≥ 95%     | 1                      | 1.06%                   | 1                                   | 1.06%                  |
| 4                                     | Point of Interconnection | Point of Interconnection (POI) Congestion  | ≤<br>0.5% | 3                      | 3.19%                   | 2                                   | 2.13%                  |

- 4.5 The performance has improved in this quarter as compared to the previous quarter in respect of the following parameters:
  - a. Call Set Up Success Rate (within licensee's own network)
  - b. Point of Interconnection (POI) Congestion
- 4.6 The performance has deteriorated in this quarter as compared to the previous quarter in respect of the following parameters:
  - a. Node-B's Accumulated downtime (not available for service) (%age)
  - b. SDCCH/Paging Channel and RRC Congestion (%age)
  - c. TCH and Circuit Switched RAB Congestion (%age)

Table 4.4: Parameter wise Analysis of Non-compliance of QoS Benchmarks for 3G Wireless Service Providers

| Parameter                                      | Benchmark | Service<br>Provider | Service<br>Area | Performance |
|--|-----------|---------------------|-----------------|-------------|
|  |           |                     | BH              | 3.38        |
|  |           | Aircel              | J&K             | 3.22        |
| Node-B's Accumulated                           |           | AllCel              | NE              | 12.11       |
| downtime (not available for                    | ≤ 2%      |                     | OR              | 3.16        |
| service) (%age)                                |           |                     | BH              | 7.28        |
|  |           | BSNL                | KOL             | 5.33        |
|  |           |                     | NE              | 2.52        |
|  |           |                     | ASM             | 11.00       |
|  |           |                     | BH              | 19.77       |
|  |           |                     | CHN             | 4.45        |
|  |           | Aircel              | J&K             | 17.69       |
| W CC . IN I D. I                               |           |                     | NE              | 52.17       |
| Worst affected Node-B's due to downtime (%age) | ≤ 2%      |                     | OR              | 10.15       |
| downtime (70age)                               |           |                     | WB              | 3.75        |
|  |           |                     | BH              | 23.37       |
|  |           | BSNL                | KOL             | 25.33       |
|  |           | DOINT               | NE              | 10.97       |
|  |           |                     | WB              | 9.51        |

| Parameter  | Benchmark | Service<br>Provider | Service<br>Area | Performance |
|--|-----------|---------------------|-----------------|-------------|
| Call Set-up Success Rate (within licensee's own network)                                 | ≥ 95%     | BSNL                | NE              | 93.00       |
|  |           | Aircel              | J&K             | 1.16        |
| SDCCH/Paging Channel and   | ≤ 1%      | BSNL                | NE              | 4.77        |
| RRC Congestion (%age)  | ≤ 1/0     | DONL                | OR              | 1.20        |
|  |           | TATA                | KR              | 1.39        |
| TCH and Circuit Switched RAB   | ≤ 2%      | BSNL                | KOL             | 4.53        |
| Congestion (%age)  | ≤ Z /0    | DONL                | NE              | 4.70        |
|  |           |                     | AP              | 6.82        |
|  |           |                     | ASM             | 13.42       |
|  |           |                     | BH              | 13.62       |
|  |           | Aircel -            | CHN             | 9.09        |
|  |           |                     | J&K             | 14.38       |
|  |           |                     | KTK             | 10.74       |
| Worst affected cells having  |           |                     | NE              | 17.52       |
| more than 3% TCH drop (call drop) and Circuit Switched                                   | ≤ 3%      |                     | OR              | 12.81       |
| Voice Drop Rate:-CBBH  |           |                     | PB              | 12.13       |
| _  |           |                     | TN              | 6.78        |
|  |           |                     | UPE             | 6.66        |
|  |           |                     | WB              | 5.29        |
|  |           |                     | ВН              | 11.83       |
|  |           | BSNL                | NE              | 6.95        |
|  |           |                     | WB              | 3.92        |
| Connections with good voice<br>quality and Circuit Switch<br>Voice Quality (CSV quality) | ≥ 95%     | BSNL                | AS              | 93.47       |
| Point of Interconnection (POI)   | ≤ 0.5%    | BSNL                | HR              | 1           |
| Congestion   | ≥ 0.3 /0  | BSNL                | PB              | 1           |

4.7 The details table on Service Area wise performance of QoS parameters for 3G Wireless Services is available at Annexure-4.2.

### Section B: Quality of Service Performance of Wireline Service Providers

Table 4.5: QoS Summary - Wireline Service

| S.<br>No.    | Parameters  | Benchmark<br>Dec- 2014    | No of license areas where operators not meeting the benchmarks  September, 2014 December, 2014 |                            |                            |                            |
|--------------|---|---------------------------|--|----------------------------|----------------------------|----------------------------|
|              |   |                           | Out of<br>102<br>(in Nos.)   | Out of<br>102<br>(in %age) | Out of<br>102<br>(in Nos.) | Out of<br>102<br>(in %age) |
| (i)          | Fault incidences per 100 subs/month   | ≤ 7                       | 1  | 1%                         | 0                          | 0%                         |
| (ii) a       | % Fault repaired by next working day for urban areas                                | ≥ 85%                     | 3  | 3%                         | 2                          | 2%                         |
| (ii) c       | % Fault repaired within 5 days (for urban areas)                                    | ≥100%                     | 2  | 2%                         | 3                          | 3%                         |
| (iii)        | Mean Time to Repair (MTTR)  | ≤10Hs                     | 5  | 5%                         | 2                          | 2%                         |
| (iv)         | Point of Interconnection<br>(POI) Congestion (No. of POIs<br>not meeting benchmark) | ≤ 0.5%                    | 3  | 3%                         | 4                          | 4%                         |
| (v)          | Metering & billing credibility  - Post-paid   | ≤ 0.1%                    | 1  | 1%                         | 0                          | 0%                         |
| (vii)<br>(a) | Resolution of billing/<br>charging/ Credit & validity<br>complaints                 | 98% within<br>4 weeks     | 1  | 1%                         | 0                          | 0%                         |
| (ix)         | Response time to the customer for assistance-                                       |                           | -  | -                          | -                          | -                          |
| (ix) a       | Accessibility of call centre/customer care  | ≥ 95%                     | 2  | 2%                         | 10                         | 10%                        |
| (ix) c       | %age of calls answered by<br>the operators (voice to<br>voice) within 90 seconds    | ≥ 95%                     | 32   | 31%                        | 32                         | 31%                        |
| (x)          | Termination / closure of service  | 100%<br>within 7<br>days  | 1  | 1%                         | 2                          | 2%                         |
| (xi)         | Time taken for refund of deposits after closures                                    | 100%<br>within 60<br>days | 0  | 0%                         | 2                          | 2%                         |

#### NOTE:

(2) Most of the SPs have not reported for the parameter "Metering and billing credibility - prepaid" because most of the service providers are not providing prepaid service in Basic(Wireline) service.

- 4.8 The performance has improved in this quarter as compared to the previous quarter in respect of the following parameters:
  - a. Faults incidences per 100 subs/month
  - b. % Fault repaired by next working day for urban areas
  - c. Mean time to repair (MTTR)
  - d. Metering and billing credibility post paid
  - e. Resolution of billing/charging/credit & validity complaints
- 4.9 The performance has deteriorated in this quarter as compared to the previous quarter in respect of the following parameters:
  - a. % Fault repaired within 5 days (for urban areas)
  - b. Point of Interconnection (POI) congestion (No. of POIs not meeting benchmark)
  - c. Accessibility of Call Centre/Customer Care
  - d. Termination / closure of service
  - e. Time taken for refund of deposits after closure

Table 4.6: Parameter wise Analysis of Non-compliance of QoS Benchmarks for Wireline Service Providers

| Parameters                     | Benchmark | Service Providers  | Service | <b>Parameters</b> |
|--------------------------------|-----------|--------------------|---------|-------------------|
|                                |           |                    | Areas   | not met           |
| % Fault repaired by next       | ≥ 85%     | TATA TELESERVICES  | KRK     | 84%               |
| working day for urban areas    |           | LTD.               | KER     | 57%               |
| % Fault repaired within 5 days | ≥100%     | MTNL               | DEL     | 97.61%            |
| (for urban areas)              |           |                    | MUM     | 99.82%            |
|                                |           | VODAFONE INDIA LTD | KRK     | 99.39%            |
| Mean Time to Repair (MTTR)     | ≤10Hs     | TATA TELESERVICES  | KRK     | 11                |
|                                |           | LTD.               | RAJ     | 12                |
| Point of Interconnection (POI) | ≤ 0.5%    | BSNL               | MH      | 04                |
| Congestion (No. of PoIs not    |           |                    | PB      | 02                |
| meeting benchmark)             |           |                    | UPE     | 02                |
|                                |           | BHARTI AIRTEL LTD. | UPE     | 01                |
| Response time to the customer  |           |                    | AP      | 94%               |
| for assistance - Accessibility | ≥ 95%     | BSNL               | HR      | 84%               |
| of call centre/ customer care  |           |                    | HP      | 73%               |
|                                |           |                    | J&K     | 55%               |
|                                |           |                    | KRK     | 93%               |
|                                |           |                    | NE-I    | 92%               |

| Response time to the customer                                  | ≥ <b>95</b> %    | BSNL               | PB    | 59%        |
|--|------------------|--------------------|-------|------------|
| for assistance - Accessibility                                 | 2 93/0           | BSNL               | RAJ   | 93%        |
| of call centre/ customer care                                  |                  |                    | UPE   |            |
|  |                  |                    | UPW   | 59%<br>62% |
|  |                  |                    | AP    | 93%        |
|  |                  |                    | ASS   | 94%        |
|  |                  |                    | BR    | 57%        |
| Response time to the   | ≥ <b>95</b> %    |                    | CHHTS | 83%        |
| customer for assistance  |                  | BSNL               | GUJ   | 85%        |
| %age of calls answered by the                                  |                  |                    | HR    | 89%        |
| operators (voice to voice)                                     |                  |                    | HP    | 84%        |
| within 90 seconds  |                  |                    | J&K   | 78%        |
|  |                  |                    | JHAR  | 87%        |
|  |                  |                    | KRK   | 83%        |
|  |                  |                    | MP    | 85%        |
|  |                  |                    | NE-I  | 93%        |
|  |                  |                    | NE-II | 91%        |
|  |                  |                    | PB    | 60%        |
|  |                  |                    | RAJ   | 34%        |
|  |                  |                    | TN    | 93%        |
|  |                  |                    | UPE   | 21%        |
|  |                  |                    | UPW   | 73%        |
|  |                  |                    | UTTRA | 84%        |
|  |                  |                    | KOL   | 92%        |
|  |                  |                    | CN    | 92%        |
|  |                  | TATA TELESERVICES  | BR    | 85%        |
|  |                  | LTD.               | GUJ   | 92%        |
|  |                  |                    | HR    | 93%        |
|  |                  |                    | KRK   | 91%        |
|  |                  |                    | MP    | 92%        |
|  |                  |                    | MUM   | 88%        |
|  |                  |                    | PB    | 67%        |
|  |                  |                    | MH    | 82%        |
|  |                  |                    | TN    | 91%        |
|  |                  |                    | KOL   | 86%        |
|  | 4.50/            | BHARTI AIRTEL LTD. | KER   | 93.32%     |
| Termination/closure of service                                 | 100%             | MTNL               | DEL   | 99.97%     |
| <ul><li>— %age requests for Termination / Closure of</li></ul> | within 7<br>days |                    | MUM   | 99.54%     |
| service complied within 7 days                                 | uays             |                    |       |            |
| Termination / closure of                                       | 100%             | BHARTI AIRTEL LTD. | HR    | 93%        |
| service— Time taken for refund                                 |                  |                    |       |            |
|  | within 60        |                    | MP    | 97%        |

4.10 Detailed table containing QoS parameters for all the Wireline Service Providers is given in Annexure-4.3.

### Section C: Quality of Service Performance of Broadband (wireline) Service

4.11 There are 117 Service Providers (SPs) providing broadband (wireline) service at the end of December, 2014. Out of these SPs, 38 Service Providers are having broadband subscriber base >10,000 and market share of these 38 SPs is 98.99% of total subscriber base. This report covers performance of top 36 broadband Service Providers vis-à-vis the QoS benchmarks prescribed by TRAI, for the QE December, 2014.

Table 4.7: Summary of Performance of Broadband Service Providers against identified parameters

|       |   |                             | No.of Licensees not meeting the<br>Benchmarks |                           |                                  |                           |  |
|-------|---|-----------------------------|---|---------------------------|----------------------------------|---------------------------|--|
| S.No. | Parameter   | Benchmark                   |   | Ending<br>er, 2014        | Quarter Ending<br>December, 2014 |                           |  |
|       |   |                             | Out of<br>69<br>(in Nos.)                     | Out of<br>69<br>(in %age) | Out of<br>63<br>(in Nos.)        | Out of<br>63<br>(in %age) |  |
| 1     | Service Provisioning  | 100% in=<15<br>working days | •   |                           |                                  |                           |  |
| (i)   | %age of connections provided within 15 days of registration of demand   | 100%                        | 7   | 10.14%                    | 5                                | 7.94%                     |  |
| 2     | Faults Repair   |                             |   |                           |                                  |                           |  |
| (i)   | % of faults repaired by next working day (>90%)   | >90%                        | 6   | 8.70%                     | 5                                | 7.94%                     |  |
| (ii)  | % of faults repaired within 3 working day   | =>99%                       | 8   | 11.59%                    | 10                               | 15.87%                    |  |
| (iii) | No. of customers to whom rent rebate is given in minumum monthly charges or equivalent usage allowance for delay in fault repair. | In nos.                     | 0   | 0.00%                     | 0                                | 0.00%                     |  |
| 3     | Billing Performance   |                             |   |                           |                                  |                           |  |
| (i)   | %age of bills disputed  | <2%                         | 0   | 0.00%                     | 0                                | 0.00%                     |  |
| (ii)  | %age of billing complaints resolved within 4 weeks  | 100% within<br>4 weeks      | 2   | 2.90%                     | 0                                | 0.00%                     |  |
| (iii) | %age of cases to whom refund of deposits is made within 60 days of closures   | 100%<br>within 60<br>weeks  | 0   | 0.00%                     | 0                                | 0.00%                     |  |

|              | Parameter                                  |           | No.of Licensees not meeting the<br>Benchmarks |                |                                  |           |  |
|--------------|--|-----------|---|----------------|----------------------------------|-----------|--|
| S.No.        |  | Benchmark | Quarter<br>Septemb                            | _              | Quarter Ending<br>December, 2014 |           |  |
|              |  |           | Out of 69                                     | Out of         | Out of                           | Out of    |  |
|              |  |           | (in Nos.)                                     | 69             | 63                               | 63        |  |
|              |  |           | , ,   | (in %age)      | (in Nos.)                        | (in %age) |  |
| 4            | Response Time to the                       |           |   |                |                                  |           |  |
|              | Customer for assistance                    |           |   |                |                                  |           |  |
| (i)          | %age of calls answered by                  | >60%      | 0   | 0.00%          | 0                                | 0.00%     |  |
|              | operator (Voice to voice) within           |           |   |                |                                  |           |  |
| (**)         | 60 sec                                     | . 000/    | _   | <b>7.05</b> 0/ | 0                                | 0.150/    |  |
| (ii)         | %age of calls answered by                  | >80%      | 5   | 7.25%          | 2                                | 3.17%     |  |
|              | operator (Voice to voice) within 90 sec    |           |   |                |                                  |           |  |
| 5            | Bandwidth utilisation/                     |           |   |                |                                  |           |  |
|              | throughput                                 |           |   |                |                                  |           |  |
| (i)          | No. of Intra network links having          |           | 0   | 0.00%          | 2                                | 3.17%     |  |
| (-)          | Bandwidth utilisation >90%                 |           |   |                | _                                | 002170    |  |
|              | during peak hours (TCBH)                   |           |   |                |                                  |           |  |
| (ii)         | No. of Upstream links for                  |           | 0   | 0.00%          | 1                                | 1.59%     |  |
| , ,          | International connectivity having          |           |   |                |                                  |           |  |
|              | bandwidth utilisation >90%                 |           |   |                |                                  |           |  |
|              | during peak hours (TCBH)                   |           |   |                |                                  |           |  |
| (iii)        | % International bandwidth                  |           | 1   | 1.45%          | 2                                | 3.17%     |  |
|              | utilization during peak hours              |           |   |                |                                  |           |  |
| <i>(</i> ; ) | (TCBH) (Enclose MRTG) <90%                 | 000/      |   | 0.000/         | 0                                | 0.000/    |  |
| (iv)         | Broadband Connection Speed                 | >80%      | 0   | 0.00%          | 0                                | 0.00%     |  |
|              | available (download) from ISP node to user |           |   |                |                                  |           |  |
| 6            | Service availability / uptime              |           |   |                |                                  |           |  |
| 0            | (for all users) in %age                    |           |   |                |                                  |           |  |
| (i)          | Service availability /uptime (for          | >98%      | 0   | 0.00%          | 1                                | 1.59%     |  |
| (-)          | all users) in %age                         |           |   |                | _                                |           |  |
| 7            | Packet loss (for wired                     | <1%       | 0   | 0.00%          | 0                                | 0.00%     |  |
|              | broadband access) in %age                  |           |   |                |                                  |           |  |
| 8            | Network latency (for wired                 |           |   |                |                                  |           |  |
|              | broadband access)                          |           |   |                |                                  |           |  |
| (i)          | User reference point at POP/ISP            | <120 ms   | 0   | 0.00%          | 0                                | 0.00%     |  |
| (**)         | Gateway node to IGSP/NIXI                  | 250       |   | 0.000/         | -                                | 1 =00/    |  |
| (ii)         | User reference point at ISP                | <350 ms   | 0   | 0.00%          | 1                                | 1.59%     |  |
|              | Gateway node to International              |           |   |                |                                  |           |  |
|              | nearest NAP port abroad (terrestrial)      |           |   |                |                                  |           |  |
| (iii)        | User reference point at ISP                | <800 ms   | 0   | 0.00%          | 1                                | 1.59%     |  |
| (111)        | Gateway node to International              | 1000 1113 |   | 0.0070         | 1                                | 1.00/0    |  |
|              | nearest NAP port abroad                    |           |   |                |                                  |           |  |
|              | (satellite)                                |           |   |                |                                  |           |  |

Note: Above benchmarks Includes 'NR'

Table 4.8: Parameter-wise Analysis of non-compliance of QoS benchmarks for Broadband Service Providers

| S1. | Parameters  | Benchmark                     | Name of the Service Proivder not   |
|-----|---|-------------------------------|--|
| No. |   | 1000/: 15                     | meeting the Benchmark  |
| 1   | Service Provisioning/<br>Activation Time  | 100% in =< 15<br>working days |  |
| 1.2 | %age of connections<br>provided within 15 days of<br>registration of demand   | 100%                          | MTNL - Delhi & Mumbai (99.94%)  Hathway Cable - Karnataka(99.00%),  Maharashtra (96.00%), Goa(91.00%)  You Broadband - All India (96.00%)  |
| 2   | Faults Repair/<br>Restoration Time  |                               |  |
| 2.2 | % of faults repaired by next working day  | >90%                          | MTNL- Delhi & Mumbai (86.49%), Atria Convergence - All India (86.00%), Hathway - Karnataka (88.00%) Honesty Net - Mumbai (84.00%), Ortel - Andhra Pradesh (72.00%)   |
| 2.3 | % of faults repaired within 3 working day   | =>99%                         | MTNL-Delhi & Mumbai (96.04%), Atria Convergence- All India (98.00%), Hathway Cable - Karnataka(98.00%), Maharashtra (97.00%), Honesty Net - Mumbai (95.63%), Ortel - Andhra Pradesh (78.00%), Tata Communications - All India (97.00%) Tata Teleservices (TTSL) - All India (98.00%) Tata Teleservices (TTML) - Maharashtra & Goa (97.60%), You Broadband - All India (98.00%) |
| 4   | Response Time to the<br>Customer for assistance   |                               |  |
| 4.3 | %age of calls answered by operator (Voice to voice) within 90 sec   | >80%                          | BSNL- All India (71.68%) Siti Cable - All India (78.00%)   |
| 5   | Bandwidth utilisation/<br>throughput  | >98% w.e.f<br>Q. E. Sept.07   |  |
| 5.2 | No. of Intra network links<br>having Bandwidth<br>utilisation >90% during<br>peak hours (TCBH)                              | 0                             | Honesty Net - Mumbai (2497)  |
| 5.4 | No. of Upstream links for<br>International connectivity<br>having bandwidth<br>utilisation >90% during<br>peak hours (TCBH) | 0                             | Home Sytems - Mumbai (1),<br>Smartlink - Mumbai (1)  |

| S1.<br>No. | Parameters   | Benchmark                   | Name of the Service Proivder not meeting the Benchmark            |
|------------|--|-----------------------------|---|
| 5.7        | % International<br>bandwidth utilization<br>during peak hours (TCBH)<br>(Enclose MRTG) < 90%             | <90%                        | Home Sytems - Mumbai (91.00%),<br>Indusind Media - All India (NR) |
| 6          | Service<br>Availability/Uptime (for<br>all users) in %age  | >98% w.e.f<br>Q.E. Sept.,07 |   |
| 6.3        | Service availability<br>/uptime (for all users) in<br>%age   | >98%                        | <u>Vasai Cable</u> - Mumbai (94.71%)                              |
| 8          | Network latency (for wired broadband access)   |                             |   |
| 8.2        | User reference point at<br>ISP Gateway node to<br>International nearest NAP<br>port abroad (terrestrial) | <350 ms                     | Meghbela Cable - Kolkata & West<br>Bengal (NR)                    |
| 8.3        | User reference point at<br>ISP Gateway node to<br>International nearest NAP<br>port abroad (satellite)   | <800 ms                     | Meghbela Cable - Kolkata & West<br>Bengal (NR)                    |

4.12 Detailed table containing QoS parameters for all the Broadband Service Providers is given in Annexure-4.4.

# Chapter 5: Performance of Cable TV, DTH and Radio Broadcasting Services

Table 5.1: Key Parameters - Broadcasting & Cable Services

| S.No | Parameter  | QE<br>Sep-14 | QE<br>Dec-14 |
|------|--|--------------|--------------|
| 1    | Number of private satellite TV channels registered with Ministry of I&B                                  | 813          | 826          |
| 2    | Maximum number of Pay TV Channels carried by certain cable operator in non-CAS areas                     | 194          | 195          |
| 3    | Maximum number of Free-to-Air (FTA) TV<br>Channels carried by certain cable operator in<br>non-CAS areas | 185          | 182          |
| 4    | Private FM Radio stations in operation   | 243          | 243          |
| 5    | Private DTH Operators  | 6            | 6            |
| 6    | Licensees of community radio stations  | 205          | 208          |
| 7    | Operational community radio station  | 171          | 175          |

#### Cable TV Services

#### (A) Analog Cable TV Services in Non CAS areas

- 5.1 In Non-CAS areas, the maximum number of TV channels being carried in a digital form by any of the reporting MSOs is 398, while in conventional analogue form, the maximum number of channels being carried by any of the reporting MSOs is 100.
- 5.2 The maximum number of Free-to-Air (FTA), Pay Channels & Local Channels reportedly being carried by any of the reporting MSOs in their cable networks in a Non-CAS area are 182, 195 and 21 respectively in the quarter ending December 2014. However, these numbers relate to different networks and hence may not be added up to arrive at the figure for the maximum number of channels being carried in any network.

#### (B) Digital Addressable Cable TV Systems (DAS areas)

- 5.3 Digitization with addressability, of the cable TV sector is in progress, in a phased manner. It is envisaged to be completed in four phases. The cutoff date for migration to "Digital Addressable Cable TV Systems" in the first phase, covering the four metropolitan cities, was 31.10.2012 and in the second phase (covering 38 cities having population more than 1 million) it was 30.03.2013. Cutoff date for the third phase, it was 30.09.2014 and for the fourth and final phase, it was 31.12.2014. However, the cutoff dates for third & fourth phases have been extended upto 31.12.2015 & 31.12.2016 respectively.
- 5.4 As on 31.12.2014, there are a total of 138 Multi System Operators (MSOs), who have been granted Permanent Registration (for 10 years) by Ministry of I&B, for providing Cable TV services through Digital Addressable Systems. A list of these 138 MSOs along with their permitted area of operation, is available at Annexure-5.1

#### Satellite TV Channels

- 5.5 The total number of permitted private satellite TV channels, by Ministry of Information and Broadcasting (MIB), as obtained from the website of MIB, is 826 as on 31st December 2014.
- 5.6 There are a total of 245 Pay channels as reported by broadcasters and their details have been uploaded on TRAI's website along with the names of the respective broadcasters. A list these pay TV channels along with names of the respective broadcasters is placed at Annexure-5.2.

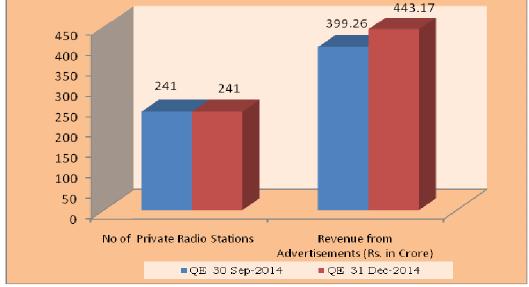
#### **FM Radio Services**

- 5.7 Apart from All India Radio, Prasar Bharati a public broadcaster, there are 243 operational private FM Radio stations as on 31<sup>st</sup> December, 2014. A list of these FM Radio service providers along with their date of operationalization is placed at Annexure 5.3. The information therein is as received from MIB.
- 5.8 The reported Advertisement Revenue during the quarter ending December, 2014 in respect of 241 private FM Radio stations was Rs 443.17 crore as against Rs 399.26 crore for the previous quarter. The figures are based on the details of Advertisement Revenue submitted by the FM Radio service providers to TRAI. However, these figures do not pertain to the same set of service providers / radio stations

Chart 5.1 : Comparative position of Revenue from FM Radio
Stations as reported to TRAI

443.17

450



#### **DTH Services**

5.9 At present, apart from free DTH service of Doordarshan of Prasar Bharati – a public broadcaster, there are 6 private DTH Operators. All these private DTH Operators are offering pay DTH services. As per the information submitted by the DTH operator through quarterly PMR for DTH services, total number of registered subscribers and active subscribers being served by these six private DTH operators, as reported to TRAI, are 73.06 million & 40.54, million respectively as on 31st December 2014. The list of pay DTH Operators is available at Annexure-5.4.

#### Community Radio

5.10 As per data received from MIB, as on 31st December, 2014, out of the 208 community radio licenses issued so far, 175 stations are operational. The status of applications for community radio station licenses as obtained from Ministry of Information and Broadcasting up to the end of December, 2014 is as per Table 5.2.

Table 5.2: Number of Applications received / Letters of Intent issued /Licenses Issued in respect of Community Radio Stations

|                                       | As on 31.12.2014 |
|---------------------------------------|------------------|
| Total No. of Applications Received    | 1624             |
| No of Letters of Intent (LOIs) issued | 500*             |
| No of Applications rejected           | 680              |
| No of Licenses issued (GOPA signed)   | 208              |
| No of stations operational            | 175              |

<sup>\*</sup>Out of 500 LOIs, 91 LOIs have been cancelled.

**Source:** Ministry of Information & Broadcasting (MIB)

#### **Teleport Service**

5.11 As per information available on the website of MIB, there are a total of 90 permitted Teleports. The status of permitted Teleports is placed at Annexure-5.5.

## Annexures

Annexure 1.1: Licensed Cellular (GSM & CDMA) Service Providers

| S1.<br>No | Service Provider                       | Area for which licensed with No.   | UASL/UL(AS)  | CMTS  |
|-----------|--|--|--|---|
| 1         | Bharti                                 | All India (22)   | All India except<br>NE   | North East  |
| 2         | Aircel Group                           | All India (23)   | All India except<br>Chennai & TN   | Chennai &<br>Tamil Nadu   |
| 3         | Reliance<br>Communications Ltd         | All India (except<br>Assam & NE) (20)                                      | All  |   |
| 4         | Reliance Telecom Ltd                   | Kolkata, MP, WB,<br>HP, Bihar, OR,<br>Assam & NE (8)                       | A11  |   |
| 5         | Vodafone                               | All India (23)   | A11  |   |
| 6         | Tata Teleservices                      | All India except<br>Assam, NE & J&K<br>(19)                                | All  |   |
| 7         | IDEA                                   | All India (22)   | Mumbai, TN incl. Chennai, Kol, WB, Bihar, OR, Assam, NE, Punjab, KTK & J&K | Delhi, MH,<br>Guj, AP, MP,<br>Kerala, HP,<br>Haryana,<br>UP-W, UP-E,<br>Rajasthan |
| 8         | Shyam Telelink                         | Delhi, Kol, Guj,<br>KTK, TN incl.<br>Chennai, Kerala,<br>UP-W, Raj, WB (9) | A11  | v   |
| 9         | BSNL                                   | All India (except<br>Delhi & Mumbai) 20                                    |  | All   |
| 10        | MTNL                                   | Delhi, Mumbai (2)  |  | All   |
| 11        | Telewings<br>Communication Pvt<br>Ltd  | MH, Guj, AP, UP-W,<br>UP-E, Bihar (6)                                      | All  |   |
| 12        | Videocon<br>Telecommunications<br>Ltd. | Guj, Har, UP-W,<br>UP-E, MP, Bihar (6)                                     | All  |   |
| 13        | Reliance Jio<br>Infocomm Ltd           | All India (21)   | All  |   |
| 14        | Quadrant                               | Punjab (1)   | Punjab   |   |

Source: DoT and Service providers

**Annexure 1.2: Wireless Subscriber Base** 

| Service Area Vodafone (GSM) |             | e (GSM)     | Bharti      | (GSM)       | Idea        | Idea (GSM)  |            | Aircel/Dishnet (GSM) |            | e (GSM)    | Reliance (CDMA) |            |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|----------------------|------------|------------|-----------------|------------|
|                             | Sep-14      | Dec-14      | Sep-14      | Dec-14      | Sep-14      | Dec-14      | Sep-14     | Dec-14               | Sep-14     | Dec-14     | Sep-14          | Dec-14     |
| Andhra Pradesh              | 6,623,389   | 6,914,336   | 20,584,804  | 21,035,524  | 13,077,270  | 13,646,780  | 2,204,855  | 2,349,727            | 2,937,423  | 3,100,944  | 1,937,653       | 1,911,028  |
| Assam                       | 2,944,656   | 3,060,613   | 4,765,883   | 4,879,060   | 666,458     | 728,824     | 4,003,311  | 4,231,441            | 2,227,943  | 2,256,672  |                 |            |
| Bihar                       | 7,697,096   | 7,880,695   | 22,658,278  | 23,260,424  | 7,090,620   | 7,764,446   | 5,442,632  | 5,674,192            | 7,003,683  | 6,158,118  | 2,579,651       | 2,587,492  |
| Delhi                       | 9,338,371   | 9,468,453   | 10,774,507  | 10,877,042  | 5,796,383   | 5,906,714   | 4,511,028  | 4,713,338            | 5,078,335  | 5,213,016  | 2,962,494       | 2,994,361  |
| Gujarat                     | 18,041,356  | 18,457,632  | 7,498,409   | 7,789,314   | 10,133,624  | 10,605,791  | 18,563     | 18,563               | 4,903,228  | 3,162,817  | 1,255,889       | 1,231,566  |
| Haryana                     | 4,965,825   | 5,061,184   | 2,421,066   | 2,529,358   | 4,252,950   | 4,428,358   | 3,592      | 3,092                | 1,548,514  | 1,602,610  | 406,073         | 405,837    |
| Himachal Pradesh            | 598,035     | 587,941     | 2,335,669   | 2,384,219   | 634,636     | 674,632     | 876,478    | 907,274              | 1,269,337  | 1,352,680  | 172,659         | 173,011    |
| Jammu & Kashmir             | 890,099     | 1,050,980   | 2,800,232   | 2,885,273   | 423,722     | 466,419     | 2,284,190  | 2,491,798            | 734,762    | 749,202    | 21              | 19         |
| Karnataka                   | 7,524,081   | 7,607,837   | 17,777,929  | 18,359,667  | 7,348,259   | 7,803,337   | 2,807,110  | 2,923,297            | 3,881,819  | 3,950,948  | 1,324,939       | 1,281,501  |
| Kerala                      | 6,897,766   | 7,058,734   | 3,818,401   | 3,959,875   | 9,264,596   | 9,494,734   | 918        | 918                  | 867,463    | 896,661    | 884,625         | 859,648    |
| Madhya Pradesh              | 5,048,878   | 5,726,055   | 10,951,800  | 11,084,420  | 18,267,158  | 18,862,565  | 22,694     | 22,694               | 9,883,928  | 10,105,955 | 2,083,922       | 2,059,127  |
| Maharashtra                 | 16,343,514  | 16,894,186  | 10,533,521  | 10,983,519  | 20,168,615  | 21,101,531  | 1,694,890  | 1,749,377            | 5,182,313  | 3,179,000  | 1,805,482       | 1,788,266  |
| Mumbai                      | 7,865,981   | 8,348,017   | 4,650,945   | 4,997,718   | 3,606,124   | 3,898,068   | 2,213,482  | 2,309,076            | 3,080,845  | 2,801,111  | 2,950,578       | 2,947,835  |
| North East                  | 1,229,623   | 1,280,728   | 3,191,007   | 3,312,390   | 390,278     | 428,926     | 2,532,562  | 2,863,557            | 851,971    | 841,141    |                 |            |
| Orissa                      | 3,561,326   | 3,583,658   | 8,317,844   | 8,601,791   | 1,206,630   | 1,327,635   | 3,855,679  | 3,909,753            | 3,388,701  | 3,615,659  | 303,522         | 300,984    |
| Punjab                      | 4,769,649   | 4,823,485   | 7,596,318   | 7,634,179   | 5,970,601   | 6,091,118   | 991,039    | 967,167              | 2,590,314  | 2,751,019  | 320,439         | 335,904    |
| Rajasthan                   | 10,362,725  | 10,517,333  | 16,388,986  | 16,900,399  | 6,268,311   | 6,525,030   | 5,252,634  | 5,448,995            | 4,974,938  | 5,261,120  | 963,772         | 971,638    |
| Tamil Nadu (incl. Chennai)  | 13,679,203  | 13,961,596  | 15,052,717  | 15,341,821  | 3,432,626   | 3,984,325   | 23,443,748 | 23,620,644           | 3,943,366  | 4,276,624  | 1,850,471       | 1,817,370  |
| UP(E)                       | 16,430,059  | 16,903,807  | 17,331,023  | 17,793,314  | 8,271,049   | 8,750,797   | 5,745,174  | 6,007,873            | 5,215,101  | 5,466,948  | 2,502,007       | 2,455,226  |
| UP(W)                       | 10,218,371  | 10,424,299  | 7,081,358   | 7,203,729   | 12,130,607  | 12,535,987  | 120,935    | 164,141              | 3,894,672  | 3,897,548  | 1,259,450       | 1,269,742  |
| Kolkata                     | 4,751,505   | 4,747,270   | 4,005,840   | 4,048,302   | 1,532,614   | 1,635,759   | 3,470,458  | 3,634,662            | 2,673,752  | 2,519,573  | 1,073,771       | 1,024,836  |
| West Bengal                 | 14,065,785  | 14,316,992  | 11,014,779  | 11,353,704  | 3,627,060   | 3,874,282   | 4,354,677  | 4,661,966            | 6,482,574  | 5,865,771  | 871,624         | 853,918    |
| Total                       | 173,847,293 | 178,675,831 | 211,551,316 | 217,215,042 | 143,560,191 | 150,536,058 | 75,850,649 | 78,673,545           | 82,614,982 | 79,025,137 | 27,509,042      | 27,269,309 |

#### Annexure 1.2 (contd.)

| Service Area               | Tata (GSM) |            | Tata (CDMA) |            | BSNL       | (GSM)      | BSNL (CDMA) |           | MTNL (GSM) |           | MTNL (CDMA) |        |
|----------------------------|------------|------------|-------------|------------|------------|------------|-------------|-----------|------------|-----------|-------------|--------|
|                            | Sep-14     | Dec-14     | Sep-14      | Dec-14     | Sep-14     | Dec-14     | Sep-14      | Dec-14    | Sep-14     | Dec-14    | Sep-14      | Dec-14 |
| Andhra Pradesh             | 4,706,743  | 4,888,106  | 1,482,821   | 1,381,305  | 9,885,542  | 9,874,832  | 60,686      | 56,728    |            |           |             |        |
| Assam                      |            |            |             |            | 1,202,528  | 1,180,718  | 96,421      | 96,110    |            |           |             |        |
| Bihar                      | 1,714,878  | 1,638,755  | 752,258     | 699,413    | 2,847,838  | 2,733,117  | 205,832     | 206,338   |            |           |             |        |
| Delhi                      |            |            | 2,558,902   | 2,836,590  |            |            |             |           | 2,293,645  | 2,302,742 | 22,991      | 22,988 |
| Gujarat                    | 2,720,119  | 2,806,961  | 454,870     | 407,077    | 3,117,161  | 3,094,333  | 84,682      | 78,841    |            |           |             |        |
| Haryana                    | 2,073,025  | 2,263,754  | 578,077     | 545,218    | 3,195,453  | 3,056,051  | 14,049      | 11,817    |            |           |             |        |
| Himachal Pradesh           | 55,498     | 52,075     | 57,459      | 55,614     | 1,398,839  | 1,396,930  | 44,868      | 41,012    |            |           |             |        |
| Jammu & Kashmir            |            |            |             |            | 1,206,310  | 1,180,843  | 59,817      | 56,020    |            |           |             |        |
| Karnataka                  | 5,975,659  | 6,372,151  | 578,065     | 522,780    | 6,659,058  | 6,616,612  | 123,062     | 113,405   |            |           |             |        |
| Kerala                     | 1,496,843  | 1,538,709  | 197,409     | 183,081    | 7,175,283  | 6,504,784  | 257,155     | 240,421   |            |           |             |        |
| Madhya Pradesh             | 3,965,288  | 4,214,799  | 567,428     | 540,548    | 3,700,544  | 3,660,639  | 166,462     | 172,648   |            |           |             |        |
| Maharashtra                | 3,911,581  | 4,188,698  | 2,475,832   | 2,448,798  | 5,436,875  | 5,192,685  | 107,434     | 98,804    |            |           |             |        |
| Mumbai                     | 2,284,890  | 2,469,310  | 1,253,577   | 1,158,028  |            |            |             |           | 1,014,521  | 1,059,071 | 66,323      | 65,868 |
| North East                 |            |            |             |            | 1,416,829  | 1,394,122  | 142,664     | 141,868   |            |           |             |        |
| Orissa                     | 2,036,955  | 2,140,887  | 196,108     | 185,473    | 3,375,286  | 3,402,979  | 50,672      | 48,252    |            |           |             |        |
| Punjab                     | 1,784,724  | 1,962,681  | 685,678     | 655,955    | 3,139,721  | 3,162,216  | 28,728      | 26,516    |            |           |             |        |
| Rajasthan                  | 691,854    | 680,408    | 1,201,285   | 1,152,144  | 5,190,761  | 3,317,614  | 146,644     | 143,821   |            |           |             |        |
| Tamil Nadu (incl. Chennai) | 5,403,635  | 5,656,685  | 321,460     | 308,909    | 9,820,813  | 9,779,866  | 80,894      | 75,191    |            |           |             |        |
| UP(E)                      | 3,774,590  | 4,038,109  | 573,756     | 537,915    | 9,393,934  | 7,769,889  | 267,288     | 269,138   |            |           |             |        |
| UP(W)                      | 3,024,509  | 3,180,161  | 701,701     | 668,104    | 3,724,936  | 3,360,876  | 79,625      | 77,504    |            |           |             |        |
| Kolkata                    | 2,497,239  | 2,466,005  | 472,037     | 436,364    | 807,287    | 783,037    | 19,928      | 19,409    |            |           |             |        |
| West Bengal                | 919,214    | 798,685    | 102,119     | 86,313     | 1,915,722  | 1,877,862  | 70,467      | 70,669    |            |           |             |        |
| Total                      | 49,037,244 | 51,356,939 | 15,210,842  | 14,809,629 | 84,610,720 | 79,340,005 | 2,107,378   | 2,044,512 | 3,308,166  | 3,361,813 | 89,314      | 88,856 |

#### Annexure 1.2 (contd.)

| Service Area               | Sistema   | (CDMA)    | Quadrant<br>(GS | , ,       | Quadran<br>(CD) |        | Loop      | (GSM)  | Telewing   | gs (GSM)   | Videoc    | Videocon (GSM) Tota |             | tal         |               |
|----------------------------|-----------|-----------|-----------------|-----------|-----------------|--------|-----------|--------|------------|------------|-----------|---------------------|-------------|-------------|---------------|
|                            | Sep-14    | Dec-14    | Sep-14          | Dec-14    | Sep-14          | Dec-14 | Sep-14    | Dec-14 | Sep-14     | Dec-14     | Sep-14    | Dec-14              | Sep-14      | Dec-14      | Net Additions |
| Andhra Pradesh             |           |           |                 |           |                 |        |           |        | 5,359,457  | 5,398,219  |           |                     | 68,860,643  | 70,557,529  | 1,696,886     |
| Assam                      |           |           |                 |           |                 |        |           |        |            |            |           |                     | 15,907,200  | 16,433,438  | 526,238       |
| Bihar                      |           |           |                 |           |                 |        |           |        | 6,090,744  | 6,517,410  |           |                     | 64,083,510  | 65,120,400  | 1,036,890     |
| Delhi                      | 997,830   | 1,019,213 |                 |           |                 |        |           |        |            |            |           |                     | 44,334,486  | 45,354,457  | 1,019,971     |
| Gujarat                    | 179,032   | 194,843   |                 |           |                 |        |           |        | 6,299,248  | 6,762,644  | 2,019,730 | 2,185,886           | 56,725,911  | 56,796,268  | 70,357        |
| Haryana                    |           |           |                 |           |                 |        |           |        |            |            | 1,675,194 | 1,839,772           | 21,133,818  | 21,747,051  | 613,233       |
| Himachal Pradesh           |           |           |                 |           |                 |        |           |        |            |            |           |                     | 7,443,478   | 7,625,388   | 181,910       |
| Jammu & Kashmir            |           |           |                 |           |                 |        |           |        |            |            |           |                     | 8,399,153   | 8,880,554   | 481,401       |
| Karnataka                  | 1,721,646 | 1,627,631 |                 |           |                 |        |           |        |            |            |           |                     | 55,721,627  | 57,179,166  | 1,457,539     |
| Kerala                     | 401,470   | 396,432   |                 |           |                 |        |           |        |            |            |           |                     | 31,261,929  | 31,133,997  | (127,932)     |
| Madhya Pradesh             |           |           |                 |           |                 |        |           |        |            |            | 2,246,948 | 2,426,766           | 56,905,050  | 58,876,216  | 1,971,166     |
| Maharashtra                |           |           |                 |           |                 |        |           |        | 7,125,382  | 7,241,912  |           |                     | 74,785,439  | 74,866,776  | 81,337        |
| Mumbai                     |           |           |                 |           |                 |        | 1,582,981 | -      |            |            |           |                     | 30,570,247  | 30,054,102  | (516,145)     |
| North East                 |           |           |                 |           |                 |        |           |        |            |            |           |                     | 9,754,934   | 10,262,732  | 507,798       |
| Orissa                     |           |           |                 |           |                 |        |           |        |            |            |           |                     | 26,292,723  | 27,117,071  | 824,348       |
| Punjab                     |           |           | 2,432,024       | 2,509,557 | 1,951           | 1,848  |           |        |            |            |           |                     | 30,311,186  | 30,921,645  | 610,459       |
| Rajasthan                  | 2,191,050 | 2,213,549 |                 |           |                 |        |           |        |            |            |           |                     | 53,632,960  | 53,132,051  | (500,909)     |
| Tamil Nadu (incl. Chennai) | 993,903   | 936,486   |                 |           |                 |        |           |        |            |            |           |                     | 78,022,836  | 79,759,517  | 1,736,681     |
| UP(E)                      |           |           |                 |           |                 |        |           |        | 9,772,784  | 10,144,872 |           |                     | 79,276,765  | 80,137,888  | 861,123       |
| UP(W)                      | 200,988   | 194,565   |                 |           |                 |        |           |        | 7,167,971  | 7,565,877  |           |                     | 49,605,123  | 50,542,533  | 937,410       |
| Kolkata                    | 677,124   | 644,162   |                 |           |                 |        |           |        |            |            |           |                     | 21,981,555  | 21,959,379  | (22,176)      |
| West Bengal                | 1,767,426 | 1,753,263 |                 |           |                 |        |           |        |            |            |           |                     | 45,191,447  | 45,513,425  |               |
| Total                      | 9,130,469 | 8,980,144 | 2,432,024       | 2,509,557 | 1,951           | 1,848  | 1,582,981 | •      | 41,815,586 | 43,630,934 | 5,941,872 | 6,452,424           | 930,202,020 | 943,971,583 | 13,769,563    |

Annexure 1.3: Wireline Subscriber Base

| Service Area                  | Bharti    |           | Reliance  |           | Quadrant (HFCL) |         | Sist   | ema    | Tata      |           |  |
|-------------------------------|-----------|-----------|-----------|-----------|-----------------|---------|--------|--------|-----------|-----------|--|
|                               | Sep-14    | Dec-14    | Sep-14    | Dec-14    | Sep-14          | Dec-14  | Sep-14 | Dec-14 | Sep-14    | Dec-14    |  |
| Andhra Pradesh                | 122,398   | 119,039   | 84,230    | 81,569    | -               | -       | -      | -      | 166,066   | 162,478   |  |
| Assam                         |           |           |           |           | -               | -       | -      | -      |           |           |  |
| Bihar                         |           |           | 6,096     | 6,100     | -               | -       | -      | -      | 12,011    | 12,228    |  |
| Delhi                         | 1,196,544 | 1,197,003 | 180,041   | 181,262   | -               | -       | -      | -      | 114,873   | 119,194   |  |
| Gujarat                       | 59,958    | 60,479    | 85,900    | 82,293    | -               | -       | -      | -      | 79,237    | 80,859    |  |
| Haryana                       | 16,450    | 16,521    | 4,881     | 4,916     | -               | -       | -      | -      | 30,007    | 32,960    |  |
| Himachal Pradesh              |           |           | 4,837     | 4,847     | -               | -       | -      | -      | 2,728     | 2,885     |  |
| Jammu & Kashmir               |           |           |           |           | -               | -       | -      | -      |           |           |  |
| Karnataka                     | 506,981   | 527,281   | 124,008   | 128,613   | -               | -       | -      | -      | 170,904   | 175,894   |  |
| Kerala                        | 48,742    | 49,204    | 42,553    | 37,301    | -               | -       | -      | -      | 14,378    | 14,631    |  |
| Madhya Pradesh                | 228,934   | 229,809   | 22,187    | 22,597    | -               | -       | -      | -      | 19,111    | 18,882    |  |
| Maharashtra                   | 70,346    | 66,655    | 86,795    | 81,756    | -               | -       | -      | -      | 263,285   | 269,800   |  |
| Mumbai                        | 349,402   | 348,587   | 234,239   | 237,094   | -               | -       | -      | -      | 523,099   | 525,642   |  |
| North East                    |           |           |           |           | -               | -       | -      | -      |           |           |  |
| Orissa                        |           |           | 2,952     | 2,952     | -               | -       | -      | -      | 7,546     | 7,800     |  |
| Punjab                        | 91,942    | 92,474    | 20,851    | 20,565    | 224,147         | 224,975 | -      | -      | 16,935    | 16,990    |  |
| Rajasthan                     | 39,232    | 39,951    | 22,092    | 23,434    | -               | -       | 55,716 | 54,954 | 9,545     | 9,946     |  |
| Tamil Nadu (incl.<br>Chennai) | 459,758   | 459,858   | 142,248   | 143,863   | -               | -       | -      | -      | 88,214    | 90,600    |  |
| U.P.(E)                       | 54,655    | 55,108    | 38,676    | 38,656    | -               | -       | -      | -      | 15,330    | 15,845    |  |
| U.P.(W)                       | 20,432    | 20,098    | 6,408     | 6,274     | -               | -       | -      | -      | 9,679     | 9,815     |  |
| Kolkata                       | 105,891   | 106,355   | 80,711    | 80,650    | -               | -       | -      | -      | 44,744    | 44,839    |  |
| West Bengal                   |           |           | 1,897     | 1,901     | =               | =       | =      | =      | 3,624     | 3,688     |  |
| Total                         | 3,371,665 | 3,388,422 | 1,191,602 | 1,186,643 | 224,147         | 224,975 | 55,716 | 54,954 | 1,591,316 | 1,614,976 |  |

#### Annexure 1.3 (contd.)

| Service Area                  | мт        | NL        | BS         | NL         | Voda   | fone   | т          | otal       |               |
|-------------------------------|-----------|-----------|------------|------------|--------|--------|------------|------------|---------------|
|                               | Sep-14    | Dec-14    | Sep-14     | Dec-14     | Sep-14 | Dec-14 | Sep-14     | Dec-14     | Net Additions |
| Andhra Pradesh                | -         | -         | 1,576,418  | 1,543,551  | 8,580  | 8,790  | 1,957,692  | 1,915,427  | -42,265       |
| Assam                         | -         | -         | 179,241    | 176,841    | 1,290  | 1,350  | 180,531    | 178,191    | -2,340        |
| Bihar                         | -         | -         | 357,674    | 354,639    | 750    | 780    | 376,531    | 373,747    | -2,784        |
| Delhi                         | 1,603,251 | 1,605,117 |            |            | 19,500 | 20,490 | 3,114,209  | 3,123,066  | 8,857         |
| Gujarat                       | -         | -         | 1,372,851  | 1,342,812  | 2,070  | 2,250  | 1,600,016  | 1,568,693  | -31,323       |
| Haryana                       | -         | -         | 426,944    | 377,796    | 150    | 90     | 478,432    | 432,283    | -46,149       |
| Himachal Pradesh              | -         | -         | 230,839    | 221,676    | 90     | 90     | 238,494    | 229,498    | -8,996        |
| Jammu & Kashmir               | -         | -         | 160,363    | 156,472    |        |        | 160,363    | 156,472    | -3,891        |
| Karnataka                     | -         | -         | 1,454,534  | 1,428,963  | 6,120  | 6,450  | 2,262,547  | 2,267,201  | 4,654         |
| Kerala                        | -         | -         | 2,659,577  | 2,580,135  | 510    | 570    | 2,765,760  | 2,681,841  | -83,919       |
| Madhya Pradesh                | -         | -         | 831,860    | 829,250    | 330    | 270    | 1,102,422  | 1,100,808  | -1,614        |
| Maharashtra                   | -         | -         | 1,789,483  | 1,730,570  | 9,120  | 9,360  | 2,219,029  | 2,158,141  | -60,888       |
| Mumbai                        | 1,926,912 | 1,916,447 |            |            | 10,620 | 11,520 | 3,044,272  | 3,039,290  | -4,982        |
| North East                    | -         | -         | 130,095    | 128,710    | 120    | 120    | 130,215    | 128,830    | -1,385        |
| Orissa                        | -         | -         | 325,809    | 324,412    | 540    | 570    | 336,847    | 335,734    | -1,113        |
| Punjab                        | -         | -         | 818,372    | 794,702    | 540    | 510    | 1,172,787  | 1,150,216  | -22,571       |
| Rajasthan                     | -         | -         | 749,996    | 722,587    | 1,800  | 1,710  | 878,381    | 852,582    | -25,799       |
| Tamil Nadu (incl.<br>Chennai) | -         | -         | 2,126,088  | 2,098,991  | 5,790  | 6,330  | 2,822,098  | 2,799,642  | -22,456       |
| U.P.(E)                       | -         | -         | 436,242    | 415,224    | 1,050  | 1,020  | 545,953    | 525,853    | -20,100       |
| U.P.(W)                       | -         | -         | 476,823    | 469,000    | 330    | 390    | 513,672    | 505,577    | -8,095        |
| Kolkata                       | -         | -         | 800,147    | 785,053    | 3,000  | 3,180  | 1,034,493  | 1,020,077  | -14,416       |
| West Bengal                   | -         |           | 465,606    | 451,317    | 30     | 30     | 471,157    | 456,936    | -14,221       |
| Total                         | 3,530,163 | 3,521,564 | 17,368,962 | 16,932,701 | 72,330 | 75,870 | 27,405,901 | 27,000,105 | -405,796      |

Annexure 1.4: Service Area and Operator wise details of PCOs

| S1. | Name of the        | Service  | Number of  | Number of  | Net PCO<br>increase/ | Percentage<br>Growth/ |
|-----|--------------------|----------|------------|------------|----------------------|-----------------------|
| No. | Circle/Service     | Provider | PCOs as on | PCOs as on | decrease as          | Decline as            |
|     | Area               |          | 30.09.14   | 31.12.14   | on 31.12.14          | on 31.12.14           |
|     | Andhra             | BSNL     | 55,346     | 50,226     | -5,120               | -9.25%                |
|     | Pradesh            | Bharti   | 207        | 207        | 0                    | 0.00%                 |
|     | (Including         | TTL      | 7,384      | 6,041      | -1,343               | -18.19%               |
|     | Telangana)         | RCL      | 17,501     | 15,577     | -1,924               | -10.99%               |
|     |                    | BSNL     | 55,346     | 50,226     | -5,120               | -9.25%                |
| 1   | Andhra             | Bharti   | 207        | 207        | 0                    | 0.00%                 |
| 1   | Pradesh            | TTL      | 7,384      | 6,041      | -1,343               | -18.19%               |
|     |                    | RCL      | 17,501     | 15,577     | -1,924               | -10.99%               |
|     |                    | BSNL     | 0          | 0          | 0                    | 0.00%                 |
|     | Telongono          | Bharti   | 0          | 0          | 0                    | 0.00%                 |
|     | Telangana          | TTL      | 0          | 0          | 0                    | 0.00%                 |
|     |                    | RCL      | 0          | 0          | 0                    | 0.00%                 |
| 2   | Assam              | BSNL     | 10,837     | 10,589     | -248                 | -2.29%                |
|     | Bihar              | BSNL     | 8,169      | 7,377      | -792                 | -9.70%                |
|     | (Including         | TTL      | 191        | 118        | -73                  | -38.22%               |
|     | Jharkhand)         | RCL      | 675        | 594        | -81                  | -12.00%               |
|     |                    | BSNL     | 2,941      | 2,341      | -600                 | -20.40%               |
| 3   | Bihar              | TTL      | 191        | 118        | -73                  | -38.22%               |
|     | -                  | RCL      | 675        | 594        | -81                  | -12.00%               |
|     | Bihar<br>Jharkhand | BSNL     | 5,228      | 5,036      | -192                 | -3.67%                |
|     |                    | TTL      | 0          | 0          | 0                    | 0.00%                 |
|     |                    | RCL      | 0          | 0          | 0                    | 0.00%                 |
|     |                    | MTNL     | 56,776     | 56,654     | -122                 | -0.21%                |
|     | D 11 :             | Bharti   | 1,321      | 1,202      | -119                 | -9.01%                |
| _   | Delhi              | TTL      | 3,647      | 3,365      | -282                 | -7.73%                |
|     |                    | RCL      | 651        | 547        | -104                 | -15.98%               |
|     |                    | BSNL     | 30,940     | 29,751     | -1,189               | -3.84%                |
|     |                    | Bharti   | 16         | 16         | 0                    | 0.00%                 |
| 5   | Gujarat            | TTL      | 4,647      | 4,083      | -564                 | -12.14%               |
|     |                    | RCL      | 2,207      | 2,049      | -158                 | -7.16%                |
|     |                    | BSNL     | 6,741      | 5,247      | -1,494               | -22.16%               |
| 6   | Haryana            | Bharti   | 223        | 214        | -9                   | -4.04%                |
|     | i iai yaiia        | TTL      | 152        | 135        | -17                  | -11.18%               |
|     |                    | RCL      | 94         | 75         | -19                  | -20.21%               |
|     | Himachal           | BSNL     | 5,057      | 4,528      | -529                 | -10.46%               |
| 7   | Pradesh            | TTL      | 59         | 49         | -10                  | -16.95%               |
|     |                    | RCL      | 41         | 39         | -2                   | -4.88%                |
| 8   | J & K              | BSNL     | 5,638      | 4,922      | -716                 | -12.70%               |

| S1.<br>No. | Name of the<br>Circle/Service<br>Area        | Service<br>Provider | Number of<br>PCOs as on<br>30.09.14 | Number of<br>PCOs as on<br>31.12.14 | Net PCO<br>increase/<br>decrease as<br>on 31.12.14 | Percentage<br>Growth/<br>Decline as<br>on 31.12.14 |
|------------|--|---------------------|-------------------------------------|-------------------------------------|--|--|
|            |  | BSNL                | 81,682                              | 56,319                              | -25,363  | -31.05%  |
| 9          | 9 Karnataka                                  | Bharti              | 6,311                               | 5,978                               | -333   | -5.28%   |
|            | namatana                                     | TTL                 | 4,540                               | 3,831                               | -709   | -15.62%  |
|            |  | RCL                 | 6,188                               | 5,408                               | -780   | -12.61%  |
|            |  | BSNL                | 32,601                              | 31,006                              | -1,595   | -4.89%   |
| 10         | Kerala                                       | Bharti              | 675                                 | 643                                 | -32  | -4.74%   |
| 10         | Keraia                                       | TTL                 | 235                                 | 192                                 | -43  | -18.30%  |
|            |  | RCL                 | 1,251                               | 1,142                               | -109   | -8.71%   |
|            | Madhya                                       | BSNL                | 30,757                              | 30,591                              | -166   | -0.54%   |
|            | Pradesh                                      | Bharti              | 3,964                               | 3,727                               | -237   | -5.98%   |
|            | (Including                                   | TTL                 | 1,874                               | 1,676                               | -198   | -10.57%  |
|            | Chattisgarh)                                 | RCL                 | 2,033                               | 1,834                               | -199   | -9.79%   |
|            |  | BSNL                | 28,193                              | 28,055                              | -138   | -0.49%   |
| 11         | Madhya                                       | Bharti              | 3,964                               | 3,727                               | -237   | -5.98%   |
| 11         | Pradesh                                      | TTL                 | 1,874                               | 1,676                               | -198   | -10.57%  |
|            |  | RCL                 | 2,033                               | 1,834                               | -199   | -9.79%   |
|            |  | BSNL                | 2,564                               | 2,536                               | -28  | -1.09%   |
|            | Chattiagarh                                  | Bharti              | 0                                   | 0                                   | 0  | 0.00%  |
|            | Chathsgain                                   | TTL                 | 0                                   | 0                                   | 0  | 0.00%  |
|            |  | RCL                 | 0                                   | 0                                   | 0  | 0.00%  |
|            |  | BSNL                | 84,973                              | 80,808                              | -4,165   | -4.90%   |
|            | Maharashtra                                  | Bharti              | 41                                  | 41                                  | 0  | 0.00%  |
|            | (Including                                   | MTNL                | 83,344                              | 82,595                              | -749   | -0.90%   |
|            | Mumbai & Goa)                                | TTML                | 31,423                              | 28,626                              | -2,797   | -8.90%   |
|            |  | RCL                 | 14,645                              | 13,857                              | -788   | -5.38%   |
|            |  | BSNL                | 84,973                              | 80,808                              | -4,165   | -4.90%   |
|            | Mohorochtro 9-                               | Bharti              | 0                                   | 0                                   | 0  | 0.00%  |
| 12         | Pradesh  Chattisgarh  Maharashtra (Including | MTNL                | 0                                   | 0                                   | 0  | 0.00%  |
|            | UUA  | TTML                | 25,286                              | 23,383                              | -1,903   | -7.53%   |
|            |  | RCL                 | 6,088                               | 5,541                               | -547   | -8.98%   |
|            |  | BSNL                | 0                                   | 0                                   | 0  | 0.00%  |
|            |  | Bharti              | 41                                  | 41                                  | 0  | 0.00%  |
|            | Mumbai                                       | MTNL                | 83,344                              | 82,595                              | -749   | -0.90%   |
|            |  | TTML                | 6,137                               | 5,243                               | -894   | -14.57%  |
|            |  | RCL                 | 8,557                               | 8,316                               | -241   | -2.82%   |
| 13         | North East                                   | BSNL                | 7,008                               | 6,664                               | -344   | -4.91%   |
|            |  | BSNL                | 5,436                               | 4,532                               | -904   | -16.63%  |
| 14         | Orissa                                       | TTL                 | 303                                 | 267                                 | -36  | -11.88%  |
|            |  | RCL                 | 161                                 | 133                                 | -28  | -17.39%  |

| S1. | Name of the                     | Service        | Number of            | Number of           | Net PCO                     | Percentage                |
|-----|---------------------------------|----------------|----------------------|---------------------|-----------------------------|---------------------------|
| No. | Circle/Service                  | Provider       | PCOs as              | PCOs as on          | increase/                   | Growth/                   |
|     | Area                            |                | on                   | 31.12.14            | decrease as                 | Decline as                |
|     |                                 |                | 30.09.14             |                     | on 31.12.14                 | on 31.12.14               |
|     |                                 | BSNL           | 9,570                | 8,903               | -667                        | -6.97%                    |
|     |                                 | Bharti         | 155                  | 137                 | -18                         | -11.61%                   |
| 15  | Punjab                          | Quardant       | 2,907                | 2,763               | -144                        | -4.95%                    |
|     | -                               | TTL            | 1,296                | 1,262               | -34                         | -2.62%                    |
|     |                                 | RCL            | 461                  | 266                 | -195                        | -42.30%                   |
|     |                                 | BSNL           | 14,299               | 13,713              | -586                        | -4.10%                    |
| 1.0 | D : 4                           | Bharti Control | 217                  | 217                 | 0                           | 0.00%                     |
| 16  | Rajasthan                       | S.Shyam        | 11,817               | 10,528              | -1,289                      | -10.91%                   |
|     |                                 | TTL            | 586                  | 501                 | -85                         | -14.51%                   |
|     |                                 | RCL            | 1,194                | 1,060               | -134                        | -11.22%                   |
|     | Tamilnadu                       | BSNL<br>Bharti | 94,221               | 91,840              | -2,381<br>-489              | -2.53%                    |
|     | (Including                      | TTL            | 10,744<br>3,644      | 10,255<br>2,892     | -489<br>-752                | -4.55%<br>-20.64%         |
|     | Chennai)                        |                | ,                    | •                   |                             |                           |
|     |                                 | RCL<br>BSNL    | <b>10,292</b> 80,065 | <b>9,187</b> 77,769 | -1,105<br>-2,296            | - <b>10.74%</b><br>-2.87% |
|     | -                               | Bharti         | 10,744               | 10,255              | -2,2 <del>9</del> 0<br>-489 | -4.55%                    |
| 17  | Tamilnadu                       | TTL            | 3,644                | 2,892               | -752                        | -20.64%                   |
|     |                                 | RCL            | 7,295                | 6,532               | -763                        | -10.46%                   |
|     |                                 | BSNL           | 14,156               | 14,071              | -85                         | -0.60%                    |
|     |                                 | Bharti         | 0                    | 0                   | -83                         | 0.00%                     |
|     | Chennai                         | TTL            | 0                    | 0                   | 0                           | 0.00%                     |
|     |                                 | RCL            | 2,997                | 2,655               | -342                        | -11.41%                   |
|     |                                 | BSNL           | 23,391               | 21,471              | -1,920                      | -8.21%                    |
| 1.0 | Uttar Pradesh                   | Bharti         | 201                  | 189                 | -12                         | -5.97%                    |
| 18  | (East)                          | TTL            | 321                  | 262                 | -59                         | -18.38%                   |
|     | , ,                             | RCL            | 698                  | 550                 | -148                        | -21.20%                   |
|     |                                 | BSNL           | 12,224               | 10,049              | -2,175                      | -17.79%                   |
|     | Uttar Pradesh -                 | Bharti         | 169                  | 150                 | -19                         | -11.24%                   |
|     | West (Including<br>Uttarakhand) | TTL            | 935                  | 766                 | -169                        | -18.07%                   |
|     | Ottaraknanaj                    | RCL            | 560                  | 466                 | -94                         | -16.79%                   |
|     | Uttar Pradesh -                 | BSNL           | 7,805                | 6,701               | -1,104                      | -14.14%                   |
|     | West                            | Bharti         | 169                  | 150                 | -19                         | -11.24%                   |
| 19  | (Excluding                      | TTL            | 935                  | 766                 | -169                        | -18.07%                   |
|     | Uttarakhand)                    | RCL            | 560                  | 466                 | -94                         | -16.79%                   |
|     |                                 | BSNL           | 4,419                | 3,348               | -1,071                      | -24.24%                   |
|     | I I++ 0 m 0 1 - 1m 1            | Bharti         | 0                    | 0                   | 0                           | 0.00%                     |
|     | Uttarakhand                     | TTL            | 0                    | 0                   | 0                           | 0.00%                     |
|     |                                 | RCL            | 0                    | 0                   | 0                           | 0.00%                     |

| S1.<br>No. | Name of the<br>Circle/Service<br>Area | Service<br>Provider | Number of<br>PCOs as on<br>30.09.14 | Number of PCOs as on 31.12.14 | Net PCO<br>increase/<br>decrease as<br>on 31.12.14 | Percentage<br>Growth/<br>Decline as<br>on 31.12.14 |
|------------|---------------------------------------|---------------------|-------------------------------------|-------------------------------|--|--|
|            | West Bengal                           | BSNL                | 24,854                              | 18,061                        | -6,793   | -27.33%  |
|            | (Including                            | Bharti              | 0                                   | 0                             | 0  | 0.00%  |
|            | Andaman &                             | TTL                 | 407                                 | 327                           | -80  | -19.66%  |
|            | Nicobar)                              | RCL                 | 908                                 | 785                           | -123   | -13.55%  |
|            | West Bengal                           | BSNL                | 24,684                              | 17,891                        | -6,793   | -27.52%  |
| 20         | (Excluding<br>Andaman &               | Bharti              | 0                                   | 0                             | 0  | 0.00%  |
| 20         |                                       | TTL                 | 407                                 | 327                           | -80  | -19.66%  |
|            | Nicobar)                              | RCL                 | 908                                 | 785                           | -123   | -13.55%  |
|            |                                       | BSNL                | 170                                 | 170                           | 0  | 0.00%  |
|            | Andaman and                           | Bharti              | 0                                   | 0                             | 0  | 0.00%  |
|            | Nicobar                               | TTL                 | 0                                   | 0                             | 0  | 0.00%  |
|            |                                       | RCL                 | 0                                   | 0                             | 0  | 0.00%  |
|            |                                       | BSNL                | 7,280                               | 7,077                         | -203   | -2.79%   |
| 21         | Kolkata                               | Bharti              | 66                                  | 59                            | -7   | -10.61%  |
| 41         | Koikata                               | TTL                 | 1,442                               | 1,231                         | -211   | -14.63%  |
|            |                                       | RCL                 | 906                                 | 799                           | -107   | -11.81%  |
|            | Tota                                  | 1                   | 8,53,730                            | 7,79,241                      | -74,489  | -8.73%   |

Annexure 1.5: Service Area & Operator wise details of Village Public Telephones

| S1.<br>No. | Name of the<br>Circle/Service Area           | Service<br>Provider | Number of<br>VPTs as on<br>30.09.14 | Number of<br>VPTs as on<br>31.12.14 | Net VPT<br>increase/<br>decrease as<br>on 31.12.14 | Percentage<br>Growth/<br>Decline as<br>on 31.12.14 |
|------------|--|---------------------|-------------------------------------|-------------------------------------|--|--|
|            | Andhra Pradesh<br>(Including                 | BSNL                | 25,107                              | 25,107                              | 0  | 0.00%  |
| -          | Telangana)                                   | TTL                 | 0                                   | 0                                   | 0  | 0.00%  |
| 1          | Andhra Pradesh                               | BSNL                | 25,107                              | 25,107                              | 0  | 0.00%  |
|            | Anuma maucsii                                | TTL                 | 0                                   | 0                                   | 0  | 0.00%  |
|            | Telangana                                    | BSNL                | 0                                   | 0                                   | 0  | 0.00%  |
|            | Telangana                                    | TTL                 | 0                                   | 0                                   | 0  | 0.00%  |
| 2          | Assam  | BSNL                | 24,692                              | 24,692                              | 0  | 0.00%  |
|            | Bihar (Including<br>Jharkhand)               | BSNL                | 67,748                              | 67,748                              | 0  | 0.00%  |
| 3          | Bihar  | BSNL                | 38,941                              | 38,941                              | 0  | 0.00%  |
|            | Jharkhand                                    | BSNL                | 28,807                              | 28,807                              | 0  | 0.00%  |
|            |  | MTNL                | 0                                   | 0                                   | 0  | 0.00%  |
| 4          | Delhi  | Bharti              | 0                                   | 0                                   | 0  | 0.00%  |
|            | Demi   | TTL                 | 0                                   | 0                                   | 0  | 0.00%  |
|            |  | RCL                 | 0                                   | 0                                   | 0  | 0.00%  |
| 5          | Gujarat                                      | BSNL                | 18,054                              | 18,054                              | 0  | 0.00%  |
| 6          | Haryana                                      | BSNL                | 6,678                               | 6,678                               | 0  | 0.00%  |
| 7          | Himachal Pradesh                             | BSNL                | 17,408                              | 16,398                              | -1,010   | -5.80%   |
| 8          | Jammu & Kashmir                              | BSNL                | 6,386                               | 6,386                               | 0  | 0.00%  |
| 9          | Karnataka                                    | BSNL                | 27,451                              | 27,451                              | 0  | 0.00%  |
| 10         | Kerala                                       | BSNL                | 1,372                               | 1,321                               | -51  | -3.72%   |
| 11         | Madhya Pradesh<br>(Including<br>Chattisgarh) | BSNL                | 70,314                              | 70,314                              | o  | 0.00%  |
|            | Madhya Pradesh                               | BSNL                | 51,986                              | 51,986                              | 0  | 0.00%  |
|            | Chattisgarh                                  | BSNL                | 18,328                              | 18,328                              | 0  | 0.00%  |
|            |  | BSNL                | 40,654                              | 40,542                              | -112   | -0.28%   |
|            | Maharashtra                                  | Bharti              | 0                                   | 0                                   | 0  | 0.00%  |
|            | (Including Mumbai                            | MTNL                | 0                                   | 0                                   | 0  | 0.00%  |
|            | & Goa)                                       | TTML                | 1,786                               | 1,786                               | 0  | 0.00%  |
| 12         |  | RCL                 | 0                                   | 0                                   | 0  | 0.00%  |
| 14         |  | BSNL                | 40,654                              | 40,542                              | -112   | -0.28%   |
|            |  | Bharti              | 0                                   | 0                                   | 0  | 0.00%  |
|            | Maharashtra & Goa                            | MTNL                | 0                                   | 0                                   | 0  | 0.00%  |
|            |  | TTML                | 1,786                               | 1,786                               | 0  | 0.00%  |
|            |  | RCL                 | 0                                   | 0                                   | 0  | 0.00%  |

| S1.<br>No. | Name of the<br>Circle/Service Area                 | Service<br>Provider | Number of<br>VPTs as on<br>30.09.14 | Number of<br>VPTs as on<br>31.12.14 | Net VPT<br>increase/<br>decrease as<br>on 31.12.14 | Percentage<br>Growth/<br>Decline as<br>on 31.12.14 |
|------------|--|---------------------|-------------------------------------|-------------------------------------|--|--|
|            |  | BSNL                | 0                                   | p0                                  | 0  | 0.00%  |
|            |  | Bharti              | 0                                   | 0                                   | 0  | 0.00%  |
|            | Mumbai   | MTNL                | 0                                   | 0                                   | 0  | 0.00%  |
|            |  | TTML                | 0                                   | 0                                   | 0  | 0.00%  |
|            |  | RCL                 | 0                                   | 0                                   | 0  | 0.00%  |
| 13         | North East   | BSNL                | 13,109                              | 13,099                              | -10  | -0.08%   |
| 14         | Orissa   | BSNL                | 45,215                              | 45,215                              | 0  | 0.00%  |
| 15         | Punjab   | BSNL                | 12,065                              | 12,065                              | 0  | 0.00%  |
|            | Pulljab  | Quadrant            | 4                                   | 3                                   | -1   | -25.00%  |
| 16         | Dojosthon  | BSNL                | 39,568                              | 39,568                              | 0  | 0.00%  |
| 10         | Rajasthan  | S. Shyam            | 3,010                               | 3,010                               | 0  | 0.00%  |
|            | Tamilnadu<br>(Including Chennai)                   | BSNL                | 15,492                              | 15,492                              | 0  | 0.00%  |
| 17         | Tamilnadu  | BSNL                | 13,837                              | 13,837                              | 0  | 0.00%  |
|            | Chennai  | BSNL                | 1,655                               | 1,655                               | 0  | 0.00%  |
| 18         | Uttar Pradesh (East)                               | BSNL                | 74,145                              | 74,145                              | 0  | 0.00%  |
|            | Uttar Pradesh- West<br>(Including<br>Uttarakhand)  | BSNL                | 39,088                              | 39,088                              | 0  | 0.00%  |
| 19         | Uttar Pradesh - West<br>(Excluding<br>Uttarakhand) | BSNL                | 23,707                              | 23,707                              | 0  | 0.00%  |
|            | Uttarakhand  | BSNL                | 15,381                              | 15,381                              | 0  | 0.00%  |
|            | West Bengal<br>(Including Andaman<br>& Nicobar)    | BSNL                | 37,310                              | 37,312                              | 2  | 0.01%  |
| 20         | West Bengal<br>(Excluding Andaman<br>& Nicobar)    | BSNL                | 36,958                              | 36,960                              | 2  | 0.01%  |
|            | Andaman and<br>Nicobar                             | BSNL                | 352                                 | 352                                 | 0  | 0.00%  |
| 21         | Kolkata  | BSNL                | 613                                 | 613                                 | 0  | 0.00%  |
|            | Total  |                     | 5,87,269                            | 5,86,087                            | -1,182   | -0.20%   |

Annexure 1.6: Internet Service Provider(ISP) wise Internet Subscriber base

| S.No. | Name of Service Provider                               | Narrowband | Broadband | Total    |
|-------|--|------------|-----------|----------|
| 1     | Bharti Airtel Ltd.                                     | 49828235   | 19190664  | 69018899 |
| 2     | Vodafone   | 42493345   | 16646663  | 59140008 |
| 3     | Idea Cellular*   | 21209520   | 12953722  | 34163242 |
| 4     | Bharat Sanchar Nigam Ltd.                              | 14735020   | 18896617  | 33631637 |
| 5     | Reliance Communications*                               | 24461140   | 7105697   | 31566837 |
| 6     | Aircel   | 15677863   | 2147692   | 17825555 |
| 7     | Telewings  | 10636210   | 0         | 10636210 |
| 8     | Tata   | 120499     | 2745907   | 2866406  |
| 9     | Mahanagar Telephone Nigam Ltd.                         | 360621     | 1511774   | 1872395  |
| 10    | Sistema Shyam  | 24535      | 1591794   | 1616329  |
| 11    | Videocon   | 1330289    | 0         | 1330289  |
| 12    | Quadrant Televentures Ltd.                             | 592398     | 161790    | 754188   |
| 13    | Atria Convergence Technologies Pvt. Ltd.               | 0          | 611050    | 611050   |
| 14    | You Broadband India Pvt. Ltd.                          | 16221      | 429352    | 445573   |
| 15    | Hathway Cable & Datacom Pvt. Ltd.                      | 10276      | 316694    | 326970   |
| 16    | Tikona   | 3112       | 269680    | 272792   |
| 17    | Asianet Satellite Communications Ltd.                  | 0          | 134617    | 134617   |
| 18    | Syscon Infoway Pvt Ltd                                 | 17413      | 103690    | 121103   |
| 19    | D-Vois Broadband Private Limited                       | 0          | 99844     | 99844    |
| 20    | GTPL Hathway Private Limited                           | 3383       | 68880     | 72263    |
| 21    | Alliance Broadband Services Pvt. Ltd.                  | 1724       | 61003     | 62727    |
| 22    | Five Network Solution (India) Ltd.                     | 0          | 61829     | 61829    |
| 23    | Ortel Communication Ltd.                               | 8571       | 49706     | 58277    |
| 24    | Siti Cable Network Ltd. (Wire and Wireless India Ltd.) | 24655      | 29521     | 54176    |
| 25    | Broadband Pacenet (I) Pvt. Ltd.                        | 71         | 52566     | 52637    |
| 26    | Citycom Networks Pvt. Ltd.                             | 1440       | 38485     | 39925    |
| 27    | Honesty Net Solutions (I) Pvt Ltd                      | 6647       | 31881     | 38528    |
| 28    | Meghbela Cable & Broadband Services (P) Ltd            | 22231      | 11907     | 34138    |
| 29    | Indusind Media & Communications Ltd.                   | 3539       | 26170     | 29709    |
| 30    | Digital Network associates Pvt. Ltd                    | 1990       | 26610     | 28600    |
| 31    | Chandra Net Pvt. Ltd.                                  | 1298       | 24311     | 25609    |
| 32    | Home Systems Pvt. Ltd.                                 | 0          | 24398     | 24398    |
| 33    | Limras Eronet Broadband Service Pvt Ltd                | 11232      | 9709      | 20941    |
| 34    | RailTel Corporation of India Ltd.                      | 5652       | 13720     | 19372    |
| 35    | Wish Net Pvt. Ltd.                                     | 0          | 19343     | 19343    |
| 36    | Rajesh Multi Channel Pvt. Ltd.                         | 3989       | 14708     | 18697    |
| 37    | Southern Online Bio Technologies Ltd.                  | 6049       | 12445     | 18494    |
| 38    | Vasai Cable Pvt. Ltd.                                  | 0          | 18470     | 18470    |
| 39    | DEN Networks Ltd                                       | 276        | 15649     | 15925    |
| 40    | R.K. Infratel Limited                                  | 683        | 14891     | 15574    |
| 41    | City Online Services Ltd                               | 7828       | 7286      | 15114    |
| 42    | Nextra Teleservices Pvt. Ltd.                          | 0          | 14256     | 14256    |
| 43    | Noida Software Technology Park Ltd.                    | 0          | 13537     | 13537    |
| 44    | SmartLink Broadband Services                           | 0          | 12238     | 12238    |
| 45    | North East Dataa Network Pvt Ltd.                      | 0          | 11052     | 11052    |

| C No | Name of Comics Dustrides                   | Nonnemberd | Dunadhand | /\    |
|------|--|------------|-----------|-------|
| S.No | Name of Service Provider                   | Narrowband | Broadband | Total |
| 46   | World Phone Internet Services Pvt Ltd      | 1254       | 9641      | 10895 |
| 47   | Pioneerelabs                               | 121        | 10749     | 10870 |
| 48   | Apna Telelink Ltd.                         | 0          | 9457      | 9457  |
| 49   | Blazenet Ltd.                              | 4069       | 3319      | 7388  |
| 50   | Quest Consultancy Pvt. Ltd.                | 0          | 7187      | 7187  |
| 51   | Sify Technologies Ltd.                     | 2955       | 2754      | 5709  |
| 52   | Nettlinx Ltd.                              | 0          | 5574      | 5574  |
| 53   | WE INTERNET LIMITED                        | 0          | 5491      | 5491  |
| 54   | IKF Technologies Ltd                       | 1803       | 3604      | 5407  |
| 55   | Spacenet Internet Services Pvt Ltd         | 0          | 4998      | 4998  |
| 56   | Yashash Cable Network Pvt Ltd              | 0          | 4672      | 4672  |
| 57   | Geocity Network Solutions Pvt. Ltd.        | 1078       | 3493      | 4571  |
| 58   | Narmada Cyberzone Pvt Ltd                  | 1858       | 2634      | 4492  |
| 59   | CJ Online Pvt. Ltd.                        | 0          | 3943      | 3943  |
| 60   | Swiftmail Communications Ltd.              | 1263       | 2560      | 3823  |
| 61   | CJM Consultancy Services Pvt. Ltd.         | 0          | 3797      | 3797  |
| 62   | Ishan Netsol Pvt. Ltd.                     | 3532       | 255       | 3787  |
| 63   | Kaizen Infonet Pvt. Ltd.                   | 779        | 2985      | 3764  |
| 64   | Hathway Bhawani Cabletel & Datacom Pvt Ltd | 0          | 3483      | 3483  |
| 65   | HCL Comnet Systems & Services Ltd.         | 3396       | 31        | 3427  |
| 66   | Intermedia Cable Communication Pvt. Ltd.   | 313        | 3094      | 3407  |
| 67   | Siliguri Internet & Cable TV Pvt. Ltd.     | 0          | 3336      | 3336  |
| 68   | Rajesh Patel Net Services Pvt. Ltd.        | 374        | 2914      | 3288  |
| 69   | Bhupati Hotels Pvt. Ltd                    | 0          | 3166      | 3166  |
| 70   | F/X Wireless Technology Services Pvt. Ltd. | 0          | 2913      | 2913  |
| 71   | Kappa Internet Services Pvt. Ltd.          | 825        | 1855      | 2680  |
| 72   | Shri Omkar Infocom Pvt. Ltd.               | 25         | 2394      | 2419  |
| 73   | Wan and Lan Internet Pvt. Ltd.             | 68         | 2196      | 2264  |
| 74   | Readylink Internet Services Pvt. Ltd.      | 191        | 1898      | 2089  |
| 75   | Hughes Communications India Ltd.           | 758        | 1305      | 2063  |
| 76   | United Telecoms Ltd.                       | 211        | 1719      | 1930  |
| 77   | Speed Online.net Pvt. Ltd.                 | 0          | 1772      | 1772  |
| 78   | Capture Network Systems Pvt. Ltd.          | 188        | 1461      | 1649  |
| 79   | Symbois Creations Pvt. Ltd.                | 65         | 1495      | 1560  |
| 80   | Star Broadband Services (I) Pvt. Ltd.      | 0          | 1559      | 1559  |
| 81   | Digital2Virtual ISP Pvt. Ltd.              | 11         | 1253      | 1264  |
| 82   | Touch Net India Pvt. Ltd.                  | 551        | 692       | 1243  |
| 83   | Multinet (Udaipur) Pvt. Ltd.               | 0          | 1089      | 1089  |
| 84   | Aeroway Networks Pvt. Ltd.                 | 34         | 700       | 734   |
| 85   | delDSL Internet Pvt. Ltd.                  | 311        | 399       | 710   |
| 86   | Sikka Broadband(P) Ltd.                    | 39         | 525       | 564   |
| 87   | Rajdhani Telecom Pvt. Ltd.                 | 90         | 459       | 549   |
| 88   | S.S.Netcom Pvt. Ltd.                       | 0          | 491       | 491   |
| 89   | Primenet Global Ltd.                       | 0          | 391       | 391   |
| 90   | Bhiwani Communications Pvt. Ltd.           | 150        | 202       | 352   |
| 91   | Speedon Network Ltd.                       | 0          | 311       | 311   |

| S.No | Name of Service Provider                       | Narrowband | Broadband | Total     |
|------|--|------------|-----------|-----------|
| 92   | Sab Infotech                                   | 0          | 297       | 297       |
| 93   | Sphier Infotech Pvt. Ltd.                      | 0          | 293       | 293       |
| 94   | ERNET India                                    | 197        | 80        | 277       |
| 95   | Conjoinix Technologies Pvt. Ltd.               | 0          | 262       | 262       |
| 96   | Rida Communication Pvt. Ltd.                   | 0          | 260       | 260       |
| 97   | Pacific Internet India Pvt. Ltd.               | 252        | 0         | 252       |
| 98   | QBC Infotech Pvt. Ltd.                         | 4          | 233       | 237       |
| 99   | Microsense Pvt. Ltd.                           | 0          | 225       | 225       |
| 100  | Gleam Worldwide Services Pvt. Ltd.             | 0          | 216       | 216       |
| 101  | Shri Vinayagaa Internet Pvt. Ltd.              | 60         | 93        | 153       |
| 102  | Harisree CableNet Pvt. Ltd.                    | 0          | 134       | 134       |
| 103  | Khetan Cable Network (P) Ltd                   | 0          | 127       | 127       |
| 104  | Trans Virtual Pvt. Ltd.                        | 44         | 78        | 122       |
| 105  | Pulse Telesystems Pvt. Ltd.                    | 0          | 121       | 121       |
| 106  | Convergent Telecom Pvt. Ltd.                   | 0          | 107       | 107       |
| 107  | Kelnet Communication Services Pvt. Ltd         | 0          | 76        | 76        |
| 108  | Tatanet Services Ltd.                          | 0          | 75        | 75        |
| 109  | NetMagic Solutions (P) Ltd.                    | 0          | 68        | 68        |
| 110  | Power Grid Corporation of India Ltd.           | 0          | 46        | 46        |
| 111  | Verizon Communications India Pvt. Ltd.         | 0          | 44        | 44        |
| 112  | Sanyog Networks Pvt. Ltd.                      | 12         | 30        | 42        |
| 113  | Adya Tech One Services Pvt. Ltd.               | 0          | 38        | 38        |
| 114  | AT&T Global Network Services India Pvt Ltd     | 0          | 37        | 37        |
| 115  | STN Communication & Advertising Pvt Ltd        | 0          | 37        | 37        |
| 116  | West Bengal Electronics Industry Development   |            |           |           |
| 116  | Corp. Ltd.                                     | 0          | 31        | 31        |
| 117  | Dream Plus Multi Services Pvt. Ltd.            | 3          | 27        | 30        |
| 118  | Pipetel Communications Pvt. Ltd.               | 1          | 29        | 30        |
| 119  | Nelco Ltd.                                     | 0          | 21        | 21        |
| 120  | Reach Network India Pvt. Ltd.                  | 3          | 15        | 18        |
| 121  | Essel Shyam Communications Ltd.                | 16         | 0         | 16        |
| 122  | Vcare Call Centres India Pvt. Ltd.             | 0          | 15        | 15        |
| 123  | Financial Technologies Communications Ltd      | 12         | 0         | 12        |
| 124  | VIVA Communications Pvt. Ltd.                  | 0          | 10        | 10        |
| 125  | ABT Ltd.                                       | 3          | 2         | 5         |
| 126  | Maple PC & Peripherals Pvt. Ltd.               | 0          | 2         | 2         |
| 127  | Godrej Infotech Ltd.                           | 0          | 1         | 1         |
| 128  | Orange Business Services India Network Pvt Ltd | 0          | 1         | 1         |
| 129  | L&T Finance Ltd.                               | 1          | 0         | 1         |
| 130  | Opto Network Pvt. Ltd.                         | 0          | 1         | 1         |
| 131  | Reliance Jio Infocomm Ltd.                     | 0          | 1         | 1         |
|      | Total  | 181654875  | 85735167  | 267390042 |

<sup>\*</sup>Wireless subscribers with less than 1 MB monthly data usage not considered as internet/ broadband subscribers by Reliance Communications Group and Idea Cellular Ltd.

# Annexure 1.7: List of Internet Service Providers reported IP Telephony Minutes for Q.E. Dec-14

| S. No. | Name of Service Providers reported IP Telephony Minutes for the quarter ending Dec-14 |
|--------|---|
| 1      | Alliance Broadband Services Pvt. Ltd.   |
| 2      | Asianet Satellite Communications Ltd.   |
| 3      | Blazenet Ltd.   |
| 4      | City Online Services Ltd.   |
| 5      | Citycom Networks Pvt. Ltd.  |
| 6      | Convergent Telecom Pvt. Ltd.  |
| 7      | Data Infosys Ltd.   |
| 8      | delDSL Internet Pvt. Ltd.   |
| 9      | Novanet Ltd.  |
| 10     | Oistel Telecom Pvt. Ltd.  |
| 11     | Opto Network Pvt. Ltd.  |
| 12     | Pipetel Communications Pvt. Ltd.  |
| 13     | Pulse Telesystems Pvt. Ltd.   |
| 14     | Sify Technologies Ltd.  |
| 15     | Tata Communications Ltd.  |
| 16     | Tata Teleservices (Maharashtra) Ltd.  |
| 17     | Trikon Electronics Pvt. Ltd.  |
| 18     | VIVA Communications Pvt. Ltd.   |
| 19     | World Phone Internet Services Pvt. Ltd.   |
| 20     | You Broadband India Pvt. Ltd.   |

Annexure 1.8: Service Area wise PMRTS subscriber Base

| SNo. | Operative Area                     | Service Providers                                 | Subscribe  | er Base    |
|------|------------------------------------|---|------------|------------|
|      |                                    |   | 30.09.2014 | 31.12.2014 |
| 1    | Delhi(Faridabad/<br>Gurgaon)       | Arya Omnitalk Radio<br>Trunking Servives Pvt.Ltd. | 4490       | 6709       |
|      |                                    | Procall(Delhi)                                    | 2809       | 661        |
|      |                                    | Procall (Faridabad)                               | 319        | 305        |
|      |                                    | Procall (Gurgaon)                                 | 792        | 79         |
|      |                                    | Total   | 8410       | 7754       |
| 2    | Mumbai(Navi<br>Mumbai/Vashi)       | Arya Omnitalk Radio<br>Trunking Services Pvt.Ltd. | 7366       | 8321       |
|      |                                    | Smartalk (Mumbai & Vashi)                         | 438        | 29         |
|      |                                    | Bhilwara Telenet(Mumbai)                          | 401        | 105        |
|      |                                    | Total   | 8205       | 8455       |
| 3    | Kolkata                            | Arya Omnitalk Radio<br>Trunking Services Pvt.Ltd. | 1760       | 1834       |
|      |                                    | Total   | 1760       | 1834       |
| 4    | TN(Chennai)                        | Arya Omnitalk Radio<br>Trunking Services Pvt.Ltd. | 5033       | 5880       |
|      |                                    | Quick Calls                                       | 21         | 21         |
|      |                                    | Total   | 5054       | 5901       |
| 5    | Karnataka<br>(Bangalore)           | Arya Omnitalk Radio<br>Trunking Services Pvt.Ltd. | 5503       | 6393       |
|      |                                    | Quick Calls                                       | 370        | 21         |
|      |                                    | Total   | 5873       | 6414       |
| 6    | Andhra Pradesh<br>(Vishakhapatna)  | Arya Omnitalk Radio<br>Trunking Services Pvt.Ltd. | 3214       | 3209       |
|      |                                    | Quick Calls                                       | 2022       | 2022       |
|      |                                    | Total   | 5236       | 5231       |
| 7    | Madhya Pradesh<br>( Indore)        | Arya Omnitalk Radio<br>Trunking Services Pvt.Ltd. | 756        | 915        |
|      |                                    | Total   | 756        | 915        |
| 8    | Rajasthan (Jaipur)                 | Procall   | 570        | 560        |
|      |                                    | Total   | 570        | 560        |
| 9    | Gujrat(Ahmedabad<br>/Surat/Baroda/ | Arya Omnitalk Radio<br>Trunking Services Pvt.Ltd. | 4712       | 5098       |
|      | Bharuch)                           | Total   | 4712       | 5098       |
| 10   | Maharashtra                        | Smartalk  | 253        | 2          |
|      | (Pune)                             | Arya Omnitalk Radio Trunking Services Pvt.Ltd.    | 1270       | 1528       |
|      |                                    | Total   | 1523       | 1530       |
|      | G                                  | rand Total  | 42,099     | 43,692     |

#### Annexure 2.1: GSM Service - Service Area wise Statistics for QE Dec-14

#### Key parameters for service areas of category-A

| Service Area       | % of pre-paid in total | ARPU<br>(Rs. per |          | Total usage ( from & outside HSA) pe<br>subscriber per month |          |       |
|--------------------|------------------------|------------------|----------|--|----------|-------|
|                    | subscribers            | month)           | Outgoing | Outgoing   | Incoming | Total |
|                    |                        |                  | SMS      | MOU  | MOU      | MOU   |
| AP                 | 96.11                  | 129              | 29       | 189  | 198      | 387   |
| Gujarat            | 94.80                  | 108              | 15       | 187  | 160      | 347   |
| Karnataka          | 94.40                  | 141              | 46       | 196  | 187      | 384   |
| MH                 | 94.82                  | 130              | 36       | 178  | 165      | 342   |
| TN (incl. Chennai) | 94.94                  | 124              | 38       | 174  | 183      | 357   |

#### Key parameters for service areas of category-B

| Service Area | % of pre-paid in total | ARPU<br>(Rs. per |                 | ge ( from & c<br>abscriber pe |                 | A) per       |
|--------------|------------------------|------------------|-----------------|-------------------------------|-----------------|--------------|
|              | subscribers            | month)           | Outgoing<br>SMS | Outgoing<br>MOU               | Incoming<br>MOU | Total<br>MOU |
| Haryana      | 96.86                  | 103              | 16              | 196                           | 181             | 377          |
| Kerala       | 96.24                  | 178              | 18              | 204                           | 258             | 462          |
| MP           | 97.69                  | 98               | 18              | 144                           | 148             | 292          |
| Punjab       | 93.43                  | 129              | 57              | 206                           | 197             | 403          |
| Rajasthan    | 97.61                  | 109              | 11              | 156                           | 174             | 331          |
| UP(E)        | 98.64                  | 95               | 12              | 164                           | 231             | 395          |
| UP(W)        | 97.97                  | 98               | 30              | 171                           | 190             | 361          |
| WB           | 99.09                  | 83               | 14              | 155                           | 193             | 348          |

#### Key parameters for service areas of category-C

|              | -                      |                  |                 |                               |                 |              |
|--------------|------------------------|------------------|-----------------|-------------------------------|-----------------|--------------|
| Service Area | % of pre-paid in total | ARPU<br>(Rs. per |                 | ge ( from & o<br>abscriber pe |                 | A) per       |
|              | subscribers            | month)           | Outgoing<br>SMS | Outgoing<br>MOU               | Incoming<br>MOU | Total<br>MOU |
| Assam        | 96.20                  | 130              | 35              | 205                           | 234             | 440          |
| Bihar        | 99.37                  | 93               | 6               | 157                           | 240             | 397          |
| HP           | 98.14                  | 106              | 19              | 203                           | 189             | 392          |
| J&K          | 92.44                  | 161              | 6               | 276                           | 246             | 522          |
| NE           | 97.51                  | 123              | 58              | 188                           | 179             | 368          |
| Orissa       | 98.78                  | 88               | 10              | 178                           | 218             | 396          |

#### Key parameters for service areas of category-Metro

| · ·          | •                    |                  |                 | 3                           |                 |              |
|--------------|----------------------|------------------|-----------------|-----------------------------|-----------------|--------------|
| Service Area | % of pre-paid in     | ARPU<br>(Rs. per |                 | ge ( from &<br>ubscriber pe |                 | SA) per      |
|              | total<br>subscribers | month)           | Outgoing<br>SMS | Outgoing<br>MOU             | Incoming<br>MOU | Total<br>MOU |
| Kolkata      | 92.92                | 109              | 24              | 210                         | 213             | 423          |
| Delhi        | 85.91                | 165              | 29              | 228                         | 186             | 414          |
| Mumbai       | 83.12                | 191              | 38              | 272                         | 191             | 463          |

# Annexure 2.2: CDMA Full Mobility Service - Service Area wise Statistics for QE Dec-14

Key parameters for service areas of Category A

| Service Area       | % of Prepaid<br>in total | ARPU               | Total us        | sage ( from 8<br>subscriber |                 | SA) per      |
|--------------------|--------------------------|--------------------|-----------------|-----------------------------|-----------------|--------------|
| Service Area       | subscribers              | (Rs. per<br>month) | Outgoing<br>SMS | Outgoing<br>MOU             | Incoming<br>MOU | Total<br>MOU |
| MH                 | 89                       | 103                | 18              | 123                         | 106             | 229          |
| Gujarat            | 80                       | 141                | 37              | 136                         | 103             | 238          |
| TN (incl. Chennai) | 80                       | 178                | 19              | 140                         | 101             | 241          |
| Karnataka          | 85                       | 143                | 12              | 148                         | 135             | 283          |
| AP                 | 86                       | 122                | 21              | 150                         | 131             | 281          |

Key parameters for service areas of Category B

|              | riog paramotor           |                    |                 | or caregor,                 | <u>,                                     </u> |              |
|--------------|--------------------------|--------------------|-----------------|-----------------------------|---|--------------|
| Service Area | % of Prepaid<br>in total | ARPU               | Total us        | sage ( from 8<br>subscriber |   | SA) per      |
| Service Area | subscribers              | (Rs. per<br>month) | Outgoing<br>SMS | Outgoing<br>MOU             | Incoming<br>MOU                               | Total<br>MOU |
| WB           | 99                       | 58                 | 6               | 155                         | 176   | 331          |
| Rajasthan    | 95                       | 80                 | 13              | 224                         | 173   | 398          |
| UP(E)        | 95                       | 62                 | 20              | 85                          | 96  | 182          |
| MP           | 95                       | 72                 | 17              | 119                         | 123   | 242          |
| Kerala       | 83                       | 139                | 13              | 119                         | 117   | 236          |
| UP(W)        | 93                       | 80                 | 22              | 110                         | 125   | 235          |
| Haryana      | 90                       | 71                 | 19              | 159                         | 133   | 292          |
| Punjab       | 79                       | 135                | 20              | 157                         | 100   | 257          |

Key parameters for service areas of Category C

| Service Area | % of Prepaid in total | ARPU<br>(Rs. per |                 | sage ( from 8<br>subscriber |                 | SA) per      |  |  |  |  |  |
|--------------|-----------------------|------------------|-----------------|-----------------------------|-----------------|--------------|--|--|--|--|--|
| Orissa       | subscribers           | month)           | Outgoing<br>SMS | Outgoing<br>MOU             | Incoming<br>MOU | Total<br>MOU |  |  |  |  |  |
| Orissa       | 91                    | 97               | 11              | 126                         | 147             | 273          |  |  |  |  |  |
| Bihar        | 96                    | 67               | 10              | 117                         | 149             | 267          |  |  |  |  |  |
| HP           | 86                    | 146              | 8               | 134                         | 111             | 245          |  |  |  |  |  |
| J&K          | 50                    | 221              | 45              | 288                         | 221             | 508          |  |  |  |  |  |
| North East   |                       |                  | NA              |                             |                 |              |  |  |  |  |  |
| Assam        | NA                    |                  |                 |                             |                 |              |  |  |  |  |  |

Key parameters for service areas of Category Metro

| Comico Anos  | % of Prepaid            | ARPU               | Total us        | sage ( from 8<br>subscriber |                 | SA) per      |
|--------------|-------------------------|--------------------|-----------------|-----------------------------|-----------------|--------------|
| Service Area | in total<br>subscribers | (Rs. per<br>month) | Outgoing<br>SMS | Outgoing<br>MOU             | Incoming<br>MOU | Total<br>MOU |
| Kolkata      | 88                      | 106                | 9               | 136                         | 137             | 273          |
| Delhi        | 87                      | 119                | 15              | 157                         | 105             | 261          |
| Mumbai       | 80                      | 161                | 24              | 103                         | 78              | 181          |

# Annexure 4.1: Performance of QoS Parameters for Cellular Mobile 2G Service

|               |                 | Pe   | erforma                                    | ance Mo  | onitori                                 | ing Re                | port o                | n Quality  | of Servi                           | e of Cellular M  | obile Ser                                    | ivce Pro                                    | viders fo                                 | r quarter                                 | ending, Dece   | mber, 2  | 014   |   |  |
|---------------|-----------------|--|--|--|---|-----------------------|-----------------------|--|------------------------------------|--|--|---|---|---|--|--|---|---|--|
|               |                 |  |  | ı  | Netwo                                   | ork Re                | lated I               | Parameter  | s                                  |  |  |   |   | Custome                                   | r Servcice Qu  | ality Par                                      | ameters   |   |  |
| Service Area  | . Provider      | Netw<br>Availa   | -  | Estab  | nectio<br>olishm<br>essibil             | ent                   |                       | Connection<br>Maintenar<br>Retainabil  | ice                                | POI  |  | Me  | etering ar                                | nd billing                                |  | the cus  | se time to<br>tomer for<br>stance   | Terminat  | ion / closure<br>service                         |
| Name of Servi | Name of Service | BTSs Accumulated<br>downtime (not available<br>for service) (%age) | Worst affected BTSs due to downtime (%age) | Call Set-up Success Rate<br>(within licensee's own<br>network) | SDCCH/ Paging Chl.<br>Congestion (%age) | TCH Congestion (%age) | Call Drop Rate (%age) | Worst affected cells<br>having more than 3% TCH<br>drop<br>(call drop) rate (%age) | Connection with good voice quality | Point of Interconnection<br>(POI) Congestion (No. of<br>POIs not meeting the<br>benchmark)<br>(Averaged over a period<br>of quarter) | Metering and billing credibility - post paid | Metering and billing credibility - pre paid | Resolution of billing/charging complaints | Resolution of billing/charging complaints | Period of applying credit/<br>waiver/adjustment to<br>customer's account from<br>the date of resolution of<br>complaints | Accessibility of call<br>centre/ austomer care | Percentage of calls<br>answered by the<br>operators (voice to voice)<br>within 90 seconds | %age requests for Termination / Closure of service complied within 7 days | Time taken for refund of deposits after closures |
|               |                 | ≤ 2%   | ≤ 2%                                       | ≥ 95%  | ≤ 1%                                    | ≤ 2%                  | ≤ <b>2</b> %          | ≤ 3%   | ≥ 95%                              | ≤ 0.5%   | ≤ 0.1%                                       | ≤ 0.1%                                      | 98%<br>within 4<br>weeks                  | 100%<br>within 6<br>weeks                 | within 1 week<br>of resolution<br>of complaint   | ≥ 95%  | ≥ 95%   | 100%<br>within 7<br>days  | 100% within<br>60 days                           |
|               | Aircel          | 0.14   | 0.72                                       | 99.39  | 0.17                                    | 0.23                  | 0.93                  | 4.67   | 97.80                              | 0  | 0.00   | 0.00  | 100.00                                    | 100.00                                    | 100.00   | 97.14  | 98.82   | 100.00  | 100.00   |
|               | Airtel          | 0.02   | 0.00                                       | 99.14  | 0.08                                    | 0.08                  | 0.39                  | 0.55   | 98.92                              | 0  | 0.01   | 0.00  | 100.00                                    | 100.00                                    | 100.00   | 99.92  | 97.68   | 100.00  | 100.00   |
|               | BSNL            | 1.83   | 1.92                                       | 97.86  | 0.68                                    | 1.80                  | 0.95                  | 2.78   | 96.67                              | 0  | 0  | 0   | 100.00                                    | *   | 100.00   | 91.00  | 76.00   | 100.00  | 100.00   |
|               | Idea            | 0.05   | 0.53                                       | 98.66  |   |                       | 0.63                  | 1.56   | 97.43                              | 0  | 0.20   | 0.04  | 100.00                                    | 100.00                                    | 99.49  | 99.52  | 98.00   | 100.00  | 100.00   |
| AP            | RCOM CDMA       | 0.34   | 0.91                                       | 98.86  |   | 0.07                  | 0.17                  | 0.10   | 99.70                              | 0  | 0.08   | 0.02  | 100.00                                    | 100.00                                    | 100.00   | 98.60  | 90.20   | 100.00  | 100.00   |
| 7 "           | RCOM GSM        | 0.39   | 0.87                                       | 99.75  | 0.02                                    | 0.07                  | 0.36                  | 0.05   | 98.88                              | 0  | 0.09   | 0.09  | 100.00                                    | 100.00                                    | 100.00   | 98.87  | 90.62   | 100.00  | 100.00   |
|               | TATA CDMA       | 0.04   | 0.08                                       | 99.24  | 0.00                                    | 0.22                  | 0.26                  | 0.19   | 98.26                              | 0  | 0.00   | 0.00  | 100.00                                    | 100.00                                    | 100.00   | 98.84  | 92.66   | 100.00  | 99.57  |
|               | TATA GSM        | 0.10   | 0.39                                       | 98.65  | 0.10                                    | 0.20                  | 0.71                  | 1.88   | 97.85                              | 0  | 0.00   | 0.00  | 100.00                                    | 100.00                                    | 100.00   | 99.55  | 85.05   | 100.00  | 100.00   |
|               | Telewings       | 0.23   | 0.93                                       | 98.36  | 0.25                                    |                       | 0.74                  | 1.79   | 97.93                              | 0  | NA   | 0.00  | 100.00                                    | 100.00                                    | NA   | 95.77  | 99.43   | NA  | NA   |
|               | Vodafone        | 0.04   | 0.17                                       | 99.65  | 0.26                                    | 0.35                  | 0.56                  | 2.15   | 98.79                              | 0  | 0.10   | 0.11  | 100.00                                    | 100.00                                    | 100.00   | 100.00   | 100.00  | 100.00  | 100.00   |
|               | Aircel          | 4.26   | 21.87                                      | 95.15  |   | 2.88                  |                       | 17.09  | 89.54                              | 0  | 0.00   | 0.01  | 100.00                                    | 100.00                                    | 100.00   | 88.77  | 90.81   | 99.39   | 100.00   |
|               | Airtel          | 0.16   | 0.82                                       | 97.83  | 0.33                                    | 0.89                  | 1.27                  | 1.21   | 98.35                              | 0  | 0.01   | 0.00  | 100.00                                    | 100.00                                    | 100.00   | 100.00   | 97.93   | 100.00  | 100.00   |
| ASM           | BSNL            | 2.51   | 5.05                                       | 95.62  | 0.87                                    |                       | 2.12                  | 4.66   | 93.47                              | 0  | 0  | 0.01  | 100.00                                    | *   | 100.00   | 99.00  | 77.73   | 100.00  | 100.00   |
|               | Idea            | 0.54   | 0.51                                       | 98.02  | 0.31                                    | 1.52                  | 1.48                  | 1.87   | 95.48                              | 0  | 0.01   | 0.24  | 100.00                                    | 100.00                                    | 100.00   | 99.03  | 99.00   | 100.00  | 100.00   |
|               | RTL             | 0.31   | 1.78                                       | 98.57  | 0.05                                    | 0.09                  | 0.68                  | 0.11   | 98.39                              | 0  | 0.06   | 0.06  | 100.00                                    | 100.00                                    | 100.00   | 98.25  | 66.02   | 100.00  | 100.00   |
|               | Vodafone        | 0.56   | 1.59                                       | 99.46  | 0.14                                    | 0.54                  | 0.60                  | 2.29   | 97.72                              | 0  | 0.30   | 0.10  | 100.00                                    | 100.00                                    | 100.00   | 99.96  | 100.00  | 100.00  | 100.00   |
|               | Aircel          | 4.90   | 29.34                                      | 93.64  | 0.94                                    | 5.91                  | 1.65                  | 12.47  | 95.00                              | 0  | 0.00   | 0.00  | 100.00                                    | 100.00                                    | 100.00   | 89.90  | 97.21   | 100.00  | 100.00   |
|               | Airtel          | 0.08   | 0.26                                       | 98.17  | 0.94                                    | 1.22                  | 1.87                  | 2.35   | 95.74                              | 0  | 0.01   | 0.01  | 100.00                                    | 100.00                                    | 100.00   | 99.16  | 97.73   | 100.00  | 100.00   |
|               | BSNL            | 14.65  | 21.55                                      | 97.49  | 0.71                                    | 0.95                  |                       | 10.43  | 96.60                              | 0  | 0  | 0   | 95.01                                     | *   | 100.00   | 99.5   | 96.65   | 100.00  | 100.00   |
|               | Idea            | 0.52   | 1.88                                       | 98.26  | 0.71                                    | 1.17                  | 1.10                  | 2.78   | 96.70                              | 0  | 0.02   | 0.03  | 100.00                                    | 100.00                                    | 100.00   | 97.03  | 98.00   | 100.00  | 100.00   |
| вн            | RCOM CDMA       | 0.39   | 1.25                                       | 97.96  | 0.00                                    | 0.02                  | 0.35                  | 1.59   | 99.81                              | 0  | 0.09   | 0.05  | 100.00                                    | 100.00                                    | 100.00   | 99.02  | 93.63   | 100.00  | 100.00   |
|               | RTL             | 0.09   | 0.32                                       | 96.15  | 0.87                                    | 0.08                  | 0.51                  | 0.12   | 97.85                              | 0  | 0.09   | 0.09  | 100.00                                    | 100.00                                    | 100.00   | 98.91  | 90.20   | 100.00  | 100.00   |
|               | TATA CDMA       | 0.14   | 0.00                                       | 97.93  | 0.00                                    | 0.31                  | 0.83                  | 1.61   | 98.21                              | 0  | 0.00   | 0.00  | 98.63                                     | 100.00                                    | 100.00   | 98.99  | 91.65   | 100.00  | 100.00   |
|               | TATA GSM        | 0.12   | 0.59                                       | 98.63  | 0.16                                    | 0.21                  | 0.53                  | 1.21   | 97.37                              | 0  | 0.00   | 0.00  | 100.00                                    | 100.00                                    | 100.00   | 95.67  | 94.08   | 100.00  | 100.00   |
|               | Telewings       | 0.29   | 0.97                                       | 98.04  | 0.44                                    | 1.23                  | 0.59                  | 2.16   | 93.23                              | 0  | NA   | 0.29  | 100.00                                    | 100.00                                    | NA   | 96.94  | 99.24   | NA  | NA   |
|               | Vodafone        | 0.43   | 1.85                                       | 99.51  | 0.23                                    | 0.49                  | 0.91                  | 1.89   | 97.44                              | 0  | 0.02   | 0.06  | 99.76                                     | 100.00                                    | 100.00   | 100.00   | 97.51   | 100.00  | 100.00   |

|     |           |      |      |       |             | - T    | _    |       |        |   |        |      |        |        |           |        |        |        |        |
|-----|-----------|------|------|-------|-------------|--------|------|-------|--------|---|--------|------|--------|--------|-----------|--------|--------|--------|--------|
|     | Aircel    | 0.41 | 2.18 | 98.56 | 0.24        |        | 1.26 | 7.83  | 97.35  | 0 | 0.00   | 0.00 | 100.00 | 100.00 | 100.00    | 96.64  | 95.51  | 100.00 | 100.00 |
|     | Airtel    | 0.02 | 0.00 | 99.90 | 0.02        |        | 0.18 | 0.29  | 99.74  | 0 | 0.01   | 0.01 | 100.00 | 100.00 | 100.00    | 100.00 | 95.50  | 100.00 | 100.00 |
|     | BSNL      | 0.56 | 1.82 | 98.03 | 0.57        |        | 0.71 | 1.44  | 99.99  | 0 | 0.02   | 0.07 | 100.00 | *      | 100.00    | 100.00 | 73.00  | 100.00 | 100.00 |
|     | Idea      | 0.02 | 0.00 | 99.61 | 0.02        |        | 0.32 | 0.77  | 96.73  | 0 |        |      |        |        | Incl in 1 |        |        |        |        |
| CHN | Vodafone  | 0.01 | 0.08 | 99.63 | 0.11        |        | 0.61 | 2.46  | 98.92  | 0 | 0.01   | 0.02 | 100.00 | 100.00 | 100.00    | 100.00 | 97.40  | 100.00 | 100.00 |
|     | RCOM CDMA | 0.28 | 0.66 | 99.04 | 0.00        | _      | 0.06 | 0.06  | 99.77  | 0 | 0.08   | 0.08 | 100.00 | 100.00 | 100.00    | 98.13  | 94.62  | 100.00 | 100.00 |
|     | RCOM GSM  | 0.27 | 0.48 | 99.75 | 0.01        | 0.03   | 0.34 | 0.03  | 99.04  | 0 | 0.07   | 0.09 | 100.00 | 100.00 | 100.00    | 98.69  | 90.56  | 100.00 | 100.00 |
|     | TATA CDMA |      |      |       |             |        |      |       |        |   | Incl i |      |        |        |           |        |        |        |        |
|     | TATA GSM  |      |      | T     |             |        |      |       |        |   | Incl i |      |        | 1      |           |        |        |        |        |
|     | Aircel    | 0.39 | 1.76 | 97.83 |             | 1.24 1 | _    | 6.06  | 97.61  | 0 | 0.00   | 0.00 | 100.00 | 100.00 | 100.00    | 93.41  | 98.10  | 100.00 | 100.00 |
|     | Airtel    | 0.01 | 0.00 | 99.82 | <del></del> |        | 0.57 | 0.74  | 99.33  | 0 | 0.03   | 0.00 | 99.99  | 99.99  | 100.00    | 100.00 | 87.43  | 100.00 | 100.00 |
|     | Idea      | 0.01 | 0.00 | 99.97 |             |        | 0.50 | 1.46  | 98.86  | 0 | 0.16   | 0.08 | 100.00 | 100.00 | 100.00    | 99.27  | 100.00 | 100.00 | 100.00 |
|     | MTNL GSM  | 0.26 | 1.45 | 96.57 | 0.47        | 1.70 1 | 1.85 | 2.52  | 97.14  | 0 | 0.04   | 0.01 | 100.00 | 100.00 | 100.00    | 95.86  | 97.27  | 100.00 | 100.00 |
| DLI | MTNL CDMA |      |      |       |             |        |      |       |        |   | N      | R    |        |        |           |        |        |        |        |
| 52. | MTS       | 0.10 | 0.33 | 98.96 | 0.00        | 0.06   | 0.67 | 1.63  | 99.21  | 0 | 0.09   | 0.05 | 100.00 | 100.00 | 100.00    | 99.40  | 97.70  | 100.00 | 100.00 |
|     | RCOM CDMA | 0.16 | 0.03 | 97.86 | 0.00        | 0.04   | 0.27 | 1.14  | 99.80  | 0 | 0.06   | 0.07 | 100.00 | 100.00 | 100.00    | 98.52  | 99.15  | 100.00 | 100.00 |
|     | RCOM GSM  | 0.33 | 0.55 | 99.64 | 0.03        | 0.04   | 0.36 | 0.11  | 98.77  | 0 | 0.07   | 0.09 | 100.00 | 100.00 | 100.00    | 98.00  | 98.23  | 100.00 | 100.00 |
|     | TATA CDMA | 0.07 | 0.18 | 98.97 | 0.00        | 0.19   | 0.37 | 0.75  | 99.12  | 0 | 0.00   | 0.00 | 100.00 | 100.00 | 100.00    | 99.10  | 95.46  | 100.00 | 99.83  |
|     | Vodafone  | 0.10 | 0.45 | 99.58 | 0.06        | 0.11 1 |      | 3.92  | 97.11  | 0 | 0.09   | 0.05 | 100.00 | 100.00 | 100.00    | 100.00 | 99.02  | 100.00 | 100.00 |
|     | Aircel    | 0.01 | 0.00 | 99.16 | 0.07        | 0.04   | 0.25 | 2.08  | 97.87  | 0 | 0.00   | 0.00 | 100.00 | 100.00 | 100.00    | 96.11  | 95.96  | 100.00 | 100.00 |
|     | Airtel    | 0.05 | 0.12 | 99.70 | 0.04        | 0.41   | 0.75 | 1.09  | 96.95  | 0 | 0.00   | 0.00 | 100.00 | 100.00 | 100.00    | 99.94  | 97.13  | 100.00 | 100.00 |
|     | BSNL      | 1.29 | 1.73 | 99.05 | 0.08        | 0.85   | 0.96 | 2.78  | 100.00 | 0 | 0.01   | 0.00 | 100.00 | *      | 100.00    | 96.82  | 96.38  | 100.00 | 100.00 |
|     | Idea      | 0.04 | 0.12 | 98.97 | 0.50        | 0.59 1 | 1.31 | 1.09  | 95.56  | 0 | 0.12   | 0.08 | 100.00 | 100.00 | 100.00    | 99.33  | 100.00 | 100.00 | 100.00 |
|     | MTS       | 0.03 | 0.00 | 99.24 | 0.00        | 0.02   | 0.16 | 2.37  | 99.18  | 0 | 0.01   | 0.01 | 100.00 | 100.00 | 100.00    | 95.80  | 95.80  | 100.00 | 100.00 |
| GUJ | RCOM CDMA | 0.18 | 0.42 | 99.08 | 0.00        |        | 0.05 | 0.19  | 99.84  | 0 | 0.08   | 0.04 | 100.00 | 100.00 | 100.00    | 98.16  | 89.03  | 100.00 | 100.00 |
| 003 | RCOM GSM  | 0.20 | 0.21 | 99.60 | 0.01        |        | 0.33 | 0.03  | 98.73  | 0 | 0.08   | 0.10 | 100.00 | 100.00 | 100.00    | 98.85  | 73.12  | 100.00 | 100.00 |
|     | TATA CDMA | 0.02 | 0.06 | 98.40 | 0.00        |        | 0.39 | 2.03  | 99.36  | 0 | 0.00   | 0.00 | 100.00 | 100.00 | 100.00    | 98.15  | 97.58  | 100.00 | 98.94  |
|     | TATA GSM  | 0.05 | 0.19 | 98.09 | 0.02        |        | 0.73 | 2.32  | 98.37  | 0 | 0.00   | 0.00 | 100.00 | 100.00 | 100.00    | 98.09  | 92.93  | 100.00 | 100.00 |
|     | Telewings | 0.15 | 0.53 | 97.85 | 0.49        |        | 0.50 | 2.30  | 98.02  | 0 | NA     | 0.01 | 100.00 | 100.00 | NA        | 95.91  | 90.38  | NA     | NA     |
|     | Videocon  | 0.06 | 0.13 | 98.91 | 0.14        | 0.10   | 0.54 | 0.94  | 97.66  | 0 | NA     | 0.02 | 100.00 | 100.00 | 100.00    | 100.00 | 98.09  | NA     | 0.00   |
|     | Vodafone  | 0.03 | 0.08 | 99.70 | 0.16        |        | 0.91 | 2.69  | 97.07  | 0 | 0.09   | 0.02 | 100.00 | 100.00 | 100.00    | 100.00 | 96.64  | 100.00 | 100.00 |
|     | Aircel    | 0.30 | 1.46 | 99.27 | 0.07        | 0.48 1 | 1.41 | 12.71 | 95.14  | 0 | 0.00   | 0.00 | 100.00 | 100.00 | 100.00    | 99.42  | 97.48  | 100.00 | 100.00 |
|     | Airtel    | 0.03 | 0.05 | 99.10 | 0.09        | 0.21   | 0.60 | 1.56  | 98.79  | 0 | 0.05   | 0.00 | 100.00 | 100.00 | 100.00    | 98.72  | 97.88  | 100.00 | 100.00 |
|     | BSNL      | 1.68 | 1.92 | 97.90 | 0.66        |        | 1.64 | 2.57  | 100.00 | 0 | 0      | 0    | 100.00 | *      | 100.00    | 100.00 | 89.62  | 100.00 | 100.00 |
|     | Idea      | 0.14 | 0.00 | 98.76 | 0.13        |        | 1.27 | 2.37  | 95.80  | 0 | 0.04   | 0.03 | 100.00 | 100.00 | 100.00    | 99.11  | 99.00  | 100.00 | 100.00 |
| HP  | RCOM CDMA | 0.17 | 0.35 | 99.07 | _           |        | 0.07 | 0.24  | 99.77  | 0 | 0.02   | 0.03 | 100.00 | 100.00 | 100.00    | 99.50  | 96.75  | 100.00 | 100.00 |
|     | RTL       | 0.19 | 0.40 | 98.59 | 0.03        |        | 0.68 | 0.03  | 98.09  | 0 | 0.03   | 0.09 | 100.00 | 100.00 | 100.00    | 98.96  | 91.70  | 100.00 | 100.00 |
|     | TATA CDMA | 0.02 | 0.00 | 97.90 | 0.00        |        | 0.14 | 0.16  | 98.19  | 0 | 0.00   | 0.00 | 100.00 | 100.00 | 100.00    | 97.63  | 98.84  | 100.00 | 100.00 |
|     | TATA GSM  | 0.00 | 0.00 | 98.76 | 0.00        |        | 1.51 | 0.00  | 97.79  | 0 | 0.00   | 0.00 | 100.00 | 100.00 | 100.00    | 99.06  | 97.52  | 100.00 | 100.00 |
|     | Vodafone  | 0.15 | 0.89 | 97.50 | 0.02        | 0.11   | 0.63 | 1.53  | 98.03  | 0 | 0.01   | 0.02 | 100.00 | 100.00 | 100.00    | 100.00 | 99.81  | 100.00 | 100.00 |

|      | Aircel    | 0.19 | 0.00  | 99.18 | 0.36 | 0.00 | 5.17 | 6.09  | 98.90 | 0 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 95.96  | 99.11  | 100.00 | 100.00 |
|------|-----------|------|-------|-------|------|------|------|-------|-------|---|------|------|--------|--------|--------|--------|--------|--------|--------|
|      | Airtel    | 0.05 | 0.07  | 99.32 | 0.10 | 0.15 | 0.33 | 0.71  | 99.07 | 0 | 0.06 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 96.80  | 100.00 | 100.00 |
|      | BSNL      | 1.02 | 1.39  | 97.17 | 0.23 | 0.96 | 1.32 | 1.45  | 97.34 | 1 | 0.07 | 0.02 | 100.00 | *      | 100.00 | 100.00 | 61.34  | 100.00 | 100.00 |
|      | Idea      | 0.01 | 0.00  | 99.99 | 0.30 | 0.35 | 0.55 | 1.50  | 98.03 | 0 | 0.15 | 0.06 | 100.00 | 100.00 | 100.00 | 100.00 | 99.00  | 100.00 | 100.00 |
| HR   | RCOM CDMA | 0.26 | 0.66  | 98.33 | 0.00 | 0.17 | 0.05 | 0.16  | 99.75 | 0 | 0.03 | 0.05 | 100.00 | 100.00 | 100.00 | 99.29  | 95.43  | 100.00 | 100.00 |
| ПК   | RCOM GSM  | 0.38 | 0.85  | 99.77 | 0.01 | 0.02 | 0.29 | 0.01  | 99.24 | 0 | 0.03 | 0.09 | 100.00 | 100.00 | 100.00 | 98.99  | 93.09  | 100.00 | 100.00 |
|      | TATA CDMA | 0.08 | 0.08  | 98.50 | 0.00 | 0.14 | 0.33 | 2.11  | 95.99 | 0 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 96.22  | 99.00  | 100.00 | 100.00 |
|      | TATA GSM  | 0.02 | 0.00  | 98.72 | 0.07 | 0.29 | 0.69 | 2.39  | 97.05 | 0 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 99.29  | 96.70  | 100.00 | 100.00 |
|      | Videocon  | 0.15 | 0.66  | 98.94 | 0.09 | 0.07 | 0.56 | 0.91  | 97.94 | 0 | NA   | 0.03 | 100.00 | 100.00 | 100.00 | 100.00 | 95.96  | NA     | 0.00   |
|      | Vodafone  | 0.03 | 0.01  | 99.83 | 0.12 | 0.17 | 0.70 | 0.34  | 97.82 | 0 | 0.07 | 0.01 | 100.00 | 100.00 | 100.00 | 100.00 | 99.40  | 100.00 | 100.00 |
|      | Aircel    | 2.54 | 17.02 | 94.16 | 1.26 | 5.35 | 1.52 | 14.00 | 93.44 | 0 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 92.07  | 98.86  | 100.00 | 100.00 |
|      | Airtel    | 0.12 | 0.09  | 98.29 | 0.29 | 0.47 | 0.49 | 1.09  | 98.19 | 0 | 0.04 | 0.00 | 100.00 | 100.00 | 100.00 | 99.40  | 94.69  | 100.00 | 100.00 |
| J&K  | BSNL      | 0.51 | 0.69  | 98.00 | 0.85 | 1.01 | 1.04 | 2.24  | 97.84 | 0 | 0.03 | 0.03 | 100.00 | *      | 100.00 | 100.00 | 50.00  | 100.00 | 100.00 |
| Jak  | Idea      | 0.70 | 1.76  | 97.99 | 0.59 | 1.42 | 1.69 | 2.49  | 96.40 | 0 | 0.03 | 0.01 | 100.00 | 100.00 | 100.00 | 96.78  | 96.00  | 100.00 | 100.00 |
|      | RCOM GSM  | 0.57 | 1.08  | 99.47 | 0.01 | 0.07 | 0.44 | 0.04  | 98.83 | 0 | 0.04 | 0.09 | 100.00 | 100.00 | 100.00 | 98.90  | 95.94  | 100.00 | 100.00 |
|      | Vodafone  | 0.42 | 3.11  | 96.76 | 0.74 | 2.04 | 0.83 | 1.24  | 98.11 | 0 | 0.06 | 0.02 | 100.00 | 100.00 | 100.00 | 100.00 | 99.21  | 100.00 | 100.00 |
|      | Aircel    | 0.35 | 1.28  | 97.81 | 0.67 | 0.42 | 0.87 | 3.19  | 97.08 | 0 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 64.09  | 94.88  | 100.00 | 100.00 |
|      | Airtel    | 0.02 | 0.00  | 99.70 | 0.05 | 0.20 | 0.75 | 1.08  | 96.12 | 0 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 95.46  | 100.00 | 100.00 |
|      | BSNL      | 5.44 | 23.56 | 99.41 | 0.48 | 0.55 | 0.49 | 2.66  | 99.81 | 0 | 0.02 | 0.10 | 99.06  | *      | 100.00 | 95.00  | 94.00  | 100.00 | 100.00 |
|      | Idea      | 0.13 | 0.24  | 99.68 | 0.04 | 0.04 | 0.25 | 0.21  | 96.53 | 0 | 0.07 | 0.07 | 100.00 | 100.00 | 100.00 | 99.25  | 97.00  | 100.00 | 100.00 |
| KOL  | MTS       | 0.07 | 0.00  | 99.84 | 0.00 | 0.00 | 0.50 | 0.75  | 99.89 | 0 | 0.02 | 0.02 | 100.00 | 100.00 | 100.00 | 98.30  | 96.30  | 100.00 | 100.00 |
| NOL  | RCOM CDMA | 0.18 | 0.14  | 99.06 | 0.00 | 0.01 | 0.12 | 0.48  | 99.75 | 0 | 0.03 | 0.07 | 100.00 | 100.00 | 100.00 | 99.39  | 98.53  | 100.00 | 100.00 |
|      | RTL       | 0.16 | 0.10  | 99.44 | 0.03 | 0.01 | 0.43 | 0.03  | 98.17 | 0 | 0.03 | 0.09 | 100.00 | 100.00 | 100.00 | 98.86  | 93.16  | 100.00 | 100.00 |
|      | TATA CDMA | 0.03 | 0.00  | 99.01 | 0.00 | 0.10 | 0.73 | 1.83  | 99.24 | 0 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 99.15  | 92.94  | 100.00 | 98.81  |
|      | TATA GSM  | 0.03 | 0.20  | 98.65 | 0.07 | 0.03 | 0.69 | 1.61  | 97.57 | 0 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 98.82  | 87.18  | 100.00 | 100.00 |
|      | Vodafone  | 0.05 | 0.26  | 99.61 | 0.04 | 0.39 | 0.95 | 2.73  | 97.03 | 0 | 0.03 | 0.04 | 100.00 | 100.00 | 100.00 | 100.00 | 98.25  | 100.00 | 100.00 |
|      | Aircel    | 0.38 | 0.00  | 99.90 | 0.01 | 0.00 | 0.59 | 2.53  | 98.77 | 0 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 99.07  | 97.32  | 100.00 | 100.00 |
|      | Airtel    | 0.00 | 0.00  | 99.83 | 0.04 | 0.07 | 0.29 | 0.86  | 99.72 | 0 | 0.02 | 0.00 | 100.00 | 100.00 | 100.00 | 99.75  | 96.27  | 100.00 | 100.00 |
|      | BSNL      | 0.46 | 0.57  | 98.00 | 0.26 | 1.78 | 0.59 | 1.58  | 99.79 | 0 | 0.04 | 0.06 | 100.00 | *      | 100.00 | 97.00  | 66.6   | 100.00 | 100.00 |
|      | Idea      | 0.16 | 0.01  | 99.90 | 0.30 | 1.33 | 0.23 | 1.94  | 95.24 | 0 | 0.18 | 0.10 | 100.00 | 100.00 | 100.00 | 99.13  | 99.00  | 100.00 | 100.00 |
| KR   | MTS       | 0.06 | 0.00  | 99.56 | 0.00 | 0.01 | 0.75 | 2.90  | 99.20 | 0 | 0.00 | 0.04 | 100.00 | 100.00 | 100.00 | 96.40  | 95.30  | 100.00 | 100.00 |
| INIX | RCOM CDMA | 0.19 | 0.11  | 99.13 | 0.00 | 0.01 | 0.04 | 0.06  | 99.74 | 0 | 0.07 | 0.06 | 100.00 | 100.00 | 100.00 | 99.08  | 96.22  | 100.00 | 100.00 |
|      | RCOM GSM  | 0.14 | 0.08  | 99.62 | 0.01 | 0.07 | 0.21 | 0.03  | 99.18 | 0 | 0.09 | 0.09 | 100.00 | 100.00 | 100.00 | 98.84  | 89.08  | 100.00 | 100.00 |
|      | TATA CDMA | 0.02 | 0.00  | 98.81 | 0.00 | 0.02 | 0.71 | 0.12  | 99.13 | 0 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 99.06  | 96.40  | 100.00 | 100.00 |
|      | TATA GSM  | 0.03 | 0.00  | 98.80 | 0.02 | 0.10 | 0.66 | 0.58  | 98.24 | 0 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 99.19  | 90.76  | 100.00 | 100.00 |
|      | Vodafone  | 0.04 | 0.21  | 99.54 | 0.08 | 0.46 | 0.59 | 0.62  | 97.47 | 0 | 0.10 | 0.04 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

|       | Aircel    | 0.15 | 0.48 | 98.64 | 0.17 | 0.36 | 1.30 | 7.58 | 96.58 | 0 | 0.00       | 0.00 | 100.00 | 100.00 | 100.00 | 96.57  | 98.04  | 100.00       | 100.00 |
|-------|-----------|------|------|-------|------|------|------|------|-------|---|------------|------|--------|--------|--------|--------|--------|--------------|--------|
|       | Airtel    | 0.13 | 1.48 | 99.03 | 0.24 | 0.33 | 0.71 | 1.05 | 99.22 | 0 | 0.02       | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 96.04  | 100.00       | 100.00 |
|       | BSNL      | 1.07 | 1.82 | 98.22 | 0.11 |      | 1.10 | 2.45 | 97.28 | 0 | 0.04       | 0.05 | 100.00 | *      | 100.00 | 98.00  | 90.38  | 100.00       | 100.00 |
|       | Idea      | 0.10 | 0.30 | 97.90 | 0.30 | -    | 0.75 | 1.91 | 96.27 | 0 | 0.04       | 0.07 | 100.00 | 100.00 | 100.00 | 99.25  | 99.00  | 100.00       | 100.00 |
|       | MTS       | 0.20 | 0.00 | 99.37 | 0.00 | 0.11 | 0.55 | 1.46 | 99.16 | 0 | 0.00       | 0.01 | 100.00 | 100.00 | 100.00 | 99.90  | 95.20  | 100.00       | 100.00 |
| KTK   | RCOM CDMA | 0.35 | 0.88 | 98.52 | 0.00 | -    | 0.08 | 0.05 | 99.78 | 0 | 0.06       | 0.03 | 100.00 | 100.00 | 100.00 | 98.09  | 92.67  | 100.00       | 100.00 |
|       | RCOM GSM  | 0.35 | 0.85 | 99.65 | 0.02 |      | 0.29 | 0.01 | 98.90 | 0 | 0.08       | 0.09 | 100.00 | 100.00 | 100.00 | 98.53  | 91.18  | 100.00       | 100.00 |
|       | TATA CDMA | 0.07 | 0.25 | 98.95 | 0.00 |      | 0.46 | 1.47 | 98.25 | 0 | 0.00       | 0.00 | 100.00 | 100.00 | 100.00 | 99.23  | 90.20  | 100.00       | 99.80  |
|       | TATA GSM  | 0.05 | 0.06 | 98.29 | 0.13 | 0.25 | 0.75 | 2.92 | 97.55 | 0 | 0.00       | 0.00 | 100.00 | 100.00 | 100.00 | 99.52  | 75.23  | 100.00       | 100.00 |
|       | Vodafone  | 0.10 | 0.38 | 99.93 | 0.05 | 0.07 | 0.58 | 1.70 | 98.66 | 0 | 0.10       | 0.19 | 100.00 | 100.00 | 100.00 | 100.00 | 92.42  | 100.00       | 100.00 |
|       | Aircel    | 0.06 | 0.04 | 98.10 | 0.21 | 0.73 | 1.02 | 6.22 | 97.80 | 0 | 0.00       | 0.00 | 100.00 | 100.00 | 100.00 | 98.89  | 95.58  | 100.00       | 100.00 |
|       | Airtel    | 0.00 | 0.00 | 99.99 | 0.00 | 0.00 | 0.27 | 0.02 | 99.96 | 0 | 0.01       | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 96.12  | 100.00       | 100.00 |
|       | Idea      | 0.07 | 0.05 | 98.57 | 0.67 | 0.85 | 1.66 | 2.70 | 95.93 | 0 | 0.08       | 0.09 | 100.00 | 100.00 | 100.00 | 99.15  | 97.00  | 100.00       | 100.00 |
|       | loop      | 0.01 | 0.00 | 98.68 | 0.30 | 0.18 | 1.27 | 1.86 | 97.03 | 9 | NA         | NA   | NA     | NA     | NA     | NA     | NA     | NA           | NA     |
|       | MTNL GSM  | 0.56 | 1.41 | 98.03 | 0.27 | 0.09 | 1.23 | 1.43 | 95.53 | 0 | 0.02       | 0.02 | 100.00 | 100.00 | 100.00 | 95.26  | 95.20  | 99.98        | 100.00 |
| МВІ   | MTNL CDMA | 0.35 | 1.14 | 97.31 | 0.88 | 0.01 | 1.24 | 2.28 | 97.21 | 0 |            |      |        |        | NR     |        |        |              |        |
|       | RCOM CDMA | 0.27 | 0.15 | 97.88 | 0.00 | 0.03 | 0.72 | 0.09 | 99.79 | 0 | 0.10       | 0.03 | 100.00 | 100.00 | 100.00 | 99.20  | 69.20  | 100.00       | 100.00 |
|       | RCOM GSM  | 0.26 | 0.28 | 99.58 | 0.05 | 0.07 | 0.39 | 0.03 | 98.93 | 0 | 0.07       | 0.09 | 100.00 | 100.00 | 100.00 | 98.98  | 67.73  | 100.00       | 100.00 |
|       | TATA CDMA | 0.02 | 0.04 | 98.95 | 0.00 | 0.06 | 0.65 | 2.43 | 99.02 | 0 | 0.00       | 0.00 | 99.70  | 100.00 | 100.00 | 99.47  | 94.42  | 100.00       | 100.00 |
|       | TATA GSM  | 0.01 | 0.00 | 99.44 | 0.14 | 0.34 | 0.40 | 2.48 | 97.68 | 0 | 0.00       | 0.00 | 100.00 | 100.00 | 100.00 | 97.90  | 89.88  | 100.00       | 100.00 |
|       | Vodafone  | 0.01 | 0.00 | 99.44 | 0.06 | 0.56 | 0.90 | 1.94 | 97.42 | 0 | 0.04       | 0.01 | 100.00 | 100.00 | 100.00 | 99.80  | 95.86  | 100.00       | 100.00 |
|       | Aircel    | 0.03 | 0.02 | 99.55 | 0.04 | 0.10 | 0.81 | 3.77 | 97.32 | 0 | 0.00       | 0.01 | 100.00 | 100.00 | 100.00 | 98.31  | 68.53  | 100.00       | 100.00 |
|       | Airtel    | 0.01 | 0.00 | 99.75 | 0.04 | 0.08 | 0.45 | 0.13 | 98.83 | 0 | 0.02       | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 96.55  | 100.00       | 100.00 |
|       | BSNL      | 1.92 | 1.90 | 95.79 | 0.59 | 1.62 | 1.53 | 2.36 | 96.13 | 0 | 0          | 0.03 | 100.00 | *      | 100.00 | 100.00 | 95.58  | 100.00       | 100.00 |
|       | Idea      | 0.10 | 0.35 | 98.46 | 0.66 | 1.03 | 1.10 | 1.30 | 97.28 | 0 | 0.18       | 0.07 | 100.00 | 100.00 | 100.00 | 99.20  | 100.00 | 100.00       | 99.52  |
| МН    | RCOM CDMA | 0.19 | 0.47 | 97.96 | 0.00 | 0.03 | 0.19 | 0.80 | 99.80 | 0 | 0.09       | 0.06 | 100.00 | 100.00 | 100.00 | 99.33  | 71.28  | 100.00       | 100.00 |
| 14111 | RCOM GSM  | 0.24 | 0.72 | 99.58 | 0.02 | 0.04 | 0.43 | 0.02 | 98.78 | 0 | 0.08       | 0.10 | 100.00 | 100.00 | 100.00 | 99.28  | 71.96  | 100.00       | 100.00 |
|       | TATA CDMA | 0.00 | 0.00 | 98.39 | 0.00 | 0.21 | 0.92 | 2.09 | 99.09 | 0 | 0.00       | 0.00 | 100.00 | 100.00 | 100.00 | 98.78  | 97.23  | 100.00       | 100.00 |
|       | TATA GSM  | 0.00 | 0.00 | 99.62 | 0.07 | 0.12 | 0.62 | 1.66 | 97.49 | 0 | 0.00       | 0.00 | 100.00 | 100.00 | 100.00 | 98.05  | 93.32  | 100.00       | 100.00 |
|       | Telewings | 0.16 | 0.60 | 97.63 | 0.44 |      | 0.58 | 1.49 | 97.66 | 0 | NA         | 0.02 | 100.00 | 100.00 | NA     | 95.48  | 98.48  | NA           | NA     |
|       | Vodafone  | 0.08 | 0.28 | 99.51 | 0.33 | 0.49 | 0.77 | 1.65 | 97.24 | 0 | 0.06       | 0.06 | 100.00 | 100.00 | 100.00 | 99.98  | 98.52  | 100.00       | 100.00 |
|       | Aircel    | 0.30 | 0.78 | 98.49 | 0.16 |      | 0.66 | 1.24 | 99.14 | 0 | 0.00       | 0.00 | 100.00 | 100.00 | 100.00 | 97.96  | 97.79  | 100.00       | 100.00 |
|       | Airtel    | 0.13 | 0.32 | 99.66 | 0.03 | -    | 0.92 | 2.08 | 96.50 | 0 | 0.02       | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 98.36  | 100.00       | 100.00 |
|       | BSNL      | 1.96 | 1.52 | 95.89 | 0.61 |      | 1.72 | 2.64 | 80.66 | 0 | 0.00       | 0.03 | 100.00 | *      | 100.00 | 49.00  | 99.21  | 100.00       | 100.00 |
|       | Idea      | 0.65 | 1.61 | 98.37 | 0.67 | _    | 0.96 | 1.63 | 97.26 | 0 | 0.05       | 0.04 | 100.00 | 100.00 | 100.00 | 99.07  | 99.00  | 100.00       | 100.00 |
| MP    | RCOM CDMA | 0.54 | 1.36 | 99.20 | 0.00 |      | 0.08 | 0.45 | 99.84 | 0 | 0.03       | 0.09 | 100.00 | 100.00 | 100.00 | 98.53  | 98.59  | 100.00       | 100.00 |
|       | RTL       | 0.23 | 0.46 | 98.77 | 0.09 |      | 0.55 | 0.02 | 97.91 | 0 | 0.03       | 0.09 | 100.00 | 100.00 | 100.00 | 98.94  | 91.54  | 100.00       | 100.00 |
|       | TATA CDMA | 0.05 | 0.00 | 99.07 | 0.00 |      | 0.55 | 2.02 | 99.18 | 0 | 0.00       | 0.00 | 100.00 | 100.00 | 100.00 | 97.42  | 94.78  | 100.00       | 100.00 |
|       | TATA GSM  | 0.01 | 0.01 | 98.58 | 0.04 |      | 0.56 | 1.11 | 98.63 | 0 | 0.00       | 0.00 | 100.00 | 100.00 | 100.00 | 98.60  | 91.52  | 100.00       | 100.00 |
|       | Videocon  | 0.15 | 0.74 | 99.08 | 0.10 | 0.10 | 0.56 | 1.13 | 98.37 | 0 | NA<br>0.07 | 0.09 | 100.00 | 100.00 | 100.00 | 100.00 | 95.30  | NA<br>100.00 | 0.00   |
|       | Vodafone  | 0.09 | 0.07 | 99.65 | 0.09 | 0.35 | 0.72 | 1.13 | 98.90 | 0 | 0.07       | 0.15 | 100.00 | 100.00 | 100.00 | 100.00 | 98.95  | 100.00       | 100.00 |

|     | Aircel    | 8.69 | 43.59 | 96.05 | 2.49 | 3.11 | 2.22 | 23.05 | 92.88 | 0 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 97.02  | 97.27  | 100.00 | 100.00 |
|-----|-----------|------|-------|-------|------|------|------|-------|-------|---|------|------|--------|--------|--------|--------|--------|--------|--------|
|     | Airtel    | 0.32 | 1.46  | 97.74 |      | 0.45 |      | 0.87  | 98.93 | 0 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 96.92  | 100.00 | 100.00 |
|     | BSNL      | 4.29 | 14.59 | 95.26 |      | 4.42 |      | 14.61 | 92.39 | 0 | 0.05 | 0.05 | 80.50  | *      | 100.00 | 98.50  | 86.50  | 100.00 | 100.00 |
| NE  | Idea      | 1.27 | 0.86  | 98.41 | 0.19 | 1.02 | 1.78 | 1.95  | 95.50 | 0 | 0.00 | 0.17 | 100.00 | 100.00 | 100.00 | 99.87  | 99.00  | 100.00 | 100.00 |
|     | RTL       | 0.35 | 1.54  | 98.59 | 0.02 | 0.27 | 0.65 | 0.07  | 97.99 | 0 | 0.04 | 0.06 | 100.00 | 100.00 | 100.00 | 98.24  | 86.90  | 100.00 | 100.00 |
|     | Vodafone  | 1.68 | 1.94  | 99.62 | 0.14 | 0.38 | 0.68 | 2.34  | 97.91 | 0 | 0.22 | 0.14 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
|     | Aircel    | 2.01 | 8.54  | 99.03 | 0.62 | 0.67 | 1.41 | 9.33  | 95.08 | 0 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 56.90  | 98.89  | 100.00 | 100.00 |
|     | Airtel    | 0.12 | 0.33  | 98.96 | 0.23 | 1.59 | 1.08 | 1.38  | 96.12 | 0 | 0.02 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 98.52  | 100.00 | 100.00 |
|     | BSNL      | 0.75 | 1.04  | 98.51 | 0.64 | 1.49 | 1.75 | 2.93  | 98.00 | 0 | 0.02 | 0.00 | 100.00 | *      | 100.00 | 97.00  | 96.33  | 100.00 | 100.00 |
|     | Idea      | 0.23 | 0.66  | 98.27 | 0.22 | 0.22 | 0.51 | 1.23  | 95.62 | 0 | 0.01 | 0.06 | 99.97  | 100.00 | 100.00 | 98.72  | 97.00  | 100.00 | 100.00 |
| OR  | RCOM CDMA | 0.31 | 0.56  | 99.42 | 0.00 | 0.00 | 0.31 | 2.69  | 99.77 | 0 | 0.02 | 0.08 | 100.00 | 100.00 | 100.00 | 99.02  | 98.94  | 100.00 | 100.00 |
|     | RTL       | 0.11 | 0.50  | 98.56 | 0.16 | 0.48 | 0.56 | 0.22  | 98.22 | 0 | 0.03 | 0.09 | 100.00 | 100.00 | 100.00 | 98.84  | 88.94  | 100.00 | 100.00 |
|     | TATA CDMA | 0.09 | 0.05  | 98.78 | 0.00 | 0.03 | 0.49 | 1.22  | 98.25 | 0 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 98.66  | 96.79  | 100.00 | 100.00 |
|     | TATA GSM  | 0.04 | 0.00  | 98.02 | 0.12 | 0.69 | 0.47 | 1.26  | 97.59 | 0 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 95.60  | 97.07  | 100.00 | 100.00 |
|     | Vodafone  | 0.13 | 0.49  | 99.67 | 0.21 | 0.33 | 0.69 | 1.83  | 98.18 | 0 | 0.06 | 0.05 | 100.00 | 100.00 | 100.00 | 99.95  | 98.28  | 100.00 | 100.00 |
|     | Aircel    | 0.14 | 0.33  | 97.76 | 0.29 | 1.30 | 0.73 | 3.17  | 96.72 | 0 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 99.30  | 96.86  | 100.00 | 100.00 |
|     | Airtel    | 0.05 | 0.03  | 99.46 | 0.08 | 0.07 | 0.43 | 0.73  | 98.64 | 0 | 0.07 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 96.72  | 100.00 | 100.00 |
|     | BSNL      | 0.50 | 1.75  | 96.59 | 0.55 | 1.40 | 1.64 | 19.46 | 95.72 | 1 | 0.00 | 0.00 | 100.00 | *      | 100.00 | 100.00 | 49.31  | 100.00 | 100.00 |
|     | Idea      | 0.05 | 0.05  | 98.83 | 0.06 | 0.19 | 0.52 | 0.27  | 97.40 | 0 | 0.06 | 0.03 | 100.00 | 100.00 | 100.00 | 99.90  | 100.00 | 100.00 | 100.00 |
|     | QTL cdma  | 0.56 | 0.00  | 98.69 | 0.46 | 0.98 | 0.49 | 0.25  | 97.77 | 0 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 97.00  | 96.00  | 100.00 | 100.00 |
| PB  | QTL gsm   | 0.07 | 0.09  | 98.60 | 0.06 | 0.28 | 0.90 | 1.09  | 97.20 | 0 | 0.00 | 0.01 | 100.00 | 100.00 | 100.00 | 100.00 | 95.72  | 100.00 | 100.00 |
|     | RCOM CDMA | 0.14 | 0.27  | 98.62 | 0.00 | 0.00 | 0.03 | 0.11  | 99.72 | 0 | 0.03 | 0.03 | 100.00 | 100.00 | 100.00 | 98.69  | 95.88  | 100.00 | 100.00 |
|     | RCOM GSM  | 0.13 | 0.15  | 99.65 | 0.01 | 0.03 | 0.28 | 0.01  | 98.91 | 0 | 0.03 | 0.09 | 100.00 | 100.00 | 100.00 | 99.11  | 92.96  | 100.00 | 100.00 |
|     | TATA CDMA | 0.02 | 0.00  | 98.83 | 0.00 | 0.13 | 0.58 | 0.33  | 99.00 | 0 | 0.02 | 0.00 | 100.00 | 100.00 | 100.00 | 98.77  | 98.49  | 100.00 | 100.00 |
|     | TATA GSM  | 0.02 | 0.00  | 98.97 | 0.04 | 0.12 | 0.61 | 1.83  | 97.27 | 0 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 99.15  | 86.64  | 100.00 | 100.00 |
|     | Vodafone  | 0.02 | 0.00  | 99.84 | 0.16 | 0.16 | 0.57 | 1.07  | 98.04 | 0 | 0.03 | 0.01 | 100.00 | 100.00 | 100.00 | 100.00 | 99.81  | 100.00 | 100.00 |
|     | Aircel    | 0.17 | 0.57  | 97.33 | 0.20 | 0.43 | 0.74 | 2.51  | 97.04 | 0 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 87.80  | 95.12  | 100.00 | 100.00 |
|     | Airtel    | 0.06 | 0.13  | 99.10 | 0.15 | 0.27 | 0.83 | 1.11  | 99.05 | 0 | 0.02 | 0.00 | 100.00 | 100.00 | 100.00 | 99.97  | 98.16  | 100.00 | 100.00 |
|     | BSNL      | 1.64 | 1.82  | 98.68 | 0.52 | 1.69 | 1.41 | 2.61  | 98.51 | 0 | 0.04 | 0.09 | 62.72  | *      | 100.00 | 95.45  | 96.43  | 100.00 | 100.00 |
|     | Idea      | 0.05 | 0.04  | 99.13 | 0.30 | 0.49 | 1.03 | 2.37  | 96.20 | 0 | 0.08 | 0.06 | 100.00 | 100.00 | 100.00 | 98.78  | 99.48  | 100.00 | 100.00 |
| RJ  | MTS       | 0.03 | 0.02  | 99.01 | 0.00 | 0.26 | 0.48 | 0.38  | 99.21 | 0 | 0.07 | 0.03 | 100.00 | 100.00 | 100.00 | 95.80  | 97.60  | 100.00 | 100.00 |
| 1/3 | RCOM CDMA | 0.23 | 0.60  | 99.04 | 0.00 | 0.01 | 0.08 | 0.37  | 99.73 | 0 | 0.07 | 0.09 | 100.00 | 100.00 | 100.00 | 97.93  | 99.40  | 100.00 | 100.00 |
|     | RCOM GSM  | 0.21 | 0.48  | 99.62 | 0.02 | 0.05 | 0.36 | 0.04  | 98.64 | 0 | 0.06 | 0.09 | 100.00 | 100.00 | 100.00 | 98.93  | 99.67  | 100.00 | 100.00 |
|     | TATA CDMA | 0.07 | 0.00  | 97.81 | 0.00 | 1.37 | 0.53 | 0.88  | 98.95 | 0 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 98.42  | 97.46  | 100.00 | 100.00 |
|     | TATA GSM  | 0.10 | 0.07  | 98.42 | 0.03 | 0.08 | 0.74 | 1.53  | 98.39 | 0 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 98.79  | 96.22  | 100.00 | 100.00 |
|     | Vodafone  | 0.04 | 0.11  | 99.81 | 0.12 | 0.19 | 0.73 | 0.50  | 97.14 | 0 | 0.07 | 0.11 | 100.00 | 100.00 | 100.00 | 100.00 | 98.23  | 100.00 | 100.00 |

|      |               |          |          |          |        |          |        |          |            |                  |          |         |           |        |        |        |        | •      |        |
|------|---------------|----------|----------|----------|--------|----------|--------|----------|------------|------------------|----------|---------|-----------|--------|--------|--------|--------|--------|--------|
|      | Aircel        | 0.28     | 1.12     | 98.76    | 0.37   | 0.75     | 1.18   | 7.22     | 95.11      | 0                | 0.00     | 0.00    | 100.00    | 100.00 | 100.00 | 96.07  | 98.23  | 100.00 | 100.00 |
|      | Airtel        | 0.01     | 0.01     | 99.78    | 0.08   | 0.07     | 0.23   | 0.45     | 99.65      | 0                | 0.01     | 0.00    | 100.00    | 100.00 | 100.00 | 100.00 | 95.50  | 100.00 | 100.00 |
|      | BSNL          | 0.48     | 1.58     | 98.89    | 0.15   | 0.56     | 0.98   | 2.36     | 97.19      | 0                | 0.02     | 0.02    | 100.00    | *      | 100.00 | 100.00 | 92.00  | 100.00 | 100.00 |
|      | Idea          | 0.01     | 0.00     | 99.64    | 0.03   | 0.11     | 0.26   | 0.86     | 96.89      | 0                | 0.03     | 0.07    | 100.00    | 100.00 | 100.00 | 99.11  | 99.00  | 100.00 | 100.00 |
| TNI  | MTS           | 0.06     | 0.00     | 99.39    | 0.00   | 0.03     | 0.46   | 1.85     | 99.20      | 0                | 0.04     | 0.01    | 100.00    | 100.00 | 100.00 | 99.60  | 93.20  | 100.00 | 100.00 |
| TN   | RCOM CDMA     |          |          |          |        |          |        |          |            |                  | Incl in  | CHN     |           |        |        |        |        |        |        |
|      | RCOM GSM      |          |          |          |        |          |        |          |            |                  | Incl in  | CHN     |           |        |        |        |        |        |        |
|      | TATA CDMA     | 0.04     | 0.00     | 98.86    | 0.00   | 0.66     | 0.43   | 0.47     | 98.85      | 0                | 0.00     | 0.00    | 100.00    | 100.00 | 100.00 | 99.33  | 97.25  | 100.00 | 99.06  |
|      | TATA GSM      | 0.08     | 0.13     | 99.45    | 0.07   | 0.05     | 0.64   | 0.95     | 98.62      | 0                | 0.00     | 0.00    | 100.00    | 100.00 | 100.00 | 99.27  | 92.60  | 100.00 | 100.00 |
|      | Vodafone      | 0.04     | 0.18     | 99.65    | 0.13   | 0.35     | 0.78   | 1.45     | 97.47      | 0                | 0.02     | 0.01    | 100.00    | 100.00 | 100.00 | 100.00 | 96.13  | 100.00 | 100.00 |
|      | Aircel        | 0.30     | 1.91     | 98.68    | 0.60   | 0.71     | 0.58   | 3.09     | 97.48      | 0                | 0.00     | 0.00    | 100.00    | 100.00 | 100.00 | 95.44  | 97.60  | 100.00 | 100.00 |
|      | Airtel        | 0.42     | 1.48     | 98.67    | 0.34   | 0.46     | 0.84   | 2.80     | 97.50      | 0                | 0.01     | 0.00    | 100.00    | 100.00 | 100.00 | 100.00 | 96.65  | 100.00 | 100.00 |
|      | BSNL          | 1.82     | 1.80     | 97.93    | _      | 1.81     | 1.71   | 2.47     | 96.50      | 0                | 0.08     | 0.09    | 100.00    | *      | 100.00 | 90.70  | 92.89  | 100.00 | 100.00 |
|      | Idea          | 0.34     | 1.29     | 98.04    | 0.65   |          | 1.16   | 2.79     | 96.48      | 0                | 0.08     | 0.04    | 100.00    | 100.00 | 100.00 | 99.77  | 100.00 | 100.00 | 100.00 |
| UPE  | RCOM CDMA     | 0.43     | 1.71     | 98.45    | _      | 0.03     | 0.26   | 1.37     | 99.84      | 0                | 0.08     | 0.07    | 100.00    | 100.00 | 100.00 | 97.62  | 94.58  | 100.00 | 100.00 |
| OI L | RCOM GSM      | 0.24     | 0.65     | 99.46    | 0.04   |          | 0.43   | 0.03     | 98.93      | 0                | 0.05     | 0.09    | 100.00    | 100.00 | 100.00 | 98.91  | 96.03  | 100.00 | 100.00 |
|      | TATA CDMA     | 0.07     | 0.10     | 98.64    | 0.00   |          | 0.57   | 1.19     | 99.21      | 0                | 0.00     | 0.00    | 100.00    | 100.00 | 100.00 | 99.52  | 97.40  | 100.00 | 98.81  |
|      | TATA GSM      | 0.13     | 0.85     | 96.82    | 0.25   | 1.52     | 1.02   | 2.97     | 96.98      | 0                | 0.00     | 0.00    | 100.00    | 100.00 | 100.00 | 99.28  | 97.49  | 100.00 | 100.00 |
|      | Telewings     | 0.42     | 1.83     | 97.68    | _      |          | 0.69   | 2.07     | 92.49      | 0                | NA       | 0.07    | 100.00    | 100.00 | NA     | 95.66  | 99.50  | NA     | NA     |
|      | Vodafone      | 0.11     | 0.45     | 99.21    | _      | 0.81     | 1.31   | 3.35     | 96.43      | 3                | 0.07     | 0.04    | 100.00    | 100.00 | 100.00 | 100.00 | 98.84  | 100.00 | 100.00 |
|      | Aircel        | 0.13     | 0.95     | 98.78    | 0.25   |          | 0.37   | 2.33     | 96.97      | 0                | 0.00     | 0.00    | 100.00    | 100.00 | 100.00 | 95.55  | 96.39  | 100.00 | 100.00 |
|      | Airtel        | 0.63     | 1.22     | 97.68    | _      | 1.12     | 1.42   | 2.33     | 97.14      | 0                | 0.02     | 0.00    | 100.00    | 100.00 | 100.00 | 100.00 | 96.18  | 100.00 | 100.00 |
|      | BSNL          | 0.89     | 1.86     | 97.56    | _      | 1.33     | 1.31   | 2.03     | 96.54      | 0                | 0.00     | 0.00    | 82.50     | *      | 100.00 | 100.00 | 96.00  | 100.00 | 100.00 |
|      | Idea          | 0.10     | 0.24     | 99.19    | _      | 1.90     | 0.98   | 2.03     | 95.87      | 0                | 0.05     | 0.01    | 100.00    | 100.00 | 100.00 | 99.46  | 98.00  | 100.00 | 100.00 |
|      | MTS           | 0.02     | 0.00     | 99.49    |        | 0.00     | 0.50   | 1.72     | 99.11      | 0                | 0.05     | 0.03    | 100.00    | 100.00 | 100.00 | 95.50  | 98.90  | 100.00 | 100.00 |
| UPW  | RCOM CDMA     | 0.47     | 1.50     | 98.99    | _      | 0.03     | 0.20   | 1.15     | 99.78      | 0                | 0.03     | 0.06    | 100.00    | 100.00 | 100.00 | 97.53  | 95.85  | 100.00 | 100.00 |
|      | RCOM GSM      | 0.40     | 1.57     | 99.61    |        |          | 0.33   | 0.03     | 98.80      | 0                | 0.03     | 0.09    | 100.00    | 100.00 | 100.00 | 97.74  | 93.79  | 100.00 | 100.00 |
|      | TATA CDMA     | 0.06     | 0.06     | 99.18    | _      | 0.06     | 0.51   | 1.26     | 98.95      | 0                | 0.00     | 0.00    | 100.00    | 100.00 | 100.00 | 99.05  | 96.82  | 100.00 | 100.00 |
|      | TATA GSM      | 0.14     | 0.36     | 98.53    | 0.12   |          | 0.80   | 1.72     | 97.27      | 0                | 0.00     | 0.00    | 100.00    | 100.00 | 100.00 | 99.01  | 94.35  | 100.00 | 100.00 |
|      | Telewings     | 0.21     | 0.67     | 98.10    |        | 1.14     | 0.50   | 1.85     | 94.61      | 0                | NA       | 0.02    | 100.00    | 100.00 | NA     | 95.56  | 98.41  | NA     | NA     |
|      | Vodafone      | 0.60     | 0.53     | 99.57    | 0.22   |          | 0.80   | 1.00     | 97.43      | 0                | 0.09     | 0.08    | 100.00    | 100.00 | 100.00 | 100.00 | 98.71  | 100.00 | 100.00 |
|      | Aircel        | 1.94     | 7.81     | 97.36    |        | _        | 1.41   | 11.42    | 95.24      | 0                | 0.00     | 0.00    | 100.00    | 100.00 | 100.00 | 31.49  | 97.98  | 100.00 | 100.00 |
|      | Airtel        | 0.01     | 0.01     | 98.93    | 0.23   | 1.35     | 1.19   | 1.75     | 95.60      | 0                | 0.03     | 0.00    | 100.00    | 100.00 | 100.00 | 100.00 | 97.32  | 100.00 | 100.00 |
|      | BSNL          | 3.05     | 15.96    |          |        |          | 1.41   | 7.88     | 96.45      | 0                | 0.02     | 0.24    | 99.17     | *      | 100.00 | 95.00  | 88.06  | 100.00 | 100.00 |
|      | Idea          | 0.05     | 0.19     | 98.86    | _      | 0.57     | 0.42   | 0.39     | 95.07      | 0                | 0.09     | 0.07    | 100.00    | 100.00 | 100.00 | 98.74  | 98.00  | 100.00 | 100.00 |
| WB   | MTS           | 0.16     | 0.00     | 99.71    |        |          | 0.77   | 2.22     | 99.76      | 0                | 0.01     | 0.02    | 100.00    | 100.00 | 100.00 | 99.40  | 95.70  | 100.00 | 100.00 |
|      | RCOM CDMA     | 0.37     | 0.74     | 98.72    | _      | 0.03     | 0.23   | 0.85     | 99.67      | 0                | 0.03     | 0.07    | 100.00    | 100.00 | 100.00 | 99.35  | 98.53  | 100.00 | 100.00 |
|      | RTL           | 0.26     | 0.73     | 98.66    |        | 0.13     | 0.61   | 0.06     | 98.34      | 0                | 0.03     | 0.09    | 100.00    | 100.00 | 100.00 | 98.99  | 95.79  | 100.00 | 100.00 |
|      | TATA CDMA     | 0.01     | 0.00     | 98.89    | _      | 0.01     | 0.62   | 1.68     | 97.96      | 0                | 0.00     | 0.00    | 100.00    | 100.00 | 100.00 | 99.11  | 97.34  | 100.00 | 100.00 |
|      | TATA GSM      | 0.03     | 0.00     | 98.75    | 0.07   | 0.26     | 0.60   | 0.66     | 97.52      | 0                | 0.00     | 0.00    | 100.00    | 100.00 | 100.00 | 96.66  | 86.18  | 100.00 | 100.00 |
|      | Vodafone      | 0.03     | 0.15     | 99.37    | 0.29   | 0.63     | 0.87   | 1.73     | 95.23      | 0                | 0.03     | 0.04    | 100.00    | 100.00 | 100.00 | 100.00 | 95.18  | 100.00 | 100.00 |
|      | *BSNL has sub | mitted ( | data for | r Resolu | tion o | f billin | g/char | ging com | olaints or | nly for the bend | hmark 98 | 3% with | in 4 week | S      |        |        |        |        |        |

Annexure 4.2: Performance of QoS Parameters for Cellular Mobile 3G Service

|                                       | Performance I               | Monitoring Rep   | ort on Qualit   | ty of Service of  | f Cellular Mob  | ile Serivce Pro                                     | viders for qua  | rter ending, Decei  | mber , 2014   |   |
|---------------------------------------|-----------------------------|--|---|---|---|---|---|---|---|---|
|                                       |                             | Network A  | vailability   | Connection E  | stablishment (  | (Accessibility)                                     | Connectio   | n Maintenance (R  | etainability)   | POI   |
| Name of the<br>Service Area<br>/ City | Name of Service<br>Provider | Node B's Accumulated downtime (not available for service) (%age) | Worst affected Node<br>B's clue to downtime<br>(%age) | Call Set-up Success<br>Rate (within<br>licersee's own<br>network) | SDCCH/Paging<br>Charnel and RRC<br>Congestion<br>(%age) | TOH and Grouit<br>Switched RAB<br>Corgestion (%age) | Call Drop and Grauit<br>Switched Voice Drop<br>Rate: (%age) | Worst affected cells<br>having more than<br>3%.TCH drop (call<br>drop) and Circuit<br>Switched Voice Drop<br>Rate:-CBBH | Connections with good voice quality and Grouit Switch Voice Quality (CSV quality) | Paint of<br>Interconnection<br>(POI) Corgestion |
|                                       | 1                           | 2  | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  |
|                                       | Benchmark                   | ≤ 2%   | ≤ <b>2</b> %  | ≥ 95%   | ≤ 1%  | ≤ 2%  | ≤ <b>2</b> %  | ≤ 3%  | ≥ 95%   | ≤ 0.5%  |
|                                       | Aircel                      | 0.13   | 0.61  | 98.86   | 0.62  | 0.53  | 0.67  | 6.82  | 99.77   | 0   |
| AP                                    | Airtel                      | 0.11   | 0.04  | 98.88   | 0.30  | 0.00  | 0.50  | 2.41  | 99.06   | 0   |
| AP                                    | BSNL                        | 0.97   | 1.87  | 97.33   | 0.80  | 1.83  | 0.73  | 2.90  | 99.80   | 0   |
|                                       | Idea                        | 0.04   | 0.09  | 99.40   | 0.16  | 0.21  | 0.46  | 1.07  | 99.78   | 0   |
|                                       | Aircel                      | 1.75   | 11.00   | 97.43   | 0.93  | 0.20  | 1.31  | 13.42   | 99.14   | 0   |
| ASM                                   | Airtel                      | 0.08   | 0.36  | 96.12   | 0.78  | 0.46  | 0.65  | 1.34  | 99.02   | 0   |
| ASIVI                                 | BSNL                        | 1.87   | 1.97  | 96.00   | 0.00  | 0.00  | 1.53  | 2.83  | 93.47   | 0   |
|                                       | RTL                         | 0.77   | 1.38  | 96.40   | 0.54  | 0.02  | 1.29  | 1.76  | 99.83   | 0   |
|                                       | Aircel                      | 3.38   | 19.77   | 98.55   | 0.68  | 0.13  | 1.27  | 13.62   | 99.13   | 0   |
| вн                                    | Airtel                      | 0.39   | 0.61  | 99.56   | 0.03  | 0.24  | 0.73  | 1.23  | 99.57   | 0   |
| БП                                    | BSNL                        | 7.28   | 23.37   | 95.83   | 0.02  | 0.63  | 1.80  | 11.83   | 96.42   | 0   |
|                                       | RTL                         | 0.74   | 1.56  | 96.43   | 0.80  | 0.07  | 1.17  | 1.85  | 99.79   | 0   |
|                                       | Aircel                      | 0.83   | 4.45  | 95.67   | 0.40  | 0.56  | 0.92  | 9.09  | 97.14   | 0   |
| CHN                                   | Airtel                      | 0.07   | 0.05  | 99.09   | 0.28  | 0.86  | 0.23  | 0.81  | 99.63   | 0   |
| CHN                                   | BSNL                        | 1.30   | 1.87  | 98.67   | 0.87  | 1.37  | 1.47  | 1.87  | 95.60   | 0   |
|                                       | Vodafone                    | 0.04   | 0.04  | 99.69   | 0.43  | 0.09  | 0.33  | 0.70  | 98.93   | 0   |
|                                       | Airtel                      | 0.19   | 0.81  | 99.18   | 0.12  | 0.12  | 0.43  | 2.27  | 98.96   | 0   |
| DLI                                   | MTNL                        | 0.50   | 1.30  | 97.30   | 0.50  | 1.47  | 1.57  | 1.47  | 96.30   | 0   |
| DLI                                   | RCOM                        | 0.32   | 1.65  | 98.70   | 0.62  | 1.31  | 0.64  | 1.64  | 99.65   | 0   |
|                                       | Vodafone                    | 0.13   | 0.75  | 98.76   | 0.11  | 0.30  | 0.67  | 2.60  | 99.07   | 0   |
|                                       | BSNL                        | 1.40   | 1.70  | 96.67   | 0.67  | 1.43  | 1.43  | 2.57  | 100.00  | 0   |
| GJ                                    | Idea                        | 0.05   | 0.14  | 99.68   | 0.38  | 0.20  | 0.54  | 1.82  | 99.08   | 0   |
| GJ                                    | TATA                        | 0.03   | 0.13  | 96.47   | 0.82  | 1.71  | 0.62  | 1.51  | 99.70   | 0   |
|                                       | Vodafone                    | 0.03   | 0.04  | 99.78   | 0.12  | 0.07  | 0.21  | 0.17  | 98.94   | 0   |
|                                       | Airtel                      | 0.04   | 0.05  | 99.07   | 0.01  | 0.00  | 0.55  | 1.59  | 98.86   | 0   |
| НР                                    | BSNL                        | 2.00   | 1.80  | 97.67   | 0.83  | 1.67  | 1.80  | 2.87  | 96.17   | 0   |
| пР                                    | Idea                        | 0.17   | 0.00  | 98.36   | 0.88  | 0.49  | 1.18  | 2.61  | 98.80   | 0   |
|                                       | RTL                         | 0.67   | 1.18  | 97.98   | 0.00  | 0.00  | 0.41  | 1.13  | 99.91   | 0   |
|                                       | BSNL                        | 1.70   | 1.40  | 96.88   | 0.84  | 1.12  | 1.59  | 2.54  | 96.87   | 1   |
| HR                                    | Idea                        | 0.00   | 0.00  | 99.60   | 0.37  | 0.00  | 0.32  | 1.18  | 99.01   | 0   |
| пк                                    | TATA                        | 0.05   | 0.00  | 97.09   | 0.54  | 1.96  | 0.36  | 1.24  | 99.19   | 0   |
|                                       | Vodafone                    | 0.03   | 0.07  | 99.81   | 0.12  | 0.03  | 0.47  | 1.17  | 98.96   | 0   |

|              | Aircel   | 3.22  | 17.69 | 96.61 | 1.16 | 0.18 | 1.47 | 14.38 | 99.06 | 0 |
|--------------|----------|-------|-------|-------|------|------|------|-------|-------|---|
|              | Airtel   | 0.15  | 0.00  | 98.48 | 0.04 | 0.01 | 0.99 | 1.14  | 98.98 | 0 |
| J&K          | BSNL     | 1.43  | 1.43  | 98.00 | 0.73 | 1.33 | 1.27 | 2.17  | 97.23 | 0 |
|              | Idea     | 0.80  | 1.50  | 97.72 | 0.90 | 0.71 | 1.68 | 2.79  | 98.89 | 0 |
|              | RCOM     | 0.47  | 1.46  | 96.75 | 0.55 | 1.27 | 1.56 | 2.65  | 98.99 | 0 |
|              | Aircel   | 0.40  | 1.57  | 99.49 | 0.14 | 0.03 | 0.26 | 2.93  | 99.28 | 0 |
| <b>1</b> /01 | BSNL     | 5.33  | 25.33 | 99.00 | 0.90 | 4.53 | 0.87 | 0.37  | 99.87 | 0 |
| KOL          | RTL      | 0.54  | 1.46  | 96.65 | 0.60 | 0.01 | 1.05 | 1.41  | 99.83 | 0 |
|              | Vodafone | 0.05  | 0.22  | 99.77 | 0.03 | 0.02 | 0.30 | 0.44  | 99.05 | 0 |
|              | Aircel   | 0.00  | 0.00  | 99.77 | 0.33 | 0.21 | 0.59 | 0.08  | 99.79 | 0 |
| KD           | BSNL     | 0.53  | 0.23  | 96.00 | 0.10 | 0.80 | 1.17 | 0.10  | 99.87 | 0 |
| KR           | Idea     | 0.08  | 0.00  | 99.39 | 0.94 | 0.35 | 0.34 | 2.05  | 97.84 | 0 |
|              | TATA     | 0.02  | 0.00  | 96.94 | 1.39 | 1.08 | 0.34 | 0.08  | 99.81 | 0 |
|              | Aircel   | 0.17  | 0.33  | 98.33 | 0.92 | 0.76 | 0.97 | 10.74 | 99.76 | 0 |
| VTV          | Airtel   | 0.07  | 0.27  | 99.05 | 0.14 | 0.26 | 0.21 | 1.58  | 99.70 | 0 |
| KTK          | BSNL     | 0.57  | 1.93  | 97.67 | 0.43 | 0.50 | 1.20 | 1.57  | 97.47 | 0 |
|              | TATA     | 0.07  | 0.08  | 98.73 | 0.83 | 0.64 | 0.50 | 1.61  | 99.13 | 0 |
|              | Airtel   | 0.01  | 0.00  | 99.98 | 0.00 | 0.00 | 0.17 | 0.05  | 99.92 | 0 |
| MBI          | MTNL     | 0.50  | 1.17  | 96.40 | 0.83 | 1.33 | 1.53 | 2.37  | 98.99 | 0 |
| IVIDI        | RCOM     | 0.55  | 1.72  | 97.46 | 0.69 | 1.22 | 0.72 | 1.79  | 99.67 | 0 |
|              | Vodafone | 0.01  | 0.00  | 98.86 | 0.00 | 0.00 | 0.83 | 1.28  | 98.97 | 0 |
|              | BSNL     | 1.90  | 1.77  | 96.00 | 0.00 | 1.87 | 1.97 | 2.70  | 95.80 | 0 |
| МН           | Idea     | 0.07  | 0.11  | 99.48 | 0.53 | 0.21 | 1.03 | 2.85  | 98.70 | 0 |
| IVIII        | TATA     | 0.02  | 0.00  | 96.91 | 0.94 | 0.82 | 0.78 | 1.80  | 99.99 | 0 |
|              | Vodafone | 0.09  | 0.09  | 99.57 | 0.73 | 0.24 | 0.32 | 0.61  | 98.94 | 0 |
|              | BSNL     | 1.76  | 1.21  | 96.26 | 0.31 | 1.23 | 1.33 | 2.72  | 96.31 | 0 |
| MP           | Idea     | 0.06  | 0.23  | 98.63 | 0.53 | 0.48 | 0.82 | 1.50  | 99.19 | 0 |
| IVIP         | RTL      | 0.52  | 1.48  | 96.93 | 0.65 | 0.09 | 0.81 | 1.80  | 99.81 | 0 |
|              | TATA     | 0.06  | 0.00  | 97.06 | 0.78 | 1.29 | 0.64 | 1.26  | 99.69 | 0 |
|              | Aircel   | 12.11 | 52.17 | 97.10 | 0.39 | 0.07 | 1.76 | 17.52 | 99.06 | 0 |
| NE           | Airtel   | 0.97  | 1.21  | 97.31 | 0.45 | 1.24 | 0.91 | 0.80  | 99.01 | 0 |
| INE          | BSNL     | 2.52  | 10.97 | 93.00 | 4.77 | 4.70 | 1.28 | 6.95  | 95.10 | 0 |
|              | RTL      | 1.22  | 1.48  | 96.57 | 0.18 | 0.01 | 1.49 | 1.92  | 99.79 | 0 |
|              | Aircel   | 3.16  | 10.15 | 96.94 | 0.47 | 0.09 | 1.13 | 12.81 | 99.09 | 0 |
| OR           | BSNL     | 0.67  | 1.67  | 96.67 | 1.20 | 1.83 | 0.87 | 2.80  | 98.00 | 0 |
|              | RTL      | 0.45  | 1.28  | 96.70 | 0.49 | 0.02 | 0.93 | 1.51  | 99.83 | 0 |

|      | Aircel   | 0.19 | 0.65 | 99.26  | 0.19 | 0.00 | 0.90 | 12.13 | 99.27  | 0 |
|------|----------|------|------|--------|------|------|------|-------|--------|---|
|      | BSNL     | 0.28 | 1.78 | 96.26  | 0.96 | 1.45 | 1.74 | 2.94  | 96.70  | 1 |
| PB   | Idea     | 0.09 | 0.18 | 98.81  | 0.75 | 0.72 | 0.90 | 1.97  | 99.36  | 0 |
|      | RCOM     | 0.31 | 1.45 | 98.27  | 0.22 | 0.75 | 0.36 | 1.57  | 99.72  | 0 |
|      | TATA     | 0.06 | 0.07 | 98.64  | 0.46 | 0.78 | 0.45 | 1.07  | 99.08  | 0 |
|      | Airtel   | 0.08 | 0.25 | 99.30  | 0.19 | 0.10 | 0.44 | 1.46  | 98.96  | 0 |
| RJ   | BSNL     | 1.77 | 1.83 | 99.00  | 0.00 | 0.00 | 1.40 | 2.90  | 98.53  | 0 |
| KJ   | RCOM     | 0.58 | 1.53 | 97.88  | 0.58 | 1.14 | 0.41 | 1.51  | 99.72  | 0 |
|      | TATA     | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00  | 100.00 | 0 |
|      | Aircel   | 0.60 | 1.46 | 97.29  | 0.03 | 0.01 | 0.59 | 6.78  | 97.84  | 0 |
| TNI  | Airtel   | 0.02 | 0.01 | 99.68  | 0.04 | 0.27 | 0.18 | 1.43  | 99.22  | 0 |
| TN   | BSNL     | 0.50 | 1.97 | 97.67  | 0.43 | 0.77 | 0.13 | 0.87  | 99.50  | 0 |
|      | Vodafone | 0.05 | 0.08 | 99.86  | 0.02 | 0.01 | 0.26 | 0.27  | 99.04  | 0 |
|      | Aircel   | 0.20 | 0.52 | 99.86  | 0.07 | 0.08 | 0.57 | 6.66  | 99.93  | 0 |
| UPE  | BSNL     | 1.57 | 0.83 | 95.61  | 1.00 | 1.97 | 1.54 | 0.00  | 96.33  | 0 |
| UPE  | Idea     | 0.31 | 1.39 | 99.04  | 0.33 | 0.15 | 0.46 | 2.67  | 98.70  | 0 |
|      | Vodafone | 0.28 | 0.82 | 99.88  | 0.25 | 0.04 | 0.21 | 0.50  | 98.96  | 0 |
|      | Airtel   | 0.48 | 1.46 | 99.16  | 0.09 | 0.00 | 0.69 | 2.67  | 98.52  | 0 |
| UPW  | BSNL     | 1.62 | 1.84 | 97.35  | 0.86 | 1.55 | 1.54 | 2.92  | 96.89  | 0 |
| UPVV | Idea     | 0.34 | 1.47 | 99.45  | 0.37 | 0.13 | 0.33 | 2.02  | 98.77  | 0 |
|      | TATA     | 0.14 | 0.80 | 99.28  | 0.34 | 0.33 | 0.30 | 0.63  | 99.20  | 0 |
|      | Aircel   | 1.07 | 3.75 | 98.82  | 0.08 | 0.00 | 0.37 | 5.29  | 98.94  | 0 |
|      | Airtel   | 0.03 | 0.00 | 99.75  | 0.08 | 0.53 | 0.51 | 2.84  | 99.57  | 0 |
| WB   | BSNL     | 1.73 | 9.51 | 97.26  | 0.91 | 0.83 | 1.24 | 3.92  | 95.84  | 0 |
|      | RTL      | 0.75 | 1.39 | 97.63  | 0.66 | 0.09 | 1.50 | 1.77  | 99.81  | 0 |
|      | Vodafone | 0.15 | 0.37 | 99.78  | 0.03 | 0.05 | 0.32 | 0.52  | 98.95  | 0 |

# Annexure 4.3: Performance of QoS Parameters for Basic (Wire-line) Service

|                      |                     |  |   |                                       | Quality Pe                                  | erformance                            | Monitoring  | g Report on             | QoS of Ba   | sic Teleph  | one Servic                                     | ce (Wireline             | e) for the G                             | ).E. Dec-14  | •  |   |  |   |
|----------------------|---------------------|--|---|---------------------------------------|---|---------------------------------------|-------------|-------------------------|---|---|--|--------------------------|--|--|--|---|--|---|
| Area                 | Provider            | lo. of<br>onth)                                      |   | Fault R                               | epair                                       |                                       |             | (MTTR)                  | POI   |   |  | Metering ar              | nd Billing                               |  |  | e to the customer   |  | n / closure of<br>vice                              |
| Name of Service Area | Name of Service Pro | Faults incidences (No. of<br>faults/100 Subs./month) | % of faults repaired by<br>next working day | % of faults repaired<br>within 5 days | % of faults repaired by<br>next working day | % of faults repaired<br>within 7 days | Rent Rebate | Mean Time to Repair (M7 | Point of Interconnection<br>(POI) Congestion (No. of<br>POIs not meeting the<br>benchmark | Metering and<br>Billingcredibility - post<br>paid | Metering and billing<br>credibility - pre paid | Resolution of            | billing/charging validity<br>com plaints | Period of applying credit/<br>waiver/adjustment to<br>customer's account from<br>the date of resolution of<br>complaints | Accessibility of call<br>centre/ customer care | Percentage of calls<br>answered by the<br>operators (voice to voice)<br>within 90 seconds | %age requests for<br>Termination / Closure of<br>service complied within 7<br>days | Time taken for refund of<br>deposits after closures |
|                      | Benchmar<br>ks      | ≤7   | For urban areas by next working day: ≥ 85%  | For urban areas:<br>≥ 100%            | For rural and hilly areas: ≥ 75%            | For rural and hilly areas: ≥ 100%     |             | ≤ 10 Hrs                | ≤ 0.5%  | ≤ 0.1%  | ≤ 0.1%   | 98%<br>within 4<br>weeks | 100%<br>within 6<br>weeks                | 1 week of<br>resolution of<br>complaint  | ≥ 95%  |   | 100%<br>within 7<br>days   | 100%<br>within 60<br>days                           |
| A&N                  | BSNL                | 3.00   | 93.00%                                      | 100.00%                               | 93.00%                                      | 100.00%                               | 8.00        | 7.00                    | 0.00  | 0.00%   | NA   | 98.00%                   | 100.00%                                  | 100.00%  | 100.00%  | 100.00%   | 100.00%  | 100.00%   |
| AP                   | Reliance            | 0.03   | 100.00%                                     | 100.00%                               | NA  | NA                                    | 0           | 4.00                    | 0.00  | 0.00%   | NA   | 100.00%                  | 100.00%                                  | 100.00%  | 95.00%   | 95.00%  | 100.00%  | 100.00%   |
|                      | TTSL                | 4.00   | 92.00%                                      | 100.00%                               | NA  | NA                                    | NA          | 7.00                    | 0.00%   | 0.10%   | NA   | 100.00%                  | NA                                       | 100.00%  | 100.00%  | 95.00%  | 100.00%  | NA  |
|                      | Vodafone            | 0.20   | 100.00%                                     | NA                                    | NA  | NA                                    | NA          | 3.21                    | 0.00  | 0.00%   | NA   | NA                       | NA                                       | NA   | 100.00%  | 100.00%   | 100.00%  | NA  |
|                      | Bharti              | 2.15   | 93.85%                                      | 100.00%                               | NA  | NA                                    | 0           | 3.09                    | 0.00  | 0.00%   | NA   | 100.00%                  | 100.00%                                  | 100.00%  | 99.00%   | 96.72%  | 100.00%  | 100.00%   |
|                      | BSNL                | 3.00   | 92.00%                                      | 100.00%                               | 86.00%                                      | 100.00%                               | 537.00      | 8.00                    | 0.00  | 0.02%   | 0.00%  | 100.00%                  | 100.00%                                  | 100.00%  | 94.00%   | 93.00%  | 100.00%  | 100.00%   |
| ASM                  | Vodafone            | 0.90   | 98.14%                                      | 100.00%                               | NA  | NA                                    | NA          | 2.24                    | 0.00  | 0.00%   | NA   | NA                       | NA                                       | NA   | 100.00%  | 100.00%   | NA   | NA  |
|                      | BSNL                | 3.00   | 97.00%                                      | 100.00%                               | 96.00%                                      | 100.00%                               | 223.00      | 3.00                    | 0.00  | 0.06%   | 0.00%  | 100.00%                  | 100.00%                                  | 100.00%  | 99.00%   | 94.00%  | 100.00%  | 100.00%   |
| ВН                   | Reliance            | 0.00   | NA  | NA                                    | NA  | NA                                    | 0           | 0.00                    | 0.00  | 0.00%   | NA   | NA                       | NA                                       | NA   | 95.00%   | 95.00%  | 100.00%  | 100.00%   |
|                      | TTSL                | 1.00   | 98.00%                                      | 100.00%                               | NA  | NA                                    | NA          | 2.00                    | 0.00%   | 0.00%   | NA   | 100.00%                  | NA                                       | 100.00%  | 100.00%  | 85.00%  | NA   | NA  |
|                      | Vodafone            | 1.90   | 100.00%                                     | NA                                    | NA  | NA                                    | NA          | 1.33                    | 0.00  | 0.00%   | NA   | NA                       | NA                                       | NA   | 100.00%  | 100.00%   | NA   | NA  |
|                      |                     | 3.00   | 96.00%                                      | 100.00%                               | 95.00%                                      | 100.00%                               | 0           | 4.00                    | 0.00  | 0.00%   | 0.00%  | 100.00%                  | 100.00%                                  | 100.00%  | 99.00%   | 57.00%  | 100.00%  | 100.00%   |
| Chattisgarh          | BSNL                | 3.00   | 98.00%                                      | 100.00%                               | 98.00%                                      | 100.00%                               | 212         | 5.00                    | 0.00  | 0.09%   | 0.00%  | 99.00%                   | 100.00%                                  | 100.00%  | 97.00%   | 83.00%  | 100.00%  | 100.00%   |
| CN                   | Reliance            | 0.04   | 100.00%                                     | 100.00%                               | NA  | NA                                    | 0.00        | 4.00                    | 0.00  | 0.00%   | NA   | NA                       | NA                                       | NA   | 95.00%   | 95.00%  | 100.00%  | 100.00%   |
|                      | Vodafone            | 0.20   | 100.00%                                     | NA                                    | NA  | NA                                    | NA          | 1:12:00 PM              | 0.00  | 0.00%   | NA   | NA                       | NA                                       | NA   | 100.00%  | 100.00%   | 100.00%  | NA  |
|                      | BSNL                | 4.00   | 95.00%                                      | 100.00%                               | 95.00%                                      | 100.00%                               | 719         | 7.00                    | 0.00  | 0.00%   | 0.00%  | 100.00%                  | 100.00%                                  | 100.00%  | 98.00%   | 92.00%  | 100.00%  | 100.00%   |
| DEL                  | Reliance            | 0.04   | 100.00%                                     | 100.00%                               |   | NA                                    | 0           | 4.00                    | 0.00  | 0.01%   | NA   | 100.00%                  | 100.00%                                  | 100.00%  | 95.00%   | 95.00%  | 100.00%  | 100.00%   |
|                      | TTSL                | 1.00   | 95.00%                                      | 100.00%                               | NA  | NA                                    | NA          | 4.00                    | 0.00%   | 0.10%   | NA   | 100.00%                  | NA                                       | 100.00%  | 100.00%  | 95.00%  | 100.00%  | NA  |
|                      | Vodafone            | 0.20   | 99.29%                                      | 100.00%                               | NA  | NA                                    | NA          |                         | 0.00  | 0.00%   | NA   | NA                       | NA                                       | NA   | 100.00%  | 100.00%   | 100.00%  | NA  |
|                      | Bharti              | 3.33   | 89.27%                                      | 100.00%                               |   | NA                                    | 0           | 4.57                    | 0.00  | 0.00%   | NA   | 100.00%                  | 100.00%                                  | 100.00%  | 100.00%  | 97.68%  | 100.00%  | 100.00%   |
|                      | MTNL                | 6.45   | 85.92%                                      | 97.61%                                |   | NA                                    | 16137       | 4.52                    | 0.00  | 0.03%   | 0.00%  | 99.78%                   | 100.00%                                  | 100.00%  | 99.32%   |   | 99.97%   | 100.00%   |
| GUJ                  | Reliance            | 0.05   | 100.00%                                     | 100.00%                               | NA  | NA                                    | 0.00        | 4.00                    | 0.00  | 0.01%   | NA   | 100.00%                  | 100.00%                                  | 100.00%  | 95.00%   | 95.00%  | 100.00%  | 100.00%   |
|                      | TTSL                | 1.00   | 97.00%                                      | 100.00%                               |   | NA                                    | NA          |                         | 0.00%   | 0.10%   | NA   | 100.00%                  | NA                                       | 100.00%  | 100.00%  | 92.00%  | 100.00%  | NA  |
|                      | Vodafone            | 0.20   | 100.00%                                     | NA                                    |   | NA                                    | NA          | 1.20                    | 0.00  | 0.00%   | NA   | NA                       | NA                                       | NA   | 100.00%  | 100.00%   | 100.00%  | NA  |
|                      | Bharti              | 1.13   | 94.21%                                      | 100.00%                               | NA  | NA                                    | 1           |                         | 0.00  | 0.00%   | NA   | 100.00%                  | 100.00%                                  | 100.00%  | 100.00%  | 97.42%  | 100.00%  | 100.00%   |
|                      | BSNL                | 4.00   | 96.00%                                      | 100.00%                               | 96.00%                                      | 100.00%                               | 513.00      | 4.00                    | 0.00  | 0.00%   | 0.00%  | 100.00%                  | 100.00%                                  | 100.00%  | 98.00%   | 85.00%  | 100.00%  | 100.00%   |

| HP   | Reliance | 0.00 | NA      | NA      | NA     | NA      | 0      | 0.00 | 0.00  | 0.00% | NA    | NA      | NA      | NA      | 95.00%  | 95.00%  | 100.00% | 100.00% |
|------|----------|------|---------|---------|--------|---------|--------|------|-------|-------|-------|---------|---------|---------|---------|---------|---------|---------|
|      | BSNL     | 4.00 | 92.00%  | 100.00% | 96.00% | 100.00% | 490.00 | 6.00 | 0.00  | 0.04% | 0.01% | 100.00% | 100.00% | 100.00% | 73.00%  | 84.00%  | 100.00% | 100.00% |
| HR   | Vodafone | 0.00 | NA      | 100.00% | NA     | NA      | NA     | 0.57 | 0.00  | 0.00% | NA    | NA      | NA      | NA      | 100.00% | 100.00% | NA      | NA      |
|      |          | 0.00 | NA      | NA      | NA     | NA      | 0      | 0    | 0.00  | 0.00% | NA    | NA      | NA      | NA      | 95.00%  | 95.00%  | 100.00% | 100.00% |
|      | TTSL     | 0.00 | 93.00%  | 100.00% | NA     | NA      | NA     | 9.00 | 0.00% | 0.00% | NA    | 100.00% | NA      | 100.00% | 100.00% | 93.00%  | 100.00% | NA      |
|      | Bharti   | 4.31 | 95.55%  | 100.00% | NA     | NA      | 0      | 3.25 | 0.00  | 0.00% | NA    | 100.00% | 100.00% | 100.00% | 100.00% | 98.62%  | 100.00% | 93.00%  |
|      | BSNL     | 5.00 | 97.00%  | 100.00% | 97.00% | 100.00% | 655    | 6    | 0.00  | 0.09% | 0.00% | 100.00% | 100.00% | 100.00% | 84.00%  | 89.00%  | 100.00% | 100.00% |
| J&K  | BSNL     | 4.00 | 94.00%  | 100.00% | 89.00% | 100.00% | 86     | 7    | 0.00  | 0.01% | 0.00% | 98.00%  | 100.00% | 100.00% | 55.00%  | 78.00%  | 100.00% | 100.00% |
| JHAR | BSNL     | 3.00 | 98.00%  | 100.00% | 86.00% | 100.00% | 2550   | 6    | 0.00  | 0.03% | 0.00% | 100.00% | 100.00% | 100.00% | 99.00%  | 87.00%  | 100.00% | 100.00% |
| KER  | Vodafone | 0.40 | 94.11%  | 100.00% | NA     | NA      | NA     | 8.01 | 0.00  | 0.00% | NA    | NA      | NA      | NA      | 100.00% | 100.00% | 100.00% | NA      |
|      | Reliance | 0.05 | 100.00% | 100.00% | NA     | NA      | 0      | 4    | 0.00  | 0.00% | NA    | 100.00% | 100.00% | 100.00% | 95.00%  | 95.00%  | 100.00% | 100.00% |
|      | TTSL     | 0.00 | 57.00%  | 100.00% | NA     | NA      | NA     | 6    | 0.00% | 0.00% | NA    | 100.00% | NA      | 100.00% | 100.00% | 96.00%  | NA      | NA      |
|      | Bharti   | 1.20 | 97.23%  | 100.00% | NA     | NA      | 0      | 2.84 | 0.00  | 0.00% | NA    | 100.00% | 100.00% | 100.00% | 100.00% | 93.32%  | 100.00% | 100.00% |
|      | BSNL     | 4.00 | 93.00%  | 100.00% | 90.00% | 100.00% | 721    | 7    | 0.00  | 0.05% | 0.00% | 100.00% | 100.00% | 100.00% | 98.00%  | 100.00% | 100.00% | 100.00% |
| KOL  | Vodafone | 0.20 | 100.00% | NA      | NA     | NA      | NA     | 1.17 | 0.00  | 0.00% | NA    | NA      | NA      | NA      | 100.00% | 100.00% | NA      | NA      |
|      | Reliance | 0.02 | 100.00% | 100.00% | NA     | NA      | 0      | 4    | 0.00  | 0.01% | NA    | 100.00% | 100.00% | 100.00% | 95.00%  | 95.00%  | 100.00% | 100.00% |
|      | TTSL     | 1.00 | NA      | 100.00% | NA     | NA      | NA     | 4    | 0.00% | 0.00% | NA    | 100.00% | NA      | 100.00% | 100.00% | 86.00%  | NA      | NA      |
|      | Bharti   | 3.04 | 87.28%  | 100.00% | NA     | NA      | 0      | 5.55 | 0.00  | 0.00% | NA    | 100.00% | 100.00% | 100.00% | 100.00% | 98.55%  | 100.00% | 100.00% |
|      | BSNL     | 5.00 | 91.00%  | 100.00% | NA     | NA      | 581    | 8    | 0.00  | 0.00% | 0.00% | 98.00%  | 100.00% | 100.00% | 100.00% | 92.00%  | 100.00% | 100.00% |
| KTK  | Vodafone | 0.30 | 99.39%  | 99.39%  | NA     | NA      | NA     | 0.57 | 0.00  | 0.00% | NA    | NA      | NA      | NA      | 100.00% | 100.00% | 100.00% | NA      |
|      | Reliance | 0.04 | 100.00% | 100.00% | NA     | NA      | 0      | 4    | 0.00  | 0.00% | NA    | NA      | NA      | NA      | 95.00%  | 95.00%  | 100.00% | 100.00% |
|      | TTSL     | 0.00 | 84.00%  | 100.00% | NA     | NA      | NA     | 11   | 0.00% | 0.00% | NA    | 100.00% | NA      | 100.00% | 100.00% | 91.00%  | 100.00% | NA      |
|      | Bharti   | 2.39 | 89.41%  | 100.00% | NA     | NA      | 0      | 4.25 | 0.00  | 0.00% | NA    | 100.00% | 100.00% | 100.00% | 100.00% | 96.12%  | 100.00% | 100.00% |
|      | BSNL     | 4.00 | 97.00%  | 100.00% | 97.00% | 100.00% | 979    | 7    | 0.00  | 0.02% | 0.00% | 99.00%  | 100.00% | 100.00% | 93.00%  | 83.00%  | 100.00% | 100.00% |
| MH   | Bharti   | 0.73 | 97.73%  | 100.00% | NA     | NA      | 0      | 3.31 | 0.00  | 0.00% | NA    | 100.00% | 100.00% | 100.00% | 100.00% | 97.20%  | 100.00% | 100.00% |
|      | BSNL     | 4.00 | 92.00%  | 100.00% | 85.00% | 100.00% | 379    | 6    | 4.00  | 0.01% | 0.00% | 100.00% | 100.00% | 100.00% | 97.00%  | 96.00%  | 100.00% | 100.00% |
|      | Reliance | 0.05 | 100.00% | 100.00% | NA     | NA      | 0      | 4    | 0.00  | 0.01% | NA    | 100.00% | 100.00% | 100.00% | 95.00%  | 95.00%  | 100.00% | 100.00% |
|      | Vodafone | 0.10 | 97.80%  | 100.00% | NA     | NA      | NA     | 2.15 | 0.00  | 0.00% | NA    | NA      | NA      | NA      | 100.00% | 100.00% | NA      | NA      |
|      | TTSL     | 1.00 | 93.00%  | 100.00% | NA     | NA      | 1      | 4    | 0.00% | 0.10% | NA    | 100.00% | NA      | 100.00% | 100.00% | 82.00%  | 100.00% | NA      |
| MP   | Vodafone | 0.50 | 100.00% | NA      | NA     | NA      | NA     | 0.28 | 0.00  | 0.00% | NA    | NA      | NA      | NA      | 100.00% | 100.00% | NA      | NA      |
|      | Reliance | 0.04 | 100.00% | 100.00% | NA     | NA      | 0      | 4    | 0.00  | 0.01% | NA    | 100.00% | 100.00% | 100.00% | 95.00%  | 95.00%  | 100.00% | 100.00% |
|      | TTSL     | 2.00 | 99.00%  | 100.00% | NA     | NA      | NA     | 2    | 0.00% | 0.10% | NA    | 100.00% | NA      | 100.00% | 100.00% | 92.00%  | NA      | NA      |
|      | Bharti   | 5.78 | 90.04%  | 100.00% | NA     | NA      | 0      | 4.48 | 0.00  | 0.00% | NA    | 100.00% | 100.00% | 100.00% | 100.00% | 98.47%  | 100.00% | 97.00%  |
|      | BSNL     | 4.00 | 90.00%  | 100.00% | 85.00% | 100.00% | 772    | 3    | 0.00  | 0.01% | 0.01% | 99.00%  | 100.00% | 100.00% | 95.00%  | 85.00%  | 100.00% | 100.00% |
| MUM  | Vodafone | 0.30 | 98.96%  | 100.00% | NA     | NA      | NA     | 3.33 | 0.00  | 0.00% | NA    | NA      | NA      | NA      | 100.00% | 100.00% | 100.00% | NA      |
|      | Bharti   | 0.30 | 95.93%  | 100.00% | NA     | NA      | 0      | 3.91 | 0.00  | 0.00% | NA    | 100.00% | 100.00% | 100.00% | 100.00% | 96.77%  | 100.00% | 100.00% |
|      | MTNL     | 4.04 | 93.27%  | 99.82%  | NA     | NA      | 24431  | 5.65 | 0.00  | 0.03% | NA    | 99.30%  | 100.00% | NA      | 96.38%  | 95.85%  | 99.54%  | 100.00% |
|      | Reliance | 0.02 | 100.00% | 100.00% | NA     | NA      | 0      | 4    | 0.00  | 0.00% | NA    | 100.00% | 100.00% | 100.00% | 95.00%  | 95.00%  | 100.00% | 100.00% |
|      | TTSL     | 1.00 | 94.00%  | 100.00% | NA     | NA      | 2      | 6    | 0.00% | 0.10% | NA    | 100.00% | NA      | 100.00% | 100.00% | 88.00%  | 100.00% | NA      |

| NE          | Vodafone | 0.00 | NA      | NA      | NA      | NA      | NA   | 0    | 0.00  | 0.00% | NA    | NA      | NA      | NA      | 100.00% | 100.00% | NA      | NA      |
|-------------|----------|------|---------|---------|---------|---------|------|------|-------|-------|-------|---------|---------|---------|---------|---------|---------|---------|
| NE-I        | BSNL     | 4.00 | 91.00%  | 100.00% | 91.00%  | 100.00% | 66   | 7    | 0.00  | 0.04% | 0.00% | 98.00%  | 100.00% | 100.00% | 92.00%  | 93.00%  | 100.00% | 100.00% |
| NE-II       | BSNL     | 3.00 | 97.00%  | 100.00% | 99.00%  | 100.00% | 181  | 5    | 0.00  | 0.01% | 0.00% | 100.00% | 100.00% | 100.00% | 96.00%  | 91.00%  | 100.00% | 100.00% |
| OR          | Reliance | 0.00 | NA      | NA      | NA      | NA      | 0    | 0    | 0.00  | 0.00% | NA    | NA      | NA      | NA      | 95.00%  | 95.00%  | 100.00% | 100.00% |
|             | TTSL     | 0.00 | 100.00% | 100.00% | NA      | NA      | NA   | 3    | 0.00% | 0.00% | NA    | 100.00% | NA      | 100.00% | 100.00% | NA      | NA      | NA      |
|             | BSNL     | 5.00 | 92.00%  | 100.00% | 91.00%  | 100.00% | 596  | 6    | 0.00  | 0.07% | 0.00% | 98.00%  | 100.00% | 100.00% | 99.00%  | 96.00%  | 100.00% | 100.00% |
|             | Vodafone | 0.80 | 97.60%  | 100.00% | NA      | NA      | NA   | 3.09 | 0.00  | 0.00% | NA    | NA      | NA      | NA      | 100.00% | 100.00% | NA      | NA      |
| PB          | Vodafone | 0.50 | 90.00%  | 100.00% | NA      | NA      | NA   | 9.19 | 0.00  | 0.00% | NA    | NA      | NA      | NA      | 100.00% | 100.00% | NA      | NA      |
|             | Reliance | 0.03 | 100.00% | 100.00% | NA      | NA      | 0    | 4    | 0.00  | 0.00% | NA    | 100.00% | 100.00% | 100.00% | 95.00%  | 95.00%  | 100.00% | 100.00% |
|             | TTSL     | 0.00 | 95.00%  | 100.00% | NA      | NA      | NA   | 3    | 0.00% | 0.10% | NA    | 100.00% | NA      | 100.00% | 100.00% | 67.00%  | NA      | NA      |
|             | Bharti   | 3.27 | 90.33%  | 100.00% | NA      | NA      | 0    | 4.42 | 0.00  | 0.00% | NA    | 100.00% | 100.00% | 100.00% | 99.00%  | 98.80%  | 100.00% | 100.00% |
|             |          | 2.61 | 96.82%  | 100.00% | 100.00% | 100.00% | 13   | 6.16 | 0.00  | 0.00% | 0.00% | 100.00% | 100.00% | 100.00% | 96.00%  | 95.00%  | 100.00% | 100.00% |
|             | BSNL     | 4.00 | 94.00%  | 100.00% | 94.00%  | 100.00% | 713  | 5    | 2.00  | 0.01% | 0.00% | 98.00%  | 100.00% | 100.00% | 59.00%  | 60.00%  | 100.00% | 100.00% |
| RAJ         | Reliance | 0.05 | 100.00% | 100.00% | NA      | NA      | 0    | 4    | 0.00  | 0.02% | NA    | 100.00% | 100.00% | 100.00% | 95.00%  | 95.00%  | 100.00% | 100.00% |
|             | TTSL     | 0.00 | 100.00% | 100.00% | NA      | NA      | NA   | 12   | 0.00% | 0.00% | NA    | 100.00% | NA      | 100.00% | 100.00% | 100.00% | NA      | NA      |
|             | Vodafone | 0.50 | 95.60%  | 100.00% | NA      | NA      | NA   | 3.42 | 0.00  | 0.00% | NA    | NA      | NA      | NA      | 100.00% | 100.00% | NA      | NA      |
|             | Bharti   | 2.38 | 94.00%  | 100.00% | NA      | NA      | 0    |      | 0.00  | 0.00% | NA    | 100.00% | 100.00% | 100.00% | 100.00% | 98.43%  | 100.00% | 100.00% |
|             | Sistema  | 1.36 | 95.46%  | 100.00% | 96.35%  |         | 0    |      |       | 0.02% | NA    | 100.00% | 100.00% | 100.00% | 97.37%  | 97.88%  | 100.00% | 100.00% |
|             | BSNL     | 5.00 | 97.00%  | 100.00% | 95.00%  | 100.00% | 636  | -    | 0.00  | 0.00% | 0.00% | 100.00% | 100.00% | 100.00% | 93.00%  | 34.00%  | 100.00% | 100.00% |
| TN          | Reliance | 0.05 | 100.00% | 100.00% | NA      | NA      | 0    |      |       | 0.01% | NA    | 100.00% | 100.00% | 100.00% | 95.00%  | 95.00%  | 100.00% | 100.00% |
|             | TTSL     | 0.00 | 91.00%  | 100.00% | NA      |         | NA   | -    | 0.00% | 0.00% | NA    | 100.00% | NA      | 100.00% | 100.00% | 91.00%  | 100.00% | NA      |
|             | Vodafone | 1.50 | 100.00% | NA      | NA      |         | NA   |      | 0.00  | 0.00% | NA    | NA      | NA      | NA      | 100.00% | 100.00% | 100.00% | NA      |
|             | Bharti   | 2.45 | 89.66%  | 100.00% | NA      | NA      | 0    | 3.88 | 0.00  | 0.00% | NA    | 100.00% | 100.00% | 100.00% | 98.00%  | 96.27%  | 100.00% | 100.00% |
|             | BSNL     | 3.00 | 96.00%  | 100.00% | 91.00%  |         | 2213 |      | 0.00  | 0.07% | 0.00% | 100.00% | 100.00% | 100.00% | 97.00%  | 93.00%  | 100.00% | 100.00% |
| UPE         |          | 0.02 | 100.00% | 100.00% | NA      |         | 0    |      | 0.00  | 0.01% | NA    | 100.00% | 100.00% | 100.00% | 95.00%  | 95.00%  | 100.00% | 100.00% |
|             | TTSL     | 2.00 | 99.00%  | 100.00% | NA      |         | NA   |      |       | 0.00% | NA    | 100.00% | NA      | 100.00% | 100.00% | 100.00% | NA      | NA      |
|             |          | 0.50 | 100.00% | NA      | NA      |         | NA   |      |       | 0.00% | NA    | NA      | NA      | NA      | 100.00% | 100.00% | NA      | NA      |
|             |          | 5.44 | 88.65%  | 100.00% | NA      |         | 0    | 4.85 |       | 0.00% | NA    | 100.00% | 100.00% | 100.00% | 100.00% | 98.99%  | 100.00% | 100.00% |
|             | BSNL     | 4.00 | 93.00%  | 100.00% | 92.00%  |         | 1045 | 6    |       | 0.09% | 0.00% | 100.00% | 100.00% | 100.00% | 59.00%  | 21.00%  | 100.00% | 100.00% |
| UPW         | Reliance | 0.00 | NA      | NA      | NA      |         | 0    | 0    | 0.00  | 0.00% | NA    | NA      | NA      | NA      | 95.00%  | 95.00%  | 100.00% | 100.00% |
|             | TTSL     | 0.00 | 100.00% | 100.00% | NA      |         | NA   | 0    |       | 0.00% | NA    | 100.00% | NA      | 100.00% | 100.00% | 100.00% | NA      | NA      |
|             | Vodafone | 0.60 | 100.00% | NA      | NA      |         | NA   |      | 0.00  | 0.00% | NA    | NA      | NA      | NA      | 100.00% | 100.00% | NA      | NA      |
|             | Bharti   | 4.57 | 93.61%  | 100.00% | NA      |         | 0    | 3.68 |       | 0.00% | NA    | 100.00% | 100.00% | 100.00% | 100.00% | 98.09%  | 100.00% | 100.00% |
|             | BSNL     | 5.00 | 96.00%  | 100.00% | 96.00%  |         | 621  | 5    | 0.00  | 0.07% | 0.00% | 100.00% | 100.00% | 100.00% | 62.00%  | 73.00%  | 100.00% | 100.00% |
| Uttaranchal | BSNL     | 4.00 | 97.00%  | 100.00% | 96.00%  | 100.00% | 193  | 5    | 0.00  | 0.00% | 0.00% | 98.00%  | 100.00% | 100.00% | 96.00%  | 84.00%  | 100.00% | 100.00% |
| WB          | Reliance | 0.00 | NA      | NA      | NA      |         | 0    | 0    | 0.00  | 0.00% | NA    | NA      | NA      | NA      | 95.00%  | 95.00%  | 100.00% | 100.00% |
|             | BSNL     | 4.00 | 92.00%  | 100.00% | 92.00%  | 100.00% | 594  | 6    | 0.00  | 0.06% | 0.00% | 100.00% | 100.00% | 100.00% | 99.00%  | 95.00%  | 100.00% | 100.00% |

# Annexure 4.4: Quality of Service Performance of Broadband Service Providers

|            |                          |                         | Perform  | ance Mo   | nitoring l   | Report o       | on Quali                     | ty of Serv  | vice of Servi   | ce Provide   | rs providir   | ng broadband  | service (wireling  | ne) for Quart   | er Ending D   | ecember, 2                         | 014  |   |   |   |
|------------|--------------------------|-------------------------|--|---|--|----------------|------------------------------|---|---|--|---|---|--|---|---|------------------------------------|--|---|---|---|
|            |                          |                         | Service<br>Provisionin<br>g  |   | Repair   |                | Billing                      | Performar   |   | Custon   | Fime to the<br>mer for<br>tance   |   | ndwidth utilisati  | on/throughpu  | it  | Service<br>availability<br>/uptime | Packet<br>Loss   | Network la  | atency (for wire<br>access)   | d broadband   |
| SI.<br>No. | Service Provider         | Service area            | %age of<br>connections<br>provided within<br>15 days of<br>registration of<br>demand | % of faults<br>repaired by<br>next<br>working<br>day (>90%) | % of faults<br>repaired<br>within 3<br>working day | Rent<br>Rebate | %age of<br>bills<br>disputed | %age of<br>billing<br>complaints<br>resolved<br>within 4<br>weeks | %age of cases<br>to whom refund<br>of deposits is<br>made within 60<br>days of closures | %age of calls<br>answered by<br>operator<br>(Voice to<br>voice) within<br>60 sec | %age of<br>calls<br>answered by<br>operator<br>(Voice to<br>voice) within<br>90 sec | No. of Intra<br>network links<br>having<br>Bandwidth<br>utilisation >90%<br>during peak<br>hours (TCBH) | No. of Upstream<br>links for<br>International<br>connectivity<br>having bandwidth<br>utilisation >90%<br>during peak hours | % International bandwidth utilization during peak hours (TCBH) (Enclose | Broadband<br>Connection<br>Speed<br>available<br>(download)<br>from ISP node<br>to user | (for all<br>users) in<br>%age      | Packet loss<br>(for wired<br>broadband<br>access) in<br>%age | User<br>reference<br>point at<br>POP/ISP<br>Gateway<br>node to<br>IGSP/NIXI | User reference<br>point at ISP<br>Gateway node to<br>International<br>nearest NAP port<br>abroad<br>(terrestrial) | User reference<br>point at ISP<br>Gateway node<br>to<br>International<br>nearest NAP<br>port abroad |
|            |                          |                         | 100%   | >90%  | =>99%  | in nos.        | <2%                          | 100%  | 100% within 60  | >60%   | >80%  | 0   | 0  | <90%  | >80%  | >98%                               | <1%  | <120 ms   | <350 ms   | <800 ms   |
| 1          | BSNL                     | All India               | 100.00%  | 94.03%  | 99.61%   | 3450           | 0.08%                        | 100.00%   | 100.00%   | 66.44%   | 71.68%  | 0   | 0  | 77.10%  | 0.00%   | 99.75%                             | 0.40%  | 24  | 207   | 0   |
|            |                          | Andhra Pradesh          | 100.00%  | 95.37%  | 100.00%  | 0              | 0.01%                        | 100.00%   | 100.00%   | 93.10%   | 94.70%  | 0   | 0  | 44.44%  | 98.57%  | 100.00%                            | 0.00%  | 48  | 46  | NA  |
|            |                          | Delhi                   | 100.00%  | 90.82%  | 99.10%   | 757            | 0.01%                        | 100.00%   | 100.00%   | 93.51%   | 95.43%  | 0   | 0  | 81.84%  | 100.00%   | 99.98%                             | 0.03%  | 34  | 82  | NA  |
|            |                          | Gujarat                 | 100.00%  | 92.46%  | 99.81%   | 6              | 0.01%                        | 100.00%   | 100.00%   | 93.34%   | 96.34%  | 0   | NA   | NA  | 100.00%   | 100.00%                            | 0.00%  | 29  | 62  | NA  |
|            |                          | Haryana                 | 100.00%  | 92.86%  | 99.63%   | 5              | 0.03%                        | 100.00%   | 100.00%   | 96.31%   | 97.50%  | 0   | NA   | NA  | 100.00%   | 100.00%                            | 0.00%  | 32  | 56  | NA  |
|            |                          | Karnataka               | 100.00%  | 90.84%  | 100.00%  | 0              | 0.01%                        | 100.00%   | 100.00%   | 93.70%   | 95.96%  | 0   | 0  | 68.29%  | 100.00%   | 100.00%                            | 0.00%  | 27  | 38  | NA  |
|            |                          | Kerala                  | 100.00%  | 95.30%  | 99.69%   | 3              | 0.01%                        | 100.00%   | 100.00%   | 86.50%   | 88.55%  | 0   | NA   | NA  | 100.00%   | 100.00%                            | 0.00%  | 49  | 33  | NA  |
|            |                          | Kolkata                 | 100.00%  | 91.67%  | 99.08%   | 61             | 0.01%                        | 100.00%   | 100.00%   | 94.56%   | 96.48%  | 0   | 0  | 67.14%  | 100.00%   | 100.00%                            | 0.00%  | 23  | 72  | NA  |
|            | <b>D</b> I               | M.P. &<br>Chattisgarh   | 100.00%  | 92.87%  | 99.67%   | 60             | 0.01%                        | 100.00%   | 100.00%   | 97.58%   | 98.90%  | 0   | 0  | 66.74%  | 100.00%   | 99.95%                             | 0.00%  | 65  | 68  | NA  |
| 2          | Bharti Airtel            | Maharashtra             | 100.00%  | 97.23%  | 99.96%   | 1              | 0.00%                        | 100.00%   | 100.00%   | 94.16%   | 96.78%  | 0   | NA   | NA  | 100.00%   | 100.00%                            | 0.03%  | 42  | 62  | NA  |
|            |                          | Mumbai                  | 100.00%  | 97.46%  | 99.87%   | 7              | 0.00%                        | 100.00%   | 100.00%   | 95.05%   | 97.24%  | 0   | 0  | 67.53%  | 100.00%   | 99.99%                             | 0.05%  | 30  | 62  | NA  |
|            |                          | Punjab                  | 100.00%  | 92.57%  | 99.46%   | 28             | 0.02%                        | 100.00%   | 100.00%   | 95.18%   | 96.74%  | 0   | 0  | 57.90%  | 100.00%   | 100.00%                            | 0.00%  | 41  | 85  | NA  |
|            |                          | Rajasthan               | 100.00%  | 95.78%  | 99.88%   | 2              | 0.01%                        | 100.00%   | 100.00%   | 94.73%   | 96.30%  | 0   | NA   | NA  | 100.00%   | 100.00%                            | 0.00%  | 36  | 56  | NA  |
|            |                          | Tamilnadu               | 100.00%  | 93.89%  | 99.97%   | 6              | 0.01%                        | 100.00%   | 100.00%   | 89.76%   | 93.34%  | 0   | 0  | 57.52%  | 99.49%  | 99.99%                             | 0.00%  | 23  | 33  | NA  |
|            |                          | Uttar Pradesh -<br>East | 100.00%  | 91.58%  | 99.42%   | 30             | 0.01%                        | 100.00%   | 100.00%   | 93.84%   | 95.42%  | 0   | 0  | 85.60%  | 100.00%   | 99.99%                             | 0.00%  | 34  | 88  | NA  |
|            |                          | Uttar Pradesh -<br>West | 100.00%  | 92.70%  | 99.49%   | 9              | 0.00%                        | 100.00%   | 100.00%   | 94.46%   | 96.19%  | 0   | NA   | NA  | 100.00%   | 99.99%                             | 0.00%  | 33  | 56  | NA  |
| 3          | MTNL                     | Delhi & Mumbai          | 99.94%   | 86.49%  | 96.04%   | 24317          | 0.032%                       | 100.00%   | 100.00%   | 87.62%   | 91.14%  | 0   | 0  | 84.64%  | 89.00%  | 99.98%                             | 0.54%  | 42  | 293   | NA  |
| 4          | Alliance Broadband       | Kolkata                 | 100.00%  | 90.00%  | 99.00%   | 0              | 0.91%                        | 100.00%   | Nil   | 77.00%   | 92.00%  | 0   | 0  | 76.00%  | 96.10%  | 98.00%                             | 0.68%  | 111   | 320   | 771   |
| 5          | Asianet Satellite        | Kerala                  | 100.00%  | 90.78%  | 99.30%   | 0              | 1.13%                        | 100.00%   | 100.00%   | 60.60%   | 81.17%  | 0   | 0  | 64.43%  | 90.00%  | 99.70%                             | 1.00%  | 50  | 270   | NA  |
| 6          | Atria Convergence        | All India               | 100.00%  | 86.00%  | 98.00%   | 10315          | 0.50%                        | 100.00%   | Nil   | 79.00%   | 84.00%  | 0   | 0  | 87.00%  | 90.00%  | 98.00%                             | 1.00%  | 50  | 300   | 0   |
| 7          | <b>Broadband Pacenet</b> | All India               | 100.00%  | 91.13%  | 99.50%   | 267            | 1.00%                        | 100.00%   | Nil   | 81.50%   | 91.50%  | 0   | 0  | 79.61%  | 80.50%  | 99.00%                             | 0.50%  | 79  | 290   | 0   |
| 8          | Citycom Networks         | All India               | 100.00%  | 91.71%  | 99.15%   | 504            | 0.30%                        | 100.00%   | 100.00%   | 90.00%   | 92.00%  | 0   | 0  | 59.00%  | 93.23%  | 99.60%                             | 1.00%  | 4   | 168   | NA  |
| 9          | DEN Networks Ltd.        | All India               | 100.00%  | 95.12%  | 99.50%   | 1072           | 0.00%                        | Nil   | Nil   | 75.00%   | NA  | 0   | 0  | 83.36%  | 95.00%  | 100.00%                            | 0.00%  | 32  | 268   | NA  |
| 10         | Digital Network          | Maharashtra &<br>Goa    | 100.00%  | 90.93%  | 99.52%   | 0              | 0.39%                        | 100.00%   | Nil   | 62.93%   | 83.58%  | 0   | 0  | 80.00%  | 80.00%  | 99.77%                             | 1.00%  | 4   | 255   | 600   |
| 11         | D-VoiS Broadband         | All India               | 100.00%  | 97.59%  | 99.52%   | 0              | 0.67%                        | 100.00%   | NA  | 98.00%   | 100.00%   | 0   | 0  | 0.00%   | 90.00%  | 100.00%                            | 0.10%  | 120   | 350   | 800   |
| 12         | Five Networks            | All India               | 100.00%  | 99.50%  | 100.00%  | NA             | 0.00%                        | 100.00%   | 100.00%   | NA   | NA  | NA  | 0  | NA  | 90.00%  | 99.00%                             | 1.00%  | NA  | NA  | NA  |
| 13         | Gujarat Telelink         | Gujarat                 | 100.00%  | 94.00%  | 99.00%   | 65             | 0.15%                        | 100.00%   | NA  | 96.00%   | 99.00%  | NA  | 0  | 86.00%  | 91.00%  | 99.00%                             | 0.00%  | 11  | 300   | NA  |

|    |  |                          |                    |                   |             |            |       |         |          |                  |                   |                  |     |                  |                  | 1                  |                |     |                                       | 1        |
|----|--|--------------------------|--------------------|-------------------|-------------|------------|-------|---------|----------|------------------|-------------------|------------------|-----|------------------|------------------|--------------------|----------------|-----|---------------------------------------|----------|
|    |  | Andhra Pradesh           | 100.00%            | 97.00%            | 100.00%     | 36         | 1.57% | 100.00% | 100.00%  | 87.00%           | 93.00%            | 0                | 0   | 79.00%           | 90.00%           | 99.18%             | 1.00%          | 75  | 320                                   | NA       |
|    |  | Delhi                    | 100.00%            | 97.00%            | 99.00%      | 165        | 1.59% | 100.00% | 100.00%  | 85.00%           | 95.00%            | 0                | 0   | 64.00%           | 85.00%           | 99.00%             | 1.00%          | 90  | 279                                   | NA       |
|    |  | Gujarat                  | 100.00%            | 90.00%            | 99.00%      | 0          | 0.00% | NA      | NA       | 68.00%           | 94.00%            | 0                | 0   | 78.00%           | 90.00%           | 100.00%            | 1.00%          | 80  | 270                                   | NA NA    |
| 1  | Hathway Cable &                        | Karnataka                | 99.00%             | 88.00%            | 98.00%      | 599        | 1.86% | 100.00% | 100.00%  | 78.00%           | 84.00%            | 0                | 0   | 77.00%           | 90.00%           | 99.18%             | 1.00%          | 80  | 350                                   | NA       |
| 14 | Datacom Ltd.                           | Maharashtra              | 96.00%             | 91.00%            | 97.00%      | 2517       | 1.35% | 100.00% | 100.00%  | 88.00%           | 91.00%            | 0                | 0   | 77.00%           | 90.00%           | 99.00%             | 1.00%          | 50  | 280                                   | NA       |
|    |  | Punjab                   | 100.00%            | 97.00%            | 99.00%      | 10         | 1.50% | 100.00% | 100.00%  | 69.00%           | 87.00%            | 0                | 0   | 83.00%           | 85.00%           | 99.00%             | 1.00%          | 95  | 310                                   | NA       |
|    |  | Goa                      | 91.00%             | 94.00%            | 100.00%     | 0          | 0.00% | NA      | NA       | 85.00%           | 95.00%            | 0                | 0   | 79.00%           | 90.00%           | 98.00%             | 1.00%          | 50  | 250                                   | NA       |
|    |  | Uttar Pradesh            | 100.00%            | 92.00%            | 99.00%      | 0          | 1.35% | 100.00% | 100.00%  | DNF              | DNF               | 0                | NA  | 88.00%           | 85.00%           | 100.00%            | 1.00%          | 75  | 305                                   | NA       |
|    |  | Chhatisgarh              | 100.00%            | 96.00%            | 99.00%      | 0          | 1.03% | 100.00% | 100.00%  | 99.00%           | 99.00%            | 0                | 0   | 89.00%           | 85.00%           | 100.00%            | 1.00%          | 98  | 296                                   | NA       |
| 15 | Home Systems                           | Mumbai                   | 100.00%            | 95.00%            | 99.99%      | NA         | 0.00% | 100.00% | NA       | 68.00%           | 89.00%            | 0                | 1   | 91.00%           | 95.00%           | 99.00%             | 0.01%          | 50  | 295                                   | NA       |
| 16 | Honesty Net<br>Solutions (I) Pvt.      | Mumbai                   | 100.00%            | 84.00%            | 95.63%      | 0          | 0.00% | 100.00% | Nil      | NA               | NA                | 2497             | NA  | NA               | 89.00%           | 100.00%            | 0.00%          | 30  | 65.97                                 | NA       |
|    | Ltd.                                   |                          |                    |                   |             |            |       |         |          |                  |                   |                  |     |                  |                  |                    |                |     |                                       |          |
| 17 | IndusInd Media                         | All India                | 100.00%            | 97.00%            | 99.00%      | 17         | 0.00% | 100.00% | 100.00%  | 100.00%          | 100.00%           | 0                | 0   | NR               | 80.00%           | 98.00%             | 1.00%          | 45  | 260                                   | NA       |
| 18 | Meghbela Cable &<br>Broadband Services | Kolkata & West<br>Bengal | 100.00%            | 99.90%            | 100.00%     | 0          | 0.00% | 100.00% | 100.00%  | 90.30%           | 100.00%           | 0                | 0   | 0.00%            | 100.00%          | 99.90%             | 0.00%          | 60  | NR                                    | NR       |
| 19 | Nextra Teleservices<br>Pvt. Ltd.       | Delhi                    | 100.00%            | 95.00%            | 100.00%     | 230        | 1.00% | 100.00% | 100.00%  | 90.00%           | 93.00%            | 0                | 0   | 83.00%           | 100.00%          | 100.00%            | 1.00%          | 120 | 350                                   | NA       |
| 20 | Noida Software<br>(NSTPL)              | All India                | 100.00%            | 100.00%           | 100.00%     | Nil        | NA    | 100.00% | 100.00%  | 85.00%           | 100.00%           | NA               | NA  | NA               | 98.00%           | 99.26%             | 1.00%          | 15  | 200                                   | NA       |
| 21 | North East Dataa<br>Network Pvt. Ltd.  | Karnataka                | 100.00%            | 99.20%            | 99.99%      | 0          | 0.00% | 100.00% | 100.00%  | 99.50%           | 99.50%            | 0                | 0   | 90.00%           | 98.00%           | 99.00%             | 1.00%          | 100 | 300                                   | 0        |
|    |  | Andhra Pradesh           | 100.00%            | 72.00%            | 78.00%      | 0          | 0.00% | 100.00% | 100.00%  | 100.00%          | 100.00%           | 0                | 0   | 79.00%           | 93.00%           | 99.95%             | 0.00%          | 94  | 264                                   | 0        |
| 22 | Ortel                                  | Kolkata                  | 100.00%            | 92.50%            | 99.90%      | 0          | 0.00% | 100.00% | 100.00%  | 100.00%          | 100.00%           | 0                | 0   | 79.00%           | 92.00%           | 100.00%            | 0.00%          | 93  | 260                                   | 0        |
| 22 | Communications                         | Madhya<br>Pradesh        | 100.00%            | 92.45%            | 99.99%      | 0          | 0.00% | 100.00% | 100.00%  | 100.00%          | 100.00%           | 0                | 0   | 79.00%           | 93.00%           | 99.90%             | 0.00%          | 94  | 268                                   | 0        |
|    |  | Orissa                   | 100.00%            | 92.57%            | 99.99%      | 0          | 0.00% | 100.00% | 100.00%  | 100.00%          | 100.00%           | 0                | 0   | 78.00%           | 93.00%           | 99.90%             | 0.00%          | 96  | 238                                   | 0        |
| 23 | Quadrant                               | Punjab                   | 100.00%            | 98.40%            | 99.90%      | 0          | 0.01% | 100.00% | 100.00%  | 75.67%           | 85.00%            | 0                | 0   | 72.00%           | 100.00%          | 99.96%             | 0.00%          | 80  | 280                                   | NA       |
| 24 | Rajesh<br>Multichannel                 | Mumbai                   | 100.00%            | 97.00%            | 100.00%     | 0          | 0.00% | 100.00% | 100.00%  | 96.00%           | 87.00%            | 0                | 0   | 87.00%           | 85.00%           | 99.00%             | 0.01%          | 0   | 0                                     | 0        |
| 25 | Reliance Com.<br>(RCL)                 | All India                | 100.00%            | 100.00%           | 100.00%     | Nil        | 0.17% | 100.00% | 100.00%  | 94.58%           | 96.50%            | 0                | 0   | 52.70%           | 85.00%           | 99.53%             | 0.50%          | 16  | 17.33                                 | 0        |
| 26 | RK Infratel                            | Gujarat                  | 100.00%            | 90.21%            | 99.25%      | 0          | 0.00% | 100.00% | NA       | 99.97%           | 100.00%           | 0                | 0   | 89.19%           | 85.00%           | 99.64%             | 0.00%          | 120 | 350                                   | NA       |
| 27 | Siti Cable                             | All India                | 100.00%            | 90.00%            | 100.00%     | 33         | 0.00% | 100.00% | 100.00%  | 64.00%           | 78.00%            | 0                | 0   | 76.60%           | 95.00%           | 98.96%             | 0.40%          | 56  | 280                                   | NA       |
| 28 | Smartlink<br>Broadband                 | Mumbai                   | 100.00%            | NA                | NA          | NA         | NA    | NA      | NA       | 99.94%           | 100.00%           | 1                | 1   | 81.00%           | 99.55%           | 99.21%             | 1.00%          | 2   | 4                                     | NA       |
| 29 | Southern (SOBTL)                       | Andhra Pradesh           | 100.00%            | 99.00%            | 100.00%     | 0          | 0.00% | 100.00% | 100.00%  | 90.00%           | 100.00%           | 0                | 0   | 78.00%           | 95.00%           | 99.00%             | 0.05%          | 100 | 300                                   | 500      |
| 30 | Syscon Infoway Pvt.<br>Ltd.            | Maharashtra<br>Mumbai    | 100.00%<br>100.00% | 99.00%<br>100.00% | 100.00%     | Nil<br>Nil | 0.00% | 100.00% | NA<br>NA | 86.00%<br>94.00% | 88.67%<br>100.00% | 0                | 0   | 83.33%<br>66.00% | 99.00%<br>99.00% | 100.00%<br>100.00% | 1.00%<br>0.00% | 1   | 47<br>47                              | 80<br>80 |
| 31 | Tata                                   | All India                | Nil                | 92.00%            | 97.00%      | 322        | 0.17% | 100.00% | 100.00%  | 90.00%           | 92.00%            | 0                | 0   | 41.64%           | 80.00%           | 98.75%             | 0.00%          | DNF | 253                                   | NA       |
| 32 | Tata (TTML)                            | Maharashtra &<br>Goa     | 100.00%            | 90.90%            | 97.60%      | 0          | 0.30% | 100.00% | NA       | 80.00%           | 84.00%            | 0                | 0   | 79.00%           | 95.00%           | 99.00%             | 0.00%          | 68  | 201                                   | 0        |
| 33 | Tata (TTSL)                            | All India (Pan<br>India) | 100.00%            | 91.00%            | 98.00%      | 0          | 0.69% | 100.00% | NA       | 88.69%           | 91.11%            | 0                | 0   | 72.00%           | 88.00%           | 99.53%             | 0.00%          | 51  | 71.5                                  | 0        |
| 34 | Vasai Cable                            | Mumbai                   | 100.00%            | 93.73%            | 99.52%      | 0          | 0.11% | 100.00% | Nil      | 79.79%           | 84.85%            | 0                | 0   | 63.00%           | 80.00%           | 94.71%             | 1.00%          | 4   | 255                                   | NA       |
| 35 | Wish Net Pvt. Ltd.                     | West Bengal              | 100.00%            | 96.30%            | 100.00%     | 0          | 0.05% | 100.00% | NA       | 81.00%           | 97.67%            | 0                | 0   | 71.74%           | 100.00%          | 99.88%             | 1.00%          | 20  | NA                                    | NA       |
|    |  | Kolkata                  | 100.00%            | 98.09%            | 100.00%     | 0          | 0.01% | 100.00% | NA       | 81.00%           | 97.67%            | 0                | 0   | 73.57%           | 100.00%          | 99.88%             | 1.00%          | 40  | NA                                    | NA       |
| 36 | You Broadband                          | All India                | 96.00%             | 91.00%            | 98.00%      | 4918       | 0.00% | 100.00% | 100.00%  | 96.00%           | 95.67%            | NA               | 0   | 75.01%           | 87.26%           | 99.23%             | 0.00%          | 9   | 277                                   | NA       |
|    |  |                          | DNF=               | Data not a        | ıs per Form | nat        |       |         | NR=      | Data not re      | ported by the     | e Service Provid | ler |                  | NA =             | Not Applicab       | ole            |     | nplied the parar<br>t in the required |          |

Annexure 5.1: List of Multi System Operators (MSOs) who have been granted permanent registration (for 10 years) by Ministry of Information & Broadcasting to operate in Digital Addressable System (DAS)

| S1.<br>No | Name of the MSO   | Address of the MSO   | Permitted City/<br>Town/Area of<br>Operation                             | Status  |
|-----------|---|--|--|---|
| 1.        | Inspire Infratech<br>Pvt. Ltd<br>9/21/2012 - BP&L                                 | Inspire Infratech Pvt. Ltd<br>Plot No.18, 2nd Floor, East<br>Avenue Market, East<br>Punjabi Bagh, New Delhi.   | National Capital<br>Territory of Delhi<br>area                           | Permanent (for 10 years) registration issued on 24.3.2014           |
| 2.        | <b>CCN DEN Network Pvt. Ltd.</b> 9/25/2012 - BP&L                                 | CCN DEN Network Pvt.<br>Ltd. C-1/9, Krishna Nagar,<br>Delhi-110051   | Phase I, II, & III   | Permanent (for 10 years) registration issued on 29.05.14            |
| 3.        | Aadhar Digital<br>Vision Pvt. Ltd<br>9/56/2012-BP&L                               | Aadhar Digital Vision Pvt.<br>Ltd 37/19, Ayalur<br>Muthiah Street,<br>Kondithope, Chennai- 79  | in the State of<br>Tamilnadu and UT<br>of Pondicherry                    | Permanent (for 10 years) registration issued on 21.02.2014          |
| 4.        | ABS Entertainment Pvt. Ltd. 9/63/2012 - BP&L                                      | ABS Entertainment Pvt.<br>Ltd. Hari Om Chambers,<br>7th Floor, B-16, Veera<br>Industrial Estate, off link<br>Road, Andheri (W),<br>Mumbai-400053.        | Mumbai Of Phase I<br>and all Cities<br>/towns of Phase III<br>& IV       | Permanent (for 10 years) registration issued on 30.05.2014          |
| 5.        | Akshaya Diginet<br>Cable Vision Pvt.<br>Limited.<br>9/75/2012 - BP&L              | Akshaya Diginet Cable<br>Vision Pvt. Limited. B-<br>20,Industrial Estate<br>Mugappair East, Chennai-<br>600037   | In the State of<br>Tamil Nadu Except<br>Coimbatore                       | Permanent (for 10 years) registration issued on 29.05.2014          |
| 6.        | Thamizhaga Cable<br>TV<br>Communication<br>Pvt. Ltd., Chennai<br>9/81/2012 - BP&L | Thamizhaga Cable TV<br>Communication Pvt. Ltd.,<br>Chennai Old No. 150, New<br>No. 48, Sami Naicken<br>Street, Chinthadripet<br>Chennai. 600002          | Chennai in Phase<br>I,and all cities<br>/towns of Phase III,<br>Phase-IV | Permanent (for 10 years) registration issued on 03.06.2014          |
| 7.        | Baba Enterprises<br>Delhi 9/92/2012 -<br>BP&L                                     | Baba Enterprises Delhi<br>106, Ist Floor, Takiya<br>Chowk, Mandir Wali Gali,<br>Burari Village, Delhi 84   | Delhi & NCR  | Permanent (for 10 years) registration issued on 10.06.2014          |
| 8.        | Novabase Digital<br>Entertainment<br>Pvt. Ltd., Delhi<br>9/100/2012 -<br>BP&L     | 226B/5, 3rd Floor Krishna<br>Palace Prakash Mohalla<br>East of Kailash New Delhi<br>110067   | Delhi & NCR  | Permanent (For 10 years) registration given on 18.06.2014           |
| 9.        | Microscan<br>Entertainment<br>Pvt. Ltd., Mumbai<br>9/85/2013 - BP&L               | Microscan Entertainment<br>Pvt. Ltd. "A" Wing, 301-<br>303, Opp. Ahura Centre,<br>Everest Grande, mahakali<br>caves Road, Andheri (E),<br>Mumbai- 400093 | Phase I, III and IV  | Permanent (For 10<br>Years) registration<br>issued on<br>13.06.2014 |

| 01        | Name of the MCO  | Address of the MCO  | Downsitted Oites/  | St-t  |
|-----------|--|---|--|---|
| S1.<br>No | Name of the MSO  | Address of the MSO  | Permitted City/<br>Town/Area of<br>Operation   | Status  |
| 10.       | Chouksey<br>Entertainments<br>Ltd. 9/131/2012 -<br>BP&L              | Chouksey Entertainments<br>Ltd Krishi Upaj Mandi,<br>Plot No – 46, 47,48 JDA<br>Scheme no5, Damoh<br>Naka Jabalpur – 482002<br>(M.P.) | Jabalpur of Phase II<br>and Phase III and<br>Phase IV in the<br>states of Bihar,<br>Maharashtra,<br>Chattisgarh, Odisha<br>Madhya Pradesh,<br>Rajasthan, Uttar<br>Pradesh and Gujrat | Permanent (For 10<br>Years) registration<br>issued on<br>30.05.2014 |
| 11.       | UCN Cable<br>Network Pvt. Ltd.<br>9/133/2012 -<br>BP&L               | UCN Cable Network Pvt.<br>Ltd. 502, Milestone<br>Building, Wardha Road,<br>12, Ramdaspeth, Nagpur<br>440 010                          | Phase-I,4 Cities of<br>Phase II viz Nagpur,<br>Jabalpur, Indore &<br>Bhopal and Phase<br>III & IV Cities   | Permanent (for 10 years) registration issued on 29.05.2014          |
| 12.       | E-Infrastructure & Entertainment (India) Pvt. Ltd. 9/145/2012 - BP&L | E-Infrastructure & Entertainment (India) Pvt. Ltd. 22 & 24, Someshwara Nilaya, Jakkur Main Road, Amruthalli, Banglore (KA) 560092     | Karnataka (except<br>Mysore), Tamilnadu<br>(except Coimbatore),<br>Andhra Pradesh<br>(except Hyderabad<br>&Vishakhapatanam<br>and Kerala state                                       | Permanent (For 10<br>Years) registration<br>issued on<br>30.05.2014 |
| 13.       | Bhima Riddhi<br>Digital Services<br>9/144/2012 -<br>BP&L             | Bhima Riddi Digital<br>Services 4th Floor,<br>Millenium Square, Near<br>Garuda Bunglow, Sath<br>Raasta, Solapur                       | Areas Phase I, II, III & IV Except Phase II cities in Gujrat, Maharashtra (excluding Solapur), Karnataka and Andhra Pradesh  | Permanent (For 10 years)) registration issued on 30.05.2014         |
| 14.       | All Digital<br>Networks India<br>Ltd. 9/13/2013 -<br>BP&L            | All Digital Networks India<br>Ltd. N 2, LIC Row Houses,<br>24th Main, 1st Phase JP<br>Nagar, Bangalore 560078                         | In the state of<br>Karnataka except<br>Mysore  | Permanent (for 10 years) registration issued on 29.05.2014          |
| 15.       | Digi Maharaja<br>Cable Network<br>Pvt. Ltd.<br>9/23/2013 - BP&L      | Digi Maharaja Cable Network Private Limited, B-8, Marol, Industrial Area, Next to MIDC Police Station Andheri (E), Mumbai 400093      | Phase I, III & IV and<br>Agra city of Phase II<br>only   | Permanent (for 10 years) registration issued on 29.05.2014          |
| 16.       | Mplex Networks Pvt. Ltd. 9/27/2013- BP&L                             | Mplex Networks Pvt. Ltd.<br>Aerolex Centre- III Floor,<br>109 KH Road, Bangalore<br>560001  | Bangalore City   | Permanent (for 10 years) registration issued on 24.01.2014          |
| 17.       | <b>Zippy Tel Pvt.</b><br><b>Ltd.</b> 9/61/2013 -<br>BP&L             | Zippy Tel Pvt. Ltd. D - 177,<br>Sector 10, Noida -201301<br>Uttar Pradesh   | Ghaziabad &<br>Goutam budh Nagar   | Permanent (For 10 years) registration issued on 29.05.2014          |

|     |   |  |   | re 5.1 (conta.)   |
|-----|---|--|---|---|
| S1. | Name of the MSO   | Address of the MSO   | Permitted City/   | Status  |
| No  |   |  | Town/Area of  |   |
|     |   |  | Operation   |   |
| 18. | Sree Devi Digital<br>Systems Pvt. Ltd.<br>9/72/2013 - BP&L      | Sree Devi Digital Systems<br>Pvt. Ltd. D. No: 39-6-16,<br>Sagar Nivas, Muralinagar,<br>Visakhapatnam-530007  | Vishakhapatnam of<br>Phase II and rest of<br>Andhra Pradesh for<br>Phase III and IV   | Permanent (For 10<br>Years) registration<br>issued on<br>06.02.2014 |
| 19. | Subam Digital<br>Cable Services,<br>9/91/2012 - BP&L            | Subam Digital Cable<br>Services, 138,Cotton<br>Market, Rajapalayam,<br>Virudhu Nagar district,<br>Tamil Nadu, PIN- 626117                              | Phase I, III & IV<br>Cities only  | Permanent (For 10 years) registration issued on 29.05.2014          |
| 20. | Asianet Satellite<br>Communications<br>Ltd. 9/28/2013 -<br>BP&L | Asianet Satellite Communi<br>cations Ltd., 2A, 2nd<br>Floor, Leela Infopark,<br>Technopark, Kazhakuttom<br>Thiruvananthapuram<br>695581                | Phase I, III & IV<br>Cities   | Permanent (for 10 years) registration issued on 30.05.2014          |
| 21. | Mansion Cable<br>Network Pvt. Ltd.<br>9/65/2013 - BP&L          | Mansion Cable Network<br>Pvt. Ltd. Part of 10 & 21,<br>IInd Floor, College Road,<br>Chhipi Tank, Meerut,<br>Uttar Pradesh - 250001                     | Notified area of in<br>the state of Uttar<br>Pradesh except (i)<br>Agra (ii) Allahabad<br>(iii) Ghaziabad (iv)<br>Kanpur (v) Lucknow<br>(vi) Varanasi | Permanent (for 10 years) registration issued on 29.05.2014          |
| 22. | Men Power Media<br>Network<br>9/103/2012 -<br>BP&L              | Men Power Media Network<br>Men Power Avenue<br>Natesanar Street Nemeli-<br>631051, Arakkonam Tk.,<br>Vellore District,<br>Tamilnadu.                   | In the state of Tamilnadu except Coimbatore and Chennai and Chittore and Nellore Districts in the state of Andhra Pradesh                             | Permanent (For 10<br>Years) registration<br>issued on<br>29.05.2014 |
| 23. | Sai Vision Cable<br>Network<br>9/58/2013 - BP&L                 | Sai Vision Cable Network<br>Shop No. 8, Aditya<br>Apartment, Anandnagar,<br>Sinhagad Road, Pune<br>411051  | Notified areas of of<br>Pune city of Phase-II<br>and Pune, Satara<br>and Ahmednagar<br>Districts of Phase –<br>III & IV                               | Permanent (for 10 years) registration issued on 27.05.2014          |
| 24. | Sea TV Network<br>Limited<br>9/40/2013 - BP&L                   | Sea TV Network Limited<br>148, Manas Nagar,<br>Shahganj, Agra- 282010  | In the state of Uttar<br>Pradesh excluding<br>Allahabad, Meerut,<br>Ghaziabad, Kanpur,<br>Lucknow, Varanasi   | Permanent (for 10 years) registration issued on 29.05.2014          |
| 25. | Vinsat Digital Pvt.<br>Ltd. 9/57/2013 -<br>BP&L                 | Vinsat Digital Pvt. Ltd.<br>#46-15-32/8, Flat No. 501,<br>5th Floor, Kandrapa<br>Complex, Dondaparthi,<br>Near Diamond Park,<br>Vishakhapatnam 530 016 | Vishakhapatnam<br>only  | Permanent (for 10 years) registration issued on 26.05.2014          |

| S1. | Name of the MSO   | Address of the MSO   | Permitted City/  | Status   |
|-----|---|--|--|--|
| No. | Name of the Moo   | riddiess of the Miso   | Town/Area of   | Status   |
|     |   |  | Operation  |  |
| 26. | Digital<br>Infotainment Pvt.<br>Ltd. F.<br>No.9/15/2013 -<br>BP&L | Digital Infotainment Pvt.<br>Ltd. Plot No.97, Marol Co-<br>operative Industrial Estate,<br>Makwana, Andheri (East),<br>Mumbai-400 059<br>Maharashtra | In the State of<br>Karnataka except<br>Mysore  | Permanent (for 10 years) registration issued on 30.05.2014                             |
| 27. | Moon Network<br>Pvt. Ltd. F.<br>No.9/45/2013 -<br>BP&L            | Moon Network Pvt. Ltd.<br>1/47, Hotel East Lite,<br>Delhi Gate, Near Raja<br>Mandi Railway Station<br>Agra 282002 U.P.                               | Agra, Firozabad,<br>Tundla &<br>Shikohabad   | Permanent (for 10 years) registration issued on 23.01.2014                             |
| 28. | Technobile Systems Network F. No.9/80/2013 - BP&L                 | Technobile Systems Network 421, Udyog Vihar, Phase-IV, Gurgaon- 122015 Haryana   | In the State of Uttar Pradesh, Bihar, Haryana, Rajasthan & Uttranchal (except Allahabad, Agra, Ghaziabad, Kanpur, Meerut & Varanasi in the State of Uttar Pradesh, Patna in the State of Bihar, Faridabad in the State of Haryana, and Jaipur & Jodhpur in the State of Rajasthan) | Permanent (For 10 years) registration issued on 30.05.2014                             |
| 29. | Den New Broad<br>Communication<br>Pvt. Ltd.<br>9/32/2013 – BP&L   | Den New Broad<br>Communication Pvt.Ltd<br>3rd Floor P.P Chamber,<br>near KDMC Bhagat Singh<br>Path Dombivili (E) 421201                              | In the state of Maharashtra except Aurangabad, Nagpur, Nasik, Navi Mumbai, Pimpri Chinchwad, Pune, Sholapur & Thane  | Permanent (For 10<br>Years) registration<br>issued on<br>22.07.2014                    |
| 30. | Home System Pvt<br>Ltd. 9/19/2012 -<br>BP&L                       | Home System Pvt Ltd.<br>A/17, Gaurav Annexe,<br>R.R.T. Road Mulund (W),<br>Mumbai -400080  | Entire DAS notified area across the country notified in the notification of government of India  | Permanent (For 10<br>Years) registration<br>issued on<br>28.03.2013                    |
| 31. | Star Broadband<br>Services (I) Pvt.<br>Ltd. 9/29/2012 -<br>BP&L   | Star Broadband Services (I) Pvt. Ltd. 19/48, Malcha Marg, Commercial Complex, Chankyapuri, New Delhi-110021  | National Capital<br>Territory of Delhi   | Permanent (For 10<br>Years w.e.f<br>30.09.2006)<br>registration issued<br>on 28.6.2012 |
| 32. | Den Adn Network<br>Pvt. Ltd.<br>9/24/2012 - BP&L                  | Den Adn Network Pvt. Ltd.<br>11/15, 3rd floor, East<br>Patel Nagar, New Delhi-<br>110008   | National Capital<br>Territory of Delhi   | Permanent (For 10<br>Years) registration<br>issued on<br>8.7.2014                      |

| <b>01</b> | T   |  |  |  |
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| S1.<br>No | Name of the MSO   | Address of the MSO   | Permitted City/ Town/Area of   | Status   |
|           |   |  | Operation  |  |
| 33.       | <b>Delhi Distribution Company</b> 9/18/2012 - BP&L                    | Delhi Distribution<br>Company Office No.2, Ist<br>Floor, Local Shopping<br>Centre, Uday Park, New<br>Delhi-110049                  | National Capital<br>Territory of Delhi   | Permanent (For 10<br>Years) registration<br>issued on<br>21.06.2012  |
| 34.       | Satellite Channels<br>Pvt. Ltd.<br>9/28/2012 - BP&L                   | Satellite Channels Pvt. Ltd.<br>E-68, 3rd Floor, Lajpat<br>Nagar-I, New Delhi-110024   | National Capital<br>Territory of Delhi<br>and cities/towns/<br>areas occurring<br>against-II,Phase-III,<br>and Phase-IV  | Permanent (For 10<br>Years) registration<br>issued on<br>29.06.2012  |
| 35.       | Kailash Cable<br>Network Pvt. Ltd<br>9/43/2012 - BP&L                 | Kailash Cable Network Pvt.<br>Ltd 36, Ram Lal<br>Mukherjee Lane, Salkia,<br>Howrah-711106  | Kolkata Metropolitan Area and cities of Howrah and Patna occurring against Phase-II and cities /town/areas occurring Phase-III & IV  | Permanent (For 10<br>Years ) registration<br>issued on<br>29.06.2012 |
| 36.       | Indusind Media<br>And<br>Communication<br>Limited<br>9/54/2012 - BP&L | Indusind Media And<br>Communication Limited<br>Under 11 (F) IN Centre,<br>49/50 MIDC, 12th Road,<br>Andheri (E), Mumbai-<br>400093 | Municipal Council of Greater Mumbai, National Capital Territory (NCT), Delhi, Kolkata Metropolitan Area, Chennai Metropolitan Area   | Permanent (For 10<br>Years) registration<br>issued on<br>29.06.2012  |
| 37.       | Barasat Cable TV<br>Network Pvt. Ltd.<br>9/61/2012 - BP&L             | Barasat Cable Tv Network Pvt. Ltd. Circular Road, Nabapally, Barasat, Pin No. 700126 (West Bengal)                                 | Kolkata<br>Metropolitan Area   | Permanent (For 10<br>Years) registration<br>issued on<br>29.06.2012  |
| 38.       | Scod 18<br>Networking Pvt.<br>Ltd 9/52/2012 -<br>BP&L                 | Scod 18 Networking Pvt.<br>Ltd Plot No. 97, Marol Co-<br>operative Industrial Estate,<br>Makwana, Andheri (E)<br>Mumbai- 400059    | In the State of<br>Maharashtra   | Permanent (For 10<br>Years) registration<br>issued on<br>29.06.2012  |
| 39.       | Den Network. Ltd<br>"Den" 9/46/2012<br>- BP&L                         | Den Network. Ltd "Den"<br>236, Ground floor, Okhla<br>Industrial Estate, Phase-<br>III, New Delhi-110020                           | Municipal Council of Greater Mumbai, National Capital Territory (NCT), Delhi, Kolkata Metropolitan Area, Chennai Metropolitan Area as well as cities/towns/ Areas occurring against Phase-II, Phase-III & Phase-IV | Permanent (For 10<br>Years) Registration<br>issued on<br>4.07.2012   |

| S1. | Name of the MSO   | Address of the MSO  | Permitted City/   | Status  |
|-----|---|---|---|---|
| No  |   |   | Town/Area of Operation  |   |
| 40. | Manthan<br>Broadband<br>Services Pvt. Ltd<br>9/53/2012 - BP&L<br>Advance<br>Multisystem           | Manthan Broadband<br>Services PVT. Ltd 6,<br>Ganesh Chandra,<br>Avenue IIIrd Floor,<br>Kolkata-700013 (W.B)<br>Advance Multisystem<br>Broadband | Kolkata Metropolitan<br>Area<br>Kolkata Metropolitan<br>Area  | Permanent (For<br>10 Years)<br>Registration<br>issued on<br>29.06.2012<br>Permanent (For<br>10 Years) |
|     | Broadband<br>Communications<br>Ltd 9/55/2012 -<br>BP&L  | Communications Ltd<br>Bankim Kannan,<br>Chinsurah Station Road,<br>Near Radion Station<br>Surah R.S., Hooghly –<br>712102 (W.B)                 |   | Registration<br>issued on<br>18.07.2012   |
| 42. | Indusind Media And Communication Limited 9/48/2012 - BP&L *second application for different areas | Indusind Media And<br>Communication Limited<br>IN Centre, 49/50 MIDC,<br>12th Road, Andheri (E),<br>Mumbai-400093                               | Cities/towns/areas occurring against Phase I, Phase II, Phase III and Phase IV as notified in the notification of Govt.   | Permanent (For<br>10 Years)<br>Registration<br>issued on<br>18.07.2012                                |
| 43. | Indian Cable Net<br>Company Limited<br>9/51/2012 - BP&L   | Indian Cable Net Company Limited J1/15, Salt Lake, Electronics Complex Block EP, Sector-V, Salt Lake Kolkata-700091                             | Cities/towns/areas occurring against Phase I, Phase II, Phase III and Phase IV as notified in the notification of Govt.   | Permanent (For<br>10 Years)<br>Registration<br>issued on<br>18.07.2012                                |
| 44. | Live Satellite<br>9/64/2012 - BP&L  | Live Satellite, Hari Om<br>Chembers, 7th Floor, B-<br>16, Veera Industrial<br>Estate, Off link Road<br>Andheri(W), Mumbai -<br>400054           | Municipal Council of<br>Greater Mumbai,<br>National Capital<br>Territory, Delhi,<br>Kolkata & Chennai<br>Metropolitan Area, as<br>well as cities/towns<br>/areas occurring<br>against phase I, II, III<br>& IV. | Permanent (For<br>10 Years)<br>Registration<br>issued on<br>23.07.2012                                |
| 45. | Hathway Cable & Datacom Limited, Mumbai. 9/68/2012 - BP&L   | Hathway Cable & Datacom Limited, Trade Word Wing,10th Floor Kamala Mills Compound, S. B. Marg Lower Parel(W), Mumbai - 13                       | Phase I, Phase II,<br>Phase III, Phase-IV   | Permanent (For<br>10 Years)<br>Registration<br>issued on<br>30.07.2012                                |
| 46. | JAK Communication Private Limited, Chennai. 9/ 77/2012 - BP&L                                     | JAK Communication Private Limited, Chennai. J-4, 6th Avenue, Anna Nagar East, Chennai - 600102  | Chennai   | Permanent (For<br>10 Years w.e.f<br>5.8.2008)<br>Registration<br>issued on 8.8.12                     |

| 01        | 1 Name of the MCO Address of the MCO Descritted City / Otets |  |  |                        |
|-----------|--|--|--|------------------------|
| S1.<br>No | Name of the MSO  | Address of the MSO                                 | Permitted City/ Town/Area of Operation | Status                 |
|           | Kable First India  | Kable First India Pvt. Ltd                         | Bangalore                              | Permanent (For 10      |
| 47.       | Pvt. Ltd.  | 2nd Floor, Indian Express                          | Bangalore                              | years) Registration    |
| 77.       | 9/117/2012 -   | Building, No. 1, Queen's                           |  | issued on              |
|           | BP&L   | Road, Bangalore 560001                             |  | 12.12.2013             |
|           | Darsh Digital  | Darsh Digital Network                              | In the state of Bihar                  | Permanent (for 10      |
| 48.       | Network Pvt. Ltd.  | Pvt. Ltd. 2nd Floor,                               | In the state of Billar                 | years) Registration    |
| 10.       | 9/4/2013 - BP&L  | Suprabhat Building, Ceat                           |  | issued on              |
|           | ) 1/2010 BI GL   | Compound, Ehibition                                |  | 13.12.2013             |
|           |  | Road, Patna 800001                                 |  | 10.12.2010             |
|           | Take one JK  | Take one JK Media Pvt.                             | city/town/area of                      | Permanent (for 10      |
| 49.       | Media Pvt. Ltd.  | Ltd. Satyam Resort                                 | Srinagar only in the                   | years) Registration    |
|           | 9/11/2013 - BP&L   | Buidling, Marble Market,                           | state of Jammu                         | issued on              |
|           | 7,11,2010 21002  | Jammu(J&K)   | Kashmir                                | 11.12.2013             |
|           | Vinod Cable TV   | Vinod Cable TV Network                             | In the state of                        | Permanent (For 10      |
| 50.       | Network  | MCF 5662, Gali No. 25, E                           | Haryana                                | Years) Registration    |
|           | 9/18/2013 - BP&L   | Block, Sanjay Colony,                              |  | issued on              |
|           | , ,  | Sector 23, Faridabad,                              |  | 12.12.2013             |
|           |  | Haryana  |  |                        |
|           | Hathway MCN  | Hathway MCN Pvt. Ltd.                              | Aurangabad only                        | Permanent (For 10      |
| 51.       | Pvt. Ltd.  | 310/311 Akshyadeep                                 |  | years) Registration    |
|           | 9/64/2013 - BP&L   | Plazatown Centre, CIDCO                            |  | given on               |
|           |  | Jalna Road, Aurangabad                             |  | 12.12.2013             |
|           | Sri Rajaganapathi  | Sri Rajaganapathi Cable                            | District of Cuddalore                  | Permanent (For 10      |
| 52.       | Cable Network  | Network 205-A, Sewa                                | in the State of Tamil                  | years) Registration    |
|           | 9/140/2013 - BP  | Complex, MRK, Salai                                | Nadu                                   | given on               |
|           | & L  | India Nagar, Neyveli,                              |  | 30.06.2014             |
|           | 77 4 1 0 11  | 607801.  | D                                      | D //C 10               |
| 53.       | Krystal Cable  | Krystal Cable Network                              | Pune                                   | Permanent (for 10      |
| 53.       | Network owned by Mr. Gawli                                   | owned by Mr. Gawli                                 |  | years))                |
|           | Shailesh babulal   | Shailesh babulal Meera<br>Nagar Garden Society, B- |  | Registration issued on |
|           | 9/75/2013 - BP&L   | 14/4, Lane 7, Flat No. 4,                          |  | 12.12.2013             |
|           | 9/13/2013 - DF &L  | Koregaon Park, Pune                                |  | 12.12.2015             |
|           |  | 411001(Maharashtra)                                |  |                        |
|           | Venkateshwara  | Venkateshwara Digital                              | Kutukuluru &                           | Permanent (for 10      |
| 54.       | Digital Home   | Home Entertainment Pvt.                            | Nakapalli (AP)                         | years) Registration    |
| 01.       | Entertainment  | Ltd. Indian Express                                | Traisapain (111)                       | issued on              |
|           | Pvt. Ltd.  | Building, No. 1, 2nd                               |  | 11.12.2013             |
|           | 9/122/2012 -   | Floor, Queens Road,                                |  |                        |
|           | BP&L   | Bangalore – 560001,                                |  |                        |
|           | Madurai Krishna  | Madurai Krishna Network                            | Phase I, II & III,                     | Permanent (for 10      |
| 55.       | Network Pvt. Ltd   | Pvt. Ltd. No. 1, Malligai                          | , ,                                    | years) Registration    |
|           | 9/7/2013 - BP&L  | Malar Street, Bharathi                             |  | issued on              |
|           |  | Nagar, Krishnapuram                                |  | 11.12.2013             |
|           |  | Colony, Madurai-625014                             |  |                        |

| S1. | Name of the MSO               | Address of the MSO                              | Permitted City/                   | Status                                |
|-----|-------------------------------|---|-----------------------------------|---------------------------------------|
| No  |                               |   | Town/Area of                      |                                       |
|     | Poona Cables                  | Poona Cables Systems &                          | <b>Operation</b> Pimpri Chinchwad | Permanent (for 10                     |
| 56. | Systems &                     | Services 5- B, P.C. M.C.                        | 1 Impir Cimiciiwau                | years) Registration                   |
|     | Services                      | Colony, Ajmera Complex                          |                                   | issued on                             |
|     | 9/39/2013 - BP&L              | Pimpri Pune 411018                              |                                   | 12.12.2013                            |
|     | Chandni Cable                 | Chandni Cable Network                           | Phase II & III                    | Permanent (For 10                     |
| 57. | <b>Network</b> Owned by       | Owned by Mr. Mohar Pal                          |                                   | years) Registration                   |
|     | Mr. Mohar Pal                 | Dangar VPO Mohna,                               |                                   | issued on                             |
|     | Dangar. 9/111/<br>2013 - BP&L | Tehsil Ballabgarh Distt.<br>Faridabad           |                                   | 12.12.2013                            |
|     | Sri Venkata Nri               | Sri Venkata Nri Simha                           | Visakhapatnam                     | Permanent (For 10                     |
| 58. | Simha Digital                 | Digital Media Pvt. Ltd.                         | Vibalilapatilalii                 | years) Registration                   |
|     | Media Pvt. Ltd.               | Sri;. Mukha Complex 2nd                         |                                   | issued on                             |
|     | 9/77/2013 - BP&L              | Flour, D. NO. 48-9-1,                           |                                   | 12.12.2013                            |
|     |                               | Dwarkanagar,Ist Lane,                           |                                   |                                       |
|     | Sky Channel,                  | Visakhapatrnam 530016<br>Sky Channel, 11/9, CSM | New Delhi                         | Permanent (for 10                     |
| 59. | 9/25/2013 - BP&L              | Janak Puri, New Delhi-                          | New Dellii                        | years) Registration                   |
|     | )                             | 110058  |                                   | issued on                             |
|     |                               |   |                                   | 9.12.2013                             |
|     | Uvaca Digital                 | Uvaca Digital Systems                           | Patna                             | Permanent (For 10                     |
| 60. | Systems Pvt. Ltd              | Pvt. Ltd G-18, First Floor,                     |                                   | Years) Registration                   |
|     | 9/108/2013 -<br>BP&L          | Naraina Vihar, New Delhi<br>110028.             |                                   | issued on<br>01.11.2013               |
|     | International                 | International Digital                           | Mumbai District                   | Permanent (For 10                     |
| 61. | Digital Services,             | Services International                          | Walibar District                  | years) Registration                   |
|     | Mumbai                        | Digital Services 41/3045,                       |                                   | issued on                             |
|     | 9/101/2012 -                  | Abhyudaya Nagar,                                |                                   | 5.11.2013                             |
|     | BP&L                          | Kalachowki, Mumbai                              |                                   |                                       |
|     | Star Vision Mr.               | 400033<br>Sita Niwas, Kurji Balupar,            | Patna, Bhabua,                    | Dormonont (for 10                     |
| 62. | Anand Kumar                   | P.O. Sadaquat Ashram,                           | Buxuar, Muhania &                 | Permanent (for 10 years) Registration |
| 02. | Mishra 9/76/2013              | Patna 800010, Bihar                             | Ara,                              | issued on                             |
|     | - BP&L                        |   |                                   | 13.12.2013                            |
|     | Satellite                     | Satellite Communication                         | Anantnag district                 | Permanent (For 10                     |
| 63. | Communication                 | Network C/o Syed Abdul                          |                                   | years) Registration                   |
|     | Network No.                   | Rashid Hilal Super                              |                                   | issued on                             |
|     | 9/35/2013 - BP&L              | Computers, Main Bus<br>Stand, Anantnag,         |                                   | 16.12.2013                            |
|     |                               | Kashmir   |                                   |                                       |
| 64. | Sristi Cable TV               | Sristi Cable TV Network                         | Kolkata, Howrah,                  | Permanent (For 10                     |
|     | Network Ltd.,                 | Ltd. 47/1, Nafar Chandra                        | Hooghly, South 24                 | years) Registration                   |
|     | Kolkata                       | Das Road, Behala,                               | Parganas and North                | issued on                             |
|     | 9/107/2012 -                  | Kolkata-700034                                  | 24 Parganas                       | 16.12.2013                            |
| 1   | BP&L                          |   |                                   |                                       |

| S1. | Name of the MSO   | Address of the MSO  | Permitted City/                                    | Status  |
|-----|---|---|--|---|
| No  | Name of the MSO   | Address of the MSO  | Town/Area of                                       | Status  |
| 110 |   |   | Operation  |   |
| 65. | Kable First<br>Davangere Pvt.<br>Ltd. 9/126/2012 -<br>BP&L                        | Kable First Davangere Pvt. Ltd. M/s Kable First India Pvt. Ltd 2nd Floor, Indian Express Building, No. 1, Queen's Road, Bangalore 560001                            | Davangere  | Permanent (for 10 years) Registration issued on 16.12.2013          |
| 66. | HCV Digital<br>Entertainment<br>Pvt. Ltd.<br>9/120/2012 -<br>BP&L                 | HCV Digital Entertainment Pvt. Ltd D. No. 25-5-140, Near Co- operative Central Bank, N.R. Pet, Eluru 534 006, Andhra Pradesh.                                       | Eluru (Andhra<br>Pradesh)                          | Permanent (for 10 years) Registration issued on 16.12.2013          |
| 67. | Saharas<br>Entertainments<br>Pvt. Ltd.<br>Hyderabad<br>9/130/2012 -<br>BP&L       | Saharas Entertainments Pvt. Ltd. Plot No. MIG A94, Dr. A.S. Rao Nagar, Kapra, Hyderabad, Pin 500 062  | Rangaraddy District,<br>Hyderabad (GHMC<br>Limits) | Permanent (For 10<br>Years) registration<br>issued on<br>16.12.2013 |
| 68. | Digital Nucleus<br>Network<br>Communications<br>Pvt. Ltd.<br>9/66/2013 -<br>BP&L. | Digital Nucleus Network<br>Communications Pvt. Ltd<br>Room No. 665V, Ward 11,<br>Chaithanya Building,<br>Aluva Road Kalady po<br>Eranakulam(dist) Kerala,<br>683574 | In the state of Kerala                             | Permanent (For 10 Years) registration issued on 09.12.2013          |
| 69. | Lucknow 9 Cable<br>Network Pvt. Ltd.<br>9/89/2013 - BP&L                          | Lucknow 9 Cable Network<br>Pvt. Ltd. C 21/A,<br>Mansarovar Garden, New<br>Delhi 110015  | Lucknow, Kanpur,<br>Allahabad, Varanasi<br>& Agra, | Permanent (for 10 years) registration issued on 17.12.2013          |
| 70. | Sky Vision Cable<br>Network<br>9/109/2012 -<br>BP&L                               | Sky Vision Cable Network<br>B.L. NO. 15,H/No18,<br>PO Jagatdal, Meghana<br>More, 24 Parg Anas<br>(North) 743125 West<br>Bengal                                      | Kolkata  | Permanent (for 10 years) registration issued on 17.12.2013          |
| 71. | M/s Mandapeta Digital Entertainment Pvt. Ltd 9/123/2012- BP&L                     | Mandapeta Digital Entertainment Pvt. Ltd 2nd Floor Queens Road Bangalore-560001 Karnataka 08855-231749  | Mandepetta   | Permanent (for 10 years) registration issued on 17.12.2013          |
| 72. | Hathway Sonali<br>Om Crystal Cable<br>Pvt. Ltd. No.<br>9/9/2013 - BP&L            | Hathway Sonali Om<br>Crystal Cable Pvt. Ltd.<br>Rehajas,4Th Floor ,<br>Corner Of main Avenue &<br>V. P Road Santacruz<br>West, Mumbai 400054                        | Mumbai   | Permanent (for 10 years) registration issued on 17.12.2013          |

| <b>01</b> | , , , , , , , , , , , , , , , , , , ,   |   |  | · · ·  |
|-----------|---|---|--|--|
| S1.<br>No | Name of the MSO   | Address of the MSO  | Permitted City/<br>Town/Area of<br>Operation   | Status   |
| 73.       | Nandini Vision Cable Network 9/74/2013 - BP&L Sanjay Takale A/P Manjari Farm Shewalewadi Tal Havel Dist Pune 412307                         |   | Pune   | Permanent (For 10 years) registration issued on 17.12.2013 |
| 74.       | Ashraf Brothers<br>9/82/2013 - BP&L   | Ashraf Brothers 15-2-<br>454, Kishan Gunj,<br>Hyderabad 500 012.                                  | Areas Of Phase II<br>and Phase III, Phase<br>IV  | Permanent (For 10 years) registration issued on 30.05.2014 |
| 75.       | Den Rajkot<br>Communication<br>Pvt.Ltd.<br>9/50/2013 - BP&<br>L   | Den Rajkot<br>Communication Pvt.Ltd.<br>1-Kediya Naviline,<br>Gheekanta Road,Rajkot-<br>361001    | Areas of Rajkot,<br>Junagarh,<br>Jamnagar, Amreli<br>and all other cities of<br>Gujarat          | Permanent (for 10 years) registration issued on 29.05.2014 |
| 76.       | Home Cable<br>Networks<br>9/98/2013 - BP&L  | Home Cable Networks #4-<br>2175/3,Opp Vijaya Dairy  |  | Permanent (For 10 years) registration issued on 29.05.2014 |
| 77.       | Kozhikode Cable Communication Limited 9/78/2013 - BP&L Golden Chamber Building, kandamkulam Road, Tail, Chalappuram. Calicut, Kerala 673002 |   | In the state of Kerala<br>and Mahi<br>(puducherry)   | Permanent (for 10 years) registration issued on 29.05.2014 |
| 78.       | S.Digital & Dataco  |   | Telengana,Andhra<br>Pradesh and<br>Maharashtra state<br>under Phase III and<br>IV notified areas | Permanent (for 10 years) registration issued on 28.05.2014 |
| 79.       | Surya Digital<br>Broadcastings<br>9/116/2012 -<br>BP&L  | Surya Digital  Broadcastings  9/116/2012 - Surya Digital  Broadcastings 103-N,  Tamil Sangam Road |  | Permanent (For 10 years) registration issued on 29.05.2014 |
| 80.       | <b>AJK T.V</b><br>9/106/2012 -<br>BP&L  | AJK T.V No.28<br>Savaripadayachi Street<br>Nellithope Puducherry                                  | Puducherry,Villupur<br>am distric and<br>Cuddalore   | Permanent (for 10 years) registration issued on 03.02.2014 |
| 81.       | Barak<br>Communication<br>9/103/2013 -<br>BP&L  | M/s Barak<br>Communication Hospital<br>Road Silchar, Cachar,<br>Assam 788004                      | Notified areas of<br>Silchar,Karimganj<br>and Hailakandi   | Permanent (For 10 years) registration issued on 28.03.2014 |

| S1. | Name of the MSO   | SO Address of the MSO Permitted City/   |   | Status  |  |
|-----|---|---|---|---|--|
| No  | Name of the Moo   | Address of the M50  | Town/Area of  | Status  |  |
| 210 |   |   | Operation   |   |  |
| 82. | Blue Sky Network 9/124/2013 - BP&L  Blue Sky Network 14, Subash Road, Abhishek Tower Dehradun-248001  |   | District of Dehradun,<br>Rishikesh, Haridwar,<br>Pauri, Tehri &<br>Chamoli districts of<br>Uttarakhand and<br>Sirmor Districts of<br>Himachal Pradesh | Permanent up to 23.1.2024 registration issued on 14.08.2014 |  |
| 83. | <b>City TV</b><br>9/79/2013 - BP&L  | M/s City TV 41-43,Raju<br>Naidu Layout No 1, 100<br>Feet Road Gandhipuram<br>Coimbatore-641012  | Notified areas of coimbatore  | Permanent (For 10 years) registration issued on 18.03.2014  |  |
| 84. | Digi Space<br>Network Pvt. Ltd.<br>9/12/2013 - BP&L   | Digi Space Network Pvt.<br>Ltd. B-8, Marol Industrial<br>Area, Next to MIDC Police<br>Station, Andheri (East)<br>Mumbai 400093            | Notified areas of<br>Mumbai   | Permanent (for 10 years) registration issued on 23.05.2014  |  |
| 85. | Faction Digital Private Limited 9/104/2012 - BP&L  BP&L  Faction Digital Priv Limited Sec. 8, Poc 12, Plot No 79, 3rd Gate No. 3, East Mo Station Rohini, Nev - 110 083             |   | Notified Area of Delhi  | Permanent (for 10 years) registration issued on 06.01.2013  |  |
| 86. | Rather Cable<br>Network<br>9/130/2013- BP&L   | Rather Cable Network<br>Manigm Near Boys Higher<br>Secondary School, Teh:<br>LAR Distt: Ganderbal<br>J & K – 191201                       | Districts Manigam<br>Lar, Ganderbal in<br>the state of Jammu<br>& Kashmir   | Permanent (For 10 Years) registration given on 18.07.2014   |  |
| 87. | Mona Netvision 9/105/2013-BP&L  Mona Netvision (owners) Shri Pradip Keshrala Dhakre) Plot No. 13/ Survey No. 377, Vrattdarshan Tower, Nagar, Sillod, Tehsil- Sillod-43lll2l, Aurang |   | in the state of<br>Maharashtra  | Permanent (for 10 years) registration issued on 25.03.2014  |  |
| 88. | Pimpri Chinchwad<br>Media<br>Communications<br>Pvt Ltd'<br>9/100/2013-BP&L  | Pimpri Chinchwad Media<br>Communications Pvt Ltd'<br>5TH Floor Venkatesh<br>Market Above pimpri<br>Vegetable Market Pimpri<br>Pune 411017 | Notified areas of<br>Pimpri-Chinchwad<br>Area and Pune<br>District,   | Permanent (for 10 years) registration issued on 20.01.2014  |  |
| 89. | Pune 411017 <b>Raja Rajeshwari</b> Raja Rajeshwari  |   | Notified areas of<br>Nellore District   | Permanent (for 10 years) registration issued on 28.03.2014  |  |

| <b>C1</b> | Nome of the MCO         | a MSO Address of the MSO Downitted City / Status                                  |                                 |                                 |
|-----------|-------------------------|---|---------------------------------|---------------------------------|
| S1.<br>No | Name of the MSO         | Address of the MSO  | Permitted City/<br>Town/Area of | Status                          |
| NO        |                         |   | Operation                       |                                 |
|           | Sri Sai                 | Sri Sai Communicatrons  | Notified areas of               | Permanent (For 10               |
| 90.       | Communicatrons          | H .No 7-3-23 Sai Durga  | Siddipet,Medak,War              | Years) registration             |
|           | 9/63/2013 - BP&L        | Nilayam.II Floor, Main  | angal,Nalagonda,                | issued on                       |
|           | 3/00/2010 BI WE         | Road Siddipet <medak< td=""><td>Karimnagar &amp;</td><td>21.02.2014</td></medak<> | Karimnagar &                    | 21.02.2014                      |
|           |                         | Dist 502103 Andhra  | Nizamabad                       | 21.02.2011                      |
|           |                         | Pradesh   |                                 |                                 |
|           | T.A. Digital Cable      | T.A. Digital Cable Network  | notified areas in the           | Permanent (For 10               |
| 91.       | Network                 | 20-4-104/411, Zam Zam   | state of Andhra                 | Years) registration             |
|           | 9/115/2013- BP&L        | Complex, Behind   | Pradesh                         | issued on                       |
|           | , ,                     | Charminar Bus stop,   |                                 | 23.05.2014                      |
|           |                         | Hyderabad 500002  |                                 |                                 |
|           | Time-N-Tune             | Time-N-Tune   | Notified areas of               | Permanent (for 10               |
| 92.       | Communication           | Communication 156-  | Jammu & Kashmir,                | years) registration             |
|           | 9/97/2013 - BP&L        | Jawahar Nagar, Talab  | Punjab, Himachal                | issued on                       |
|           |                         | Tillo, Jammu(J&K)   | Pradesh, Rajasthan,             | 23.01.2014                      |
|           |                         | 180002  | Haryana,Uttar                   |                                 |
|           |                         |   | Pradesh & Delhi                 |                                 |
|           | Akash Tori              | Akash Tori Infocom  | Phase III & IV States           | Permanent (for 10               |
| 93.       | Infocom Services        | Services S-1, 6&7,  | of West Bengal,                 | years) registration             |
|           | 9/63/2013 - BP&L        | Commercial Estate, City   | Jharkhand, Bihar.               | issued on                       |
|           |                         | Center, Durgapur – 16.  | 51                              | 06.06.2014                      |
| 0.4       | Air Media Network       | Air Media Network Pvt.  | Phase I, II, III, IV            | Permanent (For 10               |
| 94.       | Pvt. Ltd.               | Ltd. 86, Periyar EVR  |                                 | Years) registration             |
|           | 9/138/2013 -<br>BP&L    | \high Road Chennai,   |                                 | given on                        |
|           | Nagai Television        | 600007<br>Nagai Television Network  | Nagapattinum and                | 19.06.2014<br>Permanent (For 10 |
| 95.       | Network                 | 48, Big Bazar Street,   | Thiruvarur in the               | Years) registration             |
| 93.       | 9/91/2013 - BP&L        | Nagapattinum, 611001  | State of Tamil Nadu             | given on                        |
|           | )                       | ivagapattiiiuii, 011001   | State of Tallin Nadu            | 13.06.2014                      |
|           | Kerala                  | Kerala Communicators  | Notified area in the            | Permanent (For 10               |
| 96.       | Communicators           | Cable Limited, Kerla VII  | Stat of Kerla and               | Years) registration             |
| - 0.      | Cable Limited,          | 495 ABC, Near uzhavoor  | Mahi.                           | given on                        |
|           | <b>Kerala</b> 9/83/2012 | Temple, south Thravu,   |                                 | 21.03.2014                      |
|           | - BP&L                  | Pudukkad, Thrissur,   |                                 |                                 |
|           |                         | 680301  |                                 |                                 |
|           | Digi Vishal             | Digi Vishal Kanpur  | Kanpur in the State             | Permanent (For 10               |
| 97.       | Kanpur Network          | Network Pvt.Ltd B-8,  | of Uttar Pradesh                | Years) registration             |
|           | Pvt.Ltd                 | Marol, Industrial Area,   |                                 | given on                        |
|           | 9/95/2013 -BP &L        | Next to MIDC Police   |                                 | 02.06.2014                      |
|           |                         | Station Andheri (E)   |                                 |                                 |
|           |                         | Mumbai 400093   |                                 |                                 |
|           | Studio 1                | Studio 1 Television   | Poonch Districts in             | Permanent (For 10               |
| 98.       | Television              | Network Main Bazar,Near   | the state of Jammu              | Years) registration             |
|           | Network                 | Akali Gurudwara, Poonch   | & Kashmir                       | given on                        |
|           | 9/116/2013-BP&L         | Jammu & Kashmir   |                                 | 06.06.2014                      |

| S1.  | Name of the MSO Address of the MSO Permitted City/ |   | Status                              |                                       |
|------|--|---|-------------------------------------|---------------------------------------|
| No   | 1.0  |   | Town/Area of                        | 5 005                                 |
|      |  |   | Operation                           |                                       |
|      | J.K Satellite                                      | J.K Satellite J K Building                        | Districts of Kulgam,                | Permanent (For 10                     |
| 99.  | 9/132/2013 -                                       | Near Distric Hospital                             | Anantang and                        | Years) registration                   |
|      | BP&L   | Kulgam Jammu &                                    | Shopian in the state                | given on                              |
|      | G . B  | Kashmir 192231                                    | of Jamu & Kashmir                   | 08.07.2014                            |
| 100. | Sagar E<br>Technologies                            | Sagar E Technologies<br>No.165.9th Cross, Near    | In the state of<br>Karnataka, Tamil | Permanent (For 10 Years) registration |
| 100. | 9/70/2013- BP&L                                    | KNE Trust School Ground                           | Nadu, Kerala,                       | given on                              |
|      | )  | above Dental Care, Indira                         | Maharashtra,                        | 08.07.2014                            |
|      |  | Nagar 1st stage , Banglore                        | Andhra Pradesh &                    |                                       |
|      |  | 560038  | Telangana Excluding                 |                                       |
|      |  |   | Hyderabad                           |                                       |
| 101  | ACT Digital Home                                   | ACT Digital Home                                  | Andhra Pradesh and                  | Permanent (For 10                     |
| 101. | Entertainment                                      | Entertainment Pvt Ltd Trade Center 4th Floor      | Telangana                           | Years) registration                   |
|      | <b>Pvt Ltd</b> 9/137/2012 -                        | 29/4 Race Course Road                             |                                     | given on<br>10.07.2014                |
|      | BP&L   | Banglore -560001                                  |                                     | 10.07.2014                            |
|      | Maharaja   | Maharaja Telesystems                              | Agra of Phase-II and                | Permanent (For 10                     |
| 102. | Telesystems  | Privat Limited 1 Mohan                            | Phase – I. III, IV on               | Years) registration                   |
|      | Private Limited                                    | Pehalwan Complex                                  | all India basic                     | given on                              |
|      | 9/37/2013 - BP&L                                   | Bhuteshwar Tiraha                                 |                                     | 08.07.2014                            |
|      | DVD  | Matura -281004 U.P.                               | I., 41., .4.4f                      | Danna and and to                      |
| 103. | RVR<br>Infrastructures                             | RVR Infrastructures Ltd<br>406 A Road No 18 ,     | In the state of Telangana and       | Permanent up to 22.7.2024 given       |
| 105. | Ltd 9/31/2012                                      | Jubilee Hills Hyderabad                           | Andhra Pradesh                      | registration issued                   |
|      | BP&L   | 500033  | (excluding                          | on 22.08.2014                         |
|      |  |   | Visakhapatnam)                      |                                       |
|      | Sri Sai Digital Sri Sai Digital                    |   | Srikakulam District                 | Permanent (For 10                     |
| 104. | Communications                                     | Communications D.No.                              | In the State of                     | Years) registration                   |
|      | 9/21/2014 – BP&L                                   | 2/38/1 Fareedpeta                                 | Andhra Pradesh                      | given on                              |
|      |  | Village, Etcherla Mandal<br>Srikakulam District   |                                     | 24.07.2014                            |
|      |  | Andhra Pradesh 532 410                            |                                     |                                       |
|      | Paramount Digital                                  | Paramount Digital Media                           | PAN INDIA                           | Permanent (For 10                     |
| 105. | Media services (P)                                 | services (P) Ltd. Corporate                       |                                     | Years) registration                   |
|      | <b>Ltd.</b> 9/143/2013 –                           | Office :G-366, Preet Vihar                        |                                     | given on                              |
|      | BP&L   | Delhi-110092                                      |                                     | 24.07.2014                            |
| 100  | Citi Cable   | Citi Cable Network 6th                            | In the State of Goa                 | Permanent (For 10                     |
| 106. | Network  | Floor,F-1,J.S. Vas Arcade,<br>Behaind Indus Bank, |                                     | Years) registration given on          |
|      | 9/112/2013 BP&L                                    | AbadeFariaaRoad, Margo-                           |                                     | 25.07.2014                            |
|      |  | Goa- 406301                                       |                                     | 20.07.2011                            |
|      | Next Generation                                    | Next Generation Cable                             | Pune District                       | Permanent (For 10                     |
| 107. | Cable  | Communication 1345                                |                                     | Years) registration                   |
|      | Communication                                      | Shivaji Nagar, Pune                               |                                     | given on                              |
|      | 9/8/2013 – BP&L                                    | 41005   |                                     | 25.07.2014                            |

| 01   | N C 41 - NCO                            | me of the MSO Address of the MSO Permitted City/ |                         |                     |
|------|---|--|-------------------------|---------------------|
| S1.  | Name of the MSO                         | Address of the MSO                               | Permitted City/         | Status              |
| No   |   |  | Town/Area of            |                     |
|      |   |  | Operation               | 5                   |
| 100  | Canara Star                             | Canara Star Communica-                           | In the State of         | Permanent (For 10   |
| 108. | Communications                          | tions Private Limited IInd                       | Karnataka except        | Years) registration |
|      | Private Limited                         | Floor, Vamanashram                               | Mysore City             | given on            |
|      | 9/140/2012 -                            | Building G.H.S Cross Road                        |                         | 25.07.2014          |
|      | BP&L                                    | Mangalore-575008                                 |                         |                     |
|      | Sree Digital Home                       | Sree Digital Home                                | East Godavari           | Permanent (For 10   |
| 109  | Entertainment                           | Entertainment Pvt. Ltd.                          | District In the state   | Years) registration |
|      | Pvt. Ltd.                               | Indian Express Building                          | of Andhra Pradesh       | given on            |
|      | 9/119/2012 -                            | No.I 2nd Floor , Queens                          |                         | 21.08.2014          |
|      | BP&L                                    | Road Bangalore - 560001                          |                         |                     |
| 110  | Koduri                                  | Koduri Satyanarayana, Sri                        | Khammam District        | Permanent (For 10   |
|      | Satyanarayana,                          | Sai Star T.V Services                            | of Telangana.           | Years) registration |
|      | Sri Sai Star T.V                        | 11-1-123,Club Road,                              |                         | given on3.09.2014   |
|      | Services                                | Bhadrachalam – 507111                            |                         |                     |
|      | 9/117/2013 -                            | Khammam District,                                |                         |                     |
|      | BP&L                                    | Telangana.                                       |                         |                     |
|      | Abhilash                                | Abhilash Communications                          | Notified Areas of       | Permanent (For 10   |
| 111. | Communications                          | H.No 4-5-51/1/1, Besides                         | Phase – II and Phase    | Years) registration |
|      | 9/127/2013 -                            | Childrens Home, Vidya                            | – III cities in PAN     | given on 3.09.2014  |
|      | BP&L                                    | Nagar, Adilabad - 504001                         | India.                  |                     |
|      | JPR Channel                             | JPR Channel                                      | Mumbai (Phase – I)      | Permanent (For 10   |
| 112. | 9/69/2012 - BP&L                        | 204-205, Nirmal Co-op,                           | and Phase – II areas    | Years) registration |
|      |   | Industrial Estate Limited,                       | in the State of         | given on 3.09.2014  |
|      |   | 2nd Floor Near Sion Fort                         | Maharashtra and         |                     |
|      |   | Sion Mumbai                                      | Gujarat                 |                     |
|      | Operator digital                        | Operator digital Tamilnadu                       | All the cities, towns   | Permanent (For 10   |
| 113. | Tamilnadu Pvt.                          | Pvt. Ltd.  | & villages of Phase II, | Years) registration |
|      | Ltd.                                    | 1/506, B2, Palaniandavar                         | III & IV in Tamil       | given on            |
|      | 9/137/2013 -                            | Koli St, Neelambur P.O                           | Nadu.                   | 9.09.2014           |
|      | BP&L                                    | Coimbatore – 641 062                             |                         |                     |
|      | VK Digital                              | VK Digital Network                               | Cities/Towns/Areas      | Permanent (For 10   |
| 114. | Network                                 | 3 A – 29, Willow Crest                           | occurring against       | Years) registration |
|      | 9/94/2012 - BP&L                        | 6th Main Road, R.                                | Phase I, Phase II,      | given on            |
|      | , ,                                     | A.Puram Chennai – 28                             | Phase III, Phase-IV.    | 19.09.2014          |
|      | Saga                                    | Saga Entertainment                               | In the State of Tamil   | Permanent (For 10   |
| 115. | Entertainment                           | Network Pvt Ltd                                  | Nadu.                   | Years) registration |
|      | Network Pvt Ltd                         | 2/187, 1st floor, 1st Main                       |                         | given on            |
|      | 9/70/2012 - BP&L                        | 4th Cross Gomathipuram,                          |                         | 22.09.2014          |
|      | , | Madurai 625020                                   |                         |                     |
|      | Talacher TV Home                        | Talacher TV Home Cable                           | Angul District &        | Permanent (For 10   |
| 116. | Cable Network                           | Network, TTV Complex                             | Dhenkanal District      | Years) registration |
|      | 9/129/2013 -                            | Khandual Lane, Lingaraj                          | Odisha                  | given on            |
|      | BP&L                                    | Road (Hatatota), Talcher –                       |                         | 22.09.2014          |
|      | 21 001                                  | 759100 Dist– Angul                               |                         |                     |
|      |   | (Odisha)   |                         |                     |
|      | ]                                       | (0410114)  | 1                       | i                   |

| S1.  | Name of the MSO   | MSO Address of the MSO Permitted City/  |   | Status   |
|------|---|---|---|--|
| No   |   | 11441055 01 0110 11250  | Town/Area of  | Status   |
|      |   |   | Operation   |  |
| 117. | Voice & Vision<br>Club<br>9/1/214 - BP&L                        | Voice & Vision Club<br>(Prop. Munish Kumar<br>Singh). M/Q – 349,<br>Jayant, Singrauli<br>(M.P) – 486890   | Phase III & IV of<br>Madhya Pradesh &<br>Sonebhadra Districts<br>of Uttar Pradesh.  | Permanent (For 10<br>Years) registration<br>given on<br>19.09.2014 |
| 118. | Den Satellite<br>Nework Private<br>9/49/2012 –<br>BP&L(part)    | Den Satellite Nework<br>Private, 401/402 4th<br>Floor, Sentinel<br>Hiranandani Business<br>park, Powai, Mumbai-76                               | In the State of<br>Maharashtra.   | Permanent (For 10<br>Years) registration<br>given on<br>19.09.2014 |
| 119. | Venkata Sai Media<br>Pvt Ltd<br>9/113/2012 –<br>BP&L            | Venkit Sai Media Pvt Ltd<br>#8-2-502/1/A/B, Top<br>Floor, Sowbhagya Adobe,<br>Road No. 7 Banjara Hills,<br>Hyderabad – 530017<br>Andhra Pradesh | District of Srikakulam, Vijayanagaram, Visakhapatanam, East Godavari, West Godavari, Krishna, Guntur, Prakasam and Nellore in the State of Andhra Pradesh and in the District of Greater Hyderabad, Rangareddy, Medak, Nizamabad, Mehaboob Nagar, Warangal, Sangareddy and Khammam in the State of Telangana. | Permanent (For 10 Years) registration given on 25.09.2014          |
| 120. | Crystal<br>Transmission<br>Private Limited.<br>9/84/2012 – BP&L | Crystal Transmission Private Limited No: 34, First Main Road New Colony Chromepet Chennai – 600044 Tamil Nadu                                   | Chennai<br>Metropolitan Area.   | Permanent (For 10<br>Years) registration<br>given on<br>25.09.2014 |
| 121. | Yerraguntla Cable<br>Network Pvt. Ltd.<br>9/26/2014 – BP&L      | Yerraguntla Cable<br>Network Pvt. Ltd.<br>H-9, ICL Colony<br>Muddanur Road,<br>Yerraguntla – 516309<br>Kadapa District, A. P.                   | Kadapa District<br>Andhra Pradesh<br>under Phase – III &<br>IV.   | Permanent (For 10 Years) registration given on 10.10.2014          |
| 122. | Royal Services Diginet Vision Pvt. Ltd. 9/20/2014 - BP&L        | Royal Services Diginet<br>Vision Pvt. Ltd,<br>VPO – Tauni Devi, Tehasil<br>– Bamson,<br>Disst. Hamirpur (H.P)<br>177023                         | Hamirpur District,<br>Mandi District and<br>Kangra District of<br>Himachal Pradesh.   | Permanent (For 10 Years) registration given on 10.10.2014          |

| 01        | 1 Name of the MCO Address of the MCO Downitted City/ State |   |                                       | Ct -t                  |
|-----------|--|---|---------------------------------------|------------------------|
| S1.<br>No | Name of the MSO  | Address of the MSO                        | Permitted City/<br>Town/Area of       | Status                 |
| NO        |  |   | Operation                             |                        |
|           | Silverline   | Silverline Entertainment                  | In the State of Uttar                 | Permanent (For 10      |
| 123.      | Entertainment  | 302, 3rd floor NPA Arcade                 | Pradesh except Agra,                  | Years) registration    |
| 120.      | 9/16/2013 - BP&L   | 23 M.G Marg, Civil Lines.                 | Ghaziabad, Kanpur,                    | given on               |
|           | ) 10/2010 BI WE  | Allahabad – 211001                        | Lucknow, Meerut                       | 15.10.2014             |
|           |  | Uttar Pradesh                             | and Varanasi.                         |                        |
|           | Hathway New  | Hathway New Concept                       | Delhi                                 | Permanent (For 10      |
| 124.      | Concept Cable &  | Cable & Datacom Pvt.                      |                                       | Years) registration    |
|           | Datacom Pvt. Ltd.  | Ltd., "Rehejas" 4th Floor,                |                                       | given on               |
|           | 9/93/2012 - BP&L   | Corner of Main Road                       |                                       | 20.10.2014             |
|           |  | Avenue & V.P Road,                        |                                       |                        |
|           |  | Santacruz (w),                            |                                       |                        |
|           |  | Mumbai – 400054                           |                                       |                        |
| 10-       | ACN Digital Pvt.   | ACN Digital Pvt. Ltd.                     | In the State of                       | Permanent (For 10      |
| 125.      | Ltd.   | 509, Shagun Building,                     | Madhya Pradesh,                       | Years) registration    |
|           | 9/13/2014 – BP&L   | Vijay Nagar Square,                       | Rajasthan and                         | given on               |
|           |  | A.B Road, Indore –<br>452010 (M.P)        | Maharashtra under                     | 20.10.2014             |
|           | Vortex Digital   | Vortex Digital Network                    | Phase- III & IV.                      | Permanent (For 10      |
| 126.      | Network Pvt.Ltd.   | Pvt.Ltd.                                  | Bellii                                | Years) registration    |
| 120.      | 9/33/2014 – BP&L   | WZ – 300 GL – 10, 2nd                     |                                       | given on               |
|           | 3/00/2011 Braz   | Floor Jail Road,                          |                                       | 28.10.2014             |
|           |  | New Delhi - 110064                        |                                       |                        |
|           | Sanghvi Digital  | Sanghvi Digital Network                   | Bokaro District in                    | Permanent (For 10      |
| 127.      | Network  | GA – 23, 1st Floor , City                 | the State of                          | Years) registration    |
|           | 9/142/2013 -   | Center, Sector -4,                        | Jharkhand.                            | given on               |
|           | BP&L   | B.S. City, Bokaro –                       |                                       | 28.10.2014             |
|           |  | 827004.                                   |                                       |                        |
|           |  | Jharkhand                                 |                                       | 7 10                   |
| 100       | Skynet Digital   | Skynet Digital Services                   | In the State of Uttar                 | Permanent (For 10      |
| 128.      | Services Pvt. Ltd  | Pvt. Ltd                                  | Pradesh, except the                   | Years) registration    |
|           | 9/5/2013-BP&L  | 403, 4th Floor NPA<br>Arcade23 M.G . Marg | cities of Agra,                       | given on<br>07.11.2014 |
|           |  | Civil Lines, Allahabad –                  | Ghaziabad, Kanpur,<br>Lucknow, Meerut | 07.11.2014             |
|           |  | 211001(U.P                                | and Varanasi.                         |                        |
|           | Karuvai  | Karuvai Communication                     | DAS notified areas in                 | Permanent (For 10      |
| 129.      | Communication  | LLP No. 224, Anbu Nagar,                  | the State of Tamil                    | Years) registration    |
|           | LLP  | 2nd Cross, Rayanoor,                      | Nadu.                                 | given on               |
|           | 9/53/2013-BP&L   | Thoranakalpatty,                          |                                       | 27.11.2014             |
|           |  | Karur – 6390003. TN                       |                                       |                        |
|           | Ajanta Cable   | Ajanta Cable Network                      | DAS notified area of                  | Permanent (For 10      |
| 130       | Network  | Plot No, 40-1575,                         | Phase – III in                        | Years) registration    |
|           | 9/18/2014 – BP&L   | Near Swastik Talkies,                     | Vaijapur,                             | given on               |
|           |  | Station Road Vaijapur –                   | Aurangabad in                         | 19.12.2014             |
|           |  | 423701 Aurangabad                         | Maharashtra State.                    |                        |

| S1.  | Name of the MSO                              | Address of the MSO Permitted City/ |                             | Status              |
|------|--|------------------------------------|-----------------------------|---------------------|
| No   |  |                                    | Town/Area of                |                     |
|      |  |                                    | Operation                   |                     |
|      | New Prime                                    | New Prime Network                  | DAS notified in             | Permanent (For 10   |
| 131. | Network                                      | 11 – E Rohini Plaza,               | Dehradun, Haridwar,         | Years) registration |
|      | 9/87/2014 - BP&L                             | Rajpur road,                       | Tehri Garhwal,Pauri         | given on            |
|      | , ,  | Dehradun 248001                    | Garhwal,Rudrapraya          | 23.12.2014          |
|      |  | Uttarakhand                        | g, Chamoli Garhwal,         |                     |
|      |  |                                    | Uttarkashi Districts        |                     |
|      |  |                                    | in the state of             |                     |
|      |  |                                    | Uttarakhand.                |                     |
|      | Jai Mata Di Cable                            | Jai Mata Di Cable                  | DAS notified areas in       | Permanent (For 10   |
| 132. | Network                                      | Network,                           | Mehendergarh,               | Years) registration |
|      | 9/6/2/2014 – BP                              | Ward – 8, Near                     | Rewari, Bhiwani &           | given on            |
|      | &L   | Vishwakerma Mandir,                | Jhajjar District of         | 15.12.2014          |
|      |  | Kanina,                            | Haryana and Alwar           |                     |
|      |  | Dist:- Mahendergarh                | & Jhunjhnu District         |                     |
|      |  | Haryana – 123027                   | of Rajasthan.               |                     |
|      | Onsky Technology                             | Onsky Technology Pvt Ltd           | PAN India                   | Permanent (For 10   |
| 133. | Pvt. Ltd                                     | No. 4, 7th Cross                   |                             | Years) registration |
|      | 9/55/2014 – BP&L                             | Brindavan,                         |                             | given on            |
|      |  | Pondicherry – 605 013.             | 540 110 1                   | 03.12.2014          |
| 101  | Space Television                             | Space Television Network           | DAS notified area in        | Permanent (For 10   |
| 134. | Network Pvt. Ltd                             | Pvt. Ltd, Bungalow No.4,           | Municipal Council of        | Years) registration |
|      | 9/58/2014 – BP&L                             | HUC Guest House,                   | Greater Mumbai in           | given on            |
|      |  | Mohapada, Rasayani,                | Phase – I and Rest of       | 15.12.2014          |
|      | Tal. Khalapur. Dist,<br>Raigadh, Maharashtra |                                    | Maharashtra in              |                     |
|      |  |                                    | Phase - III In the State of | Permanent (For 10   |
| 135. |  |                                    | Uttarakhand                 | Years) registration |
| 133. | 9/14/2014 – BP&L                             | IInd Floor, Savitri City,          | Ottaraknanu                 | given on            |
|      | 9  14  2014 - DI &L                          | Centre Jail Road                   |                             | 12.12.2014          |
|      |  | Chauraha, Kaladhungi               |                             | 12,12,2011          |
|      |  | Road, Haldwani – 263139            |                             |                     |
|      | V. R. Cable                                  | V. R. Cable                        | In the cities of            | Permanent (For 10   |
| 136. | 9/147/2013 -                                 | No. 6, Mannaraja Koil              | Kanyakumari,                | Years) registration |
| 155. | BP&L   | Street, Tisaiyanvillai -           | Tuticorin & Chennai         | given on            |
|      |  | 627657                             | in Tamil Nadu State         | 12.12.2014          |
|      | Satellite Cable                              | Satellite Cable                    | Phase – II, III, & IV       | Permanent (For 10   |
| 137  | Communication                                | Communication                      | areas in Pune               | Years) registration |
|      | 9/22/2014 – BP&L                             | Lonar Gali, At P.O.                | District and Nasik          | given on            |
|      |  | Manchar, Taluka :                  | District                    | 12.12.2014          |
|      | Ambegaon, Dist– Pune –                       |                                    |                             |                     |
|      |  | 410503 (Maharashtra).              |                             |                     |
| 138. | R.D Cable                                    | R.D Cable Network                  | DAS notified area in        | Permanent (For 10   |
|      | Network                                      | H. No. 230 Ward No. 10,            | Canacona, Quepem,           | Years) registration |
|      | 9/47/2014 - BP&L                             | Devabag Canacona                   | Sanguem and                 | given on            |
|      |  | South Goa                          | Salcettte in the state      | 29.12.2014          |
|      |  |                                    | of Goa                      |                     |

Annexure 5.2: List of Pay Channels as reported to TRAI

| S1.<br>No. | Name of the broadcaster                        | S1.<br>No | Name of the channel   |
|------------|--|-----------|---|
| 1          | M/s 9X Media Private Limited                   | 1         | 9X  |
|            |  | 2         | 9X Jalwa  |
|            |  | 3         | 9X Jhakaas  |
|            |  | 4         | 9XM   |
|            |  | 5         | 9XO   |
| 2          | M/s AETN 18 Media Pvt Ltd                      | 6         | The History Channel   |
| 3          | M/s Asianet Communications                     | 7         | Asianet   |
|            | Limited  | 8         | Asianet Plus  |
|            |  | 9         | Suvarna   |
| 4          | M/s Azalia Broadcast Private Ltd               | 10        | Big Thrill (Earlier name Big RTL Thrill")                         |
| 5          | M/s B4U Television Network India<br>Limited    | 11        | B4U Movies  |
| 6          | M/s Bangla Entertainment Pvt Ltd               | 12        | AATH  |
| 7          | M/s BBC Global News India<br>Private Limited   | 13        | BBC World News  |
| 8          | M/s Bennett, Coleman &                         | 14        | Zoom  |
|            | Company Limited                                | 15        | Romedy Now  |
|            |  | 16        | Movies Now + (Earlier name "Romedy Now +")                        |
| 9          | M/s Business Broadcast News<br>Private Limited | 17        | Bloomberg TV India  |
| 10         | M/s Celebrities Management Pvt<br>Limited      | 18        | Travel XP HD (Earlier name "Travel XP")                           |
| 11         | M/s Dakshin Media Gaming<br>Solutions Pvt Ltd  | 19        | Ten Cricket (earlier name "Play TV")                              |
| 12         | M/s Discovery Communications                   | 20        | Animal Planet   |
|            | India  | 21        | Discovery Channel   |
|            |  | 22        | Discovery Channel – Tamil   |
|            |  | 23        | Discovery Kids Channel  |
|            |  | 24        | Discovery Science   |
|            |  | 25        | Discovery Turbo   |
|            |  | 26        | ID Investigation Discovery  |
|            |  | 27        | Discovery HD World (earlier name "Discovery HD")                  |
|            |  | 28        | Animal Planet HD World (earlier name "Discovery Home and Health") |
|            |  | 29        | TLC HD world (earlier name "Military                              |
|            |  |           | Channel")   |
|            |  | 30        | TLC   |

| S1.<br>No. | Name of the broadcaster                          | S1.<br>No | Name of the channel  |
|------------|--|-----------|--|
| 13         | E-24 Glamour Limited                             | 31        | E 24   |
| 14         | M/s Eenadu Televisoin Private                    | 32        | ETV Telugu   |
|            | Limited  | 33        | ETV Andhra Pradesh (earlier name "ETV-2")                  |
|            |  | 34        | ETV- Telangana (earlier name "ETV-3")                      |
| 15         | M/s EPIC Television Networks Pvt<br>Limited      | 35        | EPIC TV  |
| 16         | M/s Fox Channels (India) Private                 | 36        | Nat Geo Wild   |
|            | Limited  | 37        | Nat Geo People (Earlier name "Nat Geo<br>Adventure")       |
|            |  | 38        | National Geographic HD                                     |
|            |  | 39        | Nat Geo Music (HD Distribution)                            |
|            |  | 40        | Nat Geo Wild HD  |
|            |  | 41        | Nat Geo People HD (Earlier name "Nat<br>Geo Adventure HD") |
|            |  | 42        | Baby TV (HD Distribution )                                 |
| 17         | M/s Genx Entertainment Limited                   | 43        | UTV Bindass  |
|            |  | 44        | UTV Action   |
| 18         | M/s IBN Lokmat News Private Ltd                  | 45        | IBN Lokmat   |
| 19         | M/s MAA Television Network                       | 46        | MAA Gold (Earlier name "MAA Junior")                       |
|            | Limited  | 47        | MAA Movies (Earlier name "MAA Pooja")                      |
|            |  | 48        | MAA Music  |
|            |  | 49        | MAA TV   |
| 20         | M/s Mavis Satcom Limited                         | 50        | J Movies   |
|            |  | 51        | Jaya Max   |
|            |  | 52        | Jaya Plus  |
|            |  | 53        | Jaya TV  |
| 21         | M/s Media Content and                            | 54        | ABP Ananda   |
|            | Communications Services India<br>Private Limited | 55        | ABP Majha  |
| 22         | M/s MGM Programming Services<br>India Pvt Ltd    | 56        | The MGM  |
| 23         | M/s Multi Screen Media Private                   | 57        | Animax   |
|            | Limited  | 58        | AXN  |
|            |  | 59        | SET MAX  |
|            |  | 60        | MIX  |
|            |  | 61        | SAB  |
|            |  | 62        | SONY ENTERTAINMENT CHANNEL                                 |
|            |  |           | (SET)  |

| S1.<br>No. | Name of the broadcaster          | S1.<br>No | Name of the channel                      |
|------------|----------------------------------|-----------|--|
|            |                                  | 63        | PIX                                      |
|            |                                  | 64        | SIX                                      |
|            |                                  | 65        | MAX 2 (Earlier name "MAX HD")            |
|            |                                  | 66        | PAL (Earlier Name "SAB HD")              |
|            |                                  | 67        | SET HD                                   |
|            |                                  | 68        | SIX HD                                   |
|            |                                  | 69        | PIX HD                                   |
| 24         | M/s NDTV Life style Limited      | 70        | NDTV Good Times                          |
| 25         | M/s Neo Sports Broadcast Pvt     | 71        | NEO Prime (Earlier name "Neo Cricket")   |
|            | Limited                          | 72        | Neo Sports                               |
| 26         | M/s New Delhi Television Limited | 73        | NDTV 24*7                                |
|            |                                  | 74        | NDTV India                               |
|            |                                  | 75        | NDTV Profit                              |
| 27         | M/s NGC Network (India) Pvt      | 76        | Fox Life (earlier name "Fox Traveller" ) |
|            | Limited                          | 77        | National Geographic Channel (NGC)        |
|            |                                  | 78        | Fox Life HD (Earlier name "Fox           |
|            |                                  |           | Traveller HD")                           |
| 28         | M/s Odisha Television Limited    | 79        | Prarthana                                |
|            |                                  | 80        | Tarang                                   |
|            |                                  | 81        | Tarang Music                             |
|            |                                  | 82        | Alankar                                  |
| 29         | M/s Panorama Television Private  | 83        | ETV Bihar Jharkhand                      |
|            | Limited                          | 84        | ETV MP Chattisgarh                       |
|            |                                  | 85        | ETV Rajasthan                            |
|            |                                  | 86        | ETV Uttar Pradesh Uttarachal             |
|            |                                  | 87        | ETV Urdu                                 |
|            |                                  | 88        | ETV News Kannada                         |
|            |                                  | 89        | ETV News Bangla                          |
|            |                                  | 90        | ETV Haryana / Himanchal Pradesh          |
|            |                                  | 91        | ETV News Gujarati                        |
| 30         | M/s Paul Entertainments Pvt Ltd  | 92        | 9X Tashan (Earlier name "Purvaiya")      |
| 31         | M/s Prism Television Private     | 93        | ETV Bangla                               |
|            | Limited                          | 94        | ETV Gujarati                             |
|            |                                  | 95        | ETV Kannada                              |
|            |                                  | 96        | ETV Marathi                              |
|            |                                  | 97        | ETV Oriya                                |
| 32         | M/s Raj Television Network       | 98        | Raj Musix Kannada                        |
|            | Limited                          | 99        | Raj Digital Plus                         |

| S1.<br>No. | Name of the broadcaster                  | S1.<br>No | Name of the channel                                  |
|------------|--|-----------|--|
|            |  | 100       | Raj Musix  |
|            |  | 101       | Raj News   |
|            |  | 102       | Raj TV   |
|            |  | 103       | Vissa TV   |
| 33         | M/s Reliance BIG Broadcasting            | 104       | BIG MAGIC  |
|            | Pvt Limited                              | 105       | Big Magic Ganga (Earliar name "Big<br>Magic Bihar")  |
| 34         | M/s Sahara India Commercial              | 106       | Sahara Filmy   |
|            | Corporation Ltd                          | 107       | Sahara One   |
| 35         | M/s Sarthak Entertainment Pvt<br>Limited | 108       | Sarthak TV   |
| 36         | M/s Silverstar Communications            | 109       | Mega 24  |
|            | Limited                                  | 110       | Mega Musiq   |
|            |  | 111       | Mega TV  |
| 37         | M/s Star India Private Limited           | 112       | Channel (V)  |
|            |  | 113       | Star Sports 4 (Earlier name of "ESPN")               |
|            |  | 114       | FOX CRIME  |
|            |  | 115       | FX   |
|            |  | 116       | Life Ok (earlier name "Star One")                    |
|            |  | 117       | Movies OK (earlier name "Gold Action")               |
|            |  | 118       | Star Sports 3 (Earlier name of "Star<br>Cricket")    |
|            |  | 119       | Star Gold  |
|            |  | 120       | Star Jalsha  |
|            |  | 121       | Star Movies  |
|            |  | 122       | Star Movies Action                                   |
|            |  | 123       | Star Plus  |
|            |  | 124       | Star Pravah  |
|            |  | 125       | Star Sports1(Earlier name"Star Sports")              |
|            |  | 126       | Star Sports 2  |
|            |  | 127       | Star World   |
|            |  | 128       | Jalsha Movies (Earlier name "Star<br>Bengali")       |
|            |  | 129       | Star Sports HD 2 (Earlier name of "ESPN HD")         |
|            |  | 130       | Star Sports HD 1 (Earlier name of "Star Cricket HD") |
|            |  | 131       | Life Ok HD   |
|            |  | 132       | Star Gold HD   |

| S1.<br>No. | Name of the broadcaster    | S1.<br>No | Name of the channel                 |
|------------|----------------------------|-----------|-------------------------------------|
|            |                            | 133       | Star Movies HD                      |
|            |                            | 134       | Star Plus HD                        |
|            |                            | 135       | Star World Prmiere HD               |
|            |                            | 136       | Star World HD                       |
| 38         | M/s SUN TV Network Limited | 137       | Adithya TV                          |
|            |                            | 138       | Chintu TV                           |
|            |                            | 139       | Chutti TV                           |
|            |                            | 140       | Gemini Comedy                       |
|            |                            | 141       | Gemini Life                         |
|            |                            | 142       | Gemini Movies                       |
|            |                            | 143       | Gemini Music                        |
|            |                            | 144       | Gemini News                         |
|            |                            | 145       | Gemini TV                           |
|            |                            | 146       | K TV                                |
|            |                            | 147       | Kiran TV                            |
|            |                            | 148       | Kushi TV                            |
|            |                            | 149       | SUN Life                            |
|            |                            | 150       | Sun Music                           |
|            |                            | 151       | Sun News                            |
|            |                            | 152       | Surya Music (Earlier name "Sun News |
|            |                            |           | English")                           |
|            |                            | 153       | SUN TV                              |
|            |                            |           | SUN TV RI                           |
|            |                            |           | Surya TV                            |
|            |                            |           | Udaya Comedy                        |
|            |                            | 157       | ž                                   |
|            |                            | 158       | 3                                   |
|            |                            | 159       | Udaya News                          |
|            |                            | 160       | Udaya TV                            |
|            |                            | 161       | Kochu TV                            |
|            |                            | 162       | Sun TV HD                           |
|            |                            | 163       | KTV HD                              |
|            |                            | 164       | Sun Music HD                        |
|            |                            | 165       | Gemini TV HD                        |
|            |                            | 166       | Sun Action                          |
|            |                            | 167       | Gemini Action                       |
|            |                            | 168       | Surya Action                        |
|            |                            | 169       | Suriyan Tv                          |

| S1.<br>No. | Name of the broadcaster                     | S1.<br>No | Name of the channel                          |
|------------|---|-----------|--|
| 39         | M/s Taj Television India Private            | 170       | Ten Action                                   |
|            | Limited                                     | 171       | Ten Sports                                   |
|            |   | 172       | Ten Golf                                     |
|            |   | 173       | Ten HD                                       |
| 40         | M/s Times Global Broadcasting               | 174       | ET NOW                                       |
|            | Company Ltd                                 | 175       | Times Now                                    |
| 41         | M/s Turmeric Vision Pvt Ltd                 | 176       | Food Food TV                                 |
| 42         | M/s Turner International India Pvt          | 177       | Cartoon Network                              |
|            | Ltd   | 178       | CNN International                            |
|            |   | 179       | HBO  |
|            |   | 180       | POGO   |
|            |   | 181       | Toonami (Earlier name "Boomerang")           |
|            |   | 182       | WB   |
|            |   | 183       | HBO Hits HD                                  |
|            |   | 184       |  |
| 43         | M/s TV 18 Broadcast Limited                 | 185       | CNN-IBN                                      |
|            |   | 186       | IBN 7  |
|            |   | 187       | CNBC Bajaar                                  |
|            |   | 188       | CNBC TV 18 Prime HD                          |
|            |   | 189       |  |
|            |   | 190       | CNBC TV 18                                   |
| 44         | M/s TV Today Network Limited                | 191       | Aaj Tak                                      |
|            |   | 192       | Delhi Aaj Tak                                |
|            |   | 193       | J  |
|            |   | 194       | 3  |
| 45         | M/s United Home Entertainment Pvt Limited   | 195       | Hungama TV                                   |
| 46         | M/s UTV Entertainment Television<br>Limited | 196       | Disney Junior (Earlier name "UTV<br>Comedy") |
|            |   | 197       | UTV Movies                                   |
|            |   | 198       | UTV World Movies                             |
|            |   | 199       | Bindass Play (Earlier name"UTV Stars")       |
| 47         | M/s Viacom 18 Media Private                 | 200       | Colors                                       |
|            | Limited                                     | 201       | Comedy Central                               |
|            |   | 202       | MTV  |
|            |   | 203       | NICK   |
|            |   | 204       | Nick Jr / Teen Nick                          |
|            |   | 205       | SONIC  |
|            |   | 206       | VH 1   |
|            |   | 207       | Colors HD                                    |
|            |   | 208       | MTV Indies                                   |
| 48         | M/s Vijay Television Pvt Limited            | 209       | Vijay TV                                     |

| S1.<br>No. | Name of the broadcaster                   | S1.<br>No | Name of the channel                    |
|------------|---|-----------|--|
| 49         | M/s Zee Akaash News Pvt Ltd               |           | 24 Ghanta                              |
| 50         | M/s Zee Entertainment                     | 211       |  |
|            | Enterprises Limited                       |           | Bollywood")                            |
|            | r   | 212       | <i>y</i> ,                             |
|            |   | 213       | Zee Bangla Cinema                      |
|            |   | 214       |  |
|            |   | 215       | Zee Cinema                             |
|            |   | 216       | Classic Cinema                         |
|            |   | 217       | Premiere Cinema                        |
|            |   | 218       | Zee Salaam                             |
|            |   | 219       | Zee Smile                              |
|            |   | 220       | Zee Studio                             |
|            |   | 221       | Zee Talkies                            |
|            |   | 222       | Zee TV                                 |
|            |   | 223       | Zing                                   |
|            |   | 224       | Zindagi                                |
|            |   | 225       | & Picture                              |
|            |   | 226       | Zee Q                                  |
|            |   | 227       | Zee Khana Khazana                      |
|            |   |           | Zee TV HD                              |
|            |   |           | Zee Cinema HD                          |
|            |   | 230       | Zee Studio HD                          |
|            |   | 231       | Zee Bangla                             |
|            |   | 232       | Zee Marathi                            |
|            |   | 233       | & Pictures HD                          |
| 51         | M/s Zee Media Corporation                 |           | Zee 24 Taas                            |
|            | Limited                                   | 235       | 0 (                                    |
|            |   |           | Ghantalu)                              |
|            |   | 236       |  |
|            |   | 237       | Zee Kannada                            |
|            |   | 238       | Zee News                               |
|            |   | 239       | Zee Punjab Haryana Himachal (Earlier   |
|            |   |           | name "Zee Punjabi")                    |
|            |   | 240       | Zee Telugu                             |
|            |   | 241       | Zee Madhya Pradesh Chattisgarh         |
|            |   | 242       | Zee Marudhara (Earlier name "Zee       |
| F.0        | M/ Z                                      | 0.40      | Rajasthan Plus")                       |
| 52         | M/s Zoom Entertainment Network<br>Limited | 243       | Movies Now                             |
| 53         | M/s The Walt Disney Company               | 244       | Disney XD (Earlier name "Toon Disney") |
|            | (India) Pvt Limited                       | 245       | The Disney Channel                     |

Annexure 5.3: List of operational private FM Radio Stations in India

| S No. | CITY               | NAME OF THE COMPANY   | CHANNEL<br>IDENTITY | DATE OF OPERATIONA- LISATION |
|-------|--------------------|-----------------------|---------------------|------------------------------|
| 1     | KOLKATA            | ANANDA OFFSET         | FRIEND 91.9         | 28.02.2007                   |
| 2     | KANNUR             | ASIANET COMMUNICATION | BEST FM             | 13.01.2008                   |
| 3     | THRISSUR           | ASIANET COMMUNICATION | BEST FM             | 23.12.2007                   |
| 4     | AHMEDNAGAR         | B.A.G. INFOTAINMENT   | RADIO-DHAMAL        | 07.02.2008                   |
| 5     | DHULE              | B.A.G. INFOTAINMENT   | RADIO-DHAMAL        | 15.08.2007                   |
| 6     | HISSAR             | B.A.G. INFOTAINMENT   | RADIO-DHAMAL        | 18.06.2007                   |
| 7     | JABALPUR           | B.A.G. INFOTAINMENT   | RADIO-DHAMAL        | 15.02.2008                   |
| 8     | JALGOAN            | B.A.G. INFOTAINMENT   | RADIO-DHAMAL        | 01.04.2008                   |
| 9     | KARNAL             | B.A.G. INFOTAINMENT   | RADIO-DHAMAL        | 18.06.2007                   |
| 10    | MUZAFFARPUR        | B.A.G. INFOTAINMENT   | RADIO-DHAMAL        | 01.08.2007                   |
| 11    | PATIALA            | B.A.G. INFOTAINMENT   | RADIO-DHAMAL        | 18.06.2007                   |
| 12    | RANCHI             | B.A.G. INFOTAINMENT   | RADIO-DHAMAL        | 15.11.2007                   |
| 13    | SHIMLA             | B.A.G. INFOTAINMENT   | RADIO-DHAMAL        | 05.11.2009                   |
| 14    | GANGTOK            | CHINAR CIRCUITS       | NINE-91.9 FM        | 25.09.2008                   |
| 15    | DELHI              | CLEAR MEDIA           | HIT-FM              | 01.09.2006                   |
| 16    | AHMEDABAD          | D.B. CORP.            | MY-FM               | 21.07.2007                   |
| 17    | AJMER              | D.B. CORP.            | MY-FM               | 31.08.2007                   |
| 18    | AMRITSAR           | D.B. CORP.            | MY-FM               | 27.07.2007                   |
| 19    | BHOPAL             | D.B. CORP.            | MY-FM               | 26.05.2007                   |
| 20    | BILASPUR           | D.B. CORP.            | MY-FM               | 27.09.2007                   |
| 21    | CHANDIGARH<br>(UT) | D.B. CORP.            | MY-FM               | 19.02.2007                   |
| 22    | GWALIOR            | D.B. CORP.            | MY-FM               | 06.08.2007                   |
| 23    | INDORE             | D.B. CORP.            | MY-FM               | 11.08.2007                   |
| 24    | JABALPUR           | D.B. CORP.            | MY-FM               | 23.02.2008                   |
| 25    | JAIPUR             | D.B. CORP.            | MY-FM               | 28.05.2006                   |
| 26    | JALANDHAR          | D.B. CORP.            | MY-FM               | 19.04.2007                   |
| 27    | JODHPUR            | D.B. CORP.            | MY-FM               | 20.12.2007                   |

| S No. | CITY                     | NAME OF THE COMPANY                 | CHANNEL<br>IDENTITY | DATE OF OPERATIONA- LISATION |
|-------|--------------------------|-------------------------------------|---------------------|------------------------------|
| 28    | КОТА                     | D.B. CORP.                          | MY-FM               | 02.02.2008                   |
| 29    | NAGPUR                   | D.B. CORP.                          | MY-FM               | 21.10.2007                   |
| 30    | RAIPUR                   | D.B. CORP.                          | MY-FM               | 16.01.2008                   |
| 31    | SURAT                    | D.B. CORP.                          | MY-FM               | 27.08.2007                   |
| 32    | UDAIPUR                  | D.B. CORP.                          | MY-FM               | 07.07.2007                   |
| 33    | DELHI                    | DIGITAL RADIO                       | RED-FM              | 29.04.2003<br>(01.04.2005*)  |
| 34    | MUMBAI                   | DIGITAL RADIO                       | RED-FM              | 29.04.2002<br>(01.04.2005*)  |
| 35    | KOLKATA                  | DIGITAL RADIO                       | RED-FM              | 03.05.2003<br>(01.04.2005*)  |
| 36    | BHUBANESHW<br>AR/ CUTTAK | EASTERN MEDIA                       | CHOCOLATE           | 04.05.2007                   |
| 37    | ROURKELA                 | EASTERN MEDIA                       | RADIO-<br>CHOCOLATE | 23.01.2008                   |
| 38    | AHMEDABAD                | ENTERTAINMENT NETWORK INDIA LTD.    | RADIO- MIRCHI       | 10.12.2001(01.<br>04.2005*)  |
| 39    | AURANGABAD               | ENTERTAINMENT NETWORK INDIA LTD.    | RADIO- MIRCHI       | 24.07.2007                   |
| 40    | BENGALURU                | ENTERTAINMENT NETWORK INDIA LTD.    | RADIO- MIRCHI       | 17.04.2006                   |
| 41    | BHOPAL                   | ENTERTAINMENT NETWORK<br>INDIA LTD. | RADIO- MIRCHI       | 26.05.2007                   |
| 42    | CHENNAI                  | ENTERTAINMENT NETWORK<br>INDIA LTD. | RADIO- MIRCHI       | 05.05.2003<br>(01.04.2005*)  |
| 43    | COIMBATORE               | ENTERTAINMENT NETWORK INDIA LTD.    | RADIO- MIRCHI       | 03.11.2007                   |
| 44    | DELHI                    | ENTERTAINMENT NETWORK INDIA LTD.    | RADIO- MIRCHI       | 29.04.2003<br>(01.04.2005*)  |
| 45    | HYDERABAD                | ENTERTAINMENT NETWORK INDIA LTD.    | RADIO- MIRCHI       | 19.04.2006                   |
| 46    | INDORE                   | ENTERTAINMENT NETWORK INDIA LTD.    | RADIO- MIRCHI       | 01.10.2001<br>(01.04.2005*)  |
| 47    | JABALPUR                 | ENTERTAINMENT NETWORK INDIA LTD.    | RADIO- MIRCHI       | 16.02.2008                   |
| 48    | JAIPUR                   | ENTERTAINMENT NETWORK INDIA LTD.    | RADIO- MIRCHI       | 17.04.2006                   |
| 49    | JALANDHAR                | ENTERTAINMENT NETWORK INDIA LTD.    | RADIO- MIRCHI       | 24.04.2007                   |
| 50    | KANPUR                   | ENTERTAINMENT NETWORK INDIA LTD.    | RADIO- MIRCHI       | 16.06.2007                   |

| S No. | CITY                   | NAME OF THE COMPANY              | CHANNEL<br>IDENTITY | DATE OF<br>OPERATIONA-<br>LISATION |
|-------|------------------------|----------------------------------|---------------------|------------------------------------|
| 51    | KOLHAPUR               | ENTERTAINMENT NETWORK INDIA LTD. | RADIO- MIRCHI       | 18.09.2007                         |
| 52    | KOLKATA                | ENTERTAINMENT NETWORK INDIA LTD. | RADIO- MIRCHI       | 03.05.2003<br>(01.04.2005*)        |
| 53    | LUCKNOW                | ENTERTAINMENT NETWORK INDIA LTD. | RADIO- MIRCHI       | 13.08.2007                         |
| 54    | MADURAI                | ENTERTAINMENT NETWORK INDIA LTD. | RADIO- MIRCHI       | 28-09.2007                         |
| 55    | MANGALORE              | ENTERTAINMENT NETWORK INDIA LTD. | RADIO- MIRCHI       | 24.11.2007                         |
| 56    | MUMBAI                 | ENTERTAINMENT NETWORK INDIA LTD. | RADIO- MIRCHI       | 29.04.2002<br>(01.04.2005*)        |
| 57    | NAGPUR                 | ENTERTAINMENT NETWORK INDIA LTD. | RADIO- MIRCHI       | 18.10.2007                         |
| 58    | NASIK                  | ENTERTAINMENT NETWORK INDIA LTD. | RADIO- MIRCHI       | 06.07.2007                         |
| 59    | PANAJI                 | ENTERTAINMENT NETWORK INDIA LTD. | RADIO- MIRCHI       | 22.05.2007                         |
| 60    | PATNA                  | ENTERTAINMENT NETWORK INDIA LTD. | RADIO- MIRCHI       | 02.04.2007                         |
| 61    | PUNE                   | ENTERTAINMENT NETWORK INDIA LTD. | RADIO- MIRCHI       | 18.10.2002<br>(01.04.2005*)        |
| 62    | RAIPUR                 | ENTERTAINMENT NETWORK INDIA LTD. | RADIO- MIRCHI       | 11.01.2008                         |
| 63    | RAJKOT                 | ENTERTAINMENT NETWORK INDIA LTD. | RADIO- MIRCHI       | 13.06.2007                         |
| 64    | SURAT                  | ENTERTAINMENT NETWORK INDIA LTD. | RADIO- MIRCHI       | 21.08.2007                         |
| 65    | THIRUVANANTHA<br>PURAM | ENTERTAINMENT NETWORK INDIA LTD. | RADIO- MIRCHI       | 29.01.2008                         |
| 66    | VADODARA               | ENTERTAINMENT NETWORK INDIA LTD. | RADIO- MIRCHI       | 05.06.2007                         |
| 67    | VARANASI               | ENTERTAINMENT NETWORK INDIA LTD. | RADIO- MIRCHI       | 14.07.2007                         |
| 68    | VIJAYWADA              | ENTERTAINMENT NETWORK INDIA LTD. | RADIO- MIRCHI       | 11.12.2007                         |
| 69    | VISHAKAPATNAM          | ENTERTAINMENT NETWORK INDIA LTD. | RADIO- MIRCHI       | 26.10.2007                         |
| 70    | GWALIOR                | GWALIOR FARMS                    | CHASKA              | 04.08.2007                         |
| 71    | BENGALURU              | H.T. MEDIA                       | FEVER 104           | 06.03.2007                         |
| 72    | DELHI                  | H.T. MEDIA                       | FEVER 104           | 30.10.2006                         |
| 73    | KOLKATA                | H.T. MEDIA                       | FEVER 104           | 23.01.2008                         |

| S No. | CITY                   | NAME OF THE COMPANY  | CHANNEL<br>IDENTITY | DATE OF<br>OPERATIONA-<br>LISATION |
|-------|------------------------|----------------------|---------------------|------------------------------------|
| 74    | MUMBAI                 | H.T. MEDIA           | FEVER 104           | 15.01.2007                         |
| 75    | KOLKATA                | HITZ FM              | POWER-FM            | 03.05.2003                         |
| 76    | KOLKATA                | INDIA FM             | AMAR-FM             | 03.05.2003                         |
| 77    | BENGALURU              | INDIA RADIO VENTURES | RADIO-INDIGO        | 01.10.2006                         |
| 78    | PANAJI                 | INDIA RADIO VENTURES | RADIO-INDIGO        | 25.06.2007                         |
| 79    | GWALIOR                | ITM SOFTWARE         | SUNO LEMON          | 07.09.2007                         |
| 80    | BENGALURU              | KAL RADIO            | S. FM               | 06.11.2006                         |
| 81    | GULBERGA               | KAL RADIO            | S. FM               | 03.06.2008                         |
| 82    | HYDERABAD              | KAL RADIO            | S. FM               | 06.11.2006                         |
| 83    | KANNUR                 | KAL RADIO            | S. FM               | 12.03.2008*                        |
| 84    | КОСНІ                  | KAL RADIO            | S. FM               | 17.05.2008*                        |
| 85    | KOZIKODE               | KAL RADIO            | S. FM               | 07.12.2007                         |
| 86    | MADURAI                | KAL RADIO            | S. FM               | 05.10.2007                         |
| 87    | MANGALORE              | KAL RADIO            | S. FM               | 21.02.2008                         |
| 88    | MYSORE                 | KAL RADIO            | S. FM               | 03.04.2008                         |
| 89    | PUDUCHERRY<br>(UT)     | KAL RADIO            | S. FM               | 20.12.2007                         |
| 90    | RAJAHMUNDRY            | KAL RADIO            | S. FM               | 19.01.2008                         |
| 91    | THIRUVANANTHA<br>PURAM | KAL RADIO            | S. FM               | 06.02.2008                         |
| 92    | THRISSUR               | KAL RADIO            | S. FM               | 26.12.2007                         |
| 93    | TIRUCHI                | KAL RADIO            | S. FM               | 17.01.2008                         |
| 94    | TIRUPATI               | KAL RADIO            | S. FM               | 27.08.2007                         |
| 95    | TUTICORIN              | KAL RADIO            | S. FM               | 05.10.2007                         |
| 96    | VIJAYWADA              | KAL RADIO            | S. FM               | 25.12.2007                         |
| 97    | WARANGAL               | KAL RADIO            | S. FM               | 28.04.2008                         |
| 98    | CHENNAI                | MALAR PUBLICATIONS   | HELLO-FM            | 02.10.2006                         |
| 99    | COIMBATORE             | MALAR PUBLICATIONS   | HELLO-FM            | 29.10.2007                         |
| 100   | MADURAI                | MALAR PUBLICATIONS   | HELLO-FM            | 01.10.2007                         |

| S No. | CITY               | NAME OF THE COMPANY        | CHANNEL<br>IDENTITY | DATE OF<br>OPERATIONA-<br>LISATION |
|-------|--------------------|----------------------------|---------------------|------------------------------------|
| 101   | PUDUCHERRY<br>(UT) | MALAR PUBLICATIONS         | HELLO-FM            | 23.12.2007                         |
| 102   | TIRUCHI            | MALAR PUBLICATIONS         | HELLO-FM            | 14.01.2008                         |
| 103   | TIRUNELVELI        | MALAR PUBLICATIONS         | HELLO-FM            | 13.10.2007                         |
| 104   | TUTICORIN          | MALAR PUBLICATIONS         | HELLO-FM            | 15.10.2007                         |
| 105   | KANNUR             | MALAYALA MANORAMA CO. LTD. | MANGO FM            | 30.12.2007                         |
| 106   | КОСНІ              | MALAYALA MANORAMA CO. LTD. | MANGO FM            | 18.05.2008                         |
| 107   | KOZIKODE           | MALAYALA MANORAMA CO. LTD. | MANGO FM            | 29.11.2007                         |
| 108   | THRISSUR           | MALAYALA MANORAMA CO. LTD. | MANGO FM            | 14.12.2007                         |
| 109   | AHMEDABAD          | MUSIC BROADCAST PVT. LTD.  | RADIO-CITY          | 25.07.2007                         |
| 110   | AHMEDNAGAR         | MUSIC BROADCAST PVT. LTD.  | RADIO-CITY          | 08.02.2008                         |
| 111   | AKOLA              | MUSIC BROADCAST PVT. LTD.  | RADIO-CITY          | 07.02.2008                         |
| 112   | BENGALURU          | MUSIC BROADCAST PVT. LTD.  | RADIO-CITY          | 10.06.2001<br>(01.04.2005*)        |
| 113   | CHENNAI            | MUSIC BROADCAST PVT. LTD.  | RADIO-CITY          | 10.07.2006                         |
| 114   | COIMBATORE         | MUSIC BROADCAST PVT. LTD.  | RADIO-CITY          | 12.11.2007                         |
| 115   | DELHI              | MUSIC BROADCAST PVT. LTD.  | RADIO-CITY          | 29.04.2003<br>(01.04.2005*)        |
| 116   | HYDERABAD          | MUSIC BROADCAST PVT. LTD.  | RADIO-CITY          | 30.05.2006                         |
| 117   | JAIPUR             | MUSIC BROADCAST PVT. LTD.  | RADIO-CITY          | 08.09.2006                         |
| 118   | JALGOAN            | MUSIC BROADCAST PVT. LTD.  | RADIO-CITY          | 22.05.2008                         |
| 119   | LUCKNOW            | MUSIC BROADCAST PVT. LTD.  | RADIO-CITY          | 10.12.2001<br>(01.04.2005*)        |
| 120   | MUMBAI             | MUSIC BROADCAST PVT. LTD.  | RADIO-CITY          | 21.05.2002<br>(01.04.2005*)        |
| 121   | NAGPUR             | MUSIC BROADCAST PVT. LTD.  | RADIO-CITY          | 21.10.2007                         |
| 122   | NANDED             | MUSIC BROADCAST PVT. LTD.  | RADIO-CITY          | 15.05.2008                         |
| 123   | PUNE               | MUSIC BROADCAST PVT. LTD.  | RADIO-CITY          | 10.04.2008                         |
| 124   | SANGLI             | MUSIC BROADCAST PVT. LTD.  | RADIO-CITY          | 21.12.2007                         |
| 125   | SHOLAPUR           | MUSIC BROADCAST PVT. LTD.  | RADIO-CITY          | 14.11.2007                         |
| 126   | SURAT              | MUSIC BROADCAST PVT. LTD.  | RADIO-CITY          | 22.08.2007                         |

| S No. | CITY          | NAME OF THE COMPANY                | CHANNEL<br>IDENTITY | DATE OF<br>OPERATIONA-<br>LISATION |
|-------|---------------|------------------------------------|---------------------|------------------------------------|
| 127   | VADODARA      | MUSIC BROADCAST PVT. LTD.          | RADIO-CITY          | 11.06.2007                         |
| 128   | VISHAKAPATNAM | MUSIC BROADCAST PVT. LTD.          | RADIO-CITY          | 29.10.2007                         |
| 129   | CHENNAI       | MUTHOOT FINANCE                    | CHENNAI LIVE        | 04.01.2008                         |
| 130   | JAMSHEDPUR    | NEUTRAL PUBLICATION                | DHOOM FM            | 18.07.2008                         |
| 131   | RANCHI        | NEUTRAL PUBLICATION                | DHOOM FM            | 18.07.2008                         |
| 132   | CHENNAI       | NOBLE BROADCASTING                 | AAHAA-FM            | 18.01.2007                         |
| 133   | GANGTOK       | PCM CEMENT CONCRETE PVT. LTD.      | MISTY FM            | 31.01.2009                         |
| 134   | SILIGURI      | PCM CEMENT CONCRETE PVT.<br>LTD.   | MISTY FM            | 14.11.2007                         |
| 135   | AGARTALA      | POSITIVE RADIO                     | OOLALA FM           | 07.08.2007                         |
| 136   | ITANAGAR      | POSITIVE RADIO                     | OOLALA FM           | 05.08.2008                         |
| 137   | KOLHAPUR      | PUDHARI PUBLICATION                | томото ғм           | 21.09.2007                         |
| 138   | SANGLI        | PUDHARI PUBLICATION                | томото ғм           | 21.09.2009                         |
| 139   | GUWAHATI      | PURVY BROADCASTING                 | GUP-SHUP            | 09.10.2007                         |
| 140   | AHMEDABAD     | RADIO MID-DAY                      | RADIO-ONE [1]       | 26.08.2007                         |
| 141   | BENGALURU     | RADIO MID-DAY                      | RADIO-ONE [1]       | 01.08.2006                         |
| 142   | CHENNAI       | RADIO MID-DAY                      | RADIO-ONE [1]       | 10.01.2007                         |
| 143   | DELHI         | RADIO MID-DAY                      | RADIO-ONE [1]       | 23.09.2006                         |
| 144   | KOLKATA       | RADIO MID-DAY                      | RADIO-ONE [1]       | 12.12.2008                         |
| 145   | MUMBAI        | RADIO MID-DAY                      | RADIO-ONE [1]       | 29.04.2003<br>(01.04.2005*)        |
| 146   | PUNE          | RADIO MID-DAY                      | RADIO-ONE [1]       | 12.05.2008                         |
| 147   | JAIPUR        | RAJASTHAN PATRIKA                  | RADIO-TADKA         | 15.08.2006                         |
| 148   | КОТА          | RAJASTHAN PATRIKA                  | RADIO-TADKA         | 25.02.2008                         |
| 149   | RAIPUR        | RAJASTHAN PATRIKA                  | RADIO-TADKA         | 10.02.2009                         |
| 150   | UDAIPUR       | RAJASTHAN PATRIKA                  | RADIO-TADKA         | 27.08.2007                         |
| 151   | RAIPUR        | RANEKA FINCOM                      | RANGILA104.8        | 01.02.2008                         |
| 152   | AGRA          | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 18.08.2007                         |

| S No. | CITY                     | NAME OF THE COMPANY                | CHANNEL IDENTITY | DATE OF<br>OPERATIONA-<br>LISATION |
|-------|--------------------------|------------------------------------|------------------|------------------------------------|
| 153   | AJMER                    | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 28.08.2007                         |
| 154   | ALIGARH                  | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 08.12.2006                         |
| 155   | ALLAHABAD                | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 29.10.2007                         |
| 156   | AMRITSAR                 | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 01.08.2007                         |
| 157   | ASANSOL                  | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 29.06.2007                         |
| 158   | BAREILY                  | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 30.03.2007                         |
| 159   | BENGALURU                | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 09.10.2006                         |
| 160   | BHOPAL                   | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 20.05.2007                         |
| 161   | BHUBANESHWAR<br>/ CUTTAK | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 14.04.2007                         |
| 162   | BIKANER                  | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 19.01.2007                         |
| 163   | CHANDIGARH<br>(UT)       | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 12.02.2007                         |
| 164   | CHENNAI                  | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 27.09.2006                         |
| 165   | DELHI                    | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 24-09-2006                         |
| 166   | GUWAHATI                 | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 14.04.2007                         |
| 167   | GWALIOR                  | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 06.08.2007                         |
| 168   | HISSAR                   | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 02.03.2007                         |
| 169   | HYDERABAD                | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 25.09.2006                         |
| 170   | INDORE                   | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 03.08.2007                         |
| 171   | JALANDHAR                | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 14.04.2007                         |
| 172   | JAMMU                    | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 07.12.2006                         |
| 173   | JAMSHEDPUR               | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 07.11.2007                         |
| 174   | JHANSI                   | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM           | 19.01.2007                         |

| S No. | CITY                   | NAME OF THE COMPANY                | CHANNEL<br>IDENTITY | DATE OF<br>OPERATIONA-<br>LISATION |
|-------|------------------------|------------------------------------|---------------------|------------------------------------|
| 175   | JODHPUR                | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 14.12.2007                         |
| 176   | KANPUR                 | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 14.06.2007                         |
| 177   | KOLKATA                | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 21.10.2006                         |
| 178   | КОТА                   | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 21.01.2008                         |
| 179   | MANGALORE              | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 24.11.2007                         |
| 180   | MUMBAI                 | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 14.11.2006                         |
| 181   | MYSORE                 | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 14.10.2007                         |
| 182   | PANAJI                 | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 22.05.2007                         |
| 183   | PATIALA                | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 01.08.2007                         |
| 184   | PUDUCHERRY<br>(UT)     | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 01.12.2007                         |
| 185   | RAJKOT                 | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 13.06.2007                         |
| 186   | RANCHI                 | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 24.10.2007                         |
| 187   | ROURKELA               | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 06.01.2008                         |
| 188   | SHIMLA                 | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 30.06.2009                         |
| 189   | SHOLAPUR               | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 08.11.2007                         |
| 190   | SRI-NAGAR              | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 10.12.2006                         |
| 191   | SURAT                  | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 29.08.2007                         |
| 192   | THIRUVANANTHA<br>PURAM | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 28.01.2008                         |
| 193   | TIRUPATI               | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 01.08.2007                         |
| 194   | UDAIPUR                | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 03.08.2007                         |
| 195   | VADODARA               | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 05.06.2007                         |
| 196   | VISHAKAPATNAM          | RELIANCE BROADCAST<br>NETWORK LTD. | BIG-FM              | 27.10.2007                         |

| S No. | CITY                     | NAME OF THE COMPANY   | CHANNEL<br>IDENTITY | DATE OF<br>OPERATIONA-<br>LISATION |
|-------|--------------------------|-----------------------|---------------------|------------------------------------|
| 197   | AGRA                     | SHRI PURAN MULTIMEDIA | MANTRA FM           | 08.07.2007                         |
| 198   | BAREILY                  | SHRI PURAN MULTIMEDIA | MANTRA FM           | 09.04.2007                         |
| 199   | GORAKHPUR                | SHRI PURAN MULTIMEDIA | MANTRA FM           | 03.06.2007                         |
| 200   | HISSAR                   | SHRI PURAN MULTIMEDIA | MANTRA FM           | 21.03.2007                         |
| 201   | JALANDHAR                | SHRI PURAN MULTIMEDIA | MANTRA FM           | 14.04.2007                         |
| 202   | KARNAL                   | SHRI PURAN MULTIMEDIA | MANTRA FM           | 02.04.2007                         |
| 203   | RANCHI                   | SHRI PURAN MULTIMEDIA | MANTRA FM           | 27.10.2007                         |
| 204   | VARANASI                 | SHRI PURAN MULTIMEDIA | MANTRA FM           | 20.07.2007                         |
| 205   | AHMEDABAD                | SOUTH ASIA            | S. FM               | 21.04.2008                         |
| 206   | ALLAHABAD                | SOUTH ASIA            | S. FM               | 18.03.2008                         |
| 207   | ASANSOL                  | SOUTH ASIA            | S. FM               | 03.06.2008                         |
| 208   | AURANGABAD               | SOUTH ASIA            | S. FM               | 21.04.2008                         |
| 209   | BHUBANESHWAR<br>/ CUTTAK | SOUTH ASIA            | S. FM               | 28.06.2007                         |
| 210   | GANGTOK                  | SOUTH ASIA            | S.FM                | 06.03.2009                         |
| 211   | GUWAHATI                 | SOUTH ASIA            | S. FM               | 08.04.2008                         |
| 212   | JABALPUR                 | SOUTH ASIA            | S. FM               | 19.03.2008                         |
| 213   | JAMSHEDPUR               | SOUTH ASIA            | S. FM               | 13.04.2008                         |
| 214   | KANPUR                   | SOUTH ASIA            | S. FM               | 28.01.2008                         |
| 215   | NAGPUR                   | SOUTH ASIA            | S. FM               | 05.05.2008                         |
| 216   | NASIK                    | SOUTH ASIA            | S. FM               | 17.04.2008                         |
| 217   | PUNE                     | SOUTH ASIA            | S. FM               | 22.07.2008                         |
| 218   | RAJKOT                   | SOUTH ASIA            | S. FM               | 21.04.2008                         |
| 219   | SHILLONG                 | SOUTH ASIA            | S. FM               | 13.06.2008                         |
| 220   | SILIGURI                 | SOUTH ASIA            | S. FM               | 28.10.2008                         |
| 221   | VADODARA                 | SOUTH ASIA            | S. FM               | 17.04.2008                         |
| 222   | VARANASI                 | SOUTH ASIA            | S. FM               | 29.12.2007                         |

Annexure 5.3 (Contd.)

| S No. | CITY                   | NAME OF THE COMPANY | CHANNEL<br>IDENTITY | DATE OF<br>OPERATIONA-<br>LISATION |
|-------|------------------------|---------------------|---------------------|------------------------------------|
| 223   | BHOPAL                 | SOUTH ASIA          | S. FM               | 06.11.2007                         |
| 224   | INDORE                 | SOUTH ASIA          | S. FM               | 09.12.2007                         |
| 225   | AIZAWL                 | SOUTH ASIA          | S. FM               | 16.09.2013                         |
| 226   | JAIPUR                 | SOUTH ASIA          | S. FM               | 06.11.2006                         |
| 227   | LUCKNOW                | SOUTH ASIA          | S. FM               | 06.11.2007                         |
| 228   | CHENNAI                | SUN TV              | SURYANA FM          | 05.05.2003<br>(01.04.2005*)        |
| 229   | COIMBATORE             | SUN TV              | SURYANA FM          | 07.03.2003<br>(01.04.2005*)        |
| 230   | TIRUNELVELI            | SUN TV              | SURYANA FM          | 07.03.2003<br>(01.04.2005*)        |
| 231   | SILIGURI               | SYNTECH INFORMATICS | HIGH FM             | 24.11.2007                         |
| 232   | KANNUR                 | THE MATHRABHUMI     | CLUB-FM             | 30.12.2007                         |
| 233   | КОСНІ                  | THE MATHRABHUMI     | CLUB-FM             | 17.05.2008                         |
| 234   | THIRUVANANTHA<br>PURAM | THE MATHRABHUMI     | CLUB-FM             | 29.01.2008                         |
| 235   | THRISSUR               | THE MATHRABHUMI     | CLUB-FM             | 14.12.2007                         |
| 236   | AMRITSAR               | TV. TODAY           | RADIO- MEOW         | 01.06.2008                         |
| 237   | DELHI                  | TV. TODAY           | RADIO- MEOW         | 28.05.2007                         |
| 238   | JODHPUR                | TV. TODAY           | RADIO- MEOW         | 01.06.2008                         |
| 239   | KOLKATA                | TV. TODAY           | RADIO- MEOW         | 04.10.2007                         |
| 240   | MUMBAI                 | TV. TODAY           | RADIO- MEOW         | 26.01.2008                         |
| 241   | PATIALA                | TV. TODAY           | RADIO- MEOW         | 01.06.2008                         |
| 242   | SHIMLA                 | TV. TODAY           | RADIO- MEOW         | 01.10.2009                         |
| 243   | VISHAKAPATNAM          | UDAYA TV            | VISAKHA FM          | 06.02.2003<br>(01.04.2005)         |

**Source:** Ministry of Information & Broadcasting

#### Annexure 5.4: List of pay DTH Operators

#### 1. M/s. Tata Sky Ltd.,

3<sup>rd</sup> Floor, C-1, Wadia International Centre (Bombay Dyeing) Pandurang Budhkar Marg, Worli,

Mumbai – 400 025 Tel: 022-6613 3000 Fax-022-6613 3030

Website: www.tatasky.com

#### 2. M/s Dish TV India Ltd.

FC-19, Sector-16A, Film City, Noida-201301

Tel: 91-120-2467005 / 2467000

Fax: 91-120-4357082 Website: www.dishtv.in

#### 3. SUN Direct TV(P) Ltd.

Murasoli Maran Towers, 73, MRC Nagar, Main Road, MRC Nagar, Chennai – 28 PH: 044-44676767, Fax No 044-40679191

Website: www.sundirect.in

#### 4. Bharti Telemedia Ltd.

Airtel Centre, Plot No 16, Udyog Vihar Phase IV, , Gurgaon – 122 015 Ph: 0124-422222

Fax: 0124-4248063 Website: <u>www.airtel.in</u>

#### 5. Reliance Big TV Pvt. Ltd.

3rd Floor, A-Wing,

Reliance Centre, Maharaja Ranjit Singh Marg,

New Delhi – 110 002 Ph: 011-30331012

Fax: 011-30331781

Website:www.rcom.co.in

#### 6. M/s Videocon d2h Limited

(Formerly Bharat Business Channel Limited)

Plot No 1D, Udyog Vihar Industrial Area, Surajpur, Greater NOIDA, Distt, Gautam Budh Nagar - 201 306

Ph: 0120-6141000 Fax: 0120-6141250

Website: www.vedeocond2h.com

# Annexure 5.5: List of permitted teleports as downloaded from the website of Ministry of Information & Broadcasting

| Sr. | Name of Teleport  | Address  | Location           | Date of     |
|-----|---|--|--------------------|-------------|
| No  |   |  |                    | Permission  |
| 1   | TV TODAY NETWORK<br>LIMITED                                       | TV TODAY NETWORK LIMITED FC-8, SECTOR-16A, NOIDA(UP)   | NEW DELHI          | 22-Nov-2000 |
| 2   | SUN TV LTD.   | R S NO. 4288/72, 73 & 116,<br>BLOCK NO. 94, MRC NAGAR<br>CHENNAI-600018                      | CHENNAI            | 12-Mar-01   |
| 3   | ENTERTAINMENT TELEVISION NETWORK PVT. LTD                         | 7B, SHAH INDUSTRIAL ESTATE,<br>OFF VEERA DESAI ROAD,<br>ANDHERI W , MUMBAI-400053            | MUMBAI             | 23-May-01   |
| 4   | USHODAYA ENTERPRISES<br>LTD.                                      | 6-3-570, EENADU COMPLEX,<br>SOMAJIGUDA, HYDERABAD-<br>500082                                 | HYDERABAD          | 23-May-01   |
| 5   | ESSEL SHYAM<br>COMMUNICATION LIMITED                              | C-34, SECTOR-62, ELECTRONIC CITY, NOIDA-201307   | NOIDA              | 3-Sep-01    |
| 6   | ASIANET INFRASTRUCTURE PVT. LTD.                                  | ASIANET STUDIO/COMPLEX, PULIYARAKONAM P.O. THIRUVANANTHAPURAM KERALA                         | THIRUVANANTHAPURAM | 17-Oct-01   |
| 7   | ESSEL SHYAM<br>COMMUNICATION LTD                                  | C-34, ELECTRONIC CITY, SECTOR-62, NOIDA-201307   | NOIDA-2            | 7-Feb-02    |
| 8   | SAHARA SANCHAR LIMITED  | SAHARA INDIA COMPLEX, C-2, C-3, SECTOR-XI NOIDA-201301                                       | NOIDA              | 12-Feb-02   |
| 9   | TELEVISION EIGHTEEN INDIA LIMITED                                 | VIDEOCON TOWER, E-1 RANI<br>JHANSI ROAD, JHANDEWALAN<br>EXTN., NEW DELHI-110055              | NEW DELHI          | 18-Mar-02   |
| 10  | NEW DELHI TELEVISION<br>LTD. (NDTV)                               | ARCHANA COMPLEX, GREATER<br>KAILASH-I, NEW DELHI-110048                                      | NEW DELHI          | 11-Jun-02   |
| 11  | INDIAVISION<br>COMMUNICATIONS LTD.                                | SATELLITE TATU'S TOWER,<br>32/1787, PADIVATTOM, NH<br>BY-PASS ROAD, KOCHI<br>(KERALA) 682024 | KOCHI -KERALA      | 7-Nov-02    |
| 12  | NOIDA SOFTWARE<br>TECHNOLOGY PARK LTD.                            | B-23-25, POCKET-C,<br>SURAJPUR INDUSTRIAL AREA,<br>GREATER NOIDA(U.P)                        | GREATER NOIDA      | 27-Jan-03   |
| 13  | DISH TV INDIA LIMITED<br>(Formerly known ASC<br>Enterprises Ltd.) | FC-19, SECTOR-16A, NOIDA-<br>201301 (U.P.)   | NOIDA              | 2-Apr-03    |
| 14  | POSITIVE TELEVISION PVT. LTD.                                     | 7 C, DOCTORS LANE, GOL<br>MARKET, NEW DELHI-110001   | GUWAHATI           | 9-Jun-03    |
| 15  | CHANNEL GUIDE INDIA<br>LTD.                                       | BOKADIA MANSION, 3RD<br>FLOOR,229, PRINCESS STREET,<br>MUMBAI                                | MUMBAI             | 15-Sep-03   |
| 16  | INDIASIGN PVT. LTD.   | A-49, SECTOR-18,<br>ELECTRONICS CITY, HARTRON<br>COMPLEX, GURGAON(HARYANA)                   | GURGAON            | 18-Nov-03   |
| 17  | ASSOCIATED BROADCASTING PVT. LTD.                                 | CO.NO.97, ROAD NO.3,<br>BANJARA HILLS, HYDERABAD-<br>500034                                  | HYDERABAD          | 24-Nov-03   |
| 18  | AV ENTERTAINMENT PVT. LTD.  | 240, ZONE-I, M.P.NAGER, BHOPAL(M.P)  | BHOPAL             | 15-Dec-03   |

| Sr.No | Name of Teleport                        | Address  | Location           | Date of<br>Permission |
|-------|---|--|--------------------|-----------------------|
| 19    | TELEVISION<br>EIGHTEEN INDIA<br>LIMITED | EMPIRE COMPLEX, 414, SENAPATI<br>BAPAT MARG, LOWER PAREL,<br>MUMBAI-400013   | MUMBAI             | 19-Mar-04             |
| 20    | AMRITA ENTERPRISES PVT. LTD.            | TCNO.15/1069, AMRITA, GANDHI<br>NAGER, VAZHUTHANCADU,<br>THIRUVANANTHAPURAM-695014                                   | THIRUVANANTHAPURAM | 20-Apr-04             |
| 21    | MAVIS SATCOM<br>LIMITED                 | NO.48 NP, JAWAHARLAL NEHRU<br>ROAD, EKKATUTHANGAL, CHENNAI-<br>600092  | CHENNAI            | 22-Apr-04             |
| 22    | TATA COMMUNICATIONS LTD.VSNL            | VSNL, TECHNICAL COMPLEX, SDF<br>BUILDING, SALT LAKE,<br>KOLKATTA-700091  | KOLKATTA           | 14-May-04             |
| 23    | TATA COMMUNICATIONS LTD. VSNL           | VSNL, VSB, KAKKANAD, THIRKKAKARA, ERNAKULAM, COACHIN-682030  | COCHIN             | 14-May-04             |
| 24    | TATA COMMUNICATIONS LTD., VSNL,         | THIRUVELLUVAR SATELLITE VSNL<br>EARTH STATION, REDHILLS ROAD,<br>AMBATTUR, CHENNAI-600053                            | CHENNAI            | 14-May-04             |
| 25    | TATA COMMUNICATIONS LTD., VSNL          | VSNL, VSB, BANGLA SAHAB ROAD,<br>NEW DELHI-110001  | NEW DELHI          | 14-May-04             |
| 26    | TATA COMMUNICATIONS LTD., VSNL          | VSNL,VSB, FORT, MG ROAD, MUMBAI-400001   | MUMBAI             | 14-May-04             |
| 27    | LAMHAS SATELLITE<br>LTD.                | SERVICES 161, TOWER-I,<br>INTERNATIONAL INFOTECH PARK,<br>VASHI, NAVI MUMBAI   | MUMBAI             | 10-Aug-04             |
| 28    | MALAYALAM<br>COMMUNICATIONS<br>LTD.     | MALAYALAM COMMUNICATIONS<br>LTD. CHANDRAGIRI 61,<br>VIKRAMPURAM HILLS,KOWDIAR<br>P.O., THIRUVANANTHAPURAM-<br>695003 | THIRUVANANTHAPURAM | 22-Dec-04             |
| 29    | SANSKAR INFO TV<br>PVT. LTD.            | B-10, MELKAY BUILDING, OPP.<br>MAROL TELEPHONE EXCHANGE,<br>CENTRAL ROAD, MIDC, ANDHERI<br>E, MUMBAI-400093          | MUMBAI             | 23-Feb-05             |
| 30    | BENNETT COLEMAN<br>AND CO. LTD.         | BENNETT, COLEMAN & CO. LTD.,<br>THE TIMES OF INDIA BUILDING,<br>DR. D.N ROAD, MUMBAI-400001                          | MUMBAI             | 2-May-05              |
| 31    | SENIOR MEDIA LTD.                       | SENIOR MEDIA LTD NO.3, SIRI<br>FORT ROAD, NEW DELHI-49   | NEW DELHI          | 5-May-05              |
| 32    | LOK PRAKASHAN LTD.                      | LOK PRAKASHAN LTD. 57<br>CHOWRINGHEE ROAD, HORIZON,<br>3RD FLOOR, KOLKATA-700071                                     | AHMEDABAD          | 6-May-05              |
| 33    | CALCUTTATELEVISION<br>NETWORK PVT. LTD. | CALCUTTA TELEVISION NETWORK<br>PVT. LTD. 89 M.B.ROAD BIRATI,<br>KOLKATA-70051  | KOLKATA            | 22-Aug-05             |
| 34    | KOHINOOR<br>CORPORATION LTD.            | BROADCASTING KOHINOOR<br>BROADCASTING CORPORATION<br>LTD. TAGORE COMPLEX, MODEL<br>TOWN, PATIALA-147001, PUNJAB      | RAJPURA - PUNJAB   | 9-Sep-05              |

| Sr.No | Name of Teleport   | Address   | Location     | Date of<br>Permission |
|-------|--|---|--------------|-----------------------|
| 35    | TELEVISION<br>EIGHTEEN INDIA<br>LIMITED                        | VIDEOCON TOWER, E-1 RANI<br>JHANSI ROAD, JHANDEWALAN<br>EXTN., NEW DELHI-110055                                       | NOIDA        | 14-Sep-05             |
| 36    | KAMYAB TV PVT. LTD.<br>(Formerly known as MD<br>TV Pvt. Ltd.)  | KAMYAB TV PVT. LTD. 168,<br>EKAMRA MARG, UNIT-6<br>BHUBANESWER-751001   | BHUBANESHWER | 30-Sep-05             |
| 37    | KASTURI MEDIA PVT.<br>LTD.                                     | KASTHURI MEDIAS PVT. LTD.<br>NO.286, 3RD MAIN ROAD,<br>J.P. NAGER, BANGLORE-560078                                    | BANGALORE    | 10-Nov-05             |
| 38    | SST MEDIA PVT. LTD.  | 57 J.L NEHRU ROAD HORIZON,<br>3RD FLOOR, KOLKATA-700071   | KOLKATA      | 30-Nov-05             |
| 39    | ESSEL SHYAM<br>COMMUNICATION<br>LTD.                           | ROYAL PALAMS, SURVEY NO. 169,NEAR UNIT 26, AAREY MILK COLONY GOREGAON EAST, MUMBAI- 400065                            | MUMBAI       | 2-Dec-05              |
| 40    | MM TV LTD.   | MM TV LTD. POST BOX NO. 106, KANDATHIL VARGHESE MAPPILLAI MEMORIAL SOCIETY BUILDING K.K.ROAD, KOTTAYAM-686001, KERALA | ALAPUZZA     | 2-Mar-06              |
| 41    | IN CABLENET ANDHRA LTD.  | IN CABLENET ANDHRA LTD. 98,<br>OM PLAZA, DOMALGUDA,<br>HYDERABAD-500029   | HYDERABAD    | 9-Mar-06              |
| 42    | INDRA TELEVISION<br>LTD.                                       | INDRA TELEVISION LTD. MEGA<br>CITY NO. 338, ROAD NO.3,<br>ARORA COLONY BANJARA HILLS<br>HYDERABAD-500034              | HYDERABAD    | 7-Jun-06              |
| 43    | SUN TV LTD.  | R S NO. 4288/72,73 & 116, BLOCK<br>NO. 94, MRC NAGAR CHENNAI-<br>600018   | CHENNAI      | 14-Jul-06             |
| 44    | MEDIA CONTENT AND<br>COMMUNICATION<br>INDIA PRIVATE<br>LIMITED | DLF CNTRE, 7TH FLOOR, 4<br>SNANSAD SERVICESMARG, NEW<br>DELHI-110001  | NOIDA        | 20-Sep-06             |
| 45    | TATA SKY LIMITED   | TATA SKY LTD. 3RD FLOOR,C-1, WADIA INTERNATIONAL CENTRE BOMBAY DYEING, PANDURANG BUDHAR MARG, WORLI, MUMBAI-400025    | NEW DELHI    | 20-Sep-06             |
| 46    | SATISH SUGERS LTD.   | VAISHNAVI BHAVANA, 89/1, 1ST A MAIN ROAD,INDUSTRIAL SUBRUB, 2ND STAGE, YESHWANTHPUR, BANGLORE- 560022                 | BANGALORE    | 26-Sep-06             |
| 47    | SHITAL FIBRES LTD.   | SHITAL FIBRES LTD. A-17, FOCAL<br>POINT EXTENSION, P.O.BOX NO.<br>407 AND 449, JALLANDHAR-<br>144004                  | JALANDHAR    | 29-Sep-06             |
| 48    | MH ONE TV NETWORK LTD.   | MH ONE TV NETWORK LTD.<br>2,SSI INDUSTRIAL AREA, GT<br>KARNAL ROAD, DELHI-33  | DELHI        | 23-Nov-06             |
| 49    | STV ENTERPRISES<br>LTD.  | 268 MASJID KOTH, NEAR UDAI<br>PARK MARKET, NEW DELHI-<br>110049   | NEW DELHI    | 11-Jan-07             |
| 50    | AIRR X MEDIA LTD.  | 502 ASHWIN ATHWA LINES SURAT<br>GUJARAT   | SURAT        | 13-Mar-07             |

| Sr.No | Name of Teleport                            | Address  | Location                                   | Date of<br>Permission |
|-------|---|--|--|-----------------------|
| 51    | BROADCAST<br>EQUIPMENTS INDIA PVT.<br>LTD.  | 370-371/2, FIRST FLOOR,<br>HOSPITAL ROAD, JANGPURA,<br>NEW DELHI-110014                                | NEW DELHI                                  | 21-May-07             |
| 52    | WINNING COMMUNICATIONS LTD.                 | EDGEWINNING EDGE<br>COMMUNICATIONS LTD. 301,<br>SWARNA JAYANTHI COMPLEX,<br>AMEERPET, HYDERABAD-500038 | HYDERABAD                                  | 25-May-07             |
| 53    | INDIASIGN PVT. LTD.                         | GL-34/1 SALTLAKE ELECTRONIC<br>COMPLEX SECTOR-5, KOLKATTA<br>WEST BANGAL                               | KOLKATA                                    | 15-Jun-07             |
| 54    | INDIASIGN PVT. LTD.                         |  | CHENNAI                                    | 15-Jun-07             |
| 55    | RACHANA TELEVISION PVT. LTD.                | PLOT NO. 564-A-19-III, ROAD<br>NO.92, JUBILEE HILLS,<br>HYDERABAD-500033                               | HYDERABAD                                  | 15-Jun-07             |
| 56    | ORTEL COMMUNICATIONS LTD.                   | ORTEL COMMUNICATIONS LTD.<br>B-7/122 A, SAFDARJUNG<br>ENCLAVE, NEW DELHI-110029                        | BHUBANESHWER                               | 25-Jun-07             |
| 57    | SOWBHAGYA EXPORTS<br>LTD.                   | SOWBHAGYA EXPORTS LTD.<br>77/14 SKD NAGER, SRINAGER<br>COLONY HYDERABAD-500073<br>ANDHRA PRADESH       | HYDERABAD                                  | 4-Jul-07              |
| 58    | ESSEL SHYAM COMMUNICATION LTD.              | C-138, NARAINA INDUSTRIAL<br>AREA-I, AROOR NEW DELI-28   | KERALA                                     | 5-Jul-07              |
| 59    | PRAGYA VISION PVT.<br>LTD.                  | FC-13, SECTOR 16A, FILM CITY, NOIDA-201301   | NOIDA                                      | 5-Sep-07              |
| 60    | BRAHMAPUTRA TELE-<br>PRODUCTIONS PVT. LTD.  | 13 <sup>TH</sup> MILE TAMULIKUCHI<br>BYRNIHAT RI -BHOI MEGHALAYA                                       | GUWAHATI                                   | 25-Sep-07             |
| 61    | G. NEXT MEDIA PVT.<br>LTD.                  | 78, OKHALA INDUSTRIAL<br>ESTATE PHASE-III, NEW DELHI-<br>110020  | NEW DELHI                                  | 5-Oct-07              |
| 62    | INDIASIGN PVT. LTD.                         | 1343, ROAD NO. 67, JUBILEE<br>HILL, HYDERABAD  | HYDERABAD                                  | 14-Mar-08             |
| 63    | TATA COMMUNICATIONS<br>LIMITED              | THIRUVALLUR SATELLITE EARTH STATION, 226, RED HILLS ROAD, AMBATTUR, CHENNAI-600053                     | CHENNAI-2                                  | 6-May-08              |
| 64    | POSITIVE TELEVISION PVT. LTD.               | POSSITIVE TELEVISION PVT.<br>LTD. DOCTOR'S LANE, GOL<br>MARKET, NEW DELHI-110001                       | 7C,NOIDA                                   | 23-May-08             |
| 65    | EASTERN MEDIA LTD.                          | A/62,NAYAPALLI,<br>BHUBANESWAR-751003, ORISSA  | BHUBANESHWER                               | 2-Jul-08              |
| 66    | RAJASTHAN PATRIKA<br>PRIVATE LIMITED        | KESARGARH, JLN MARG, JAIPUR-<br>302004   | JAIPUR                                     | 5-Aug-08              |
| 67    | PRIDE EAST<br>ENTERTAINMENT PVT.<br>LIMITED | NEWS LIVE, 558, G.S.ROAD,<br>CHRISTIAN BARTI, DISPUR,<br>GUWAHATI-78                                   | GUWAHATI                                   | 13-Aug-08             |
| 68    | INDIASIGN PVT. LTD.                         | 1343, ROAD NO. 67, JUBILEE<br>HILL, HYDERABAD  | HYDERABAD (Location<br>Shifted from Noida) | 17-Sep-08             |
| 69    | VINTAGE STUDIO PVT.<br>LTD.                 | 23/24, EAST PATEL NAGAR, NEW DELHI-110008  | NEW DELHI                                  | 5-Jan-09              |
| 70    | SKYLINE TELE MEDIA<br>SERVICES PVT. LTD.    | C-4,SHIVALIK, NEAR MALVIYA<br>NAGAR MARKET, NEW DELHI-<br>110017                                       | NOIDA                                      | 27-May-09             |
| 71    | INFORMATION TV PVT.<br>LTD.                 | 275, CAPTAIN GAUR MARG,<br>SRINIVASPURI, NEW DELHI-<br>110065  | NEW DELHI                                  | 3-Jun-09              |

| Sr.No | Name of Teleport  | Address  | Location   | Date of    |
|-------|---|--|------------|------------|
|       |   |  |            | Permission |
| 72    | UNILAZER EXPORTS AND MANAGEMENT CONSULTANTS LIMITED     | PARIJAT HOUSE, 1076, DR.<br>E.MOSES ROAD, WORLI, NAKA,<br>MUMBAI-400018                                | MUMBAI     | 26-Jun-09  |
| 73    | COMSAT SYSTEM PVT.<br>LTD.                              | PLOT NO.22/A, IDA, MALLAPUR,<br>HYDERABAD-50076  | HYDERABAD  | 14-Oct-09  |
| 74    | BHARTI TELEPORTS<br>LIMITED                             | THE GRAND HOTEL, VASANT KUNJ, PHASE-II, NELSON MANDELA ROAD, NEW DELHI-110070                          | Noida      | 11-Nov-09  |
| 75    | SRI VENKATESWARA<br>CHANNEL PVT. LTD.                   | BHAKTITHIRUNILAYAM,<br>HIMAYATH NAGAR, HYDERABAD   | TIRUPATI   | 11-Nov-09  |
| 76    | TATA COMMUNICATIONS<br>LIMITED                          | THIRUVALLUVAR SATELLITE EARTH STATION, 226, RED HILLS ROAD, AMBATTUR, CHENNAI-600053                   | CHENNAI -3 | 13-Jan-10  |
| 77    | ROYS INSTITUTE OF<br>COMPETITIVE<br>EXAMINATION PVT LTD | 11/1 B.T ROAD BELGHORIA<br>KOLKATA-700056 24 PARGANAS<br>NORTH WEST BENGAL                             | KOLKATA    | 1-Apr-10   |
| 78    | INDEPENDENT NEWS<br>SERVICES PVT. LTD.                  | PLOT NO. 17B & 17C, SECTOR 16A, FILM CITY NOIDA(UP)  | NOIDA -2   | 28-Apr-10  |
| 79    | RAJ TELEVISION<br>NETWORK LTD.                          | 32, POES ROAD, 2ND STREET, TEYNAMPET, CHENNAI-600018   | CHENNAI    | 5-May-10   |
| 80    | ESSEL<br>SHYAMCOMMUNICATION<br>LTD.                     | C-138, NARAINA INDUSTRIAL<br>AREA-I, NEW DELHI-28  | NOIDA -3   | 12-May-10  |
| 81    | KANSANNEWS<br>PRIVATE LIMITED                           | HOUSE NO. 18, SECTOR-18,<br>CHANDIGARH   | CHANDIGARH | 13-May-10  |
| 82    | TATA COMMUNICATIONS LTD. VSNL                           | TATA COMMUNICATIONS LTD. VIDESH SANCHAR BHAWAN MAHATMA GANDHI ROAD, MUMBAI-400001                      | CHENNAI -4 | 4-Jun-10   |
| 83    | DISH TV INDIA LTD.                                      | PLOT NO.18, SECTOR-16A, NOIDA-201301   | NOIDA      | 6-Apr-11   |
| 84    | AASTHA BROADCASTING<br>NETWORK LIMITED                  | AATHA BHAWAN, A-105,<br>SECTOR-5, NOIDA-201301   | NOIDA      | 2-May-11   |
| 85    | MAHUAA MEDIA<br>PRIVATE LIMITED                         | FC 17A & 17B, SECTOR 16A, FILM CITY, NOIDA-201301  | NOIDA      | 25-May-11  |
| 86    | RTR Broadcast Pvt. Ltd.                                 | D-38, RDC, Raj Nagar,<br>Ghaziabad   | Ghaziabad  | 7-Sep-11   |
| 87    | Silver Star<br>Communication Ltd.                       | NO. 24, VI MAIN ROAD,<br>KASTURIBA NAGAR, ADYAR,<br>CHENNAI-600020 INDIA                               | CHENNAI    | 2-Nov-11   |
| 88    | Lamha Satellite Services<br>Ltd                         | TOWER-I, 6TH FLOOR, INTERNATIONAL INFOTECH PARK, ABOVE VASI RAILWAY STATION, VASI, NAVI MUMBAI-400703. | MUMBAI     | 13-Feb-12  |
| 89    | Skyline Tele Media<br>Services Ltd.                     | FC-23, SECTOR-16A, FILM CITY, NOIDA-201305   | NOIDA-2    | 02-Jul-12  |
| 90    | Bharti Teleports Limited                                | Plot No 192, Block B, Phase II, NOIDA - 201 305  | NOIDA-2    | 29-Oct-12  |

Source: Ministry of Information & Broadcasting

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