

**Quarterly Performance Monitoring Report (PMR) on Quality of Service of Wireless Data Services**

**Report for quarter ending: March 2019**

**Compliance Status**

| Sl. No.        | Parameters | Benchmarks                                     | Generations                                       | Compliance Status |        |                |         |                 |        |                    |       |        |
|----------------|------------|--|---|-------------------|--------|----------------|---------|-----------------|--------|--------------------|-------|--------|
|                |            |  |   | Airtel            | BSNL   | VIL-Brand Idea | MTNL    | Reliance JIO    | TATA   | VIL-Brand Vodafone |       |        |
| Andhra Pradesh | 1          | Service Activation /Provisioning               | Within 4 hrs with 95% success rate.               | All Generations   | 99.00  |                | 99.97   |                 | 98.60  | 100                | 99.80 |        |
|                |            |  |   | 2G                |        | 98.00          |         |                 |        |                    |       |        |
|                |            |  |   | 3G                |        | 98.00          |         |                 |        |                    |       |        |
|                | 2          | Successful data transmission download attempts | >80%  | All Generations   |        |                |         |                 |        | 100                |       |        |
|                |            |  |   | 2G (GSM)          | 100.00 | 98.23          | 100.00  |                 |        |                    |       | 100.00 |
|                |            |  |   | 3G                | 100.00 | 99.45          | 100.00  |                 |        |                    |       |        |
|                | 3          | Successful data transmission upload attempts   | >75%  | All Generations   |        |                |         |                 |        |                    | 100   |        |
|                |            |  |   | 2G (GSM)          | 100.00 | 99.95          | 100.00  |                 |        |                    |       | 100.00 |
|                |            |  |   | 3G                | 100.00 | 99.95          | 100.00  |                 |        |                    |       |        |
|                |            |  |   | 4G                | 100.00 |                | 100.00  |                 | 100.00 |                    |       |        |
|                | 4          | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1 |                |         |                 |        |                    |       |        |
|                |            |  |   |                   | Plan 2 |                |         |                 |        |                    |       |        |
|                |            |  |   | 2G                | Plan 1 | 134.00         | 34.81   | 139(open plan)  |        |                    | 52    | 175.17 |
|                |            |  |   | 3G                | Plan 1 | 2278.00        | 766.46  | 3361(open plan) |        |                    |       |        |
|                | 5          | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | CDMA              | Plan 1 |                |         |                 |        |                    |       |        |
|                |            |  |   |                   | Plan 2 |                |         |                 |        |                    |       |        |
|                |            |  |   | 2G                | Plan 1 | 176.00         | 133.67  | 175(open plan)  |        |                    | 95    | 243.23 |
|                |            |  |   | 3G                | Plan 1 | 2895.00        | 3166.33 | 5310(open plan) |        |                    |       |        |
|                | 6          | Latency  | Data <250ms                                       | All Generations   |        |                |         |                 |        |                    | 154.4 |        |
|                |            |  |   | 2G (GSM)          | 150.00 | 173.33         | 120.00  |                 |        |                    |       | 125.25 |
|                |            |  |   | 3G                | 73.00  | 57.33          | 37.00   |                 |        |                    |       |        |
|                |            |  |   | 4G                | 46.00  |                | 36.00   |                 | 55.92  |                    |       |        |
|                | 7          | PDP Context Activation Success Rate            | ≥95%  | All Generations   |        |                |         |                 |        |                    | 100   |        |
|                |            |  |   | 2G (GSM)          | 99.90  | 99.95          | 99.15   |                 |        |                    |       | 99.95  |
|                |            |  |   | 3G                | 99.85  | 99.95          | 98.58   |                 |        |                    |       |        |
|                |            |  |   | 4G                | 99.52  |                | 97.87   |                 | 99.48  |                    |       |        |
|                | 8          | Drop rate :                                    | ≤5%   | All Generations   |        |                |         |                 |        |                    | 1.5   |        |
|                |            |  |   | 2G (GSM)          | 2.58   | 0.58           | 2.54    |                 |        |                    |       | 2.80   |
| 3G             |            |  |   | 0.90              | 0.65   | 0.58           |         |                 |        |                    |       |        |
| 4G             |            |  |   | 0.65              |        | 0.81           |         | 0.42            |        |                    |       |        |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.

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| Sl. No. | Parameters                          | Benchmarks                                     | Generations                                       | Compliance Status |                  |                |          |                |         |                    |  |         |
|---------|-------------------------------------|--|---|-------------------|------------------|----------------|----------|----------------|---------|--------------------|--|---------|
|         |                                     |  |   | Airtel            | BSNL             | VIL-Brand Idea | MTNL     | Reliance JIO   | TATA    | VIL-Brand Vodafone |  |         |
| Assam   | 1                                   | Service Activation /Provisioning               | Within 4 hrs with 95% success rate.               | All Generations   |                  | 100.00         |          | 98.96          |         | 98.13              |  | 100.00  |
|         |                                     |  |   | 2G                |                  |                | 100.00   |                |         |                    |  |         |
|         |                                     |  |   | 3G                |                  |                | 100.00   |                |         |                    |  |         |
|         | 2                                   | Successful data transmission download attempts | >80%  | All Generations   |                  |                |          |                |         |                    |  |         |
|         |                                     |  |   | 2G (GSM)          |                  | 100.00         | 98.50    | 100.00         |         |                    |  | 100.00  |
|         |                                     |  |   | 3G                |                  | 100.00         | 98.50    |                |         |                    |  | 100.00  |
|         |                                     |  |   | 4G                |                  | 100.00         |          | 100.00         |         | 100.00             |  | 100.00  |
|         | 3                                   | Successful data transmission upload attempts   | >75%  | All Generations   |                  |                |          |                |         |                    |  |         |
|         |                                     |  |   | 2G (GSM)          |                  | 100.00         | 98.30    | 100.00         |         |                    |  | 100.00  |
|         |                                     |  |   | 3G                |                  | 100.00         | 98.30    |                |         |                    |  | 100.00  |
|         |                                     |  |   | 4G                |                  | 100.00         |          | 100.00         |         | 100.00             |  | 100.00  |
|         | 4                                   | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1           |                |          |                |         |                    |  |         |
|         |                                     |  |   |                   | Plan 2           |                |          |                |         |                    |  |         |
|         |                                     |  |   |                   | Plan 3           |                |          |                |         |                    |  |         |
|         |                                     |  |   | 2G                | Plan 1           | 141.00         | 83.30    | 134(open plan) |         |                    |  | 124.33  |
|         |                                     |  |   |                   | Plan 2           |                |          |                |         |                    |  |         |
|         |                                     |  |   | 3G                | Plan 1           | 2218.00        | 1249.17  |                |         |                    |  | 2038.33 |
|         |                                     |  |   |                   | Plan 2           |                |          |                |         |                    |  |         |
|         |                                     |  |   |                   | Plan 3           |                |          |                |         |                    |  |         |
|         | 4G                                  | Plans  | 10858.00  |                   | 8369(open plan)  |                | 6238.77  |                | 6464.00 |                    |  |         |
|         |                                     |  |   |                   |                  |                |          |                |         |                    |  |         |
|         | 5                                   | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | CDMA              | Plan 1           |                |          |                |         |                    |  |         |
|         |                                     |  |   |                   | Plan 2           |                |          |                |         |                    |  |         |
|         |                                     |  |   |                   | Plan 3           |                |          |                |         |                    |  |         |
|         |                                     |  |   | 2G                | Plan 1           | 180.00         | 146.70   | 167(open plan) |         |                    |  | 160.21  |
|         |                                     |  |   |                   | Plan 2           |                |          |                |         |                    |  |         |
|         |                                     |  |   | 3G                | Plan 1           | 4446.00        | 2882.70  |                |         |                    |  | 3082.33 |
|         | Plan 2                              |  |   |                   |                  |                |          |                |         |                    |  |         |
|         | Plan 3                              |  |   |                   |                  |                |          |                |         |                    |  |         |
|         | 4G                                  | Plans  | 24001.00  |                   | 14156(open plan) |                | 26476.25 |                | 7401.67 |                    |  |         |
|         |                                     |  |   |                   |                  |                |          |                |         |                    |  |         |
| 6       | Latency                             | Data <250ms                                    | All Generations                                   |                   |                  |                |          |                |         |                    |  |         |
|         |                                     |  | 2G (GSM)  |                   | 219.00           | 252.20         | 210.00   |                |         | 223.67             |  |         |
|         |                                     |  | 3G  |                   | 146.00           | 162.90         |          |                |         | 208.00             |  |         |
|         |                                     |  | CDMA  |                   |                  |                |          |                |         |                    |  |         |
|         |                                     |  | 4G  |                   | 56.00            |                | 93.00    |                | 46.86   | 43.00              |  |         |
| 7       | PDP Context Activation Success Rate | ≥95%   | All Generations                                   |                   |                  |                |          |                |         |                    |  |         |
|         |                                     |  | 2G (GSM)  |                   | 99.90            | 98.60          | 99.05    |                |         | 99.55              |  |         |
|         |                                     |  | 3G  |                   | 98.47            | 98.00          |          |                |         | 97.45              |  |         |
|         |                                     |  | CDMA  |                   |                  |                |          |                |         |                    |  |         |
|         |                                     |  | 4G  |                   | 98.09            |                | 98.98    |                | 99.83   | 99.97              |  |         |
| 8       | Drop rate :                         | ≤5%  | All Generations                                   |                   |                  |                |          |                |         |                    |  |         |
|         |                                     |  | 2G (GSM)  |                   | 2.93             |                | 0.20     |                |         | 2.65               |  |         |
|         |                                     |  | 3G  |                   | 0.94             | 1.30           |          |                |         | 0.47               |  |         |
|         |                                     |  | 4G  |                   | 0.87             |                | 0.79     |                | 0.37    | 0.14               |  |         |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.

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| Sl. No.             | Parameters                          | Benchmarks                                     | Generations                                       | Compliance Status |   |                               |                                |                 |        |                    |        |        |
|---------------------|-------------------------------------|--|---|-------------------|---|-------------------------------|--------------------------------|-----------------|--------|--------------------|--------|--------|
|                     |                                     |  |   | Airtel            | BSNL                                      | VIL-Brand Idea                | MTNL                           | Reliance JIO    | TATA   | VIL-Brand Vodafone |        |        |
| Bihar and Jharkhand | 1                                   | Service Activation /Provisioning               | Within 4 hrs with 95% success rate.               | All Generations   | 100.00                                    |                               | 98.92                          |                 | 98.93  | 100                | 100.00 |        |
|                     |                                     |  |   | 2G                |   | 100.00                        |                                |                 |        |                    |        |        |
|                     |                                     |  |   | 3G                |   | 100.00                        |                                |                 |        |                    |        |        |
|                     | 2                                   | Successful data transmission download attempts | >80%  | All Generations   |   |                               |                                |                 |        | 100                |        |        |
|                     |                                     |  |   | 2G (GSM)          | 100.00                                    | 100.00                        | 100.00                         |                 |        |                    | 100.00 |        |
|                     |                                     |  |   | 3G                | 100.00                                    | 100.00                        | 100.00                         |                 |        |                    |        |        |
|                     | 3                                   | Successful data transmission upload attempts   | >75%  | All Generations   |   |                               |                                |                 |        |                    | 100    |        |
|                     |                                     |  |   | 2G (GSM)          | 100.00                                    | 100.00                        | 100.00                         |                 |        |                    | 99.93  |        |
|                     |                                     |  |   | 3G                | 100.00                                    | 100.00                        | 100.00                         |                 |        |                    |        |        |
|                     |                                     |  |   | 4G                | 100.00                                    |                               | 100.00                         |                 | 100.00 |                    |        |        |
|                     | 4                                   | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1                                    |                               |                                |                 |        |                    |        |        |
|                     |                                     |  |   |                   | Plan 2                                    |                               |                                |                 |        |                    |        |        |
|                     |                                     |  |   |                   | Plan 3                                    |                               |                                |                 |        |                    |        |        |
|                     |                                     |  |   | 2G                | Plan 1                                    | 36.00                         | 58.9(2G postpaid)              | 96(open plan)   |        |                    | 36     | 55.79  |
|                     |                                     |  |   |                   | Plan 2                                    |                               | 58.9(Prepaid 2G data)          |                 |        |                    |        |        |
|                     |                                     |  |   | 3G                | Plan 1                                    | 1591.00                       | 811.4(3G postpaid data plans)  | 2526(open plan) |        |                    |        |        |
|                     |                                     |  |   |                   | Plan 2                                    |                               | 811.4(3G prepaid data plan)    |                 |        |                    |        |        |
|                     |                                     |  |   |                   | Plan 3                                    |                               |                                |                 |        |                    |        |        |
|                     |                                     |  |   | 4G                | Plans                                     | 7946.00                       |                                | 3547(open plan) |        | 7190.34            |        |        |
|                     |                                     |  |   | 5                 | Average Throughput for Packet data (Kbps) | >75% of the subscribed speed. | CDMA                           | Plan 1          |        |                    |        |        |
|                     | Plan 2                              |  |   |                   |   |                               |                                |                 |        |                    |        |        |
|                     | Plan 3                              |  |   |                   |   |                               |                                |                 |        |                    |        |        |
|                     | 2G                                  | Plan 1   | 139.00  |                   |   |                               | 112.4(2G postpaid data plans)  | 227(opne plan)  |        |                    | 69     | 122.83 |
|                     |                                     | Plan 2   |   |                   |   |                               | 112.4(Prepaid 2G data)         |                 |        |                    |        |        |
|                     | 3G                                  | Plan 1   | 2991.00   |                   |   |                               | 1867.3(3G postpaid data plans) | 3494(open plan) |        |                    |        |        |
|                     |                                     | Plan 2   |   |                   |   |                               | 1859.9(3G prepaid data plan)   |                 |        |                    |        |        |
|                     |                                     | Plan 3   |   |                   |   |                               |                                |                 |        |                    |        |        |
|                     | 4G                                  | Plans  | 11241.00  |                   | 6202(open plan)                           |                               | 20967.92                       |                 |        |                    |        |        |
| 6                   | Latency                             | Data <250ms                                    | All Generations                                   |                   |   |                               |                                |                 | 235.11 |                    |        |        |
|                     |                                     |  | 2G (GSM)  | 150.00            | 205.60                                    | 227.00                        |                                |                 |        | 157.27             |        |        |
|                     |                                     |  | 3G  | 96.00             | 101.10                                    | 94.00                         |                                |                 |        |                    |        |        |
|                     |                                     |  | 4G  | 46.00             |   | 73.00                         |                                | 53.03           |        |                    |        |        |
| 7                   | PDP Context Activation Success Rate | ≥95%   | All Generations                                   |                   |   |                               |                                |                 | 100    |                    |        |        |
|                     |                                     |  | 2G (GSM)  | 99.67             | 97.10                                     | 99.47                         |                                |                 |        | 99.59              |        |        |
|                     |                                     |  | 3G  | 99.76             | 97.10                                     | 96.48                         |                                |                 |        |                    |        |        |
|                     |                                     |  | 4G  | 99.47             |   | 97.18                         |                                | 99.83           |        |                    |        |        |
| 8                   | Drop rate :                         | ≤5%  | All Generations                                   |                   |   |                               |                                |                 | 1.18   |                    |        |        |
|                     |                                     |  | 2G (GSM)  | 3.40              |   | 3.07                          |                                |                 |        | 2.89               |        |        |
|                     |                                     |  | 3G  | 0.38              | 0.90                                      | 2.86                          |                                |                 |        |                    |        |        |
|                     |                                     |  | 4G  | 0.23              |   | 0.36                          |                                | 0.52            |        |                    |        |        |

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|---------|-------------------------------------|--|---|-------------------|--------|----------------|---------|--------------|------|--------------------|--|
|         |                                     |  |   | Airtel            | BSNL   | VIL-Brand Idea | MTNL    | Reliance JIO | TATA | VIL-Brand Vodafone |  |
| Chennai | 1                                   | Service Activation /Provisioning               | Within 4 hrs with 95% success                     | All Generations   |        | 100.00         |         |              |      |                    |  |
|         | 2                                   | Successful data transmission download attempts | >80%  | All Generations   |        |                |         |              |      |                    |  |
|         |                                     |  |   | 2G (GSM)          |        | 96.96          |         |              |      |                    |  |
|         |                                     |  |   | 3G                |        | 97.34          |         |              |      |                    |  |
|         |                                     |  |   | CDMA              |        |                |         |              |      |                    |  |
|         | 3                                   | Successful data transmission upload attempts   | >75%  | All Generations   |        |                |         |              |      |                    |  |
|         |                                     |  |   | 2G (GSM)          |        | 97.50          |         |              |      |                    |  |
|         |                                     |  |   | 3G                |        | 97.95          |         |              |      |                    |  |
|         |                                     |  |   | CDMA              |        |                |         |              |      |                    |  |
|         | 4                                   | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1 |                |         |              |      |                    |  |
|         |                                     |  |   |                   | Plan 2 |                |         |              |      |                    |  |
|         |                                     |  |   |                   | Plan 3 |                |         |              |      |                    |  |
|         |                                     |  |   | 2G                | Plan 1 |                | 62.00   |              |      |                    |  |
|         |                                     |  |   |                   | Plan 2 |                |         |              |      |                    |  |
|         |                                     |  |   | 3G                | Plan 1 |                | 551.00  |              |      |                    |  |
|         |                                     |  |   |                   | Plan 2 |                |         |              |      |                    |  |
|         |                                     |  |   |                   | Plan 3 |                |         |              |      |                    |  |
|         | 4G                                  | Plans  |   |                   |        |                |         |              |      |                    |  |
|         | 5                                   | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | CDMA              | Plan 1 |                |         |              |      |                    |  |
|         |                                     |  |   |                   | Plan 2 |                |         |              |      |                    |  |
|         |                                     |  |   |                   | Plan 3 |                |         |              |      |                    |  |
|         |                                     |  |   | 2G                | Plan 1 |                | 143.00  |              |      |                    |  |
|         |                                     |  |   |                   | Plan 2 |                |         |              |      |                    |  |
|         |                                     |  |   | 3G                | Plan 1 |                | 3027.00 |              |      |                    |  |
|         |                                     |  |   |                   | Plan 2 |                |         |              |      |                    |  |
|         |                                     |  |   |                   | Plan 3 |                |         |              |      |                    |  |
|         | 4G                                  | Plans  |   |                   |        |                |         |              |      |                    |  |
|         | 6                                   | Latency  | Data <250ms                                       | All Generations   |        |                |         |              |      |                    |  |
|         |                                     |  |   | 2G (GSM)          |        | 183.00         |         |              |      |                    |  |
|         |                                     |  |   | 3G                |        | 67.00          |         |              |      |                    |  |
|         |                                     |  |   | CDMA              |        |                |         |              |      |                    |  |
|         |                                     |  |   | 4G                |        |                |         |              |      |                    |  |
| 7       | PDP Context Activation Success Rate | ≥95%   | All Generations                                   |                   |        |                |         |              |      |                    |  |
|         |                                     |  | 2G (GSM)  |                   | 98.30  |                |         |              |      |                    |  |
|         |                                     |  | 3G  |                   | 97.62  |                |         |              |      |                    |  |
|         |                                     |  | CDMA  |                   |        |                |         |              |      |                    |  |
|         |                                     |  | 4G  |                   |        |                |         |              |      |                    |  |
| 8       | Drop rate :                         | ≤5%  | All Generations                                   |                   |        |                |         |              |      |                    |  |
|         |                                     |  | 2G (GSM)  |                   | 1.78   |                |         |              |      |                    |  |
|         |                                     |  | 3G  |                   | 1.88   |                |         |              |      |                    |  |
|         |                                     |  | CDMA  |                   |        |                |         |              |      |                    |  |
|         |                                     |  | 4G  |                   |        |                |         |              |      |                    |  |

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|----------|-------------|--|---|-------------------|--------|----------------|---------|----------------|-----------------|--------------------|---------|--------|---------|
|          |             |  |   | Airtel            | BSNL   | VIL-Brand Idea | MTNL    | Reliance JIO   | TATA            | VIL-Brand Vodafone |         |        |         |
| Delhi    | 1           | Service Activation /Provisioning               | Within 4 hrs with 95% success                     | All Generations   | 99.00  |                | 99.85   | 98.12          | 98.73           | 100                | 99.92   |        |         |
|          | 2           | Successful data transmission download attempts | >80%  | All Generations   |        |                |         |                |                 | 100                |         |        |         |
|          |             |  |   | 2G (GSM)          | 99.72  |                | 100.00  | 95.58          |                 |                    | 100.00  |        |         |
|          |             |  |   | 3G                | 99.91  |                | 100.00  | 98.62          |                 |                    | 100.00  |        |         |
|          |             |  |   | CDMA              |        |                |         |                |                 |                    |         |        |         |
|          |             |  |   | 4G                | 100.00 |                |         |                | 100.00          |                    | 99.91   |        |         |
|          | 3           | Successful data transmission upload attempts   | >75%  | All Generations   |        |                |         |                |                 |                    | 100     |        |         |
|          |             |  |   | 2G (GSM)          | 99.91  |                | 100.00  | 90.78          |                 |                    |         | 100.00 |         |
|          |             |  |   | 3G                | 100.00 |                | 100.00  | 98.33          |                 |                    |         | 99.91  |         |
|          |             |  |   | CDMA              |        |                |         |                |                 |                    |         |        |         |
|          | 4           | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1 |                |         |                |                 |                    |         | 20     |         |
|          |             |  |   |                   | Plan 2 |                |         |                |                 |                    |         |        |         |
|          |             |  |   |                   | Plan 3 |                |         |                |                 |                    |         |        |         |
|          |             |  |   | 2G                | Plan 1 | 56.00          |         | 55(open plan)  | 91.81           |                    |         |        | 53.67   |
|          |             |  |   |                   | 3G     | Plan 1         | 678.00  |                | 1843(open plan) | 681.26             |         |        |         |
|          |             |  |   | Plan 2            |        |                |         |                |                 |                    |         |        |         |
|          |             |  |   | Plan 3            |        |                |         |                |                 |                    |         |        |         |
|          |             |  |   | 4G                | Plans  | 7380.00        |         |                |                 |                    | 6513.00 |        | 4984.33 |
|          | 5           | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | CDMA              | Plan 1 |                |         |                |                 |                    |         | 73     |         |
|          |             |  |   |                   | Plan 2 |                |         |                |                 |                    |         |        |         |
|          |             |  |   |                   | Plan 3 |                |         |                |                 |                    |         |        |         |
|          |             |  |   | 2G                | Plan 1 | 81.00          |         | 233(open plan) | 200.89          |                    |         |        | 150.83  |
|          |             |  |   |                   | 3G     | Plan 1         | 1446.00 |                | 6157(open plan) | 3767.00            |         |        |         |
|          |             |  |   | Plan 2            |        |                |         |                |                 |                    |         |        |         |
|          |             |  |   | Plan 3            |        |                |         |                |                 |                    |         |        |         |
|          | 4G          | Plans  | 22889.00  |                   |        |                |         | 23368.45       |                 | 15365.15           |         |        |         |
|          | 6           | Latency  | Data <250ms                                       | All Generations   |        |                |         | 137.00         |                 |                    | 143.22  |        |         |
|          |             |  |   | 2G (GSM)          | 228.00 |                | 134.00  |                |                 |                    |         | 172.00 |         |
|          |             |  |   | 3G                | 83.00  |                | 57.00   |                |                 |                    |         | 95.67  |         |
|          |             |  |   | CDMA              |        |                |         |                |                 |                    |         |        |         |
|          |             |  |   | 4G                | 152.00 |                |         |                |                 | 33.31              |         |        | 49.67   |
|          | 7           | PDP Context Activation Success Rate            | ≥95%  | All Generations   |        |                |         | 98.30          |                 |                    | 97.28   |        |         |
| 2G (GSM) |             |  |   | 99.14             |        | 99.36          |         |                |                 |                    | 99.63   |        |         |
| 3G       |             |  |   | 100.00            |        | 99.25          |         |                |                 |                    | 98.44   |        |         |
| CDMA     |             |  |   |                   |        |                |         |                |                 |                    |         |        |         |
| 4G       |             |  |   | 97.85             |        |                |         |                | 99.71           |                    |         | 99.85  |         |
| 8        | Drop rate : | ≤5%  | All Generations                                   |                   |        |                | 2.18    |                |                 | 0.21               |         |        |         |
|          |             |  | 2G (GSM)  | 2.92              |        | 0.21           |         |                |                 |                    | 1.76    |        |         |
|          |             |  | 3G  | 0.39              |        | 0.69           |         |                |                 |                    | 0.62    |        |         |
|          |             |  | CDMA  |                   |        |                |         |                |                 |                    |         |        |         |
|          |             |  | 4G  | 0.55              |        |                |         |                | 0.42            |                    |         | 0.32   |         |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.

**Quarterly Performance Monitoring Report (PMR) on Quality of Service of Wireless Data Services**

**Report for quarter ending: March 2019**

**Compliance Status**

| Sl. No. | Parameters                          | Benchmarks                                     | Generations                                       | Compliance Status |   |                               |           |                  |          |                    |         |  |  |    |  |
|---------|-------------------------------------|--|---|-------------------|---|-------------------------------|-----------|------------------|----------|--------------------|---------|--|--|----|--|
|         |                                     |  |   | Airtel            | BSNL                                      | VIL-Brand Idea                | MTNL      | Reliance JIO     | TATA     | VIL-Brand Vodafone |         |  |  |    |  |
| Gujarat | 1                                   | Service Activation /Provisioning               | Within 4 hrs with 95% success                     | All Generations   | 100.00                                    | 98.00                         | 98.93     |                  | 98.38    | 100                | 100.00  |  |  |    |  |
|         | 2                                   | Successful data transmission download attempts | >80%  | 2G (GSM)          |   |                               |           |                  |          |                    |         |  |  |    |  |
|         |                                     |  |   | All Generations   |   | 98.00                         |           |                  | 100      |                    |         |  |  |    |  |
|         |                                     |  |   | 2G (GSM)          | 100.00                                    |                               | 100.00    |                  |          | 99.83              |         |  |  |    |  |
|         |                                     |  |   | 3G                | 100.00                                    |                               | 100.00    |                  |          | 100.00             |         |  |  |    |  |
|         |                                     |  |   | 4G                | 100.00                                    |                               | 100.00    | 100.00           |          | 100.00             |         |  |  |    |  |
|         | 3                                   | Successful data transmission upload attempts   | >75%  | All Generations   |   | 99.00                         |           |                  |          | 100                |         |  |  |    |  |
|         |                                     |  |   | 2G (GSM)          | 100.00                                    |                               | 100.00    |                  |          | 100.00             |         |  |  |    |  |
|         |                                     |  |   | 3G                | 100.00                                    |                               | 100.00    |                  |          | 100.00             |         |  |  |    |  |
|         |                                     |  |   | 4G                | 100.00                                    |                               | 100.00    |                  |          | 100.00             |         |  |  |    |  |
|         |                                     |  |   | CDMA              |   |                               |           |                  |          |                    |         |  |  |    |  |
|         | 4                                   | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1                                    |                               |           |                  |          |                    | 62      |  |  |    |  |
|         |                                     |  |   |                   | Plan 2                                    |                               |           |                  |          |                    |         |  |  |    |  |
|         |                                     |  |   |                   | Plan 3                                    |                               |           |                  |          |                    |         |  |  |    |  |
|         |                                     |  |   | 2G                | Plan 1                                    | 107.00                        |           | 118(open plan)   |          | 65                 | 81.58   |  |  |    |  |
|         |                                     |  |   |                   | 3G  | 4012.00                       | 1563 kbps | 1946(open plan)  |          |                    | 2406.00 |  |  |    |  |
|         |                                     |  |   | 3G                | Plan 2                                    |                               |           |                  |          | 2088               |         |  |  |    |  |
|         |                                     |  |   |                   | Plan 3                                    |                               |           |                  |          | 3126               |         |  |  |    |  |
|         |                                     |  |   |                   | 4G  | 7792.00                       |           | 7596(open plan)  | 9882.53  |                    | 4893.33 |  |  |    |  |
|         |                                     |  |   | 5                 | Average Throughput for Packet data (Kbps) | >75% of the subscribed speed. | CDMA      | Plan 1           |          |                    |         |  |  | 82 |  |
|         |                                     |  |   |                   |   |                               |           | Plan 2           |          |                    |         |  |  |    |  |
|         | Plan 3                              |  |   |                   |   |                               |           |                  |          |                    |         |  |  |    |  |
|         | 2G                                  | Plan 1   | 170.00  |                   |   |                               |           | 182(open plan)   |          | 129                | 168.79  |  |  |    |  |
|         |                                     | 3G   | 4557.00   |                   |   |                               | 4920 Kbps | 4568(open plan)  |          |                    | 6679.37 |  |  |    |  |
|         | 3G                                  | Plan 2   |   |                   |   |                               |           |                  |          | 3146               |         |  |  |    |  |
|         |                                     | Plan 3   |   |                   |   |                               |           |                  |          | 5055               |         |  |  |    |  |
|         |                                     | 4G   | 14719.00  |                   |   |                               |           | 14298(open plan) | 28941.69 |                    | 8337.98 |  |  |    |  |
|         | 6                                   | Latency  | Data <250ms                                       | All Generations   |   | 85 ms                         |           |                  |          | 64.5               |         |  |  |    |  |
|         |                                     |  |   | 2G (GSM)          | 216.00                                    |                               | 120.00    |                  |          | 130.33             |         |  |  |    |  |
|         |                                     |  |   | 3G                | 55.00                                     |                               | 61.00     |                  |          | 56.17              |         |  |  |    |  |
|         |                                     |  |   | 4G                | 42.00                                     |                               | 48.00     |                  | 42.66    | 28.33              |         |  |  |    |  |
|         |                                     |  |   | CDMA              |   |                               |           |                  |          |                    |         |  |  |    |  |
| 7       | PDP Context Activation Success Rate | ≥95%   | All Generations                                   |                   | 99.62                                     |                               |           |                  | 99.3     |                    |         |  |  |    |  |
|         |                                     |  | 2G (GSM)  | 99.99             |   | 99.95                         |           |                  | 99.78    |                    |         |  |  |    |  |
|         |                                     |  | 3G  | 99.59             |   | 99.94                         |           |                  | 99.78    |                    |         |  |  |    |  |
|         |                                     |  | 4G  | 99.55             |   | 99.69                         |           | 99.72            | 99.69    |                    |         |  |  |    |  |
|         |                                     |  | CDMA  |                   |   |                               |           |                  |          |                    |         |  |  |    |  |
| 8       | Drop rate :                         | ≤5%  | All Generations                                   |                   | 1.00                                      |                               |           |                  | 2.3      |                    |         |  |  |    |  |
|         |                                     |  | 2G (GSM)  | 4.93              |   | 0.32                          |           |                  | 4.30     |                    |         |  |  |    |  |
|         |                                     |  | 3G  | 0.23              |   | 0.47                          |           |                  | 0.41     |                    |         |  |  |    |  |
|         |                                     |  | 4G  | 0.06              |   | 0.47                          |           | 0.38             | 0.24     |                    |         |  |  |    |  |
|         |                                     |  | CDMA  |                   |   |                               |           |                  |          |                    |         |  |  |    |  |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.

**Quarterly Performance Monitoring Report (PMR) on Quality of Service of Wireless Data Services**

**Report for quarter ending: March 2019**

**Compliance Status**

| Sl. No.          | Parameters                          | Benchmarks                                     | Generations                                       | Compliance Status |   |                               |                 |                  |                 |                    |       |        |  |
|------------------|-------------------------------------|--|---|-------------------|---|-------------------------------|-----------------|------------------|-----------------|--------------------|-------|--------|--|
|                  |                                     |  |   | Airtel            | BSNL                                      | VIL-Brand Idea                | MTNL            | Reliance JIO     | TATA            | VIL-Brand Vodafone |       |        |  |
| Himachal Pradesh | 1                                   | Service Activation /Provisioning               | Within 4 hrs with 95% success rate.               | All Generations   |   | 100.00                        | 100.00          | 99.48            |                 | 98.91              | 100   | 100.00 |  |
|                  |                                     |  |   | 2G (GSM)          |   |                               |                 |                  |                 |                    |       |        |  |
|                  |                                     |  |   | 3G                |   |                               |                 |                  |                 |                    |       |        |  |
|                  |                                     |  |   | CDMA              |   |                               |                 |                  |                 |                    |       |        |  |
|                  | 2                                   | Successful data transmission download attempts | >80%  | All Generations   |   |                               | 92.00           |                  |                 |                    | 100   |        |  |
|                  |                                     |  |   | 2G (GSM)          |   | 100.00                        |                 | 100.00           |                 |                    |       | 100.00 |  |
|                  |                                     |  |   | 3G                |   | 100.00                        |                 | 100.00           |                 |                    |       |        |  |
|                  |                                     |  |   | 4G                |   | 100.00                        |                 | 100.00           |                 | 100.00             |       |        |  |
|                  | 3                                   | Successful data transmission upload attempts   | >75%  | All Generations   |   |                               | 93.00           |                  |                 |                    | 100   |        |  |
|                  |                                     |  |   | 2G (GSM)          |   | 100.00                        |                 | 100.00           |                 |                    |       | 100.00 |  |
|                  |                                     |  |   | 3G                |   | 100.00                        |                 | 100.00           |                 |                    |       |        |  |
|                  |                                     |  |   | 4G                |   | 100.00                        |                 | 100.00           |                 | 100.00             |       |        |  |
|                  | 4                                   | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1                                    |                               |                 |                  |                 |                    |       |        |  |
|                  |                                     |  |   |                   | Plan 2                                    |                               |                 |                  |                 |                    |       |        |  |
|                  |                                     |  |   | 2G                | Plan 1                                    | 78.00                         | 65.00           | 74(open plan)    |                 |                    | 80    | 122.04 |  |
|                  |                                     |  |   |                   | 3G  | Plan 1                        | 1386.00         | 983.00           | 1647(open plan) |                    |       |        |  |
|                  |                                     |  |   |                   |   | Plan 2                        |                 |                  |                 |                    |       |        |  |
|                  |                                     |  |   | 4G                | Plan 3                                    |                               |                 |                  |                 |                    |       |        |  |
|                  |                                     |  |   |                   | Plans                                     | 1981.00                       |                 | 8576(open plan)  |                 | 10532.13           |       |        |  |
|                  |                                     |  |   | 5                 | Average Throughput for Packet data (Kbps) | >75% of the subscribed speed. | CDMA            | Plan 1           |                 |                    |       |        |  |
|                  | Plan 2                              |  |   |                   |   |                               |                 |                  |                 |                    |       |        |  |
|                  | 2G                                  | Plan 1   | 109.00  |                   |   |                               | 106.00          | 171(open plan)   |                 |                    | 113   | 179.46 |  |
|                  |                                     | 3G   | Plan 1  |                   |   |                               | 3147.00         | 1782.00          | 4298(open plan) |                    |       |        |  |
|                  |                                     |  | Plan 2  |                   |   |                               |                 |                  |                 |                    |       |        |  |
|                  | 4G                                  | Plan 3   |   |                   |   |                               |                 |                  |                 |                    |       |        |  |
|                  |                                     | Plans  | 4878.00   |                   |   |                               |                 | 14811(open plan) |                 | 27995.70           |       |        |  |
|                  | 6                                   | Latency  | Data <250ms                                       |                   |   |                               | All Generations |                  |                 | 84.00              |       |        |  |
|                  |                                     |  |   | 2G (GSM)          |   | 222.00                        |                 | 216.00           |                 |                    |       | 105.55 |  |
| 3G               |                                     |  |   | 168.00            |   | 181.00                        |                 |                  |                 |                    |       |        |  |
| 4G               |                                     |  |   | 85.00             |   | 105.00                        |                 | 40.31            |                 |                    |       |        |  |
| 7                | PDP Context Activation Success Rate | ≥95%   | All Generations                                   |                   |   | 99.00                         |                 |                  |                 | 100                |       |        |  |
|                  |                                     |  | 2G (GSM)  |                   | 99.04                                     |                               | 100.00          |                  |                 |                    | 99.53 |        |  |
|                  |                                     |  | 3G  |                   | 100.00                                    |                               | 100.00          |                  |                 |                    |       |        |  |
|                  |                                     |  | 4G  |                   | 98.29                                     |                               | 100.00          |                  | 99.88           |                    |       |        |  |
| 8                | Drop rate :                         | ≤5%  | All Generations                                   |                   |   | 1.00                          |                 |                  |                 | 0.98               |       |        |  |
|                  |                                     |  | 2G (GSM)  |                   | 1.68                                      |                               | 0.62            |                  |                 |                    | 2.90  |        |  |
|                  |                                     |  | 3G  |                   | 0.34                                      |                               | 0.76            |                  |                 |                    |       |        |  |
|                  |                                     |  | 4G  |                   | 0.57                                      |                               | 0.86            |                  | 0.37            |                    |       |        |  |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.

**Quarterly Performance Monitoring Report (PMR) on Quality of Service of Wireless Data Services**

**Report for quarter ending: March 2019**

**Compliance Status**

| Sl. No. | Parameters                          | Benchmarks                                     | Generations                                       | Compliance Status |        |                |         |                  |                 |                    |         |          |         |
|---------|-------------------------------------|--|---|-------------------|--------|----------------|---------|------------------|-----------------|--------------------|---------|----------|---------|
|         |                                     |  |   | Airtel            | BSNL   | VIL-Brand Idea | MTNL    | Reliance JIO     | TATA            | VIL-Brand Vodafone |         |          |         |
| Haryana | 1                                   | Service Activation /Provisioning               | Within 4 hrs with 95% success                     | All Generations   | 100.00 | 98.33          | 99.99   |                  | 98.23           | 100                | 99.97   |          |         |
|         |                                     |  |   | 2G (GSM)          |        |                |         |                  |                 |                    |         |          |         |
|         | 2                                   | Successful data transmission download attempts | >80%  | All Generations   |        | 86.67          |         |                  |                 |                    | 99.9    |          |         |
|         |                                     |  |   | 2G (GSM)          | 100.00 |                | 100.00  |                  |                 |                    | 100.00  |          |         |
|         |                                     |  |   | 3G                | 100.00 |                | 100.00  |                  |                 |                    | 100.00  |          |         |
|         |                                     |  |   | 4G                | 100.00 |                | 100.00  |                  | 100.00          |                    | 100.00  |          |         |
|         | 3                                   | Successful data transmission upload attempts   | >75%  | All Generations   |        | 86.67          |         |                  |                 |                    | 99.9    |          |         |
|         |                                     |  |   | 2G (GSM)          | 100.00 |                | 100.00  |                  |                 |                    | 100.00  |          |         |
|         |                                     |  |   | 3G                | 100.00 |                | 100.00  |                  |                 |                    | 100.00  |          |         |
|         |                                     |  |   | 4G                | 100.00 |                | 99.99   |                  | 100.00          |                    | 100.00  |          |         |
|         | 4                                   | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1 |                |         |                  |                 |                    |         |          |         |
|         |                                     |  |   |                   | Plan 2 |                |         |                  |                 |                    |         |          |         |
|         |                                     |  |   | 2G                | Plan 1 | 157.00         | 73.33   | 151(open plan)   |                 |                    | 65.55   | 112.33   |         |
|         |                                     |  |   |                   | 3G     | Plan 1         | 1116.00 | 1766.67          | 1640(open plan) |                    |         | 796.6    | 4196.50 |
|         |                                     |  |   |                   |        | Plan 2         |         |                  |                 |                    |         | 1453.84  |         |
|         |                                     |  |   | Plan 3            |        |                |         |                  |                 | 1313.23            |         |          |         |
|         |                                     |  |   | 4G                | Plans  | 1195.00        |         | 5641(open plan)  |                 | 13740.83           |         | 8362.58  |         |
|         | 5                                   | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | CDMA              | Plan 1 |                |         |                  |                 |                    |         |          |         |
|         |                                     |  |   |                   | Plan 2 |                |         |                  |                 |                    |         |          |         |
|         |                                     |  |   |                   | Plan 3 |                |         |                  |                 |                    |         |          |         |
|         |                                     |  |   | 2G                | Plan 1 | 170.00         | 122.67  | 176(open plan)   |                 |                    | 97.85   | 171.44   |         |
|         |                                     |  |   |                   | 3G     | Plan 1         | 2123.00 | 1846.67          | 3105(open plan) |                    |         | 1642.03  | 6909.59 |
|         |                                     |  |   | Plan 2            |        |                |         |                  |                 |                    | 2561.66 |          |         |
|         |                                     |  |   | Plan 3            |        |                |         |                  |                 |                    | 2599.33 |          |         |
|         |                                     |  |   | 4G                | Plans  | 10516.00       |         | 11420(open plan) |                 | 36764.94           |         | 16000.60 |         |
|         | 6                                   | Latency  | Data <250ms                                       | All Generations   |        | 123.33         |         |                  |                 |                    | 84      |          |         |
|         |                                     |  |   | 2G (GSM)          | 233.00 |                | 149.00  |                  |                 |                    | 72.88   |          |         |
|         |                                     |  |   | 3G                | 138.00 |                | 26.00   |                  |                 |                    | 20.90   |          |         |
| 4G      |                                     |  |   | 95.00             |        | 52.00          |         | 43.86            |                 | 15.03              |         |          |         |
| 7       | PDP Context Activation Success Rate | ≥95%   | All Generations                                   |                   | 98.45  |                |         |                  |                 | 100                |         |          |         |
|         |                                     |  | 2G (GSM)  | 98.74             |        | 99.76          |         |                  |                 | 99.60              |         |          |         |
|         |                                     |  | 3G  | 100.00            |        | 99.37          |         |                  |                 | 98.27              |         |          |         |
|         |                                     |  | 4G  | 98.13             |        | 99.98          |         | 99.83            |                 | 99.90              |         |          |         |
| 8       | Drop rate :                         | ≤5%  | All Generations                                   |                   | 1.58   |                |         |                  |                 | 1.4                |         |          |         |
|         |                                     |  | 2G (GSM)  | 0.93              |        | 3.05           |         |                  |                 | 4.44               |         |          |         |
|         |                                     |  | 3G  | 0.03              |        | 1.74           |         |                  |                 | 1.07               |         |          |         |
|         |                                     |  | 4G  | 0.06              |        | 0.67           |         | 0.42             |                 | 0.29               |         |          |         |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.



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**Report for quarter ending: March 2019**

**Compliance Status**

| Sl. No.           | Parameters | Benchmarks                                     | Generations                                       | Compliance Status |          |                |                  |              |          |                    |        |  |
|-------------------|------------|--|---|-------------------|----------|----------------|------------------|--------------|----------|--------------------|--------|--|
|                   |            |  |   | Airtel            | BSNL     | VIL-Brand Idea | MTNL             | Reliance JIO | TATA     | VIL-Brand Vodafone |        |  |
| Jammu and Kashmir | 1          | Service Activation /Provisioning               | Within 4 hrs with 95% success                     | All Generations   | 100.00   | 98.00          | 95.63            |              | 97.33    |                    | 99.99  |  |
|                   |            |  |   | 3G                |          |                |                  |              |          |                    |        |  |
|                   | 2          | Successful data transmission download attempts | >80%  | All Generations   |          | 96.00          |                  |              |          |                    |        |  |
|                   |            |  |   | 2G (GSM)          | 100.00   |                | 100.00           |              |          |                    | 100.00 |  |
|                   |            |  |   | 3G                | 100.00   |                | 100.00           |              |          |                    |        |  |
|                   |            |  |   | 4G                | 100.00   |                | 100.00           |              | 100.00   |                    |        |  |
|                   | 3          | Successful data transmission upload attempts   | >75%  | All Generations   |          | 87.00          |                  |              |          |                    |        |  |
|                   |            |  |   | 2G (GSM)          | 100.00   |                | 100.00           |              |          |                    |        |  |
|                   |            |  |   | 3G                | 100.00   |                | 100.00           |              |          |                    |        |  |
|                   |            |  |   | 4G                | 100.00   |                | 100.00           |              | 100.00   |                    |        |  |
|                   | 4          | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA Plan 1       |          |                |                  |              |          |                    |        |  |
|                   |            |  |   | 2G Plan 1         | 185.00   | 39.00          | 107(open plan)   |              |          |                    | 132.07 |  |
|                   |            |  |   | 3G Plan 1         | 722.00   | 1324.00        | 3473(open plan)  |              |          |                    |        |  |
|                   |            |  |   | 4G Plans          | 11153.00 |                | 5062(open plan)  |              | 4379.68  |                    |        |  |
|                   | 5          | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | CDMA Plan 1       |          |                |                  |              |          |                    |        |  |
|                   |            |  |   | 2G Plan 1         | 228.00   | 69.00          | 119(open plan)   |              |          |                    | 173.81 |  |
|                   |            |  |   | 3G Plan 1         | 1030.00  | 1919.00        | 5791(open plan)  |              |          |                    |        |  |
|                   |            |  |   | 4G Plans          | 22556.00 |                | 11809(open plan) |              | 19944.80 |                    |        |  |
|                   | 6          | Latency  | Data <250ms                                       | All Generations   |          | 177.00         |                  |              |          |                    |        |  |
|                   |            |  |   | 2G (GSM)          | 216.00   |                | 206.00           |              |          |                    | 131.81 |  |
|                   |            |  |   | 3G                | 99.00    |                | 148.00           |              |          |                    |        |  |
|                   |            |  |   | 4G                | 68.00    |                | 75.00            |              | 44.88    |                    |        |  |
|                   | 7          | PDP Context Activation Success Rate            | ≥95%  | All Generations   |          | 98.00          |                  |              |          |                    |        |  |
|                   |            |  |   | 2G (GSM)          | 100.00   |                | 100.00           |              |          |                    | 99.92  |  |
|                   |            |  |   | 3G                | 99.33    |                | 100.00           |              |          |                    |        |  |
|                   |            |  |   | 4G                | 100.00   |                | 100.00           |              | 99.96    |                    |        |  |
|                   | 8          | Drop rate :                                    | ≤5%   | All Generations   |          | 2.00           |                  |              |          |                    |        |  |
|                   |            |  |   | 2G (GSM)          | 1.96     |                | 0.27             |              |          |                    | 2.22   |  |
| 3G                |            |  |   | 0.46              |          | 0.88           |                  |              |          |                    |        |  |
| 4G                |            |  |   | 0.45              |          | 1.01           |                  | 0.35         |          |                    |        |  |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.

**Quarterly Performance Monitoring Report (PMR) on Quality of Service of Wireless Data Services**

**Report for quarter ending: March 2019**

**Compliance Status**

| Sl. No. | Parameters                          | Benchmarks                                     | Generations                                       | Compliance Status |        |                |         |                 |        |                    |       |          |
|---------|-------------------------------------|--|---|-------------------|--------|----------------|---------|-----------------|--------|--------------------|-------|----------|
|         |                                     |  |   | Airtel            | BSNL   | VIL-Brand Idea | MTNL    | Reliance JIO    | TATA   | VIL-Brand Vodafone |       |          |
| Kolkata | 1                                   | Service Activation /Provisioning               | Within 4 hrs with 95% success                     | All Generations   | 99.00  |                | 99.43   |                 | 99.07  | 100                | 99.99 |          |
|         | 2                                   | Successful data transmission download attempts | >80%  | All Generations   |        | 95.30          |         |                 |        | 100                |       |          |
|         |                                     |  |   | 2G (GSM)          | 100.00 |                | 99.30   |                 |        | 100.00             |       |          |
|         |                                     |  |   | 3G                | 100.00 |                | 99.52   |                 |        | 100.00             |       |          |
|         |                                     |  |   | CDMA              |        |                |         |                 |        |                    |       |          |
|         |                                     |  |   | 4G                | 100.00 |                |         |                 | 100.00 | 100.00             |       |          |
|         | 3                                   | Successful data transmission upload attempts   | >75%  | All Generations   |        | 94.60          |         |                 |        | 100                |       |          |
|         |                                     |  |   | 2G (GSM)          | 100.00 |                | 98.11   |                 |        | 100.00             |       |          |
|         |                                     |  |   | 3G                | 100.00 |                | 99.14   |                 |        | 100.00             |       |          |
|         |                                     |  |   | CDMA              |        |                |         |                 |        |                    |       |          |
|         |                                     |  |   | 4G                | 100.00 |                |         |                 | 100.00 | 100.00             |       |          |
|         | 4                                   | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1 |                |         |                 |        |                    |       |          |
|         |                                     |  |   |                   | Plan 2 |                |         |                 |        |                    |       |          |
|         |                                     |  |   | 2G                | Plan 1 | 172.00         | 49.30   | 112(open plan)  |        |                    | 71    | 157.00   |
|         |                                     |  |   |                   | Plan 2 |                |         |                 |        |                    |       |          |
|         |                                     |  |   | 3G                | Plan 1 | 3644.00        | 649.00  | 2289(open plan) |        |                    |       | 3130.67  |
|         |                                     |  |   |                   | Plan 2 |                |         |                 |        |                    |       |          |
|         |                                     |  |   |                   | Plan 3 |                |         |                 |        |                    |       |          |
|         |                                     |  |   | 4G                | Plans  | 14278.00       |         |                 |        | 6753.83            |       | 11218.33 |
|         | 5                                   | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | CDMA              | Plan 1 |                |         |                 |        |                    |       |          |
|         |                                     |  |   |                   | Plan 2 |                |         |                 |        |                    |       |          |
|         |                                     |  |   | 2G                | Plan 1 | 179.00         | 87.60   | 142(open plan)  |        |                    | 168   | 199.37   |
|         |                                     |  |   |                   | Plan 2 |                |         |                 |        |                    |       |          |
|         |                                     |  |   | 3G                | Plan 1 | 7186.00        | 2016.60 | 4348(open plan) |        |                    |       | 8084.41  |
|         |                                     |  |   |                   | Plan 2 |                |         |                 |        |                    |       |          |
|         |                                     |  |   |                   | Plan 3 |                |         |                 |        |                    |       |          |
|         |                                     |  |   | 4G                | Plans  | 33198.00       |         |                 |        | 26857.39           |       | 20996.01 |
|         | 6                                   | Latency  | Data <250ms                                       | All Generations   |        | 128.00         |         |                 |        | 150.67             |       |          |
|         |                                     |  |   | 2G (GSM)          | 104.00 |                | 237.00  |                 |        | 155.67             |       |          |
|         |                                     |  |   | 3G                | 49.00  |                | 120.00  |                 |        | 44.00              |       |          |
|         |                                     |  |   | CDMA              |        |                |         |                 |        |                    |       |          |
|         |                                     |  |   | 4G                | 33.00  |                |         |                 | 48.45  | 45.00              |       |          |
| 7       | PDP Context Activation Success Rate | ≥95%   | All Generations                                   |                   |        |                |         |                 | 100    |                    |       |          |
|         |                                     |  | 2G (GSM)  | 100.00            | 99.89  | 98.20          |         |                 | 98.47  |                    |       |          |
|         |                                     |  | 3G  | 100.00            | 99.94  | 99.07          |         |                 | 98.53  |                    |       |          |
|         |                                     |  | CDMA  |                   |        |                |         |                 |        |                    |       |          |
|         |                                     |  | 4G  | 99.31             |        |                |         | 99.80           | 99.98  |                    |       |          |
| 8       | Drop rate :                         | ≤5%  | All Generations                                   |                   |        |                |         |                 | 1.28   |                    |       |          |
|         |                                     |  | 2G (GSM)  | 1.88              |        | 0.79           |         |                 | 3.98   |                    |       |          |
|         |                                     |  | GSM (OSS)   |                   |        |                |         |                 |        |                    |       |          |
|         |                                     |  | 3G  | 0.04              |        | 0.07           |         |                 | 0.57   |                    |       |          |
|         |                                     |  | 3G (OSS)  |                   |        |                |         |                 |        |                    |       |          |
|         |                                     |  | CDMA  |                   |        |                |         |                 |        |                    |       |          |
| 4G      | 0.17                                |  |   |                   | 0.27   | 0.16           |         |                 |        |                    |       |          |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.

**Quarterly Performance Monitoring Report (PMR) on Quality of Service of Wireless Data Services**

**Report for quarter ending: March 2019**

**Compliance Status**

| Sl. No. | Parameters                          | Benchmarks                                     | Generations                                       | Compliance Status |        |                |         |                  |        |                    |        |          |
|---------|-------------------------------------|--|---|-------------------|--------|----------------|---------|------------------|--------|--------------------|--------|----------|
|         |                                     |  |   | Airtel            | BSNL   | VIL-Brand Idea | MTNL    | Reliance JIO     | TATA   | VIL-Brand Vodafone |        |          |
| Kerala  | 1                                   | Service Activation /Provisioning               | Within 4 hrs with 95% success                     | All Generations   | 100.00 |                | 99.95   |                  | 98.68  | 100                | 100.00 |          |
|         | 2                                   | Successful data transmission download attempts | >80%  | 2G (GSM)          |        |                |         |                  |        |                    |        |          |
|         |                                     |  |   | All Generations   |        | 97.84          |         |                  | 100    |                    |        |          |
|         |                                     |  |   | 2G (GSM)          | 100.00 |                | 100.00  |                  |        | 100.00             |        |          |
|         |                                     |  |   | 3G                | 100.00 |                | 100.00  |                  |        |                    |        |          |
|         |                                     |  |   | 4G                | 100.00 |                | 100.00  |                  | 100.00 | 100.00             |        |          |
|         | 3                                   | Successful data transmission upload attempts   | >75%  | All Generations   |        | 97.17          |         |                  |        | 100                |        |          |
|         |                                     |  |   | 2G (GSM)          | 100.00 |                | 100.00  |                  |        |                    |        |          |
|         |                                     |  |   | 3G                | 100.00 |                | 100.00  |                  |        |                    |        |          |
|         |                                     |  |   | 4G                | 100.00 |                | 100.00  |                  | 100.00 | 100.00             |        |          |
|         | 4                                   | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1 |                |         |                  |        |                    |        |          |
|         |                                     |  |   |                   | Plan 2 |                |         |                  |        |                    |        |          |
|         |                                     |  |   |                   | Plan 3 |                |         |                  |        |                    |        |          |
|         |                                     |  |   | 2G                | Plan 1 | 134.00         | 45.28   | 157(open plan)   |        |                    | 34     | 145.86   |
|         |                                     |  |   |                   | 3G     | 6126.00        | 835.71  | 1245(open plan)  |        |                    |        | 2900.76  |
|         |                                     |  |   | 4G                | Plan 2 |                |         |                  |        |                    | 1072   |          |
|         |                                     |  |   |                   | Plan 3 |                |         |                  |        |                    | 1629   |          |
|         |                                     |  |   |                   | Plans  | 12568.00       | 1458.21 | 6669(open plan)  |        | 5801.77            |        | 4231.05  |
|         | 5                                   | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | CDMA              | Plan 1 |                |         |                  |        |                    |        |          |
|         |                                     |  |   |                   | Plan 2 |                |         |                  |        |                    |        |          |
|         |                                     |  |   |                   | Plan 3 |                |         |                  |        |                    |        |          |
|         |                                     |  |   | 2G                | Plan 1 | 232.00         | 85.01   | 207(open plan)   |        |                    | 62     | 188.69   |
|         |                                     |  |   |                   | 3G     | 8841.00        | 1918.13 | 3061(open plan)  |        |                    |        | 3965.53  |
|         |                                     |  |   | 4G                | Plan 2 |                |         |                  |        |                    | 2050   |          |
|         |                                     |  |   |                   | Plan 3 |                |         |                  |        |                    | 2885   |          |
|         |                                     |  |   |                   | Plans  | 17354.00       | 4663.65 | 13953(open plan) |        | 21692.42           |        | 11877.82 |
|         | 6                                   | Latency  | Data <250ms                                       | All Generations   |        | 120.07         |         |                  |        |                    | 151.1  |          |
|         |                                     |  |   | 2G (GSM)          | 234.00 |                | 203.00  |                  |        |                    | 59.33  |          |
|         |                                     |  |   | 3G                | 85.00  |                | 26.00   |                  |        |                    | 25.00  |          |
|         |                                     |  |   | 4G                | 68.00  |                | 22.00   |                  | 44.11  |                    | 18.00  |          |
| CDMA    |                                     |  |   |                   |        |                |         |                  |        |                    |        |          |
| 7       | PDP Context Activation Success Rate | ≥95%   | All Generations                                   |                   | 98.61  |                |         |                  |        | 100                |        |          |
|         |                                     |  | 2G (GSM)  | 99.26             |        | 99.99          |         |                  |        | 99.71              |        |          |
|         |                                     |  | 3G  | 99.97             |        | 98.74          |         |                  |        | 79.75              |        |          |
|         |                                     |  | 4G  | 99.85             |        | 99.88          |         | 99.76            |        | 99.80              |        |          |
|         |                                     |  | CDMA  |                   |        |                |         |                  |        |                    |        |          |
| 8       | Drop rate :                         | ≤5%  | All Generations                                   |                   | 0.44   |                |         |                  |        | 0.9                |        |          |
|         |                                     |  | 2G (GSM)  | 1.97              |        | 2.04           |         |                  |        | 3.75               |        |          |
|         |                                     |  | 3G  | 0.18              |        | 1.08           |         |                  |        | 1.01               |        |          |
|         |                                     |  | 4G  | 0.02              |        | 0.60           |         | 0.41             |        | 0.07               |        |          |
|         |                                     |  | CDMA  |                   |        |                |         |                  |        |                    |        |          |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.

**Quarterly Performance Monitoring Report (PMR) on Quality of Service of Wireless Data Services**

**Report for quarter ending: March 2019**

**Compliance Status**

| Sl. No.   | Parameters  | Benchmarks                                     | Generations                                       | Compliance Status |        |                |         |                  |        |                    |       |          |         |
|-----------|-------------|--|---|-------------------|--------|----------------|---------|------------------|--------|--------------------|-------|----------|---------|
|           |             |  |   | Airtel            | BSNL   | VIL-Brand Idea | MTNL    | Reliance JIO     | TATA   | VIL-Brand Vodafone |       |          |         |
| Karnataka | 1           | Service Activation /Provisioning               | Within 4 hrs with 95% success                     | All Generations   | 100.00 | 100.00         | 99.97   |                  | 98.54  | 100                | 99.99 |          |         |
|           | 2           | Successful data transmission download attempts | >80%  | 2G (GSM)          |        |                |         |                  |        |                    |       |          |         |
|           |             |  |   | All Generations   |        |                |         |                  |        | 100                |       |          |         |
|           |             |  |   | 2G (GSM)          | 100.00 | 100.00         | 100.00  |                  |        |                    |       | 100.00   |         |
|           |             |  |   | 3G                | 100.00 | 100.00         |         |                  |        |                    |       | 100.00   |         |
|           |             |  |   | 4G                | 100.00 |                | 100.00  |                  | 100.00 |                    |       | 100.00   |         |
|           | 3           | Successful data transmission upload attempts   | >75%  | All Generations   |        |                |         |                  |        |                    | 100   |          |         |
|           |             |  |   | 2G (GSM)          | 100.00 | 100.00         | 100.00  |                  |        |                    |       | 100.00   |         |
|           |             |  |   | 3G                | 100.00 | 100.00         |         |                  |        |                    |       | 100.00   |         |
|           |             |  |   | 4G                | 100.00 |                | 100.00  |                  | 100.00 |                    |       | 100.00   |         |
|           | 4           | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1 |                |         |                  |        |                    |       |          |         |
|           |             |  |   |                   | Plan 2 |                |         |                  |        |                    |       |          |         |
|           |             |  |   |                   | Plan 3 |                |         |                  |        |                    |       |          |         |
|           |             |  |   | 2G                | Plan 1 | 113.00         | 94.57   | 144(open plan)   |        |                    | 51.07 | 173.12   |         |
|           |             |  |   | 3G                | Plan 1 | 1695.00        | 1340.47 |                  |        |                    |       |          | 5273.91 |
|           |             |  |   |                   | Plan 2 |                |         |                  |        |                    |       | 528      |         |
|           |             |  |   |                   | Plan 3 |                |         |                  |        |                    |       | 1504     |         |
|           |             |  |   | 4G                | Plans  | 5806.00        |         | 8447(open plan)  |        | 6129.38            |       | 21494.35 |         |
|           | 5           | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | CDMA              | Plan 1 |                |         |                  |        |                    |       |          |         |
|           |             |  |   |                   | Plan 2 |                |         |                  |        |                    |       |          |         |
|           |             |  |   |                   | Plan 3 |                |         |                  |        |                    |       |          |         |
|           |             |  |   | 2G                | Plan 1 | 179.00         | 173.01  | 165(open plan)   |        |                    | 87.5  | 207.72   |         |
|           |             |  |   | 3G                | Plan 1 | 3648.00        | 2493.83 |                  |        |                    |       |          | 8653.92 |
|           |             |  |   |                   | Plan 2 |                |         |                  |        |                    |       | 1390     |         |
|           |             |  |   |                   | Plan 3 |                |         |                  |        |                    |       | 2477     |         |
|           |             |  |   | 4G                | Plans  | 15860.00       |         | 13744(open plan) |        | 27413.66           |       | 25892.75 |         |
|           | 6           | Latency  | Data <250ms                                       | All Generations   |        | 143.80         |         |                  |        |                    | 118.9 |          |         |
|           |             |  |   | 2G (GSM)          | 106.00 |                | 142.00  |                  |        |                    |       | 98.48    |         |
|           |             |  |   | 3G                | 70.00  |                |         |                  |        |                    |       | 43.24    |         |
|           |             |  |   | 4G                | 22.00  |                | 9.00    |                  | 48.53  |                    |       | 27.67    |         |
|           |             |  |   | CDMA              |        |                |         |                  |        |                    |       |          |         |
|           | 7           | PDP Context Activation Success Rate            | ≥95%  | All Generations   |        | 96.22          |         |                  |        |                    | 100   |          |         |
| 2G (GSM)  |             |  |   | 99.40             |        | 99.02          |         |                  |        |                    | 98.62 |          |         |
| 3G        |             |  |   | 99.80             |        |                |         |                  |        |                    | 78.65 |          |         |
| 4G        |             |  |   | 99.57             |        | 99.64          |         | 99.60            |        |                    | 98.68 |          |         |
| CDMA      |             |  |   |                   |        |                |         |                  |        |                    |       |          |         |
| 8         | Drop rate : | ≤5%  | All Generations                                   |                   | 0.58   |                |         |                  |        | 1                  |       |          |         |
|           |             |  | 2G (GSM)  | 3.45              |        | 0.49           |         |                  |        |                    | 2.33  |          |         |
|           |             |  | 3G  | 0.19              |        |                |         |                  |        |                    | 0.43  |          |         |
|           |             |  | 4G  | 0.22              |        | 0.08           |         | 0.55             |        |                    | 0.17  |          |         |
|           |             |  | CDMA  |                   |        |                |         |                  |        |                    |       |          |         |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.

**Quarterly Performance Monitoring Report (PMR) on Quality of Service of Wireless Data Services**

**Report for quarter ending: March 2019**

**Compliance Status**

| Sl. No.     | Parameters                          | Benchmarks                                     | Generations                                       | Compliance Status |        |                |         |                 |                 |                    |                    |                 |         |
|-------------|-------------------------------------|--|---|-------------------|--------|----------------|---------|-----------------|-----------------|--------------------|--------------------|-----------------|---------|
|             |                                     |  |   | Airtel            | BSNL   | VIL-Brand Idea | MTNL    | Reliance JIO    | TATA            | VIL-Brand Vodafone |                    |                 |         |
| Maharashtra | 1                                   | Service Activation /Provisioning               | Within 4 hrs with 95% success                     | All Generations   | 100.00 | 99.21          | 99.96   |                 | 98.50           | 100                | 100.00             |                 |         |
|             |                                     |  |   | 2G (GSM)          |        |                |         |                 |                 |                    |                    |                 |         |
|             | 2                                   | Successful data transmission download attempts | >80%  | All Generations   |        | 96.66          |         |                 |                 |                    | 100                |                 |         |
|             |                                     |  |   | 2G (GSM)          | 100.00 |                | 99.63   |                 |                 |                    | 100.00             |                 |         |
|             |                                     |  |   | 3G                | 100.00 |                | 100.00  |                 |                 |                    | 100.00             |                 |         |
|             |                                     |  |   | 4G                | 100.00 |                | 91.33   |                 | 100.00          |                    | 100.00             |                 |         |
|             | 3                                   | Successful data transmission upload attempts   | >75%  | All Generations   |        | 96.36          |         |                 |                 |                    | 100                |                 |         |
|             |                                     |  |   | 2G (GSM)          | 100.00 |                | 100.00  |                 |                 |                    | 100.00             |                 |         |
|             |                                     |  |   | 3G                | 100.00 |                | 100.00  |                 |                 |                    | 100.00             |                 |         |
|             |                                     |  |   | 4G                | 100.00 |                | 100.00  |                 | 100.00          |                    | 100.00             |                 |         |
|             | 4                                   | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1 |                |         |                 |                 |                    |                    |                 |         |
|             |                                     |  |   |                   | Plan 2 |                |         |                 |                 |                    |                    |                 |         |
|             |                                     |  |   | 2G                | Plan 1 | 83.00          | 102.00  | 99(open plan)   |                 |                    | 24.2(EDGE)         | 149.32          |         |
|             |                                     |  |   |                   | 3G     | Plan 1         | 1077.00 | 3893.00         | 3117(open plan) |                    |                    |                 | 4349.74 |
|             |                                     |  |   |                   |        | Plan 2         |         |                 |                 |                    |                    | 1391(photon 3G) |         |
|             |                                     |  |   | 4G                | Plan 3 |                |         |                 |                 |                    |                    |                 |         |
|             |                                     |  |   |                   | Plans  | 9622.00        |         | 3329(open plan) |                 | 8257.99            |                    | 6841.51         |         |
|             | 5                                   | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | CDMA              | Plan 1 |                |         |                 |                 |                    |                    |                 |         |
|             |                                     |  |   |                   | Plan 2 |                |         |                 |                 |                    |                    |                 |         |
|             |                                     |  |   |                   | Plan 3 |                |         |                 |                 |                    |                    |                 |         |
|             |                                     |  |   | 2G                | Plan 1 | 142.00         | 119.00  | 175(open plan)  |                 |                    | 102.62(EDGE)       | 201.44          |         |
|             |                                     |  |   |                   | Plan 2 |                |         |                 |                 |                    |                    |                 |         |
|             |                                     |  |   |                   | Plan 3 |                |         |                 |                 |                    |                    |                 |         |
|             |                                     |  |   | 3G                | Plan 1 | 2690.00        | 4010.00 | 4706(open plan) |                 |                    |                    | 7092.42         |         |
|             |                                     |  |   |                   | Plan 2 |                |         |                 |                 |                    | 4574.28(photon 3G) |                 |         |
|             |                                     |  |   |                   | Plan 3 |                |         |                 |                 |                    |                    |                 |         |
|             |                                     |  |   | 4G                | Plans  | 17936.00       |         | 9761(open plan) |                 | 26563.52           |                    | 15777.04        |         |
|             | 6                                   | Latency  | Data <250ms                                       | All Generations   |        | 118.00         |         |                 |                 |                    | 175.5              |                 |         |
| 2G (GSM)    |                                     |  |   | 234.00            |        | 124.00         |         |                 |                 | 224.00             |                    |                 |         |
| 3G          |                                     |  |   | 58.00             |        | 141.00         |         |                 |                 | 77.67              |                    |                 |         |
| 4G          |                                     |  |   | 70.00             |        | 67.00          |         | 64.62           |                 | 49.33              |                    |                 |         |
| 7           | PDP Context Activation Success Rate | ≥95%   | All Generations                                   |                   | 97.30  |                |         |                 |                 | 100                |                    |                 |         |
|             |                                     |  | 2G (GSM)  | 100.00            |        | 99.74          |         |                 |                 | 99.55              |                    |                 |         |
|             |                                     |  | 3G  | 100.00            |        | 98.95          |         |                 |                 | 98.68              |                    |                 |         |
|             |                                     |  | 4G  | 100.00            |        | 99.90          |         | 99.40           |                 | 99.96              |                    |                 |         |
| 8           | Drop rate :                         | ≤5%  | All Generations                                   |                   | 2.10   |                |         |                 |                 | 0.7                |                    |                 |         |
|             |                                     |  | 2G (GSM)  | 0.00              |        | 2.18           |         |                 |                 | 4.23               |                    |                 |         |
|             |                                     |  | 3G  | 0.00              |        | 1.10           |         |                 |                 | 0.70               |                    |                 |         |
|             |                                     |  | 4G  | 0.00              |        | 0.59           |         | 0.49            |                 | 0.27               |                    |                 |         |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.

**Quarterly Performance Monitoring Report (PMR) on Quality of Service of Wireless Data Services**

**Report for quarter ending: March 2019**

**Compliance Status**

| Sl. No.        | Parameters | Benchmarks                                     | Generations                                       | Compliance Status |        |                |         |                 |        |                    |                 |        |
|----------------|------------|--|---|-------------------|--------|----------------|---------|-----------------|--------|--------------------|-----------------|--------|
|                |            |  |   | Airtel            | BSNL   | VIL-Brand Idea | MTNL    | Reliance JIO    | TATA   | VIL-Brand Vodafone |                 |        |
| Madhya Pradesh | 1          | Service Activation /Provisioning               | Within 4 hrs with 95% success rate.               | All Generations   |        | 100.00         |         | 99.05           |        | 98.71              | 100             | 99.99  |
|                |            |  |   | 2G                |        |                | 97.66   |                 |        |                    |                 |        |
|                |            |  |   | 3G                |        |                | 97.36   |                 |        |                    |                 |        |
|                | 2          | Successful data transmission download attempts | >80%  | All Generations   |        |                |         |                 |        |                    | 100             |        |
|                |            |  |   | 2G (GSM)          |        | 100.00         | 100.00  | 99.67           |        |                    |                 | 99.83  |
|                |            |  |   | 3G                |        | 100.00         | 100.00  | 100.00          |        |                    |                 |        |
|                | 3          | Successful data transmission upload attempts   | >75%  | All Generations   |        |                |         |                 |        |                    | 100             |        |
|                |            |  |   | 2G (GSM)          |        | 100.00         | 100.00  | 100.00          |        |                    |                 | 99.83  |
|                |            |  |   | 3G                |        | 100.00         | 100.00  | 100.00          |        |                    |                 |        |
|                |            |  |   | 4G                |        | 100.00         |         | 99.57           | 100.00 |                    |                 |        |
|                | 4          | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1 |                |         |                 |        |                    | 22(Photon whiz) |        |
|                |            |  |   |                   | Plan 2 |                |         |                 |        |                    |                 |        |
|                |            |  |   | 2G                | Plan 1 | 127.00         |         | 135(open plan)  |        |                    | 76(EDGE)        | 89.28  |
|                |            |  |   | 3G                | Plan 1 | 1044.00        | 1418.30 | 1909(open plan) |        |                    | 1424(Photon 3G) |        |
|                | 5          | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | CDMA              | Plan 1 |                |         |                 |        |                    | 77(photon whiz) |        |
|                |            |  |   |                   | Plan 2 |                |         |                 |        |                    |                 |        |
|                |            |  |   | 2G                | Plan 1 | 222.00         |         | 190(open plan)  |        |                    | 103(EDGE)       | 187.08 |
|                |            |  |   | 3G                | Plan 1 | 2390.00        | 2607.90 | 3869(open plan) |        |                    | 2470(Photon 3G) |        |
|                | 6          | Latency  | Data <250ms                                       | All Generations   |        |                |         |                 |        |                    | 87.6            |        |
|                |            |  |   | 2G (GSM)          |        | 115.00         | 203.40  | 139.00          |        |                    |                 | 119.34 |
|                |            |  |   | 3G                |        | 39.00          | 110.10  | 97.00           |        |                    |                 |        |
|                |            |  |   | 4G                |        | 40.00          |         | 53.00           | 59.02  |                    |                 |        |
|                | 7          | PDP Context Activation Success Rate            | ≥95%  | All Generations   |        |                |         |                 |        |                    | 99.4            |        |
|                |            |  |   | 2G (GSM)          |        | 99.96          | 96.80   | 99.79           |        |                    |                 | 99.91  |
|                |            |  |   | 3G                |        | 99.59          | 98.30   | 98.66           |        |                    |                 |        |
|                |            |  |   | 4G                |        | 99.79          |         | 97.65           | 99.70  |                    |                 |        |
|                | 8          | Drop rate :                                    | ≤5%   | All Generations   |        |                |         |                 |        |                    | 2.1             |        |
|                |            |  |   | 2G (GSM)          |        | 4.50           |         | 0.62            |        |                    |                 | 3.20   |
| 3G             |            |  |   | 0.18              | 0.90   | 0.83           |         |                 |        |                    |                 |        |
| 4G             |            |  |   | 0.04              |        | 0.37           | 0.43    |                 |        |                    |                 |        |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.

**Quarterly Performance Monitoring Report (PMR) on Quality of Service of Wireless Data Services**

**Report for quarter ending: March 2019**

**Compliance Status**

|               | Sl. No.     | Parameters                                     | Benchmarks  | Generations     | Compliance Status |          |                |                  |              |          |                    |          |
|---------------|-------------|--|---|-----------------|-------------------|----------|----------------|------------------|--------------|----------|--------------------|----------|
|               |             |  |   |                 | Airtel            | BSNL     | VIL-Brand Idea | MTNL             | Reliance JIO | TATA     | VIL-Brand Vodafone |          |
| <b>Mumbai</b> | 1           | Service Activation /Provisioning               | Within 4 hrs with 95% success                     | All Generations | 99.00             |          | 99.91          | 98.99            | 98.61        | 100      | 99.95              |          |
|               |             |  |   | 3G              |                   |          |                |                  |              |          |                    |          |
|               | 2           | Successful data transmission download attempts | >80%  | All Generations |                   |          |                |                  |              | 100      |                    |          |
|               |             |  |   | 2G (GSM)        | 100.00            |          | 100.00         | 100.00           |              |          | 99.92              |          |
|               |             |  |   | 3G              | 100.00            |          |                | 100.00           |              |          | 100.00             |          |
|               |             |  |   | 4G              | 100.00            |          | 100.00         |                  | 100.00       |          | 100.00             |          |
|               | 3           | Successful data transmission upload attempts   | >75%  | All Generations |                   |          |                |                  |              | 100      |                    |          |
|               |             |  |   | 2G (GSM)        | 100.00            |          | 100.00         | 99.94            |              |          | 100.00             |          |
|               |             |  |   | 3G              | 100.00            |          |                | 99.29            |              |          | 100.00             |          |
|               |             |  |   | 4G              | 100.00            |          | 100.00         |                  | 100.00       |          | 99.58              |          |
|               | 4           | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA            | Plan 1            |          |                |                  |              |          | 18(photon whiz)    |          |
|               |             |  |   |                 | Plan 2            |          |                |                  |              |          |                    |          |
|               |             |  |   | 2G              | Plan 1            | 160.00   |                | 83(open plan)    | 52.61        |          |                    | 166.87   |
|               |             |  |   | 3G              | Plan 1            | 3884.00  |                |                  | 447.45       |          |                    | 5815.87  |
|               |             |  |   | 4G              | Plans             | 8889.00  |                | 8139(open plan)  |              | 7166.64  |                    | 9783.17  |
|               | 5           | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | CDMA            | Plan 1            |          |                |                  |              |          | 38(Photon whiz)    |          |
|               |             |  |   |                 | Plan 2            |          |                |                  |              |          |                    |          |
|               |             |  |   | 2G              | Plan 1            | 244.00   |                | 138(open plan)   | 79.37        |          |                    | 183.27   |
|               |             |  |   | 3G              | Plan 1            | 6929.00  |                |                  | 800.24       |          |                    | 8096.89  |
|               |             |  |   | 4G              | Plans             | 16929.00 |                | 11477(open plan) |              | 24102.71 |                    | 19909.41 |
|               | 6           | Latency  | Data <250ms                                       | All Generations |                   |          |                |                  |              |          | 142.4              |          |
|               |             |  |   | 2G (GSM)        |                   | 111.00   |                | 108.00           |              |          |                    | 77.41    |
|               |             |  |   | 3G              |                   | 37.00    |                |                  | 206.20       |          |                    | 15.53    |
|               |             |  |   | 4G              |                   | 27.00    |                | 29.00            |              | 33.06    |                    | 13.71    |
|               | 7           | PDP Context Activation Success Rate            | ≥95%  | All Generations |                   |          |                | 99.28            |              |          | 97.79              |          |
|               |             |  |   | 2G (GSM)        |                   | 100.00   |                | 99.53            |              |          |                    | 98.84    |
|               |             |  |   | 3G              |                   | 100.00   |                |                  |              |          |                    | 97.27    |
|               |             |  |   | 4G              |                   | 100.00   |                | 98.46            |              | 99.63    |                    | 99.47    |
| 8             | Drop rate : | ≤5%  | All Generations                                   |                 |                   |          | 2.09           |                  |              | 0.77     |                    |          |
|               |             |  | 2G (GSM)  |                 | 4.12              |          | 0.33           |                  |              |          | 4.97               |          |
|               |             |  | 3G  |                 | 0.12              |          |                |                  |              |          | 1.15               |          |
|               |             |  | 4G  |                 | 0.20              |          | 0.73           |                  | 0.38         |          | 0.31               |          |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.

**Quarterly Performance Monitoring Report (PMR) on Quality of Service of Wireless Data Services**

**Report for quarter ending: March 2019**

**Compliance Status**

| Sl. No.      | Parameters  | Benchmarks                                     | Generations                                       | Compliance Status |        |                |         |                 |        |                    |        |         |         |
|--------------|-------------|--|---|-------------------|--------|----------------|---------|-----------------|--------|--------------------|--------|---------|---------|
|              |             |  |   | Airtel            | BSNL   | VIL-Brand Idea | MTNL    | Reliance JIO    | TATA   | VIL-Brand Vodafone |        |         |         |
| North East-I | 1           | Service Activation /Provisioning               | Within 4 hrs with 95% success rate.               | All Generations   | 100.00 |                | 98.79   |                 | 97.74  |                    | 100.00 |         |         |
|              |             |  |   | 2G                |        | 100.00         |         |                 |        |                    |        |         |         |
|              |             |  |   | 3G                |        | 100.00         |         |                 |        |                    |        |         |         |
|              | 2           | Successful data transmission download attempts | >80%  | All Generations   |        |                |         |                 |        |                    |        |         |         |
|              |             |  |   | 2G (GSM)          | 100.00 | 100.00         | 100.00  |                 |        |                    | 99.60  |         |         |
|              |             |  |   | 3G                | 100.00 | 100.00         |         |                 |        |                    | 99.80  |         |         |
|              |             |  |   | 4G                | 100.00 |                | 100.00  |                 | 100.00 |                    | 99.78  |         |         |
|              | 3           | Successful data transmission upload attempts   | >75%  | All Generations   |        |                |         |                 |        |                    |        |         |         |
|              |             |  |   | 2G (GSM)          | 100.00 | 100.00         | 100.00  |                 |        |                    | 100.00 |         |         |
|              |             |  |   | 3G                | 100.00 | 100.00         |         |                 |        |                    | 100.00 |         |         |
|              |             |  |   | 4G                | 100.00 |                | 100.00  |                 | 100.00 |                    | 99.82  |         |         |
|              | 4           | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1 |                |         |                 |        |                    |        |         |         |
|              |             |  |   | 2G                | Plan 1 | 142.00         | 74.01   | 124(open plan)  |        |                    |        | 153.67  |         |
|              |             |  |   |                   | 3G     | Plan 1         | 2014.00 | 1764.33         |        |                    |        |         | 3266.88 |
|              |             |  |   |                   |        | Plan 2         |         |                 |        |                    |        |         |         |
|              |             |  |   | Plan 3            |        |                |         |                 |        |                    |        |         |         |
|              |             |  |   | 4G                | Plans  | 11570.00       |         | 4282(open plan) |        | 7966.94            |        | 6043.07 |         |
|              | 5           | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | CDMA              | Plan 1 |                |         |                 |        |                    |        |         |         |
|              |             |  |   | 2G                | Plan 1 | 187.00         | 79.43   | 166(open plan)  |        |                    |        | 186.39  |         |
|              |             |  |   |                   | 3G     | Plan 1         | 4431.00 | 2673.88         |        |                    |        |         | 3706.96 |
|              |             |  |   |                   |        | Plan 2         |         |                 |        |                    |        |         |         |
|              |             |  |   | Plan 3            |        |                |         |                 |        |                    |        |         |         |
|              |             |  |   | 4G                | Plans  | 23897.00       |         | 7101(open plan) |        | 27538.57           |        | 6856.67 |         |
|              | 6           | Latency  | Data <250ms                                       | All Generations   |        |                |         |                 |        |                    |        |         |         |
|              |             |  |   | 2G (GSM)          | 222.00 | 234.00         | 225.00  |                 |        |                    | 226.33 |         |         |
|              |             |  |   | 3G                | 154.00 | 156.00         |         |                 |        |                    | 187.67 |         |         |
|              |             |  |   | 4G                | 59.00  |                | 80.00   |                 | 58.51  |                    | 49.00  |         |         |
|              | 7           | PDP Context Activation Success Rate            | ≥95%  | All Generations   |        |                |         |                 |        |                    |        |         |         |
|              |             |  |   | 2G (GSM)          | 99.99  | 95.53          | 97.64   |                 |        |                    | 99.56  |         |         |
|              |             |  |   | 3G                | 100.00 | 96.94          |         |                 |        |                    | 97.45  |         |         |
| 4G           |             |  |   | 98.16             |        | 96.30          |         | 98.71           |        | 99.98              |        |         |         |
| 8            | Drop rate : | ≤5%  | All Generations                                   |                   |        |                |         |                 |        |                    |        |         |         |
|              |             |  | 2G (GSM)  | 2.72              |        | 0.23           |         |                 |        | 4.62               |        |         |         |
|              |             |  | 3G  | 0.92              | 0.48   |                |         |                 |        | 1.15               |        |         |         |
|              |             |  | 4G  | 1.12              |        | 1.05           |         | 0.55            |        | 0.27               |        |         |         |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.



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**Report for quarter ending: March 2019**

**Compliance Status**

|                      | Sl. No.     | Parameters                                     | Benchmarks  | Generations     | Compliance Status |          |                |      |              |      |                    |
|----------------------|-------------|--|---|-----------------|-------------------|----------|----------------|------|--------------|------|--------------------|
|                      |             |  |   |                 | Airtel            | BSNL     | VIL-Brand Idea | MTNL | Reliance JIO | TATA | VIL-Brand Vodafone |
| <b>North East-II</b> | 1           | Service Activation /Provisioning               | Within 4 hrs with 95% success                     | All Generations |                   | 100.00   |                |      |              |      |                    |
|                      |             |  |   | 3G              |                   |          |                |      |              |      |                    |
|                      | 2           | Successful data transmission download attempts | >80%  | All Generations |                   | 98.00    |                |      |              |      |                    |
|                      |             |  |   | 2G (GSM)        |                   |          |                |      |              |      |                    |
|                      |             |  |   | 3G              |                   |          |                |      |              |      |                    |
|                      |             |  |   | 4G              |                   |          |                |      |              |      |                    |
|                      | 3           | Successful data transmission upload attempts   | >75%  | All Generations |                   | 96.00    |                |      |              |      |                    |
|                      |             |  |   | 2G (GSM)        |                   |          |                |      |              |      |                    |
|                      |             |  |   | 3G              |                   |          |                |      |              |      |                    |
|                      |             |  |   | 4G              |                   |          |                |      |              |      |                    |
|                      | 4           | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA Plan 1     |                   |          |                |      |              |      |                    |
|                      |             |  |   | 2G Plan 1       |                   |          |                |      |              |      |                    |
|                      |             |  |   | 3G Plan 1       |                   | 378 kbps |                |      |              |      |                    |
|                      |             |  |   | Plan 2          |                   |          |                |      |              |      |                    |
|                      |             |  |   | Plan 3          |                   |          |                |      |              |      |                    |
|                      |             |  |   | 4G Plans        |                   |          |                |      |              |      |                    |
|                      | 5           | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | CDMA Plan 1     |                   |          |                |      |              |      |                    |
|                      |             |  |   | 2G Plan 1       |                   |          |                |      |              |      |                    |
|                      |             |  |   | 3G Plan 1       |                   | 969 kbps |                |      |              |      |                    |
|                      |             |  |   | Plan 2          |                   |          |                |      |              |      |                    |
|                      |             |  |   | Plan 3          |                   |          |                |      |              |      |                    |
|                      |             |  |   | 4G Plans        |                   |          |                |      |              |      |                    |
|                      | 6           | Latency  | Data <250ms                                       | All Generations |                   | 114 ms   |                |      |              |      |                    |
|                      |             |  |   | 2G (GSM)        |                   |          |                |      |              |      |                    |
|                      |             |  |   | 3G              |                   |          |                |      |              |      |                    |
|                      |             |  |   | 4G              |                   |          |                |      |              |      |                    |
|                      | 7           | PDP Context Activation Success Rate            | ≥95%  | All Generations |                   | 98.00    |                |      |              |      |                    |
|                      |             |  |   | 2G (GSM)        |                   |          |                |      |              |      |                    |
|                      |             |  | 3G  |                 |                   |          |                |      |              |      |                    |
|                      |             |  | 4G  |                 |                   |          |                |      |              |      |                    |
| 8                    | Drop rate : | ≤5%  | All Generations                                   |                 | 0.61              |          |                |      |              |      |                    |
|                      |             |  | 2G (GSM)  |                 |                   |          |                |      |              |      |                    |
|                      |             |  | 3G  |                 |                   |          |                |      |              |      |                    |
|                      |             |  | 4G  |                 |                   |          |                |      |              |      |                    |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.

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**Report for quarter ending: March 2019**

**Compliance Status**

| Sl. No. | Parameters  | Benchmarks                                     | Generations                                       | Compliance Status |        |                |         |                 |      |                    |       |          |         |
|---------|-------------|--|---|-------------------|--------|----------------|---------|-----------------|------|--------------------|-------|----------|---------|
|         |             |  |   | Airtel            | BSNL   | VIL-Brand Idea | MTNL    | Reliance JIO    | TATA | VIL-Brand Vodafone |       |          |         |
| Orissa  | 1           | Service Activation /Provisioning               | Within 4 hrs with 95% success rate.               | All Generations   |        | 100.00         |         | 99.41           |      | 99.03              | 100   | 99.99    |         |
|         |             |  |   | 2G                |        |                | 100.00  |                 |      |                    |       |          |         |
|         |             |  |   | 3G                |        |                | 100.00  |                 |      |                    |       |          |         |
|         | 2           | Successful data transmission download attempts | >80%  | All Generations   |        |                |         |                 |      |                    | 100   |          |         |
|         |             |  |   | 2G (GSM)          |        | 100.00         | 100.00  | 100.00          |      |                    |       | 100.00   |         |
|         |             |  |   | 3G                |        | 100.00         | 100.00  |                 |      |                    |       | 100.00   |         |
|         |             |  |   | 4G                |        | 100.00         |         | 100.00          |      | 100.00             |       | 100.00   |         |
|         | 3           | Successful data transmission upload attempts   | >75%  | All Generations   |        |                |         |                 |      |                    | 100   |          |         |
|         |             |  |   | 2G (GSM)          |        | 100.00         | 100.00  | 100.00          |      |                    |       | 100.00   |         |
|         |             |  |   | 3G                |        | 100.00         | 100.00  |                 |      |                    |       | 100.00   |         |
|         |             |  |   | 4G                |        | 100.00         |         | 100.00          |      | 100.00             |       | 100.00   |         |
|         | 4           | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1 |                |         |                 |      |                    |       |          |         |
|         |             |  |   |                   | Plan 2 |                |         |                 |      |                    |       |          |         |
|         |             |  |   | 2G                | Plan 1 | 83.00          | 103.00  | 63(open plan)   |      |                    | 133   | 180.00   |         |
|         |             |  |   |                   | 3G     | Plan 1         | 1840.00 | 2077.00         |      |                    |       |          | 6677.00 |
|         |             |  |   |                   |        | Plan 2         |         |                 |      |                    |       |          |         |
|         |             |  |   | 4G                | Plan 3 |                |         |                 |      |                    |       |          |         |
|         |             |  |   |                   | Plans  | 10243.00       |         | 1837(open plan) |      | 8036.36            |       | 11011.00 |         |
|         | 5           | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | CDMA              | Plan 1 |                |         |                 |      |                    |       |          |         |
|         |             |  |   |                   | Plan 2 |                |         |                 |      |                    |       |          |         |
|         |             |  |   | 2G                | Plan 1 | 144.00         | 173.00  | 156(open plan)  |      |                    | 148   | 196.00   |         |
|         |             |  |   |                   | 3G     | Plan 1         | 3359.00 | 5974.67         |      |                    |       |          | 9483.67 |
|         |             |  |   |                   |        | Plan 2         |         |                 |      |                    |       |          |         |
|         |             |  |   | 4G                | Plan 3 |                |         |                 |      |                    |       |          |         |
|         |             |  |   |                   | Plans  | 11528.00       |         | 4270(open plan) |      | 29432.24           |       | 13008.33 |         |
|         | 6           | Latency  | Data <250ms                                       | All Generations   |        |                |         |                 |      |                    | 89.11 |          |         |
|         |             |  |   | 2G (GSM)          |        | 154.00         | 247.07  | 124.00          |      |                    |       | 126.00   |         |
|         |             |  |   | 3G                |        | 58.00          | 73.03   |                 |      |                    |       | 56.00    |         |
|         |             |  |   | 4G                |        | 44.00          |         | 63.00           |      | 56.37              |       | 47.00    |         |
|         | 7           | PDP Context Activation Success Rate            | ≥95%  | All Generations   |        |                |         |                 |      |                    | 100   |          |         |
|         |             |  |   | 2G (GSM)          |        | 99.75          | 98.88   | 98.80           |      |                    |       | 98.11    |         |
|         |             |  |   | 3G                |        | 99.72          | 98.90   |                 |      |                    |       | 98.64    |         |
| 4G      |             |  |   | 98.38             |        | 99.34          |         | 99.63           |      | 99.98              |       |          |         |
| 8       | Drop rate : | ≤5%  | All Generations                                   |                   |        |                |         |                 |      | 0.66               |       |          |         |
|         |             |  | 2G (GSM)  |                   | 4.26   |                | 2.15    |                 |      |                    | 3.09  |          |         |
|         |             |  | 3G  |                   | 0.27   | 1.05           |         |                 |      |                    | 0.71  |          |         |
|         |             |  | 4G  |                   | 0.32   |                | 0.47    |                 | 0.40 |                    | 0.13  |          |         |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.

**Quarterly Performance Monitoring Report (PMR) on Quality of Service of Wireless Data Services**

**Report for quarter ending: March 2019**

**Compliance Status**

| Sl. No. | Parameters                          | Benchmarks                                     | Generations                                       | Compliance Status |   |                               |          |                 |                 |                    |         |         |  |  |  |
|---------|-------------------------------------|--|---|-------------------|---|-------------------------------|----------|-----------------|-----------------|--------------------|---------|---------|--|--|--|
|         |                                     |  |   | Airtel            | BSNL                                      | VIL-Brand Idea                | MTNL     | Reliance JIO    | TATA            | VIL-Brand Vodafone |         |         |  |  |  |
| Punjab  | 1                                   | Service Activation /Provisioning               | Within 4 hrs with 95% success                     | All Generations   | 100.00                                    | 100.00                        | 99.95    |                 | 98.71           | 100                | 100.00  |         |  |  |  |
|         |                                     |  |   | 2G (GSM)          |   |                               |          |                 |                 |                    |         |         |  |  |  |
|         | 2                                   | Successful data transmission download attempts | >80%  | All Generations   |   | 97.15                         |          |                 |                 |                    | 99.9    |         |  |  |  |
|         |                                     |  |   | 2G (GSM)          | 100.00                                    |                               | 100.00   |                 |                 |                    | 100.00  |         |  |  |  |
|         |                                     |  |   | 3G                | 100.00                                    |                               | 100.00   |                 |                 |                    | 100.00  |         |  |  |  |
|         |                                     |  |   | 4G                | 100.00                                    |                               | 100.00   |                 | 100.00          |                    | 100.00  |         |  |  |  |
|         | 3                                   | Successful data transmission upload attempts   | >75%  | All Generations   |   | 95.46                         |          |                 |                 |                    | 100     |         |  |  |  |
|         |                                     |  |   | 2G (GSM)          | 100.00                                    |                               | 100.00   |                 |                 |                    |         |         |  |  |  |
|         |                                     |  |   | 3G                | 100.00                                    |                               | 100.00   |                 |                 |                    |         |         |  |  |  |
|         |                                     |  |   | 4G                | 100.00                                    |                               | 100.00   |                 | 100.00          |                    | 100.00  |         |  |  |  |
|         | 4                                   | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1                                    |                               |          |                 |                 |                    |         |         |  |  |  |
|         |                                     |  |   |                   | Plan 2                                    |                               |          |                 |                 |                    |         |         |  |  |  |
|         |                                     |  |   |                   | Plan 3                                    |                               |          |                 |                 |                    |         |         |  |  |  |
|         |                                     |  |   | 2G                | Plan 1                                    | 88.00                         |          | 103(open plan)  |                 |                    | 76.96   | 126.12  |  |  |  |
|         |                                     |  |   |                   | 3G  | Plan 1                        | 759.00   | 1739.81         | 2166(open plan) |                    | 898.51  | 4859.97 |  |  |  |
|         |                                     |  |   |                   | Plan 2                                    |                               |          |                 |                 |                    | 1186.82 |         |  |  |  |
|         |                                     |  |   |                   | Plan 3                                    |                               |          |                 |                 |                    |         |         |  |  |  |
|         |                                     |  |   | 4G                | Plans                                     | 5354.00                       |          | 2581(open plan) |                 | 10355.80           |         | 4812.49 |  |  |  |
|         |                                     |  |   | 5                 | Average Throughput for Packet data (Kbps) | >75% of the subscribed speed. | CDMA     | Plan 1          |                 |                    |         |         |  |  |  |
|         |                                     |  |   |                   |   |                               |          | Plan 2          |                 |                    |         |         |  |  |  |
|         | Plan 3                              |  |   |                   |   |                               |          |                 |                 |                    |         |         |  |  |  |
|         | 2G                                  | Plan 1   | 146.00  |                   |   |                               |          | 187(open plan)  |                 |                    | 121.75  | 179.99  |  |  |  |
|         |                                     | 3G   | Plan 1  |                   |   |                               | 1161.00  | 2355.92         | 5189(open plan) |                    | 1973.07 | 6819.34 |  |  |  |
|         |                                     | Plan 2   |   |                   |   |                               |          |                 |                 |                    | 2944.95 |         |  |  |  |
|         |                                     | Plan 3   |   |                   |   |                               |          |                 |                 |                    |         |         |  |  |  |
|         | 4G                                  | Plans  | 8515.00   |                   | 10314(open plan)                          |                               | 33988.69 |                 | 7779.62         |                    |         |         |  |  |  |
|         | 6                                   | Latency  | Data <250ms                                       | All Generations   |   |                               |          |                 |                 |                    | 81.1    |         |  |  |  |
|         |                                     |  |   | 2G (GSM)          | 205.00                                    |                               | 224.00   |                 |                 |                    |         | 89.85   |  |  |  |
| 3G      |                                     |  |   | 174.00            | 130.85                                    | 113.00                        |          |                 |                 |                    | 16.80   |         |  |  |  |
| 4G      |                                     |  |   | 117.00            |   | 100.00                        |          | 34.97           |                 |                    | 17.63   |         |  |  |  |
| 7       | PDP Context Activation Success Rate | ≥95%   | All Generations                                   |                   | 97.10                                     |                               |          |                 |                 | 99.5               |         |         |  |  |  |
|         |                                     |  | 2G (GSM)  | 99.74             |   | 100.00                        |          |                 |                 |                    | 99.53   |         |  |  |  |
|         |                                     |  | 3G  | 100.00            |   | 100.00                        |          |                 |                 |                    | 97.46   |         |  |  |  |
|         |                                     |  | 4G  | 99.06             |   | 100.00                        |          | 99.71           |                 |                    | 99.85   |         |  |  |  |
| 8       | Drop rate :                         | ≤5%  | All Generations                                   |                   | 1.60                                      |                               |          |                 |                 | 3.2                |         |         |  |  |  |
|         |                                     |  | 2G (GSM)  | 0.58              |   | 3.18                          |          |                 |                 |                    | 3.88    |         |  |  |  |
|         |                                     |  | 3G  | 0.36              |   | 0.43                          |          |                 |                 |                    | 0.70    |         |  |  |  |
|         |                                     |  | 4G  | 0.04              |   | 0.41                          |          | 0.24            |                 |                    | 0.45    |         |  |  |  |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.

**Quarterly Performance Monitoring Report (PMR) on Quality of Service of Wireless Data Services**

**Report for quarter ending: March 2019**

**Compliance Status**

| Sl. No.   | Parameters  | Benchmarks                                     | Generations                                       | Compliance Status |        |                |         |                  |       |                    |                 |          |
|-----------|-------------|--|---|-------------------|--------|----------------|---------|------------------|-------|--------------------|-----------------|----------|
|           |             |  |   | Airtel            | BSNL   | VIL-Brand Idea | MTNL    | Reliance JIO     | TATA  | VIL-Brand Vodafone |                 |          |
| Rajasthan | 1           | Service Activation /Provisioning               | Within 4 hrs with 95% success rate                | All Generations   | 100.00 | 98.00          | 99.99   |                  | 98.64 | 100                | 99.99           |          |
|           |             |  |   | 3G                |        |                |         |                  |       |                    |                 |          |
|           | 2           | Successful data transmission download attempts | >80%  | All Generations   |        | 100.00         |         |                  |       |                    | 100             |          |
|           |             |  |   | 2G (GSM)          | 100.00 |                | 100.00  |                  |       |                    | 100.00          |          |
|           |             |  |   | 3G                | 100.00 |                | 100.00  |                  |       |                    | 100.00          |          |
|           |             |  |   | CDMA              |        |                |         |                  |       |                    |                 |          |
|           | 3           | Successful data transmission upload attempts   | >75%  | All Generations   |        | 100.00         |         |                  |       | 100.00             | 100             | 100.00   |
|           |             |  |   | 2G (GSM)          | 100.00 |                | 100.00  |                  |       |                    | 100.00          |          |
|           |             |  |   | 3G                | 100.00 |                | 100.00  |                  |       |                    | 100.00          |          |
|           |             |  |   | CDMA              |        |                |         |                  |       |                    |                 |          |
|           | 4           | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1 |                |         |                  |       |                    | 25(photon whiz) |          |
|           |             |  |   |                   | Plan 2 |                |         |                  |       |                    |                 |          |
|           |             |  |   | 2G                | Plan 1 | 123.00         | 1273.60 | 122(open plan)   |       |                    | 98(EDGE)        | 117.92   |
|           |             |  |   | 3G                | Plan 1 | 2635.00        | 1111.20 | 2299(open plan)  |       |                    |                 | 4139.92  |
|           | 5           | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | CDMA              | Plans  | 16437.00       |         | 7560(open plan)  |       | 11969.35           |                 | 6177.31  |
|           |             |  |   |                   | Plan 1 |                |         |                  |       |                    | 70(photon whiz) |          |
|           |             |  |   |                   | Plan 2 |                |         |                  |       |                    |                 |          |
|           |             |  |   | 2G                | Plan 1 | 137.00         | 1959.70 | 182(open plan)   |       |                    | 109(EDGE)       | 181.93   |
|           | 6           | Latency  | Data <250ms                                       | 3G                | Plan 1 | 3920.00        | 1886.90 | 4094(open plan)  |       |                    |                 | 7974.33  |
|           |             |  |   | 4G                | Plans  | 20436.00       |         | 14559(open plan) |       | 33685.14           |                 | 13006.48 |
|           |             |  |   |                   | Plan 1 |                |         |                  |       |                    |                 |          |
|           |             |  |   |                   | Plan 2 |                |         |                  |       |                    |                 |          |
|           | 7           | PDP Context Activation Success Rate            | ≥95%  | All Generations   |        |                |         |                  |       |                    | 153.2           | 121.00   |
|           |             |  |   | 2G (GSM)          | 169.00 |                | 102.00  |                  |       |                    | 95.50           |          |
|           |             |  |   | 3G                | 66.00  | 90.62          | 46.00   |                  |       |                    |                 |          |
|           |             |  |   | CDMA              |        |                |         |                  |       |                    |                 |          |
|           | 8           | Drop rate :                                    | ≤5%   | All Generations   |        |                |         |                  |       | 51.71              |                 | 45.33    |
|           |             |  |   | 2G (GSM)          | 99.20  |                | 99.53   |                  |       |                    | 99.5            |          |
| 3G        |             |  |   | 100.00            | 100.00 | 98.81          |         |                  |       | 99.78              |                 |          |
| CDMA      |             |  |   |                   |        |                |         |                  |       |                    |                 |          |
| 8         | Drop rate : | ≤5%  | All Generations                                   |                   |        |                |         |                  | 99.84 |                    | 99.23           |          |
|           |             |  | 2G (GSM)  | 99.68             |        | 99.46          |         |                  |       |                    |                 |          |
|           |             |  | 3G  | 0.39              | 3.99   | 0.16           |         |                  |       |                    |                 |          |
|           |             |  | CDMA  |                   |        |                |         |                  |       |                    |                 |          |
| 8         | Drop rate : | ≤5%  | All Generations                                   |                   |        |                |         |                  |       | 3.40               | 4.32            |          |
|           |             |  | 2G (GSM)  | 1.84              |        | 0.12           |         |                  |       |                    |                 |          |
|           |             |  | 3G  | 0.39              | 3.99   | 0.16           |         |                  |       | 0.62               |                 |          |
|           |             |  | CDMA  |                   |        |                |         |                  |       |                    |                 |          |
| 8         | Drop rate : | ≤5%  | All Generations                                   |                   |        |                |         |                  | 0.39  |                    | 0.35            |          |
|           |             |  | 2G (GSM)  | 1.84              |        | 0.12           |         |                  |       |                    |                 |          |
|           |             |  | 3G  | 0.39              | 3.99   | 0.16           |         |                  |       |                    |                 |          |
|           |             |  | CDMA  |                   |        |                |         |                  |       |                    |                 |          |
| 8         | Drop rate : | ≤5%  | All Generations                                   |                   |        |                |         |                  |       |                    | 0.35            |          |
|           |             |  | 2G (GSM)  | 1.84              |        | 0.12           |         |                  |       |                    |                 |          |
|           |             |  | 3G  | 0.39              | 3.99   | 0.16           |         |                  |       |                    |                 |          |
|           |             |  | CDMA  |                   |        |                |         |                  |       |                    |                 |          |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.

**Quarterly Performance Monitoring Report (PMR) on Quality of Service of Wireless Data Services**

**Report for quarter ending: March 2019**

**Compliance Status**

| Sl. No.   | Parameters  | Benchmarks                                     | Generations                                       | Compliance Status |        |                |         |                 |        |                    |        |          |         |
|-----------|-------------|--|---|-------------------|--------|----------------|---------|-----------------|--------|--------------------|--------|----------|---------|
|           |             |  |   | Airtel            | BSNL   | VIL-Brand Idea | MTNL    | Reliance JIO    | TATA   | VIL-Brand Vodafone |        |          |         |
| Tamilnadu | 1           | Service Activation /Provisioning               | Within 4 hrs with 95% success                     | All Generations   | 100.00 | 100.00         | 99.07   |                 | 98.37  | 100                | 99.99  |          |         |
|           |             |  |   | 2G (GSM)          |        |                |         |                 |        |                    |        |          |         |
|           | 2           | Successful data transmission download attempts | >80%  | All Generations   |        |                |         |                 |        |                    | 100    |          |         |
|           |             |  |   | 2G (GSM)          | 100.00 | 98.62          | 100.00  |                 |        |                    | 100.00 |          |         |
|           |             |  |   | 3G                | 100.00 | 99.74          |         |                 |        |                    | 100.00 |          |         |
|           |             |  |   | CDMA              |        |                |         |                 |        |                    |        |          |         |
|           |             |  |   | 4G                | 100.00 |                | 100.00  |                 | 100.00 |                    | 100.00 |          |         |
|           | 3           | Successful data transmission upload attempts   | >75%  | All Generations   |        |                |         |                 |        |                    | 100    |          |         |
|           |             |  |   | 2G (GSM)          | 100.00 | 97.63          | 100.00  |                 |        |                    | 100.00 |          |         |
|           |             |  |   | 3G                | 100.00 | 99.51          |         |                 |        |                    | 100.00 |          |         |
|           |             |  |   | CDMA              |        |                |         |                 |        |                    |        |          |         |
|           |             |  |   | 4G                | 100.00 |                | 100.00  |                 | 100.00 |                    | 100.00 |          |         |
|           | 4           | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1 |                |         |                 |        |                    |        | 19       |         |
|           |             |  |   |                   | Plan 2 |                |         |                 |        |                    |        |          |         |
|           |             |  |   | 2G                | Plan 1 | 121.00         | 70.01   | 110(open plan)  |        |                    |        | 22       | 95.94   |
|           |             |  |   |                   | Plan 1 | 4302.00        | 804.79  |                 |        |                    |        |          | 2518.92 |
|           |             |  |   | 4G                | Plans  | 6062.00        |         | 5083(open plan) |        | 7194.92            |        | 6357.65  |         |
|           | 5           | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | CDMA              | Plan 1 |                |         |                 |        |                    |        | 28       |         |
|           |             |  |   |                   | Plan 2 |                |         |                 |        |                    |        |          |         |
|           |             |  |   | 2G                | Plan 1 | 213.00         | 116.87  | 157(open plan)  |        |                    |        | 64       | 159.09  |
|           |             |  |   |                   | Plan 1 | 7318.00        | 1618.10 |                 |        |                    |        |          | 6185.66 |
|           |             |  |   | 4G                | Plans  | 15042.00       |         | 7656(open plan) |        | 26319.98           |        | 13479.77 |         |
|           | 6           | Latency  | Data <250ms                                       | All Generations   |        |                |         |                 |        |                    |        | 200      |         |
|           |             |  |   | 2G (GSM)          | 166.00 | 363.17         | 110.00  |                 |        |                    |        | 117.50   |         |
|           |             |  |   | 3G                | 56.00  | 144.55         |         |                 |        |                    |        | 25.67    |         |
|           |             |  |   | CDMA              |        |                |         |                 |        |                    |        |          |         |
|           |             |  |   | 4G                |        | 34.00          |         | 33.00           |        | 55.12              |        | 19.50    |         |
|           | 7           | PDP Context Activation Success Rate            | ≥95%  | All Generations   |        |                |         |                 |        |                    |        | 98.34    |         |
| 2G (GSM)  |             |  |   | 100.00            | 99.75  | 99.47          |         |                 |        |                    | 99.65  |          |         |
| 3G        |             |  |   | 99.89             | 99.33  |                |         |                 |        |                    | 99.45  |          |         |
| CDMA      |             |  |   |                   |        |                |         |                 |        |                    |        |          |         |
|           |             |  | 4G  | 99.65             |        | 99.77          |         | 99.64           |        | 99.29              |        |          |         |
| 8         | Drop rate : | ≤5%  | All Generations                                   |                   |        |                |         |                 |        |                    | 1.02   |          |         |
|           |             |  | 2G (GSM)  | 1.51              | 0.33   | 2.29           |         |                 |        |                    | 4.67   |          |         |
|           |             |  | 3G  | 0.32              | 0.26   |                |         |                 |        |                    | 0.74   |          |         |
|           |             |  | CDMA  |                   |        |                |         |                 |        |                    |        |          |         |
|           |             |  | 4G  | 0.11              |        | 0.23           |         | 0.42            |        | 0.15               |        |          |         |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.

**Quarterly Performance Monitoring Report (PMR) on Quality of Service of Wireless Data Services**

**Report for quarter ending: March 2019**

**Compliance Status**

| Sl. No.              | Parameters  | Benchmarks                                     | Generations                                       | Compliance Status |                  |                |          |                 |          |                    |        |          |
|----------------------|-------------|--|---|-------------------|------------------|----------------|----------|-----------------|----------|--------------------|--------|----------|
|                      |             |  |   | Airtel            | BSNL             | VIL-Brand Idea | MTNL     | Reliance JIO    | TATA     | VIL-Brand Vodafone |        |          |
| Uttar Pradesh (East) | 1           | Service Activation /Provisioning               | Within 4 hrs with 95% success                     | All Generations   | 100.00           | 97.80          | 99.99    |                 | 98.88    | 100                | 100.00 |          |
|                      |             |  |   | 2G (GSM)          |                  |                |          |                 |          |                    |        |          |
|                      | 2           | Successful data transmission download attempts | >80%  | All Generations   |                  | 85.66          |          |                 |          |                    | 100    |          |
|                      |             |  |   | 2G (GSM)          | 100.00           |                | 100.00   |                 |          |                    | 99.83  |          |
|                      |             |  |   | 3G                | 100.00           |                | 100.00   |                 |          |                    | 99.75  |          |
|                      |             |  |   | 4G                | 100.00           |                | 100.00   |                 | 100.00   |                    | 100.00 |          |
|                      | 3           | Successful data transmission upload attempts   | >75%  | All Generations   |                  | 83.73          |          |                 |          |                    | 100    |          |
|                      |             |  |   | 2G (GSM)          | 100.00           |                | 100.00   |                 |          |                    | 99.74  |          |
|                      |             |  |   | 3G                | 100.00           |                | 100.00   |                 |          |                    | 99.91  |          |
|                      |             |  |   | 4G                | 100.00           |                | 100.00   |                 | 100.00   |                    | 100.00 |          |
|                      | 4           | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1           |                |          |                 |          |                    |        |          |
|                      |             |  |   |                   | Plan 2           |                |          |                 |          |                    |        |          |
|                      |             |  |   |                   | Plan 3           |                |          |                 |          |                    |        |          |
|                      |             |  |   | 2G                | Plan 1           | 100.00         | 90.00    | 179(open plan)  |          |                    | 110.2  | 135.86   |
|                      |             |  |   | 3G                | Plan 1           | 1101.00        | 2281.00  | 6497(open plan) |          |                    |        | 5930.79  |
|                      | 4G          | Plans  | 5341.00   |                   | 7852(open plan)  |                | 7504.59  |                 | 14914.06 |                    |        |          |
|                      | 5           | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | CDMA              | Plan 1           |                |          |                 |          |                    |        |          |
|                      |             |  |   |                   | Plan 2           |                |          |                 |          |                    |        |          |
|                      |             |  |   |                   | Plan 3           |                |          |                 |          |                    |        |          |
|                      |             |  |   | 2G                | Plan 1           | 263.00         | 154.00   | 230(open plan)  |          |                    | 125.05 | 190.83   |
|                      |             |  |   | 3G                | Plan 1           | 3009.00        | 2402.00  | 8877(open plan) |          |                    |        | 10989.39 |
|                      | 4G          | Plans  | 13272.00  |                   | 10389(open plan) |                | 34380.75 |                 | 24642.87 |                    |        |          |
|                      | 6           | Latency  | Data <250ms                                       | All Generations   |                  | 219.00         |          |                 |          |                    | 109.74 |          |
|                      |             |  |   | 2G (GSM)          | 231.00           |                | 219.00   |                 |          |                    |        | 160.86   |
|                      |             |  |   | 3G                | 198.00           |                | 106.00   |                 |          |                    |        | 51.03    |
|                      |             |  |   | 4G                | 120.00           |                | 80.00    |                 | 49.69    |                    |        | 74.52    |
|                      | 7           | PDP Context Activation Success Rate            | ≥95%  | All Generations   |                  | 99.11          |          |                 |          |                    | 100    |          |
|                      |             |  |   | 2G (GSM)          | 98.69            |                | 99.68    |                 |          |                    |        | 99.76    |
| 3G                   |             |  |   | 100.00            |                  | 98.72          |          |                 |          |                    | 99.35  |          |
| 4G                   |             |  |   | 98.83             |                  | 98.25          |          | 99.83           |          |                    | 99.97  |          |
| 8                    | Drop rate : | ≤5%  | All Generations                                   |                   | 1.73             |                |          |                 |          | 0.85               |        |          |
|                      |             |  | 2G (GSM)  | 3.35              |                  | 2.29           |          |                 |          |                    | 2.41   |          |
|                      |             |  | 3G  | 0.25              |                  | 0.90           |          |                 |          |                    | 0.73   |          |
|                      |             |  | 4G  | 0.28              |                  | 0.40           |          | 0.46            |          |                    | 0.59   |          |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.

**Quarterly Performance Monitoring Report (PMR) on Quality of Service of Wireless Data Services**

**Report for quarter ending: March 2019**

**Compliance Status**

| Sl. No.              | Parameters                          | Benchmarks                                     | Generations                                       | Compliance Status |         |                |                 |                  |                 |                    |          |          |        |  |
|----------------------|-------------------------------------|--|---|-------------------|---------|----------------|-----------------|------------------|-----------------|--------------------|----------|----------|--------|--|
|                      |                                     |  |   | Airtel            | BSNL    | VIL-Brand Idea | MTNL            | Reliance JIO     | TATA            | VIL-Brand Vodafone |          |          |        |  |
| Uttar Pradesh (West) | 1                                   | Service Activation /Provisioning               | Within 4 hrs with 95% success                     | All Generations   | 100.00  | 97.70          | 99.97           |                  | 98.81           | 100                | 99.99    |          |        |  |
|                      | 2                                   | Successful data transmission download attempts | >80%  | 2G (GSM)          |         |                |                 |                  |                 |                    |          |          |        |  |
|                      |                                     |  |   | All Generations   |         | 94.60          |                 |                  | 100             |                    |          |          |        |  |
|                      |                                     |  |   | 2G (GSM)          | 100.00  |                | 100.00          |                  |                 | 99.83              |          |          |        |  |
|                      |                                     |  |   | 3G                | 100.00  |                | 100.00          |                  |                 | 99.75              |          |          |        |  |
|                      |                                     |  |   | CDMA              |         |                |                 |                  |                 |                    |          |          |        |  |
|                      | 3                                   | Successful data transmission upload attempts   | >75%  | 4G                | 100.00  |                | 100.00          |                  | 100.00          |                    | 100.00   |          |        |  |
|                      |                                     |  |   | All Generations   |         | 91.60          |                 |                  | 100             |                    |          |          |        |  |
|                      |                                     |  |   | 2G (GSM)          | 100.00  |                | 100.00          |                  |                 | 99.74              |          |          |        |  |
|                      |                                     |  |   | 3G                | 100.00  |                | 100.00          |                  |                 | 99.91              |          |          |        |  |
|                      |                                     |  |   | CDMA              |         |                |                 |                  |                 |                    |          |          |        |  |
|                      | 4                                   | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1  |                |                 |                  |                 |                    |          |          |        |  |
|                      |                                     |  |   |                   | Plan 2  |                |                 |                  |                 |                    |          |          |        |  |
|                      |                                     |  |   |                   | Plan 3  |                |                 |                  |                 |                    |          |          |        |  |
|                      |                                     |  |   | 2G                | Plan 1  | 84.00          | 97.70           | 114(open plan)   |                 | 94                 | 135.86   |          |        |  |
|                      |                                     |  |   |                   | 3G      | Plan 1         | 1279.00         | 1924.30          | 4142(open plan) |                    |          | 5930.79  |        |  |
|                      |                                     |  |   |                   |         | Plan 2         |                 |                  |                 |                    | 3876     |          |        |  |
|                      |                                     |  |   | 4G                | Plan 3  |                |                 |                  |                 |                    |          |          |        |  |
|                      |                                     |  |   |                   | Plans   | 2071.00        |                 | 6333(open plan)  |                 | 10124.78           | 14914.06 |          |        |  |
|                      |                                     |  |   |                   | CDMA    | Plan 1         |                 |                  |                 |                    |          |          |        |  |
|                      |                                     |  |   |                   |         | Plan 2         |                 |                  |                 |                    |          |          |        |  |
|                      | Plan 3                              |  |   |                   |         |                |                 |                  |                 |                    |          |          |        |  |
|                      | 5                                   | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | 2G                | Plan 1  | 180.00         | 133.30          | 198(open plan)   |                 | 134                | 190.83   |          |        |  |
|                      |                                     |  |   |                   | 3G      | Plan 1         | 2168.00         | 2941.00          | 6241(open plan) |                    |          | 10989.85 |        |  |
|                      |                                     |  |   |                   |         | Plan 2         |                 |                  |                 |                    | 4358     |          |        |  |
|                      |                                     |  |   | Plan 3            |         |                |                 |                  |                 |                    |          |          |        |  |
|                      |                                     |  |   | 4G                | Plans   | 5483.00        |                 | 16943(open plan) |                 | 30467.10           | 24642.87 |          |        |  |
|                      |                                     |  |   |                   |         |                |                 |                  |                 |                    |          |          |        |  |
|                      |                                     |  |   | 6                 | Latency | Data <250ms    | All Generations |                  | 226.70          |                    |          |          | 65.1   |  |
|                      |                                     |  |   |                   |         |                | 2G (GSM)        | 173.00           |                 | 120.00             |          |          | 160.86 |  |
|                      | 3G                                  | 89.00  |   |                   |         |                | 44.00           |                  |                 | 51.03              |          |          |        |  |
|                      | CDMA                                |  |   |                   |         |                |                 |                  |                 |                    |          |          |        |  |
| 4G                   | 45.00                               |  | 52.00   |                   |         |                |                 | 47.85            | 74.52           |                    |          |          |        |  |
| 7                    | PDP Context Activation Success Rate | ≥95%   | All Generations                                   |                   | 97.60   |                |                 |                  | 100             |                    |          |          |        |  |
|                      |                                     |  | 2G (GSM)  | 99.18             |         | 99.79          |                 |                  | 99.76           |                    |          |          |        |  |
|                      |                                     |  | 3G  | 100.00            |         | 98.62          |                 |                  | 99.35           |                    |          |          |        |  |
|                      |                                     |  | CDMA  |                   |         |                |                 |                  |                 |                    |          |          |        |  |
|                      |                                     |  | 4G  | 98.94             |         | 95.81          |                 | 99.86            | 99.97           |                    |          |          |        |  |
| 8                    | Drop rate :                         | ≤5%  | All Generations                                   |                   | 2.60    |                |                 |                  | 2.1             |                    |          |          |        |  |
|                      |                                     |  | 2G (GSM)  | 0.27              |         | 1.94           |                 |                  | 2.41            |                    |          |          |        |  |
|                      |                                     |  | 3G  | 0.40              |         | 1.71           |                 |                  | 0.73            |                    |          |          |        |  |
|                      |                                     |  | CDMA  |                   |         |                |                 |                  |                 |                    |          |          |        |  |
|                      |                                     |  | 4G  | 0.15              |         | 0.96           |                 | 0.36             | 0.59            |                    |          |          |        |  |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.

**Quarterly Performance Monitoring Report (PMR) on Quality of Service of Wireless Data Services**

**Report for quarter ending: March 2019**

**Compliance Status**

| Sl. No.   | Parameters  | Benchmarks                                     | Generations                                       | Compliance Status |        |                |          |                  |        |                    |        |          |
|---|-------------|--|---|-------------------|--------|----------------|----------|------------------|--------|--------------------|--------|----------|
|   |             |  |   | Airtel            | BSNL   | VIL-Brand Idea | MTNL     | Reliance JIO     | TATA   | VIL-Brand Vodafone |        |          |
| West Bengal   | 1           | Service Activation /Provisioning               | Within 4 hrs with 95% success                     | All Generations   | 100.00 | 96.03          | 99.56    |                  | 99.01  | 100                | 100.00 |          |
|   | 2           | Successful data transmission download attempts | >80%  | All Generations   |        | 100.00         |          |                  |        |                    | 100    |          |
|   |             |  |   | 2G (GSM)          | 100.00 |                | 99.77    |                  |        |                    |        | 98.81    |
|   |             |  |   | 3G                | 100.00 |                |          |                  |        |                    |        | 99.57    |
|   |             |  |   | CDMA              |        |                |          |                  |        |                    |        |          |
|   |             |  |   | 4G                | 100.00 |                | 98.19    |                  | 100.00 |                    |        | 99.86    |
|   | 3           | Successful data transmission upload attempts   | >75%  | All Generations   |        | 100.00         |          |                  |        |                    | 100    |          |
|   |             |  |   | 2G (GSM)          | 100.00 |                | 96.29    |                  |        |                    |        | 98.71    |
|   |             |  |   | 3G                | 100.00 |                |          |                  |        |                    |        | 99.52    |
|   |             |  |   | CDMA              |        |                |          |                  |        |                    |        |          |
|   |             |  |   | 4G                | 100.00 |                | 99.38    |                  | 100.00 |                    |        | 99.67    |
|   | 4           | Minimum download speed (Kbps)                  | To be measured for each Plan and Reported to TRAI | CDMA              | Plan 1 |                |          |                  |        |                    |        |          |
|   |             |  |   |                   | Plan 2 |                |          |                  |        |                    |        |          |
|   |             |  |   | 2G                | Plan 1 | 76.00          | 154.00   | 100(open plan)   |        |                    | 73     | 85.51    |
|   |             |  |   |                   | Plan 2 | 1301.00        | 7679.54  |                  |        |                    |        | 2108.42  |
|   |             |  |   | 4G                | Plans  | 6249.00        |          | 2693(open plan)  |        | 6226.65            |        | 3958.98  |
|   |             |  |   |                   | CDMA   | Plan 1         |          |                  |        |                    |        |          |
|   |             |  |   |                   |        | Plan 2         |          |                  |        |                    |        |          |
|   | 5           | Average Throughput for Packet data (Kbps)      | >75% of the subscribed speed.                     | 2G                | Plan 1 | 121.00         | 197.00   | 152(open plan)   |        |                    | 167    | 135.66   |
|   |             |  |   |                   | Plan 2 |                |          |                  |        |                    |        |          |
|   |             |  |   | 3G                | Plan 1 | 2717.00        | 10035.09 |                  |        |                    |        | 4889.89  |
|   |             |  |   |                   | Plan 3 |                |          |                  |        |                    |        |          |
|   |             |  |   | 4G                | Plans  | 7829.00        |          | 16108(open plan) |        | 28466.10           |        | 10864.30 |
|   | 6           | Latency  | Data <250ms                                       | All Generations   |        | 57.00          |          |                  |        |                    | 142.17 |          |
|   |             |  |   | 2G (GSM)          | 234.00 |                | 235.00   |                  |        |                    |        | 182.07   |
|   |             |  |   | 3G                | 75.00  |                |          |                  |        |                    |        | 30.48    |
|   |             |  |   | CDMA              |        |                |          |                  |        |                    |        |          |
|   |             |  |   | 4G                | 39.00  |                | 107.00   |                  | 56.26  |                    |        | 34.27    |
|   | 7           | PDP Context Activation Success Rate            | ≥95%  | All Generations   |        | 95.11          |          |                  |        |                    | 100    |          |
|   |             |  |   | 2G (GSM)          | 99.04  |                | 99.96    |                  |        |                    |        | 99.43    |
|   |             |  |   | 3G                | 99.43  |                |          |                  |        |                    |        | 98.51    |
|   |             |  |   | CDMA              |        |                |          |                  |        |                    |        |          |
| 4G  |             |  |   | 99.72             |        | 99.59          |          | 99.87            |        |                    | 99.97  |          |
| 8   | Drop rate : | ≤5%  | All Generations                                   |                   |        |                |          |                  |        | 3.65               |        |          |
|   |             |  | 2G (GSM)  | 3.18              |        | 0.61           |          |                  |        |                    | 4.83   |          |
|   |             |  | 3G  | 0.41              |        |                |          |                  |        |                    | 0.76   |          |
|   |             |  | 3G(OSS)   |                   |        |                |          |                  |        |                    |        |          |
|   |             |  | CDMA  |                   |        |                |          |                  |        |                    |        |          |
|   |             |  | 4G  | 0.73              |        | 0.22           |          | 0.49             |        |                    | 0.25   |          |
| Note 1: The text in the bracket ( like RNC_PayG, Mblaze etc) are the plan names of the respective service provider.           |             |  |   |                   |        |                |          |                  |        |                    |        |          |
| Note 2: In case of all operators except CDMA operators provider is not offering different plans based on the data throughput. |             |  |   |                   |        |                |          |                  |        |                    |        |          |

Note 1:In case of all operators except CDMA operators provider is not offering different plans based on the data throughput.