



Telecom Regulatory Authority of India

The Indian Telecom Services Performance Indicators

April – June, 2020

New Delhi, India

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Snapshot

| (Data as on Q.E. 30 th June, 2020) | |
|--|-------------------|
| Telecom Subscribers (Wireless+Wireline) | |
| Total Subscribers | 1,160.52 Million |
| % change over the previous quarter | -1.48% |
| Urban Subscribers | 636.83 Million |
| Rural Subscribers | 523.69 Million |
| Market share of Private Operators | 88.55% |
| Market share of PSU Operators | 11.45% |
| Tele-density | 85.85 |
| Urban Tele-density | 137.35 |
| Rural Tele-density | 58.96 |
| Wireless Subscribers | |
| Total Wireless Subscribers | 1,140.71 Million |
| % change over the previous quarter | -1.47% |
| Urban Subscribers | 619.11 Million |
| Rural Subscribers | 521.60 Million |
| Market share of Private Operators | 89.33% |
| Market share of PSU Operators | 10.67% |
| Tele-density | 84.38 |
| Urban Tele-density | 133.53 |
| Rural Tele-density | 58.72 |
| Total Wireless Data Usage during the quarter | 25,979 million GB |
| Number of Public Mobile Radio Trunk Services (PMRTS) | 64,838 |
| Number of Very Small Aperture Terminals (VSAT) | 2,95,571 |
| Wireline Subscribers | |
| Total Wireline Subscribers | 19.81 Million |
| % change over the previous quarter | -2.02% |
| Urban Subscribers | 17.72 Million |
| Rural Subscribers | 2.09 Million |
| Market share of PSU Operators | 56.84% |
| Market share of Private Operators | 43.16% |
| Tele-density | 1.47 |
| Rural Tele-density | 0.24 |
| Urban Tele-density | 3.82 |
| No. of Village Public Telephones (VPT) | 68,406 |
| No. of Public Call Office (PCO) | 1,61,937 |

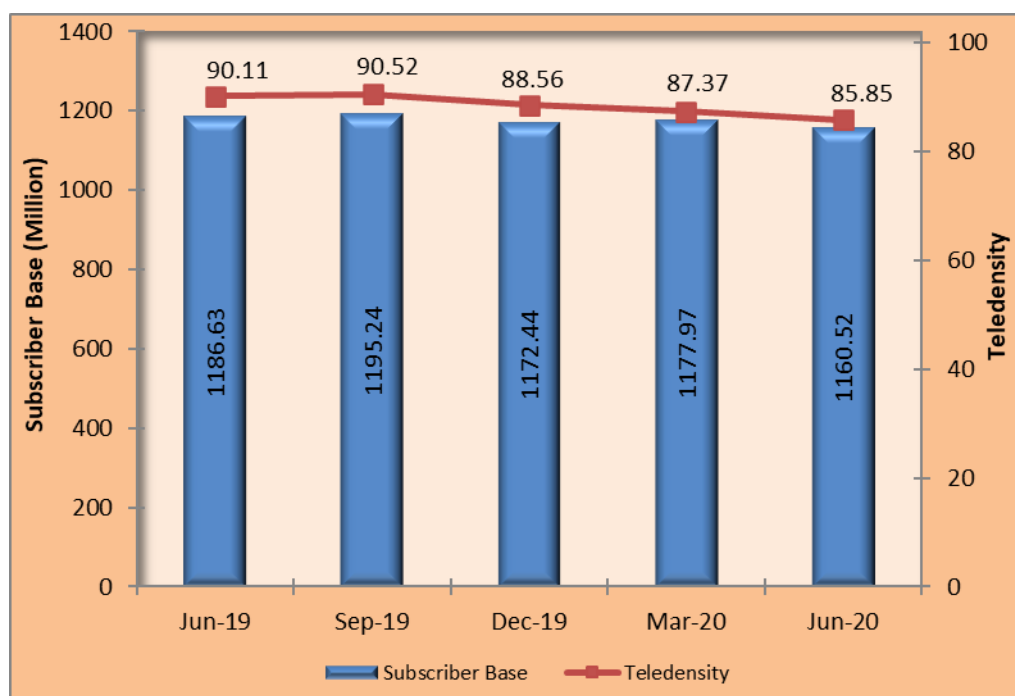
| Telecom Financial Data | |
|---|----------------|
| Gross Revenue (GR) during the quarter | ₹66,858 Crore |
| % change in GR over the previous quarter | -1% |
| Adjusted Gross Revenue (AGR) during the quarter | ₹44,128 Crore |
| % change in AGR over the previous quarter | -1.81% |
| Share of Public sector undertakings in Access AGR | 7.22% |
| Monthly Average Revenue Per User (ARPU) for Access Services | ₹98.01 |
| Internet/Broadband Subscribers | |
| Total Internet Subscribers | 749.07 Million |
| % change over previous quarter | 0.79% |
| Narrowband subscribers | 50.84 Million |
| Broadband subscribers | 698.23 Million |
| Wired Internet Subscribers | 23.05 Million |
| Wireless Internet Subscribers | 726.01 Million |
| Urban Internet Subscribers | 455.98 Million |
| Rural Internet Subscribers | 293.09 Million |
| Total Internet Subscribers per 100 population | 55.41 |
| Urban Internet Subscribers per 100 population | 98.35 |
| Rural Internet Subscribers per 100 population | 33 |
| Broadcasting & Cable Services | |
| Number of private satellite TV channels permitted by the Ministry of I&B for uplinking only/downlinking only/both uplinking and downlinking | 909 |
| Number of Pay TV Channels as reported by broadcasters | 332 |
| Number of private FM Radio Stations (excluding All India Radio) | 367 |
| Number of total active subscribers with pay DTH operators | 70.58 Million |
| Number of Operational Community Radio Stations | 300 |
| Number of pay DTH Operators | 4 |
| Revenue & Usage Parameters | |
| Monthly ARPU of Wireless Service | ₹90.12 |
| Minutes of Usage (MOU) per subscriber per month - Wireless Service | 744 Minutes |
| Total Outgoing Minutes of Usage for Internet Telephony | 124.07 Million |
| Wireless Data Usage | |
| Average Wireless Data Usage per wireless data subscriber per month | 12.15 GB |
| Average revenue realization per subscriber per GB wireless data during the quarter | 10.55 |

* For ARPU explanation please refer to footnote on Page 52

Executive Summary

1. The number of telephone subscribers in India decreased from 1,177.97 million at the end of Mar-20 to 1,160.52 million at the end of Jun-20, registering a decline rate of 1.48% over the previous quarter. This reflects Year-On-Year (Y-O-Y) decline rate of 2.20% over the same quarter of the last year. The overall Tele-density in India also decreased from 87.37 as in QE Mar-20 to 85.85 as in QE Jun-20.

Trends in Telephone subscribers and Tele-density in India

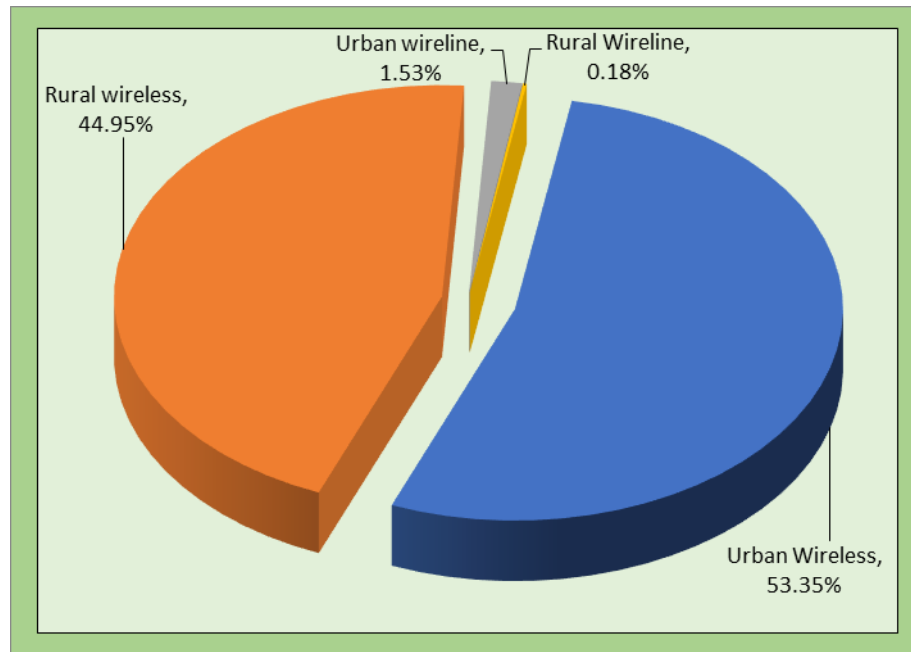


2. Telephone subscribers in Urban areas decreased from 656.46 million at the end of Mar-20 to 636.83 million at the end of Jun-20 and Urban Tele-density also declined from 142.31 to 137.35 during the same period.
3. Rural telephone subscribers increased from 521.51 million at the end of Mar-20 to 523.69 million at the end of Jun-20 and Rural

Tele-density also increased from 58.79 to 58.96 during the same period.

4. Out of the total subscription, the share of Rural subscription increased from 44.27% at the end of Mar-20 to 45.13% at the end of Jun-20.

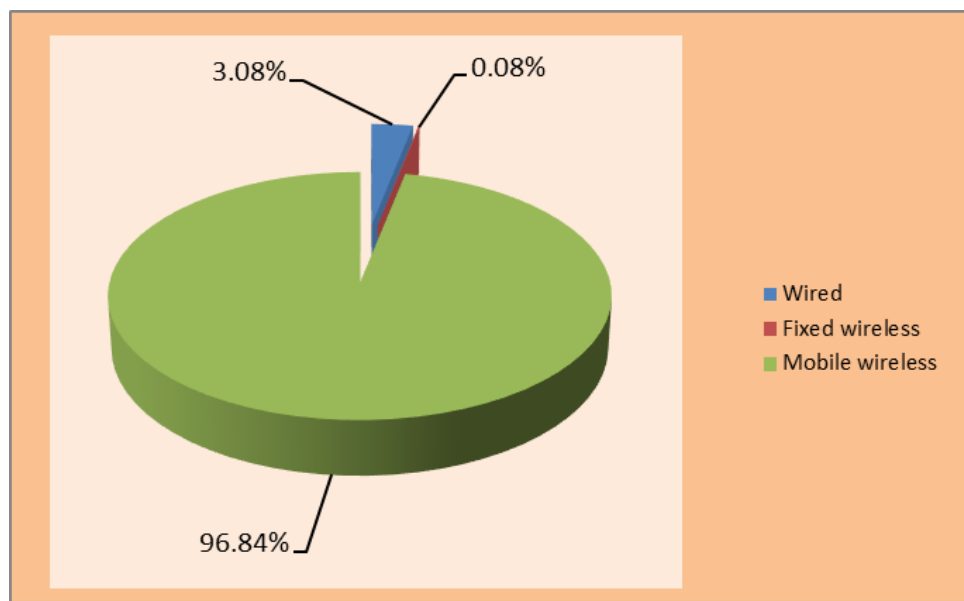
Composition of Telephone Subscribers



5. With a net decrease of 17.04 million subscribers during the quarter, the total wireless subscriber base decreased from 1,157.75 million at the end of Mar-20 to 1,140.71 million at the end of Jun-20, registering a decline rate of 1.47% over the previous quarter. Wireless subscriptions declined on Y-O-Y basis at the rate of 2.12% during the year.
6. Wireless Tele-density declined from 85.87 at the end of Mar-20 to 84.38 at the end of Jun-20 with quarterly decline rate of 1.73%.

7. Wireline subscribers decreased from 20.22 million at the end of Mar-20 to 19.81 million at the end of Jun-20 with a quarterly decline rate of 2.02% and on a Y-O-Y basis, wireline subscriptions also declined by 6.42% in QE Jun-20.
8. Wireline Tele-density decreased from 1.50 at the end of Mar-20 to 1.47 at the end of Jun-20.
9. Total number of Internet¹ subscribers increased from 743.19 million at the end of Mar-20 to 749.07 million at the end of Jun-20, registering a quarterly growth rate of 0.79%. Out of 749.07 million internet subscribers, number of Wired Internet subscribers are 23.06 million and number of Wireless Internet subscribers are 726.01 million.

Composition of internet subscription



¹ Internet: Interconnected global networks that use the internet protocol.

10. The Internet subscriber base is comprised of Broadband² Internet subscriber base of 698.23 million and Narrowband³ Internet subscriber base of 50.84 million.
11. The broadband Internet subscriber base increased by 1.57% from 687.44 million at the end of Mar-20 to 698.23 million at the end of Jun-20. However, the narrowband Internet subscriber base declined by 8.81% from 55.75 million at the end of Mar-20 to 50.84 million at the end of Jun-20.
12. Monthly Average Revenue per User (ARPU)⁴ for wireless service decreased by 1.50%, from ₹91.49 in QE Mar-20 to ₹90.12 in QE Jun-20. On Y-O-Y basis, monthly ARPU for wireless service increased by 21.30% in this quarter.
13. Prepaid ARPU per month for QE Jun-20 remained same i.e. ₹84 as it was QE Mar-20 however for Postpaid ARPU per month decreased from ₹244 in QE Mar-20 to ₹224 in QE Jun-20.
14. On an all India average, the overall Minutes of Usage (MOU)⁵ per subscriber per month for wireless service decreased by 0.80% from 750 in QE Mar-20 to 744 in QE Jun-20.
15. Prepaid MOU per subscriber per month decreased from 757 in QE Mar-20 to 748 in QE Jun-20. However, Postpaid MOU per subscriber per month increased from 611 in QE Mar-20 to 648 in QE Jun-20.

² Broadband: Internet access with a minimum capacity of greater or equal 512 Kbit/s in one or both directions.

³ Narrowband: Internet access with a capacity of less than 512 Kbit/s in one or both directions.

(Source-ITU)

⁴ ARPU per month is calculated by dividing net subscribers' revenue by average number of subscribers.

⁵ MOU per subscriber per month is calculated by dividing total minutes of usage (incoming & outgoing) by average number of subscribers.

16. Gross Revenue⁶ (GR) and Adjusted Gross Revenue⁷ (AGR) of Telecom Service Sector for the Q.E. Jun-20 has been ₹66,858 Crore and ₹44,128 Crore respectively. GR and AGR decreased by 1% and 1.81% respectively in Q.E. Jun-20 as compared to previous quarter.
17. The Y-O-Y growth in GR and AGR in Q.E. Jun-20 over the same quarter in last year has been 8.65% and 12.79% respectively.
18. Pass-through⁸ charges increased from ₹22,593 Crore in QE Mar-20 to ₹22,730 Crore in QE Jun-20 with quarterly growth rate of 0.60%. The Y-O-Y growth rate of 1.42% has been recorded in pass-through charges for QE Jun-20.
19. The License Fee⁹ decreased from ₹3,604 Crore for the QE Mar-20 to ₹3,526 Crore for the QE Jun-20. The quarterly and the Y-O-Y growth rates of license fee are -2.16% and 12.57% respectively in this quarter.

⁶ Gross Revenue is inclusive of installation charges, late fees, sale proceeds of handsets (or any other terminal equipment etc.), revenue on account of interest, dividend, value added services, supplementary services, access or interconnection charges, roaming charges, revenue from permissible sharing of infrastructure and any other miscellaneous revenue, without any set-off for related item of expense etc.

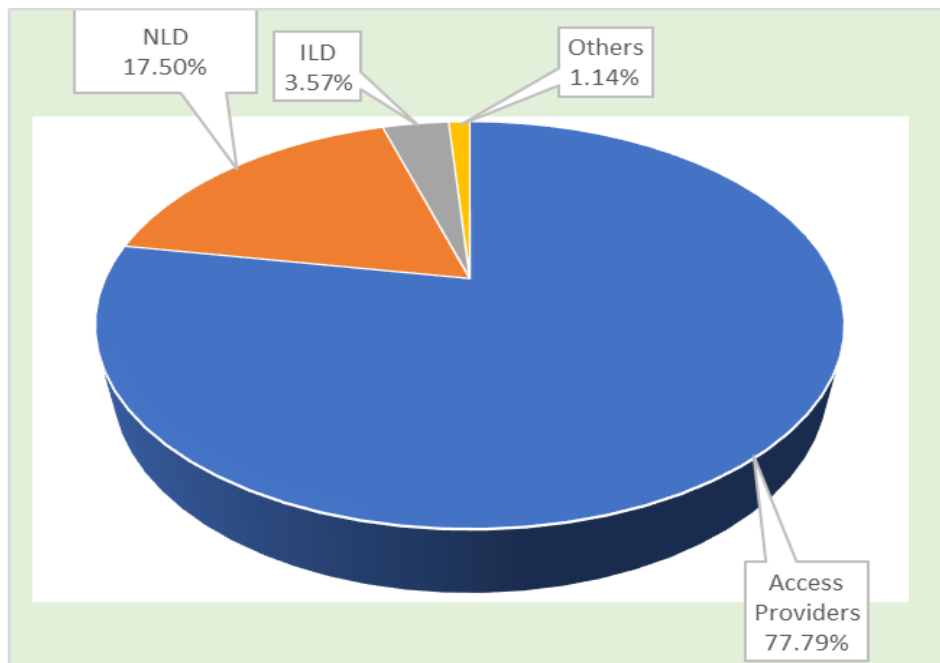
⁷ Adjusted Gross Revenue: The following shall be excluded from the Gross Revenue to arrive at the AGR:

- I. PSTN related call charges (Access Charges) actually paid to other eligible/entitled telecommunication service providers within India;
- II. Roaming revenues actually passed on to other eligible/entitled telecommunication service providers; and
- III. Service Tax on provision of service and Sales Tax actually paid to the Government if gross revenue had included as component of Sales Tax and Service Tax

⁸ Pass through charges means the charges excluded from gross revenue to arrive at adjusted gross revenue for the purpose of levying licence fee.

⁹ License Fee means a fee payable by Licensee at prescribed intervals and rates for the period of the Licence.

Service-wise composition of Adjusted Gross Revenue



20. Access services contributed 77.79% of the total Adjusted Gross Revenue of telecom services. In Access services, Gross Revenue (GR), Adjusted Gross Revenue (AGR), License Fee and Spectrum Usage Charges (SUC)¹⁰ decreased by 0.15%, 0.49%, 0.83% and 3.83% respectively in QE Jun-20. However, Pass Through Charges increased quarterly by 0.63% during the same period.
21. Monthly Average Revenue per User (ARPU) for Access Services based on AGR, increased from ₹97.64 in QE Mar-20 to ₹98.01 in QE Jun-20.

¹⁰ Spectrum Usage Charge is payable by the licensees providing mobile access services, as a percentage of their Adjusted Gross Revenue (AGR).

(Source – DoT License Agreement)

22. The performance of wireline service providers in terms of QoS during the quarter vis-à-vis that in the previous quarter is given below: -

| Parameters showing improvement in QoS | Parameters showing deterioration in QoS |
|---|---|
| <ul style="list-style-type: none"> • “Fault repair” Fault incidences No. of faults per 100 subs/month) | <ul style="list-style-type: none"> • “Fault repair” % Fault repaired by next working day (for urban areas) • “Mean time to Repair” (MTTR) • “Metering and Billing” Metering and billing credibility - post-paid, • “Response time to the customer for assistance” <ul style="list-style-type: none"> - Accessibility of call centre/ customer care - %age of calls answered by the operators (voice to voice) within 90 seconds • “Termination / closure of service”- Time taken for refund of deposits after closures |

23. The performance of Cellular Mobile service providers in terms of Quality of Service (QoS) during the quarter vis-à-vis that in the previous quarter is given as below: -

| Parameters showing improvement in QoS | Parameters showing deterioration in QoS |
|---|---|
| <ul style="list-style-type: none"> • Network QoS DCR Spatial Distribution Measure [Network_ QSD (90,90)] • Metering and billing credibility - post paid | <ul style="list-style-type: none"> • Accessibility of call centre/ customer care • %age of calls answered by the operators (voice to voice) within 90 sec • Time taken for refund of deposits after closures |

24. A total number of 909 private satellite TV channels have been permitted by the Ministry of Information and Broadcasting (MIB) for uplinking only/downlinking only/both uplinking and downlinking, as on 30th June, 2020.
25. As per the reporting done by broadcasters in pursuance of the Tariff Order (Broadcasting & Cable), dated 3rd March 2017, as amended, there are 332 pay channels as on 30th June 2020, which include 235 SD (standard definition) pay TV channels and 97 HD (high definition) Pay TV channels.
26. Since its introduction in the year 2003, DTH (direct-to-home) service has displayed a phenomenal growth. During QE 30th June 2020, there were 4 pay DTH service providers in the country.
27. Pay DTH has attained total active subscriber base of around 70.58 million in QE 30th June 2020. This is in addition the subscribers of DTH Free Dish (free DTH services of Doordarshan).
28. Apart from the radio stations operated by All India Radio – the public broadcaster, as on 30th June 2020, there are 367 operational private FM Radio stations in 105 cities with operational 31 Private FM Radio broadcasters as compared to 368 private FM Radio Stations in 105 cities with operational 32 FM Radio broadcasters in the previous quarter.
29. The reported advertisement revenue during the quarter ending 30th June 2020 in respect of 366 private FM Radio stations is ₹98.41 crore as against ₹400.64 crore in respect of 367 private FM Radio stations for the previous quarter.
30. As per data received from MIB, as on 30th June 2020, 300 Community Radio Stations are operational in the country.

Trends at a Glance

| A. Access Service (Wireline + Wireless) | | | | | | | | | |
|---|------------------------|------------------------|------------------------|------------------------|------------------------|---|--|---|---|
| | QE Jun 2019 | QE Sep 2019 | QE Dec 2019 | QE Mar 2020 | QE Jun 2020 | %age change over Jun- 2019 | %age change over Sept- 2019 | %age change over Dec- 2019 | %age change over Mar- 2020 |
| | | | | | | (12 months) | (9 months) | (6 months) | (3 months) |
| 1) Subscriber Base (in million) | | | | | | | | | |
| Wireline | 21.17 | 21.49 | 21.00 | 20.22 | 19.81 | -6.42% | -7.82% | -5.68% | -2.02% |
| Wireless | 1165.46 | 1173.75 | 1151.44 | 1157.75 | 1140.71 | -2.12% | -2.82% | -0.93% | -1.47% |
| Total | 1186.63 | 1195.24 | 1172.44 | 1177.97 | 1160.52 | -2.20% | -2.91% | -1.02% | -1.48% |
| Rural | 511.05 | 517.29 | 509.99 | 521.51 | 523.69 | 2.47% | 1.24% | 2.68% | 0.42% |
| Urban | 675.58 | 677.95 | 662.45 | 656.46 | 636.83 | -5.74% | -6.07% | -3.87% | -2.99% |
| 2) Tele-density | | | | | | | | | |
| Wireline | 1.61 | 1.63 | 1.59 | 1.50 | 1.47 | -8.84% | -9.97% | -7.83% | -2.27% |
| Wireless | 88.50 | 88.90 | 86.98 | 85.87 | 84.38 | -4.66% | -5.08% | -2.99% | -1.73% |
| Total | 90.11 | 90.52 | 88.57 | 87.37 | 85.85 | -4.73% | -5.17% | -3.08% | -1.74% |
| Rural | 56.99 | 57.59 | 56.67 | 58.79 | 58.96 | 3.45% | 2.38% | 4.04% | 0.28% |
| Urban | 160.78 | 160.63 | 156.26 | 142.31 | 137.35 | -14.57% | -14.49% | -12.10% | -3.48% |
| 3) Service Provider wise Subscribers Base (in Million) (wireless+wireline) | | | | | | | | | |
| Bharti Airtel | 324.65 | 329.88 | 331.61 | 332.21 | 320.94 | -1.14% | -2.71% | -3.22% | -3.39% |
| Vodafone Idea | 383.77 | 372.86 | 333.01 | 319.62 | 305.56 | -20.38% | -18.05% | -8.24% | -4.40% |
| Reliance Jio | 331.26 | 356.08 | 371.07 | 388.61 | 398.70 | 20.36% | 11.97% | 7.45% | 2.60% |
| BSNL | 126.86 | 127.19 | 127.70 | 128.60 | 126.48 | -0.30% | -0.55% | -0.95% | -1.64% |
| MTNL | 6.63 | 6.57 | 6.50 | 6.45 | 6.44 | -2.84% | -2.02% | -0.90% | -0.21% |
| Tata Tele. | 12.56 | 1.82 | 1.79 | 1.77 | 1.73 | -86.26% | -5.05% | -3.51% | -2.52% |
| Reliance Com. | 0.68 | 0.63 | 0.57 | 0.52 | 0.48 | -30.04% | -23.92% | -16.23% | -8.52% |
| Quadrant | 0.22 | 0.21 | 0.20 | 0.18 | 0.18 | -19.19% | -15.34% | -10.53% | -2.87% |
| Total | 1186.63 | 1195.24 | 1172.44 | 1177.97 | 1160.52 | -2.20% | -2.91% | -1.02% | -1.48% |

| B. Internet Services | | | | | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|---------------------------------------|---------------------------------------|--------------------------------------|--------------------------------------|
| | QE Jun 2019 | QE Sep 2019 | QE Dec 2019 | QE Mar 2020 | QE Jun 2020 | %age change over Jun-2019 (12 months) | %age change over Sept-2019 (9 months) | %age change over Dec-2019 (6 months) | %age change over Mar-2020 (3 months) |
| 1) Subscriber's Base (in million) | | | | | | | | | |
| A. Wired Internet Subscribers | 21.67 | 22.26 | 22.39 | 22.42 | 23.06 | 6.43% | 3.60% | 3.00% | 2.87% |
| B. Wireless Internet Subscribers | 643.64 | 665.37 | 696.36 | 720.78 | 726.01 | 12.80% | 9.11% | 4.26% | 0.73 % |
| i. Mobile Wireless (Mobile & Dongle) | 643.09 | 664.79 | 695.74 | 720.17 | 725.38 | 12.80% | 9.11% | 4.26% | 0.72% |
| ii. Fixed Wireless (Wi-Fi, Wi-Max, Point-to-Point Radio & VSAT) | 0.55 | 0.58 | 0.62 | 0.61 | 0.63 | 14.44% | 9.16% | 2.75% | 3.69% |
| Total Internet Subscribers | 665.31 | 687.62 | 718.74 | 743.19 | 749.07 | 12.59% | 8.94% | 4.22% | 0.79% |
| 2) No. of Internet Subs per 100 Population | 50.52 | 52.08 | 54.29 | 55.12 | 55.41 | 9.68% | 6.40% | 2.06% | 0.53% |

C. Usage and Revenue for Wireless Services

| | | | | | | | | | |
|--|-----|-----|-----|-----|-----|--------|--------|--------|--------|
| Traffic (MOU) (minutes of uses/subscriber/month) | 701 | 691 | 712 | 750 | 744 | 6.13% | 7.74% | 4.49% | -0.80% |
| ARPU (Rs./sub/month) | 74 | 74 | 79 | 91 | 90 | 21.30% | 21.16% | 14.58% | -1.50% |

D. Telecom Financial Data

| | QE Jun 2019 | QE Sep 2019 | QE Dec 2019 | QE Mar 2020 | QE Jun 2020 | %age change over Jun-2019 (12 months) | %age change over Sept-2019 (9 months) | %age change over Dec-2019 (6 months) | %age change over Mar-2020 (3 months) |
|---|-------------|-------------|-------------|-------------|-------------|---------------------------------------|---------------------------------------|--------------------------------------|--------------------------------------|
| 1. Telecom Sector | | | | | | | | | |
| i) Gross Revenue (₹ in Crores) | 61535 | 59992 | 63764 | 67534 | 66858 | 8.65% | 11.44% | 4.85% | -1.00% |
| ii) Adjusted Gross Revenue (₹ in Crores) | 39124 | 37338 | 40877 | 44940 | 44128 | 12.79% | 18.18% | 7.95% | -1.81% |
| 2. Access Services | | | | | | | | | |
| Adjusted Gross Revenue (₹ in Crores) | 28650 | 27921 | 30323 | 34496 | 34328 | 19.82% | 22.95% | 13.21% | -0.49% |
| ARPU per month (AGR/ Average subscribers/3) | 80.66 | 78.17 | 85.07 | 97.64 | 98.01 | 21.51% | 25.39% | 15.21% | 0.38% |

Introduction

This Report presents the Key Parameters and growth trends for the Telecom Services in India for the quarter ending 30th June, 2020. It provides a broad perspective on the Telecom Services to serve as a reference document for various stakeholders, research agencies and analysts. Chapter-1 depicts the growth pattern, in terms of Subscriber base and Tele-density of Wireline, Wireless, Internet and Value Added Services (VAS) as well as Wireless Data Usage. Chapter-2 covers the key revenue and usage parameters. Chapter-3 gives the financial and accounting data. Chapter-4 covers performance of various telecom service providers in terms of QoS. The information relating to Cable TV, DTH & Radio Broadcast services is provided in Chapter-5.

2. The Report has been prepared based on the information furnished by the Service Providers. It is also available on TRAI's website (www.trai.gov.in under the link <http://www.trai.gov.in/release-publication/reports/performance-indicators-reports>). Any suggestion or any clarification pertaining to this report, Pr. Advisor (F&EA), TRAI may be contacted on Tel. +91-11-23221856, Fax. +91-11-23235249 and e-mail: skmishra.trai@nic.in.

Chapter 1 :

Subscription Data

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- In this report, Tele-density figures are derived from the subscriber data provided by the operators and the population projection of the country are taken from the Population Projections for India and States (2011-36), Report of the Technical Group on Population Projections, National Commission on Population, Ministry of Health & Family Welfare.” (Based on Census of India 2011).

Section A : Access Service - An Overview

- 1.1 The number of telephone subscribers in India decreased from 1,177.97 million at the end of Mar-20 to 1,160.52 million at the end of Jun-20, registering a decline rate of 1.48% over the previous quarter. This reflects year-on-year (Y-O-Y) growth rate of -2.20% over the same quarter of last year. The overall Tele-density in India also decreased from 87.37 as on 31st March, 2020 to 85.85 as on 30th June, 2020 with quarterly decline rate of 1.74%.

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

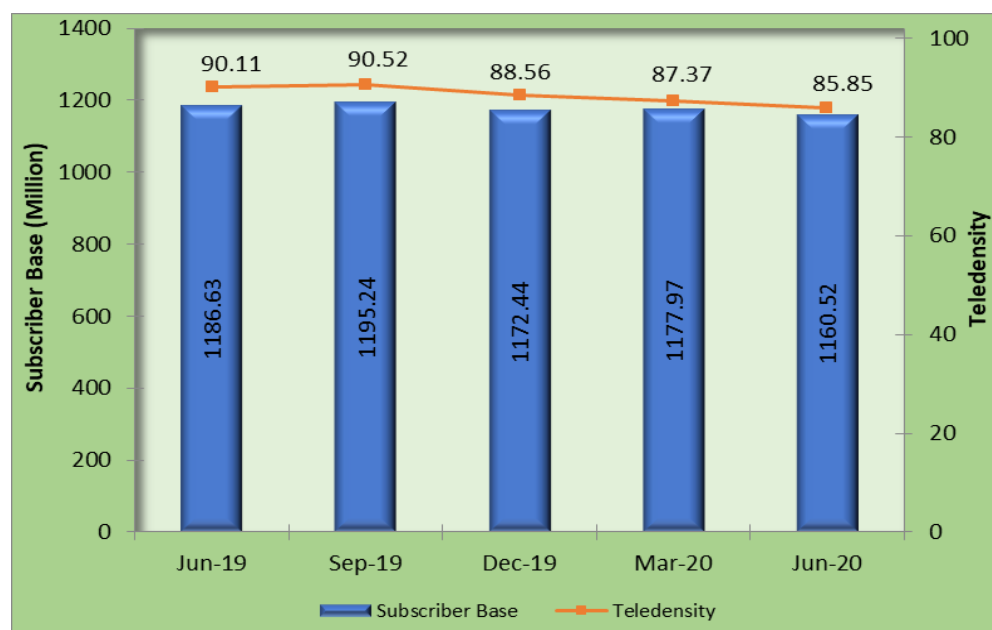
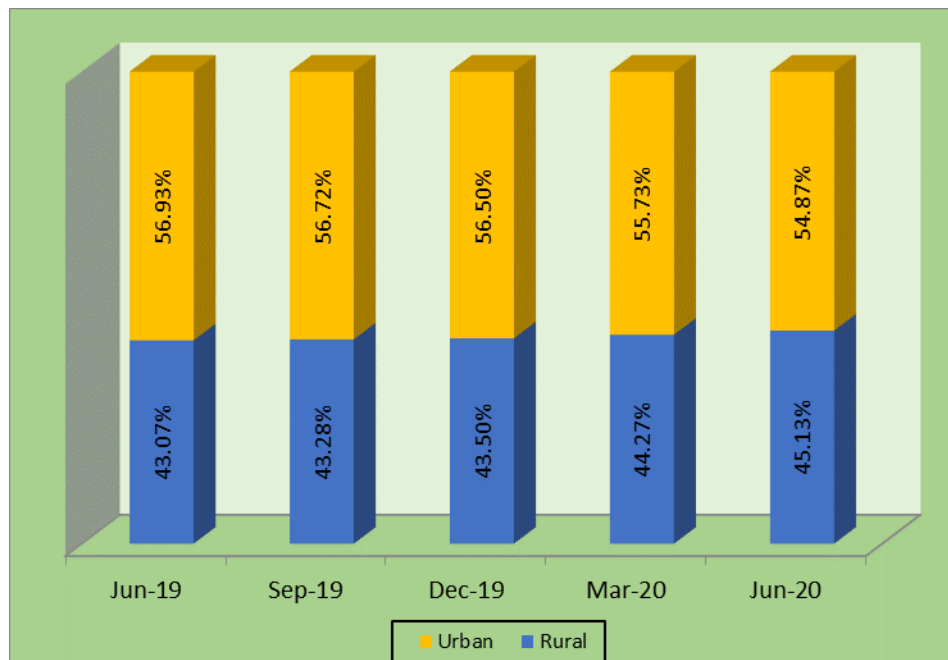


Table 1.1: Subscriber Base & Tele-density - Rural & Urban

| Quarter ending | Subscriber Base (million) | | Tele-density | |
|----------------|---------------------------|--------|--------------|--------|
| | Rural | Urban | Rural | Urban |
| Jun-19 | 511.05 | 675.58 | 56.99 | 160.78 |
| Sep-19 | 517.29 | 677.95 | 57.59 | 160.63 |
| Dec-19 | 509.99 | 662.45 | 56.67 | 156.26 |
| Mar-20 | 521.51 | 656.46 | 58.79 | 142.31 |
| Jun-20 | 523.69 | 636.83 | 58.96 | 137.35 |

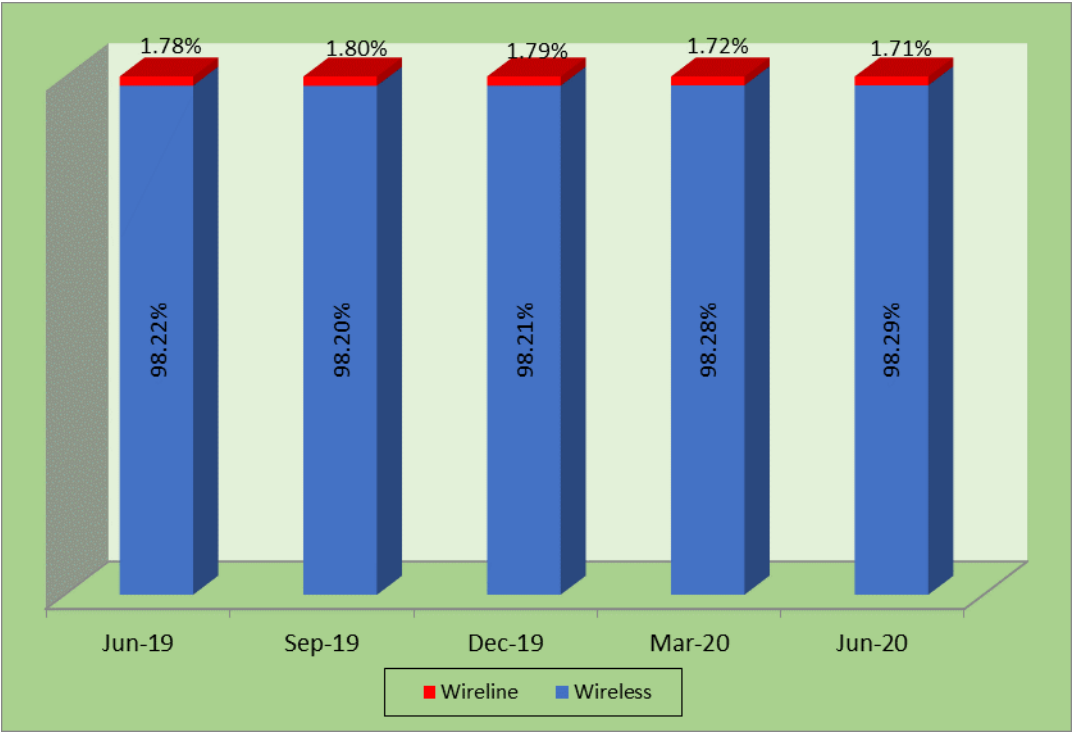
- 1.2 Telephone subscription in Urban areas decreased from 656.46 million at the end of Mar-20 to 636.83 million at the end of Jun-20 and Urban Tele-density also declined from 142.31 to 137.35 at the end of the quarter.
- 1.3 Rural telephone subscription increased from 521.51 million at the end of Mar-20 to 523.69 million at the end of Jun-20 and Rural Tele-density also increased from 58.79 to 58.96 at the end of the quarter.
- 1.4 The Y-O-Y growth rates of Urban and Rural telephone subscriptions from Jun-19 to Jun-20 are -5.74% and 2.47% respectively. The Y-O-Y growth rates of Urban and Rural Tele-density from Jun-19 to Jun-20 are -14.57% and 3.45% respectively.

Chart 1.2: Market Share - Rural & Urban Subscribers



- 1.5 Share of subscriptions of rural areas in the total telephone subscriptions increased from 44.27% at the end of Mar-20 to 45.13% at the end of Jun-20.

Chart 1.3: Composition of Access subscription - Wireline & Wireless



1.6 Share of wireline subscription in total telephone subscription decreased from 1.72% at the end of Mar-20 to 1.71% at the end of Jun-20.

Chart 1.4: Composition of Rural-Urban Telephone Subscription at the end of the quarter

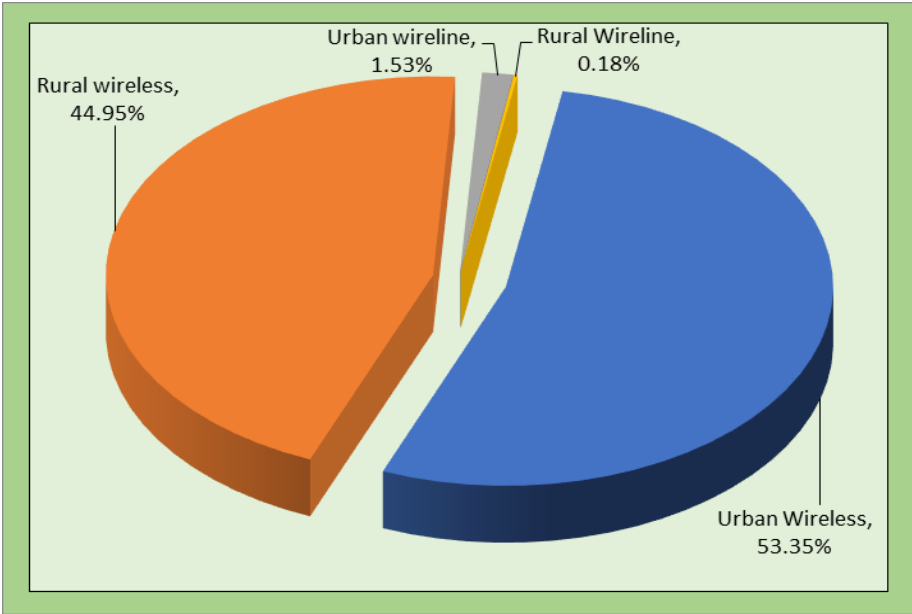


Table 1.2: Service Area wise Access (Wireless+Wireline) Subscriber base

| Service Area | Subscribers (million) | | | |
|----------------------|-----------------------|-----------------|---------------|----------------|
| | Mar-20 | Jun-20 | Net Additions | Rate of Growth |
| Andhra Pradesh | 89.17 | 87.66 | -1.51 | -1.69% |
| Assam | 23.72 | 23.60 | -0.12 | -0.49% |
| Bihar | 84.90 | 83.85 | -1.05 | -1.24% |
| Delhi | 56.67 | 55.22 | -1.44 | -2.54% |
| Gujarat | 68.93 | 67.20 | -1.74 | -2.52% |
| Haryana | 27.94 | 27.55 | -0.39 | -1.41% |
| Himachal Pradesh | 10.89 | 10.83 | -0.06 | -0.54% |
| Jammu & Kashmir | 12.00 | 11.93 | -0.07 | -0.55% |
| Karnataka | 69.78 | 68.81 | -0.97 | -1.39% |
| Kerala | 44.99 | 45.09 | 0.10 | 0.21% |
| Madhya Pradesh | 75.90 | 75.19 | -0.72 | -0.95% |
| Maharashtra | 94.15 | 92.59 | -1.56 | -1.65% |
| Mumbai | 40.90 | 39.53 | -1.37 | -3.35% |
| North East | 12.12 | 11.97 | -0.15 | -1.20% |
| Orissa | 33.54 | 33.18 | -0.37 | -1.09% |
| Punjab | 39.87 | 39.20 | -0.67 | -1.68% |
| Rajasthan | 66.02 | 64.84 | -1.18 | -1.79% |
| T.N. (incl. Chennai) | 83.99 | 80.59 | -3.41 | -4.05% |
| U.P.(E) | 97.16 | 98.27 | 1.11 | 1.14% |
| U.P.(W) | 63.69 | 62.40 | -1.29 | -2.02% |
| Kolkata | 26.39 | 26.01 | -0.37 | -1.42% |
| West Bengal | 55.25 | 55.01 | -0.24 | -0.44% |
| All India | 1,177.97 | 1,160.52 | -17.45 | -1.48% |

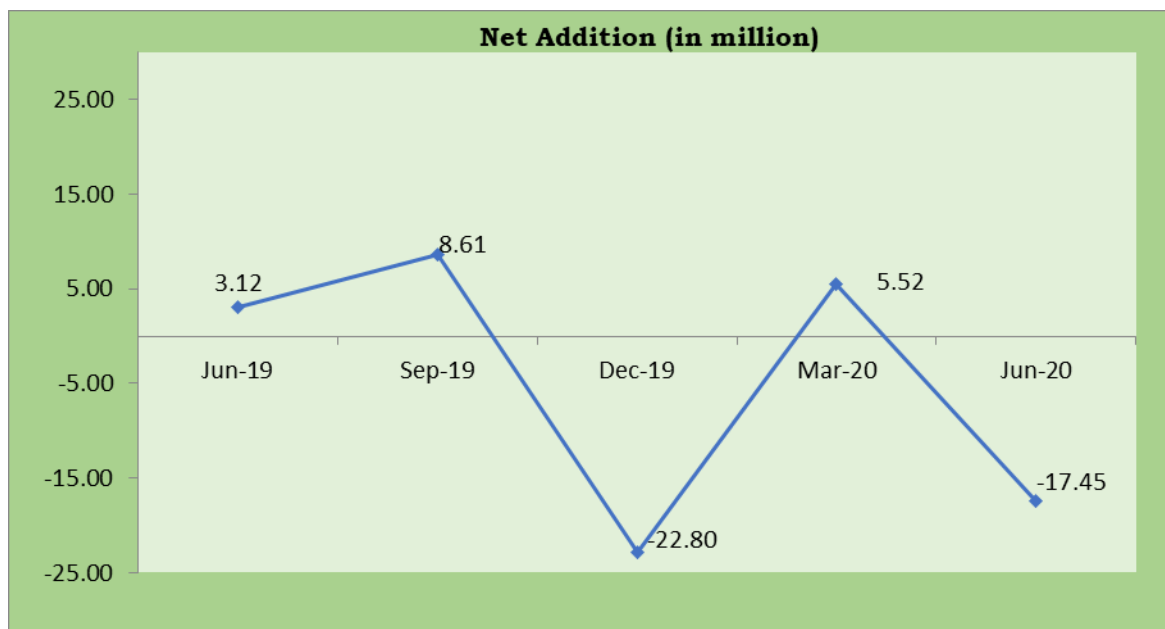
1.7 All service areas showed decline in their subscriber base except Kerala and UP (E) during the quarter ending Jun-20. UP (E) service area showed maximum growth of 1.14% and Tamil Nadu service area showed maximum decline rate of 4.05% during the quarter.

Table 1.3: Service Area wise Rural-Urban Subscribers at QE Jun-20

| Service Area | Number of Subscribers (in million) | | | |
|----------------------|------------------------------------|---------------|---------------|------------------------|
| | Total | Rural | Urban | % of Rural Subscribers |
| Andhra Pradesh | 87.66 | 43.95 | 43.71 | 50.14% |
| Assam | 23.60 | 13.90 | 9.70 | 58.89% |
| Bihar | 83.85 | 55.86 | 27.99 | 66.62% |
| Delhi | 55.22 | 2.46 | 52.76 | 4.46% |
| Gujarat | 67.20 | 26.84 | 40.36 | 39.94% |
| Haryana | 27.55 | 12.52 | 15.03 | 45.44% |
| Himachal Pradesh | 10.83 | 7.35 | 3.48 | 67.89% |
| Jammu & Kashmir | 11.93 | 5.72 | 6.21 | 47.91% |
| Karnataka | 68.81 | 26.89 | 41.92 | 39.07% |
| Kerala | 45.09 | 21.07 | 24.02 | 46.73% |
| Madhya Pradesh | 75.19 | 34.41 | 40.77 | 45.77% |
| Maharashtra | 92.59 | 43.54 | 49.05 | 47.02% |
| Mumbai | 39.53 | 1.79 | 37.74 | 4.54% |
| North East | 11.97 | 5.94 | 6.04 | 49.58% |
| Orissa | 33.18 | 22.11 | 11.07 | 66.64% |
| Punjab | 39.20 | 13.53 | 25.67 | 34.51% |
| Rajasthan | 64.84 | 35.08 | 29.76 | 54.10% |
| T.N. (incl. Chennai) | 80.59 | 23.81 | 56.77 | 29.55% |
| U.P.(E) | 98.27 | 61.19 | 37.08 | 62.27% |
| U.P.(W) | 62.40 | 29.40 | 33.00 | 47.11% |
| Kolkata | 26.01 | 1.89 | 24.13 | 7.26% |
| West Bengal | 55.01 | 34.44 | 20.57 | 62.61% |
| All India | 1,160.52 | 523.69 | 636.83 | 45.13% |

1.8 Only eight service areas have more than 50% share of rural subscribers in their total number of subscribers. Himachal Pradesh service area has maximum share of rural subscribers (67.89%) in its total telephone subscribers.

Chart 1.5: Trend of Net Addition/decline in Telephone Subscription



1.9 The net decrease in telephone subscription is 17.45 million during QE Jun-20 as compared to the net addition of 5.52 million subscribers during QE Mar-20.

Table 1.4 : Service Area wise Tele-density

| Service Area/ States | As on 31 st March, 2020 | | | As on 30 th June, 2020 | | |
|-------------------------|------------------------------------|--------------------|--------------------|-----------------------------------|--------------------|--------------------|
| | Rural Tele-density | Urban Tele-density | Total Tele-density | Rural Tele-density | Urban Tele-density | Total Tele-density |
| Andhra Pradesh | 79.13 | 129.80 | 99.06 | 80.57 | 122.77 | 97.24 |
| Assam | 47.16 | 186.45 | 68.34 | 47.13 | 183.00 | 67.83 |
| Bihar | 41.68 | 117.38 | 53.25 | 41.22 | 114.20 | 52.40 |
| Delhi | - | - | 280.18 | - | - | 271.78 |
| Gujarat | 73.30 | 126.17 | 98.53 | 73.31 | 120.12 | 95.71 |
| Haryana | 73.64 | 128.95 | 95.97 | 72.04 | 126.95 | 94.29 |
| Himachal Pradesh | 111.07 | 473.05 | 148.13 | 111.27 | 461.06 | 147.10 |
| J&K | 60.14 | 154.23 | 88.15 | 59.77 | 152.74 | 87.52 |
| Karnataka | 75.54 | 144.36 | 105.14 | 71.10 | 146.16 | 103.47 |

| Service Area/ States | As on 31 st March, 2020 | | | As on 30 th June, 2020 | | |
|-------------------------------------|------------------------------------|--------------------|--------------------|-----------------------------------|--------------------|--------------------|
| | Rural Tele-density | Urban Tele-density | Total Tele-density | Rural Tele-density | Urban Tele-density | Total Tele-density |
| Kerala | 190.84 | 98.54 | 127.13 | 195.46 | 97.41 | 127.23 |
| Madhya Pradesh | 42.43 | 131.54 | 67.40 | 42.34 | 128.56 | 66.54 |
| Maharashtra (incl. Mumbai)* | 70.42 | 148.83 | 108.09 | 69.77 | 104.04 | 105.51 |
| North East | 57.72 | 122.51 | 79.07 | 57.76 | 118.69 | 77.93 |
| Orissa | 62.37 | 139.24 | 76.46 | 61.69 | 137.11 | 75.55 |
| Punjab | 76.50 | 194.68 | 127.33 | 75.77 | 189.83 | 124.94 |
| Rajasthan | 61.63 | 148.00 | 84.26 | 60.50 | 144.31 | 82.49 |
| Tamil Nadu (incl. Chennai) | 70.83 | 141.73 | 108.21 | 64.98 | 138.25 | 103.70 |
| Uttar Pradesh (incl. UPE & UPW)* | 46.29 | 132.86 | 67.17 | 49.72 | 120.73 | 66.88 |
| West Bengal (incl. Kolkata)* | 57.43 | 128.50 | 82.77 | 57.24 | 126.51 | 82.01 |
| All India | 58.79 | 142.31 | 87.37 | 58.96 | 137.35 | 85.85 |

* Population data/projections are available state-wise only.

Notes:-

1. Tele-density figures are derived from the subscriber data provided by the operators and the population projections, for Urban and Rural areas, of the country are taken from Report of the technical group on population projections published by National Commission on Population, Ministry of Health & Family Welfare (Based on Census of India 2011).
2. Delhi Service area, apart from the State of Delhi, includes wireless subscribers of the areas served by the local exchanges of Ghaziabad & Noida (in UP) and Gurgaon & Faridabad (in Haryana).
3. Data/information for Andhra Pradesh includes Telengana, Madhya Pradesh includes Chhatisgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura states.

1.10 Kerala service area has the highest Rural Tele-density of 195.44 followed by Himachal Pradesh service area of 111.27. Bihar service area has the lowest Rural Tele-density of 41.22 followed by Madhya Pradesh service area with rural tele-density of 42.34 in QE Jun-20.

Table 1.5 : State/UT wise subscriber base (wireline+wireless)

| Sl. No. | States/UT | Total Telephone Subscription (million) | | |
|--------------------------|--|--|---------------|---------------|
| | | Total | Rural | Urban |
| 1 | Andhra Pradesh | 45.80 | 25.90 | 19.89 |
| 2 | Arunachal Pradesh | 1.30 | 0.76 | 0.54 |
| 3 | Assam | 23.60 | 13.90 | 9.70 |
| 4 | Bihar | 61.83 | 43.74 | 18.08 |
| 5 | Chhattisgarh | 20.01 | 9.70 | 10.31 |
| 6 | Goa | 2.84 | 1.10 | 1.74 |
| 7 | Gujarat | 66.46 | 26.61 | 39.85 |
| 8 | Haryana | 33.26 | 12.57 | 20.68 |
| 9 | Himachal Pradesh | 10.83 | 7.35 | 3.48 |
| 10 | Jharkhand | 22.02 | 12.11 | 9.91 |
| 11 | Karnataka | 68.81 | 26.89 | 41.92 |
| 12 | Kerala | 45.00 | 21.03 | 23.97 |
| 13 | Madhya Pradesh | 55.18 | 24.71 | 30.47 |
| 14 | Maharashtra Incl. Mumbai | 129.28 | 44.24 | 85.05 |
| 15 | Manipur | 2.31 | 0.96 | 1.36 |
| 16 | Meghalaya | 2.31 | 1.31 | 1.00 |
| 17 | Mizoram | 1.34 | 0.54 | 0.80 |
| 18 | Nagaland | 1.62 | 0.84 | 0.79 |
| 19 | Odisha | 33.18 | 22.11 | 11.07 |
| 20 | Punjab | 37.39 | 13.48 | 23.90 |
| 21 | Rajasthan | 64.84 | 35.08 | 29.76 |
| 22 | Sikkim | 0.67 | 0.38 | 0.29 |
| 23 | Tamil Nadu (incl. Chennai) | 79.41 | 23.49 | 55.92 |
| 24 | Telangana | 41.87 | 18.05 | 23.82 |
| 25 | Tripura | 3.09 | 1.54 | 1.55 |
| 26 | Uttar Pradesh (UPE + UPW) | 155.39 | 84.11 | 71.28 |
| 27 | Uttarakhand | 12.93 | 6.50 | 6.43 |
| 28 | West Bengal Incl. Kolkata | 79.98 | 35.78 | 44.20 |
| Union Territories | | | | |
| 1 | Andaman & Nicobar Islands | 0.37 | 0.17 | 0.20 |
| 2 | Chandigarh | 1.80 | 0.04 | 1.76 |
| 3 | Dadra and Nagar Haveli and Daman and Diu | 0.73 | 0.23 | 0.50 |
| 4 | Delhi | 41.88 | 2.40 | 39.48 |
| 5 | Jammu & Kashmir | 11.48 | 5.55 | 5.93 |
| 6 | Ladakh | 0.45 | 0.17 | 0.28 |
| 7 | Lakshdweep | 0.09 | 0.04 | 0.049 |
| 8 | Puduchery | 1.17 | 0.33 | 0.85 |
| Total | | 1160.52 | 523.69 | 636.83 |

Table 1.6 : State/UT wise total Tele-density

| Sl.No. | State/UT | Total Tele-density | | |
|--------------------------|--|--------------------|--------------|---------------|
| | | Total | Rural | Urban |
| 1 | Andhra Pradesh | 87.07 | 128.31 | 238.31 |
| 2 | Arunachal Pradesh | 85.41 | 66.26 | 142.79 |
| 3 | Assam | 67.83 | 47.13 | 183.00 |
| 4 | Bihar | 50.72 | 40.81 | 122.96 |
| 5 | Chhattisgarh | 68.43 | 45.00 | 134.20 |
| 6 | Goa | 182.90 | 261.15 | 153.84 |
| 7 | Gujarat | 96.09 | 73.14 | 121.54 |
| 8 | Haryana | 113.84 | 72.35 | 174.72 |
| 9 | Himachal Pradesh | 147.10 | - | - |
| 10 | Jharkhand | 57.77 | 42.79 | 101.05 |
| 11 | Karnataka | 103.47 | 71.10 | 146.16 |
| 12 | Kerala | 127.23 | 195.14 | 97.47 |
| 13 | Madhya Pradesh | 65.88 | 41.38 | 126.75 |
| 14 | Maharashtra Incl. Mumbai | 104.53 | 68.53 | 143.85 |
| 15 | Manipur | 73.60 | 44.52 | 136.23 |
| 16 | Meghalaya | 70.78 | 50.58 | 148.96 |
| 17 | Mizoram | 110.66 | 97.10 | 122.04 |
| 18 | Nagaland | 74.57 | 66.30 | 86.01 |
| 19 | Odisha | 75.55 | 61.69 | 137.11 |
| 20 | Punjab | 123.88 | 75.54 | 193.85 |
| 21 | Rajasthan | 82.49 | 60.50 | 144.31 |
| 22 | Sikkim | 100.21 | 99.76 | 100.79 |
| 23 | Tamil Nadu (incl. Chennai) | 104.26 | 64.92 | 139.86 |
| 24 | Telangana | 111.48 | 88.92 | 138.01 |
| 25 | Tripura | 76.27 | 59.64 | 105.53 |
| 26 | Uttar Pradesh (UPE +UPW) | 67.88 | 48.12 | 131.70 |
| 27 | Uttarakhand | 114.30 | 87.89 | 164.11 |
| 28 | West Bengal Incl. Kolkata | 81.85 | 56.92 | 126.78 |
| Union Territories | | | | |
| 1 | Andaman & Nicobar Islands | 92.05 | 74.84 | 115.27 |
| 2 | Chandigarh | 150.52 | - | - |
| 3 | Dadra and Nagar Haveli and Daman and Diu | 70.53 | 99.36 | 62.45 |
| 4 | Delhi | 206.10 | - | - |
| 5 | Jammu & Kashmir | 86.08 | 59.29 | 149.01 |
| 6 | Ladakh | 153.20 | 81.52 | 325.18 |
| 7 | Lakshdweep | 130.51 | - | - |
| 8 | Puduchery | 75.82 | 69.70 | 78.46 |
| | Total | 85.85 | 58.96 | 137.35 |

Table 1.7 : Service Provider wise Growth/Decline in Subscriber base

| Service Provider | Subscriber base (millions) | | | Rate of Growth (%) | Market Share in QE Mar-20 (%) | Market Share in QE Jun-20 (%) |
|-------------------|----------------------------|-----------------|---------------|--------------------|-------------------------------|-------------------------------|
| | Mar-20 | Jun-20 | Net Additions | | | |
| Reliance Jio | 388.61 | 398.70 | 10.10 | 2.60% | 32.99% | 34.36% |
| Bharti Airtel | 332.21 | 320.94 | -11.26 | -3.39% | 28.20% | 27.66% |
| Vodafone Idea Ltd | 319.62 | 305.56 | -14.06 | -4.40% | 27.13% | 26.33% |
| BSNL | 128.60 | 126.48 | -2.12 | -1.64% | 10.92% | 10.90% |
| MTNL | 6.45 | 6.44 | -0.01 | -0.21% | 0.55% | 0.55% |
| Tata Teleservices | 1.77 | 1.73 | -0.04 | -2.52% | 0.15% | 0.15% |
| Reliance Com. | 0.52 | 0.48 | -0.04 | -8.52% | 0.04% | 0.04% |
| Quadrant | 0.18 | 0.18 | -0.005 | -2.87% | 0.02% | 0.02% |
| Total | 1,177.97 | 1,160.52 | -17.45 | -1.48% | 100% | 100.00% |

Note: 1. M/s Bharti Airtel Ltd has reported the wireless subscribers including the subscribers of M/s Tata Teleservices Ltd.

2. M/s BSNL includes number of subscribers of its Virtual Network Operator (VNO).

1.11 M/s Reliance Jio Infocomm Ltd is the market leader with 34.96% in the access segment in terms of number of subscribers with 398.70 million subscribers at the end of Jun-20 followed by M/s Bharti Airtel Ltd with 320.94 million subscribers.

1.12 In term of net addition, Reliance Jio Infocomm Ltd became the biggest gainer with net addition of 10.10 million telephone subscribers during the QE Jun-20.

Table 1.8 : Market Share of the service providers in total rural subscriber base

| Service Provider | No. of Total Subscribers (in millions) | No. of Rural Subscribers (in millions) | Percentage of Rural subscribers | Market share of Rural subscribers (%) |
|-------------------------|---|---|--|--|
| Vodafone Idea Ltd | 305.56 | 166.02 | 54.33% | 31.70 |
| Bharti Airtel | 320.94 | 151.09 | 47.08% | 28.85 |
| Reliance Jio | 398.70 | 166.35 | 41.72% | 31.77 |
| BSNL | 126.48 | 40.10 | 31.70% | 7.66 |
| Quadrant | 0.18 | 0.03 | 19.56% | 0.01 |
| Tata Teleservices | 1.73 | 0.04 | 2.56% | 0.01 |
| MTNL | 6.44 | 0.05 | 0.71% | 0.01 |
| Reliance Com. | 0.48 | 0.001 | 0.17% | 0.0002 |
| Total | 1,160.52 | 523.69 | 45.13% | 100 |

1.13 M/s Vodafone Idea Ltd is the telecom service provider with highest proportion of rural telephone subscribers of 54.33% followed by Bharti Airtel of 47.08% to their total telephone subscribers at the end of Jun-20.

Section B : Wireless Service

Table 1.9: List of Cellular Mobile (GSM, LTE & CDMA) Service Providers currently providing service [As on 30th June, 2020]

| Sl.No. | Service Provider | Licensed Service Areas |
|--------|--|--|
| 1 | Reliance Jio Infocom Ltd | All India |
| 2 | Bharti Airtel Ltd | All India |
| 3 | Vodafone Idea Ltd | All India |
| 4 | BSNL | All India (except Delhi & Mumbai) |
| 5 | MTNL | Delhi & Mumbai |
| 6 | Reliance Communications Ltd / Reliance Telecom Ltd | All India (except Assam & NE) / Kolkata, MP, WB, HP, Bihar, Odisha, Assam & NE |

Source : DoT website

UL Access Services Licensees Virtual Network Operators (VNOs) who are providing services as on 30th June, 2020

| | | |
|---|---|------------------------------|
| 1 | Surftelecom Pvt. Ltd (Formerly Plintron India Pvt. Ltd. | All India |
| 2 | AdPay Mobile Payment India Pvt. Ltd | Tamil Nadu including Chennai |

Source : As reported by telecom service providers

1.14 Number of total Wireless subscribers decreased from 1,157.75 million at the end of Mar-20 to 1,140.71 million at the end of Jun-20, thereby showing a quarterly decline rate of 1.47%. During the quarter, net decline of 17.04 million wireless subscribers has been recorded.

1.15 The total wireless subscriber base recorded a Y-O-Y negative growth rate of 2.12% in QE Jun-20 over the same quarter in the previous year.

1.16 Wireless Teledensity in the country decreased from 85.87 at the end of Mar-20 to 84.38 at the end of Jun-20.

Chart 1.6: Wireless Subscriber Base and Teledensity

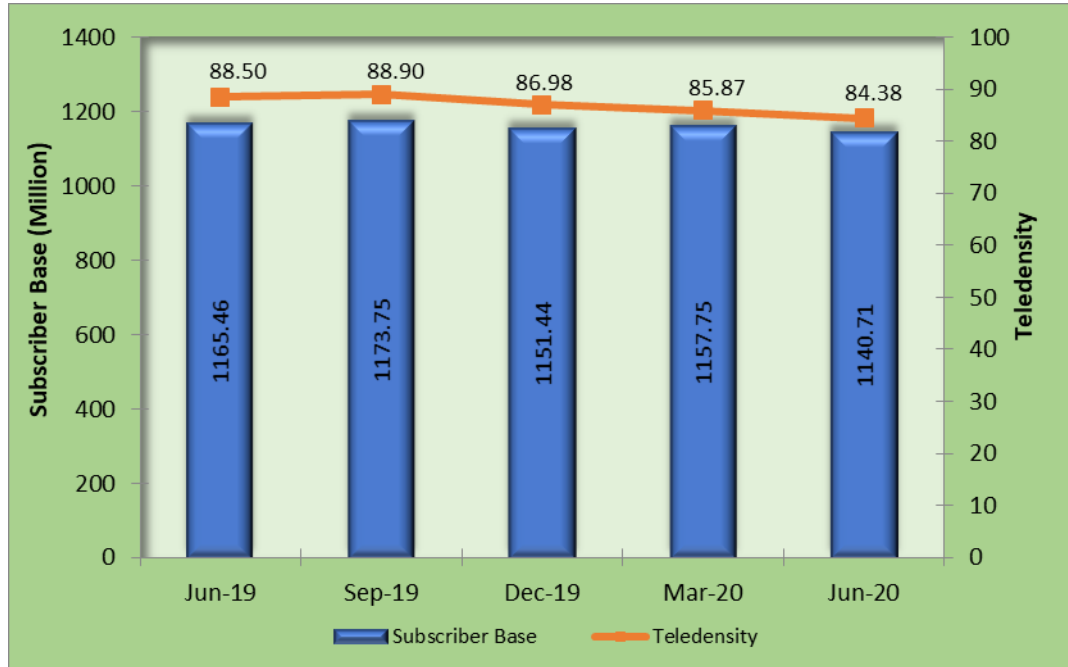


Table 1.10: Wireless Subscriber Base & Tele-density - Rural & Urban

| Quarter ending | Subscriber Base (million) | | Tele-density | |
|----------------|---------------------------|--------|--------------|--------|
| | Rural | Urban | Rural | Urban |
| Jun-19 | 508.19 | 657.27 | 56.68 | 156.42 |
| Sep-19 | 514.56 | 659.18 | 57.28 | 156.18 |
| Dec-19 | 507.46 | 643.97 | 56.39 | 151.90 |
| Mar-20 | 519.27 | 638.48 | 58.54 | 138.41 |
| Jun-20 | 521.60 | 619.11 | 58.72 | 133.53 |

1.17 Number of Rural Wireless subscribers increased from 519.27 million at the end of Mar-20 to 521.60 million at the end of Jun-20, however, the number of urban wireless subscribers decreased from 638.48 million to 619.11 million during the quarter. Quarterly

growth rates of Rural and Urban wireless subscriptions are 0.45% and -3.03% respectively during QE Jun-20.

1.18 The share of rural wireless subscription increased from 44.85% to 45.73% in total wireless subscription in this quarter.

Chart 1.7: Wireless Market Share - Rural & Urban

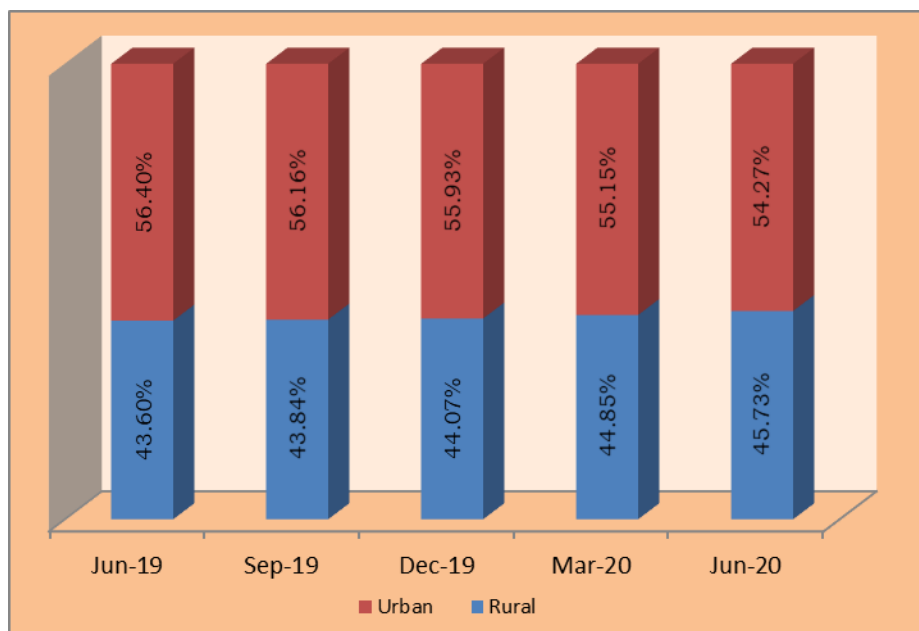


Table 1.11: Growth in Wireless Subscriber base

| Service Provider | Subscriber Base (millions) | | | Rate of Growth (%) | Market Share Mar-20 (%) | Market Share Jun-20 (%) |
|-------------------|----------------------------|-----------------|---------------|--------------------|-------------------------|-------------------------|
| | Mar-20 | Jun-20 | Net Additions | | | |
| Reliance Jio | 387.52 | 397.25 | 9.73 | 2.51 | 33.47 | 34.82 |
| Bharti Airtel | 327.81 | 316.67 | -11.14 | -3.40 | 28.31 | 27.76 |
| Vodafone Idea Ltd | 319.17 | 305.10 | -14.06 | -4.41 | 27.57 | 26.75 |
| BSNL | 119.87 | 118.31 | -1.56 | -1.30 | 10.35 | 10.37 |
| MTNL | 3.36 | 3.35 | -0.01 | -0.16 | 0.29 | 0.29 |
| Reliance Com. | 0.02 | 0.02 | 0.00 | -2.30 | 0.002 | 0.002 |
| Total | 1,157.75 | 1,140.71 | -17.04 | -1.47 | 100 | 100 |

1.19 M/s RJIL Limited is the market leader with a wireless subscriber base of **397.25 million** which translates into market share of **34.82%** w.r.t total wireless subscriber base. M/s Bharti Airtel Ltd. is at 2nd position with a total subscriber base of **316.67 million** and market share of **27.76%**. M/s RJIL has reported the net additions of **9.73 Million**.

1.20 In terms of net additions during QE Jun-20, except M/s RJIL Limited all service providers have showed negative growth in their wireless subscribers.

Table 1.12: Service Area wise Wireless Subscriber base

| Service Area | Subscriber base (in million) | | | |
|----------------------|------------------------------|-----------------|---------------|--------------------|
| | Mar-20 | Jun-20 | Net Additions | Rate of change (%) |
| Andhra Pradesh | 87.86 | 86.35 | -1.50 | -1.71 |
| Assam | 23.60 | 23.49 | -0.12 | -0.49 |
| Bihar | 84.72 | 83.67 | -1.05 | -1.24 |
| Delhi | 53.40 | 52.03 | -1.36 | -2.55 |
| Gujarat | 67.93 | 66.24 | -1.70 | -2.50 |
| Haryana | 27.67 | 27.26 | -0.42 | -1.51 |
| Himachal Pradesh | 10.79 | 10.74 | -0.05 | -0.50 |
| Jammu & Kashmir | 11.86 | 11.79 | -0.07 | -0.60 |
| Karnataka | 67.63 | 66.68 | -0.95 | -1.40 |
| Kerala | 43.43 | 43.59 | 0.16 | 0.36 |
| Madhya Pradesh | 75.23 | 74.56 | -0.67 | -0.89 |
| Maharashtra | 92.80 | 91.28 | -1.51 | -1.63 |
| Mumbai | 37.83 | 36.47 | -1.36 | -3.60 |
| North East | 12.02 | 11.88 | -0.15 | -1.21 |
| Orissa | 33.33 | 32.97 | -0.36 | -1.08 |
| Punjab | 39.17 | 38.52 | -0.65 | -1.66 |
| Rajasthan | 65.53 | 64.37 | -1.16 | -1.77 |
| T.N. (incl. Chennai) | 81.98 | 78.63 | -3.35 | -4.09 |
| U.P.(E) | 96.76 | 97.94 | 1.18 | 1.22 |
| U.P.(W) | 63.38 | 62.08 | -1.31 | -2.06 |
| Kolkata | 25.73 | 25.36 | -0.38 | -1.46 |
| West Bengal | 55.07 | 54.81 | -0.27 | -0.48 |
| All India | 1,157.75 | 1,140.71 | -17.04 | -1.47 |

Table 1.13: Service Area wise Wireless Rural-Urban Subscriber base

| Service Area | Subscriber base (in million) | | | |
|----------------------|------------------------------|---------------|---------------|------------------------|
| | Total | Rural | Urban | % of Rural Subscribers |
| Andhra Pradesh | 86.35 | 43.82 | 42.54 | 50.74 |
| Assam | 23.49 | 13.88 | 9.60 | 59.11 |
| Bihar | 83.67 | 55.84 | 27.83 | 66.74 |
| Delhi | 52.03 | 2.46 | 49.57 | 4.73 |
| Gujarat | 66.24 | 26.76 | 39.48 | 40.40 |
| Haryana | 27.26 | 12.47 | 14.78 | 45.76 |
| Himachal Pradesh | 10.74 | 7.30 | 3.44 | 68.00 |
| Jammu & Kashmir | 11.79 | 5.70 | 6.08 | 48.39 |
| Karnataka | 66.68 | 26.80 | 39.88 | 40.19 |
| Kerala | 43.59 | 20.21 | 23.38 | 46.37 |
| Madhya Pradesh | 74.56 | 34.39 | 40.18 | 46.12 |
| Maharashtra | 91.28 | 43.36 | 47.92 | 47.50 |
| Mumbai | 36.47 | 1.79 | 34.67 | 4.92 |
| North East | 11.88 | 5.92 | 5.95 | 49.88 |
| Orissa | 32.97 | 22.07 | 10.90 | 66.94 |
| Punjab | 38.52 | 13.40 | 25.12 | 34.79 |
| Rajasthan | 64.37 | 35.05 | 29.33 | 54.44 |
| T.N. (incl. Chennai) | 78.63 | 23.57 | 55.06 | 29.97 |
| U.P.(E) | 97.94 | 61.16 | 36.78 | 62.45 |
| U.P.(W) | 62.08 | 29.38 | 32.70 | 47.32 |
| Kolkata | 25.36 | 1.89 | 23.47 | 7.44 |
| West Bengal | 54.81 | 34.37 | 20.44 | 62.71 |
| All India | 1,140.71 | 521.60 | 619.11 | 45.73 |

1.21 Detailed table on service provider wise subscriber base in each service area is at Annexure-1.1.

Table 1.14 : Service Area wise Wireless Tele-density

| Service Area | As on 31 st March, 2020 | | | As on 30 th June, 2020 | | |
|--------------------------------|------------------------------------|--------------------|--------------------|-----------------------------------|--------------------|--------------------|
| | Rural Tele-density | Urban Tele-density | Total Tele-density | Rural Tele-density | Urban Tele-density | Total Tele-density |
| A.P. | 78.86 | 126.49 | 97.59 | 80.32 | 119.47 | 95.78 |
| Assam | 47.11 | 184.65 | 68.02 | 47.07 | 181.18 | 67.51 |
| Bihar | 41.66 | 116.74 | 53.14 | 41.21 | 113.55 | 52.29 |
| Delhi | - | - | 264.02 | - | - | 256.09 |
| Gujarat | 73.05 | 123.44 | 97.10 | 73.09 | 117.50 | 94.34 |
| Haryana | 73.39 | 127.08 | 95.07 | 71.79 | 124.88 | 93.30 |
| H.P. | 110.26 | 467.11 | 146.79 | 110.49 | 455.43 | 145.83 |
| J&K | 60.00 | 151.23 | 87.16 | 59.65 | 149.55 | 86.49 |
| Karnataka | 75.27 | 137.18 | 101.90 | 70.87 | 139.04 | 100.28 |
| Kerala | 182.64 | 95.84 | 122.72 | 187.51 | 94.81 | 123.01 |
| M.P. | 42.39 | 129.52 | 66.81 | 42.31 | 126.67 | 65.99 |
| Maharashtra (incl. Mumbai)* | 70.12 | 141.79 | 104.55 | 69.50 | 137.08 | 102.02 |
| North East | 57.58 | 120.87 | 78.43 | 57.63 | 117.05 | 77.30 |
| Orissa | 62.25 | 137.14 | 75.98 | 61.58 | 135.06 | 75.09 |
| Punjab | 75.77 | 190.45 | 125.10 | 75.08 | 185.73 | 122.78 |
| Rajasthan | 61.55 | 145.84 | 83.63 | 60.44 | 142.20 | 81.89 |
| Tamil Nadu (incl. Chennai) | 70.12 | 137.44 | 105.62 | 64.31 | 134.07 | 101.17 |
| Uttar Pradesh (incl. UPE&UPW)* | 46.25 | 131.75 | 66.87 | 49.69 | 119.69 | 66.60 |
| West Bengal (incl. Kolkata)* | 57.32 | 126.33 | 81.92 | 57.13 | 124.29 | 81.15 |
| All India | 58.54 | 138.41 | 85.87 | 58.72 | 133.53 | 84.38 |

* Population data/projections are available state-wise only.

Notes:

1. Tele-density figures are derived from the subscriber data provided by the operators and the population projections, for Urban and Rural areas, of the country are taken from the Report of the technical group on population projections published by National Commission on Population, Ministry of Health & Family Welfare (Based on Census of India 2011).
2. Delhi Service area, apart from the State of Delhi, includes wireless subscribers of the areas served by the local exchanges of Ghaziabad & Noida (in UP) and Gurgaon & Faridabad (in Haryana).
3. Data/information for Andhra Pradesh includes Telengana, Madhya Pradesh includes Chhatisgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura states.

Table 1.15 : State/UT wise Wireless Subscriber Base

| Sl. No. | States/UT | Wireless Subscribers (in million) | | |
|---------|--|-----------------------------------|---------------|---------------|
| | | Total | Rural | Urban |
| 1 | Andhra Pradesh | 45.08 | 25.80 | 19.28 |
| 2 | Arunachal Pradesh | 1.28 | 0.75 | 0.53 |
| 3 | Assam | 23.49 | 13.88 | 9.60 |
| 4 | Bihar | 61.74 | 43.73 | 18.01 |
| 5 | Chhattisgarh | 19.88 | 9.69 | 10.19 |
| 6 | Goa | 2.75 | 1.07 | 1.68 |
| 7 | Gujarat | 65.51 | 26.53 | 38.98 |
| 8 | Haryana | 32.94 | 12.53 | 20.42 |
| 9 | Himachal Pradesh | 10.74 | 7.30 | 3.44 |
| 10 | Jharkhand | 21.93 | 12.11 | 9.83 |
| 11 | Karnataka | 66.68 | 26.80 | 39.88 |
| 12 | Kerala | 43.51 | 20.17 | 23.33 |
| 13 | Madhya Pradesh | 54.69 | 24.70 | 29.99 |
| 14 | Maharashtra | 125.00 | 44.08 | 80.91 |
| 15 | Manipur | 2.29 | 0.95 | 1.34 |
| 16 | Meghalaya | 2.29 | 1.31 | 0.98 |
| 17 | Mizoram | 1.33 | 0.53 | 0.79 |
| 18 | Nagaland | 1.62 | 0.84 | 0.78 |
| 19 | Odisha | 32.97 | 22.07 | 10.90 |
| 20 | Punjab | 36.88 | 13.36 | 23.52 |
| 21 | Rajasthan | 64.37 | 35.05 | 29.33 |
| 22 | Sikkim | 0.67 | 0.38 | 0.29 |
| 23 | Tamil Nadu | 77.50 | 23.25 | 54.25 |
| 24 | Telangana | 41.27 | 18.02 | 23.25 |
| 25 | Tripura | 3.07 | 1.54 | 1.53 |
| 26 | Uttar Pradesh | 154.80 | 84.06 | 70.74 |
| 27 | Uttarakhand | 12.85 | 6.49 | 6.36 |
| 28 | West Bengal | 79.15 | 35.71 | 43.43 |
| | Union Territories | | | |
| 1 | Andaman & Nicobar Islands | 0.35 | 0.17 | 0.19 |
| 2 | Chandigarh | 1.63 | 0.04 | 1.59 |
| 3 | Dadra and Nagar Haveli and Daman and Diu | 0.73 | 0.23 | 0.50 |
| 4 | Delhi | 38.73 | 2.40 | 36.33 |
| 5 | Jammu & Kashmir | 11.34 | 5.54 | 5.80 |
| 6 | Ladakh | 0.45 | 0.17 | 0.28 |
| 7 | Lakshdweep | 0.08 | 0.04 | 0.05 |
| 8 | Puduchery | 1.13 | 0.32 | 0.81 |
| | Total | 1140.71 | 521.60 | 619.11 |

Table 1.16 : State/UT wise Wireless Tele-density

| Sl.No. | State/UT | Wireless Tele-density | | |
|--------|--|-----------------------|--------------|---------------|
| | | Total | Rural | Urban |
| 1 | Andhra Pradesh | 85.71 | 75.31 | 105.13 |
| 2 | Arunachal Pradesh | 84.00 | 65.84 | 138.40 |
| 3 | Assam | 67.51 | 47.07 | 181.18 |
| 4 | Bihar | 50.65 | 40.80 | 122.43 |
| 5 | Chhattisgarh | 67.99 | 44.96 | 132.63 |
| 6 | Goa | 177.45 | 255.10 | 148.62 |
| 7 | Gujarat | 94.71 | 72.93 | 118.86 |
| 8 | Haryana | 112.77 | 72.10 | 172.45 |
| 9 | Himachal Pradesh | 145.83 | 110.49 | 455.43 |
| 10 | Jharkhand | 57.55 | 42.77 | 100.23 |
| 11 | Karnataka | 100.28 | 70.87 | 139.04 |
| 12 | Kerala | 123.01 | 187.21 | 94.88 |
| 13 | Madhya Pradesh | 65.29 | 41.35 | 124.77 |
| 14 | Maharashtra | 101.07 | 68.29 | 136.86 |
| 15 | Manipur | 72.97 | 44.34 | 134.64 |
| 16 | Meghalaya | 70.23 | 50.51 | 146.56 |
| 17 | Mizoram | 109.73 | 96.97 | 120.44 |
| 18 | Nagaland | 74.27 | 66.27 | 85.32 |
| 19 | Odisha | 75.09 | 61.58 | 135.06 |
| 20 | Punjab | 122.19 | 74.86 | 190.71 |
| 21 | Rajasthan | 81.89 | 60.44 | 142.20 |
| 22 | Sikkim | 99.44 | 99.70 | 99.11 |
| 23 | Tamil Nadu | 101.75 | 64.26 | 135.67 |
| 24 | Telangana | 109.90 | 88.78 | 134.72 |
| 25 | Tripura | 75.78 | 59.57 | 104.32 |
| 26 | Uttar Pradesh | 67.62 | 48.09 | 130.68 |
| 27 | Uttarakhand | 113.58 | 87.76 | 162.29 |
| 28 | West Bengal | 80.99 | 56.82 | 124.57 |
| | Union Territories | | | |
| 1 | Andaman & Nicobar Islands | 87.87 | 72.04 | 109.24 |
| 2 | Chandigarh | 136.42 | - | - |
| 3 | Dadra and Nagar Haveli and Daman and Diu | 70.02 | 98.49 | 62.04 |
| 4 | Delhi | 190.61 | - | - |
| 5 | Jammu & Kashmir | 85.02 | 59.17 | 145.76 |
| 6 | Ladakh | 153.20 | 81.52 | 325.18 |
| 7 | Lakshdweep | 124.28 | - | - |
| 8 | Puduchery | 72.97 | 68.36 | 74.96 |
| | All India Tele-density | 84.38 | 58.72 | 133.53 |

Table 1.17 : Rural Wireless Subscriber base and Market Share as on 30.06.2020

| Service Provider | Total number of wireless Subscribers (in millions) | Rural Subscribers (in millions) | % of Rural subscribers in total | Market Share of Rural Subscribers (%) |
|-------------------------|---|--|--|--|
| Reliance Jio | 397.25 | 166.35 | 41.88 | 31.89 |
| Bharti Airtel* | 316.67 | 151.09 | 47.71 | 28.97 |
| Vodafone Idea Ltd | 305.10 | 166.02 | 54.41 | 31.83 |
| BSNL | 118.31 | 38.09 | 32.20 | 7.30 |
| MTNL | 3.35 | 0.05 | 1.36 | 0.01 |
| Reliance Com. | 0.02 | 0.00 | 0.00 | 0.00 |
| Total | 1,140.71 | 521.60 | 45.73 | 100 |

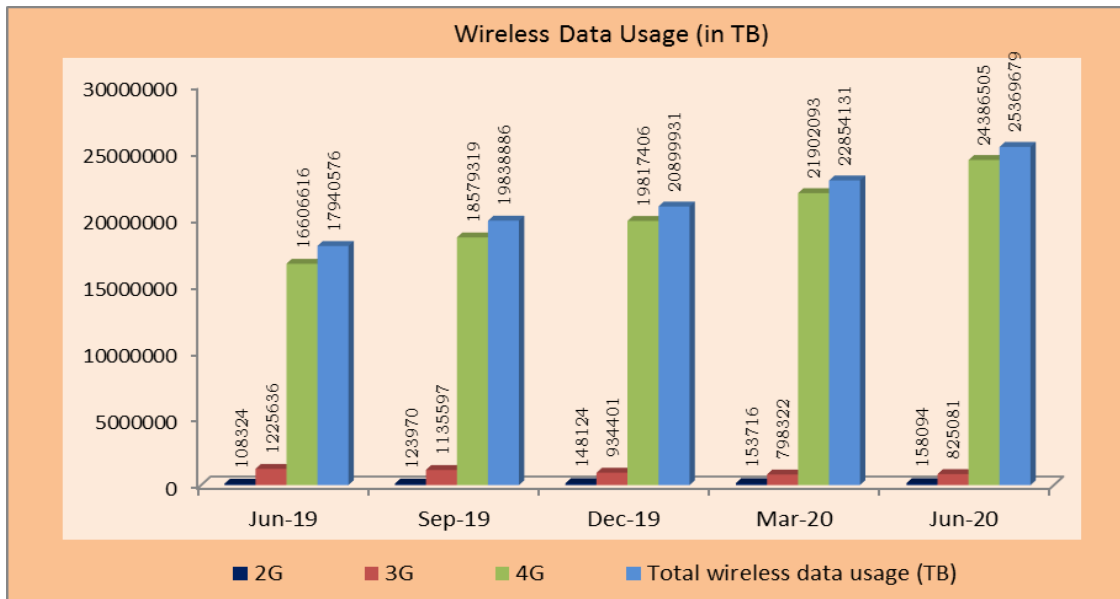
- Note:** 1. M/s Reliance Com. has not reported number of its rural wireless subscribers and hence its rural wireless subscription has been taken as NIL.
2. M/s Bharti Airtel Ltd has reported the wireless subscribers including the subscribers of M/s Tata Teleservices Ltd for QE June, 2020.

Wireless Data Usage

- 1.22 Volume of total wireless data usage increased from 22,854,131 TB during Q.E. Mar-20 to 25,369,679 TB during Q.E. Jun-20 with quarterly growth rate of 11.01%. Out of total data wireless usage, 2G data usage was 158,094 TB, 3G data usage was 825,081 TB and 4G data usage was 24,386,505 TB during the quarter.
- 1.23 Total number of wireless data subscribers increased from 720.18 million at the end of Mar-20 to 725.40 million at the end of Jun-20.
- 1.24 The contribution of 2G, 3G and 4G data usage in total volume of wireless data usage are about 0.62%, 3.25% and 96.12% respectively during the QE Jun-20.

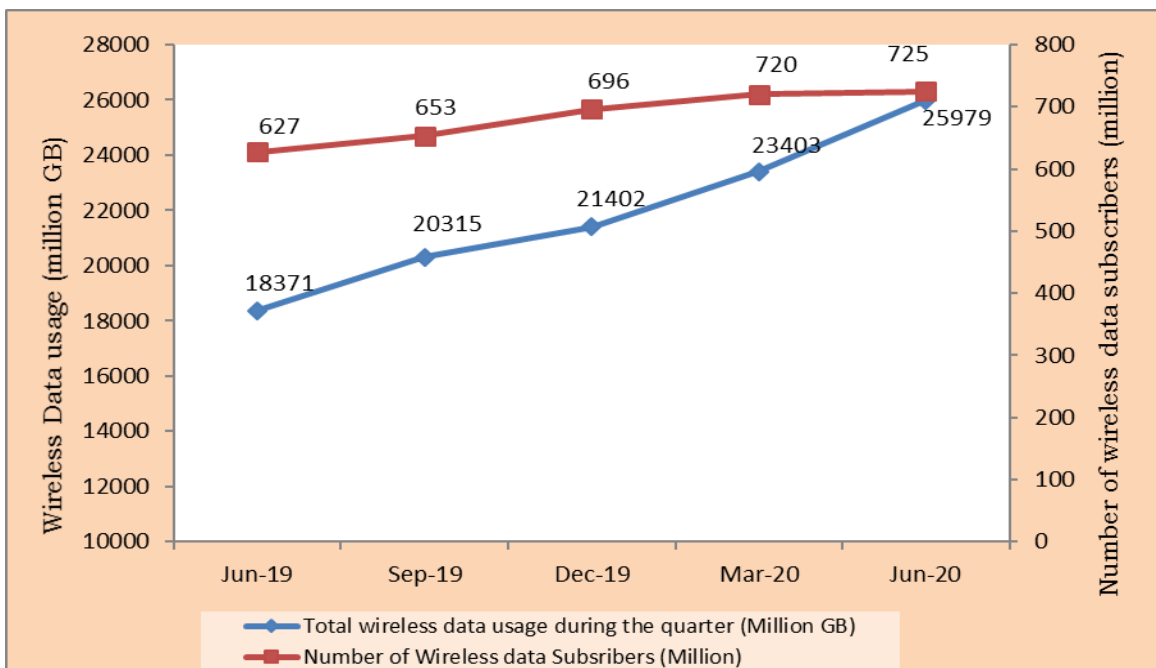
1.25 Technology-wise trend of growth in volume of wireless data usage is depicted in the following chart.

Chart 1.8: Trend of technology wise wireless data use (in TB)



1.26 The following chart depicts the trend of number of wireless data subscribers and volume of wireless data usage in QE Jun-20.

Chart 1.9: Trend of Wireless data subscribers(million) and volume of wireless data usage (million GB)



Section C : Wireline Service

Table 1.18 : Service Providers providing Wireline Service

[As on 30th June, 2020]

| Sl. No. | Name of the Service Provider | Area of Operation |
|---------|--------------------------------------|---|
| 1 | Bharti Airtel Ltd | Telangana, Delhi, Gujarat, Haryana, Karnataka, Kerala, Kolkata, Madhya Pradesh (excluding Chhattisgarh), Chhattisgarh, Maharashtra (excluding Mumbai), Mumbai, Punjab, Rajasthan, Tamilnadu (excluding Chennai), Chennai, UP-East and UP-West(excluding Uttarakhand). |
| 2 | BSNL | All India except Delhi & Mumbai |
| 3 | MTNL | Delhi & Mumbai |
| 4 | Quadrant Televentures Ltd. | Punjab |
| 5 | Reliance Communications Ltd. | Andhra Pradesh (excluding Telangana), Telangana, Bihar (Excluding Jharkhand), Jharkhand, Delhi, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Kolkata, Madhya Pradesh (excluding Chhattisgarh), Chhattisgarh, Maharashtra (Excluding Mumbai & Goa) Goa, Mumbai, Orissa, Punjab, Rajasthan, Tamilnadu (excluding Chennai), Chennai, UP-East, UP-West (Excluding Uttarakhand), Uttarakhand and West Bengal (Excluding Andaman & Nicobar and Sikkim) |
| 6 | Tata Teleservices (Maharashtra) Ltd. | Maharashtra & Goa, Mumbai |
| | Tata Teleservices Ltd. | Andhra Pradesh (Excluding Telangana), Telangana, Bihar (Excluding Jharkhand), Jharkhand, Delhi, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Kolkata, Maharashtra (excluding Mumbai & Goa), Goa, Mumbai Madhya Pradesh (Excluding Chhattisgarh), Chhattisgarh, Orissa, Punjab, Rajasthan, Tamilnadu (Excluding Chennai), Chennai, UP-East, UP-West (Excluding Uttarakhand), Uttarakhand and West Bengal (Excluding Andaman & Nicobar and Sikkim) |
| 7 | Vodafone Idea Ltd | Andhra Pradesh (Excluding Telangana), Telangana, Assam, Bihar (Excluding Jharkhand), Jharkhand, Delhi, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Kolkata, Madhya Pradesh (Excluding Chhattisgarh), Chhattisgarh, Maharashtra (Excluding Mumbai & Goa), Goa, Mumbai Meghalaya, Orissa, Punjab, Rajasthan, Tamilnadu (Excluding Chennai), UP-East, UP-West (Excluding Uttarakhand), Uttarakhand and West Bengal (Excluding Andaman & Nicobar and Sikkim) |

| | | |
|---|--------------|---|
| 8 | Reliance Jio | Andhra Pradesh (Excluding Telangana), Telangana, Assam, Bihar (Excluding Jharkhand), Jharkhand, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Kolkata, Madhya Pradesh (Excluding Chhattisgarh), Chhattisgarh, Maharashtra (Excluding Mumbai), Mumbai, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Tamilnadu (Excluding Chennai), Chennai, UP-East, UP-West (Excluding Uttarakhand), Uttarakhand and West Bengal (Excluding Andaman & Nicobar and Sikkim) |
|---|--------------|---|

1.27 Total number of Wireline subscribers decreased from 20.22 million at the end of Mar-20 to 19.81 million at the end of Jun-20 with quarterly decline rate of 2.02%. Overall Wireline Teledensity also decreased from 1.50 at the end of Mar-20 to 1.47 at the end of Jun-20.

1.28 Urban wireline subscriber base declined by 1.40%, from 17.97 million at the end of Mar-20 to 17.72 million at the end of Jun-20. Rural wireline subscription also declined by 6.94%, from 2.24 million to 2.09 million during the same period.

Chart 1.10: Wireline Subscriber Base and Tele-density

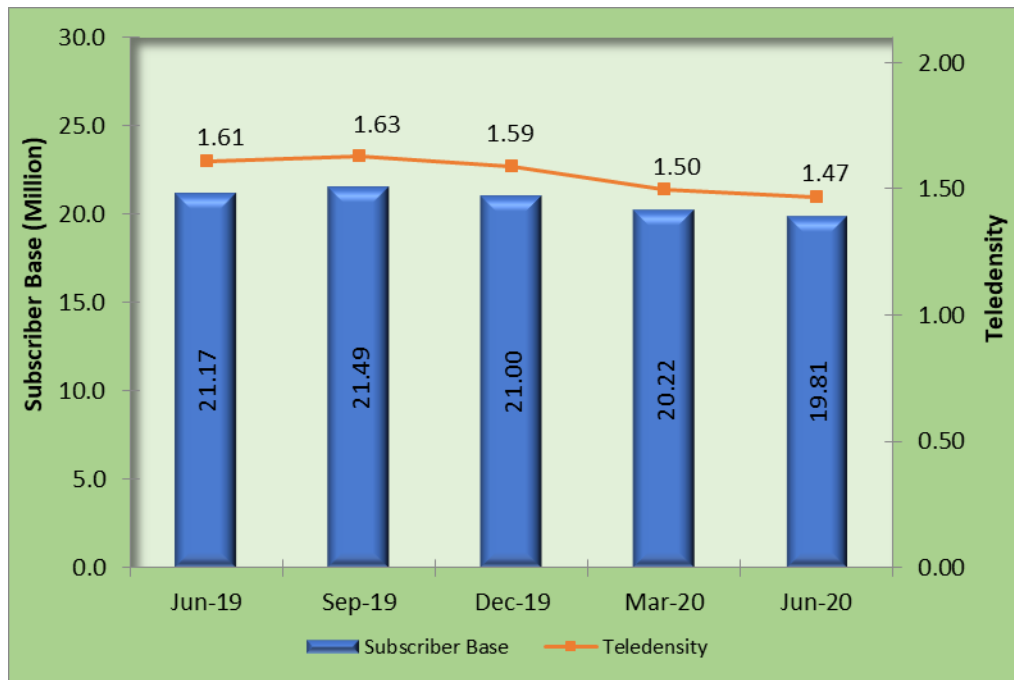


Table 1.19 : Wireline Subscriber Base & Tele-density - Rural & Urban

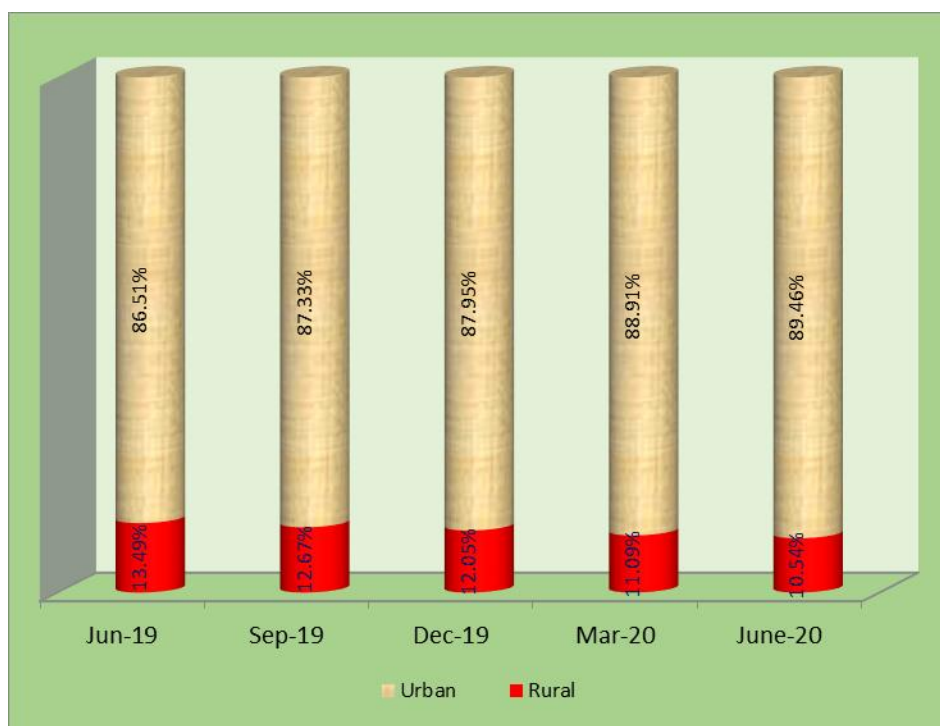
| Quarter ending | Subscriber Base (million) | | Tele-density (%) | |
|----------------|------------------------------|-------|------------------|-------|
| | Rural | Urban | Rural | Urban |
| Jun-19 | 2.85 | 18.31 | 0.32 | 4.36 |
| Sep-19 | 2.72 | 18.77 | 0.30 | 4.45 |
| Dec-19 | 2.53 | 18.47 | 0.28 | 4.36 |
| Mar-20 | 2.24 | 17.97 | 0.25 | 3.90 |
| Jun-20 | 2.09 | 17.72 | 0.24 | 3.82 |

**Table 1.20 : Service Provider wise Subscriber base (Rural - Urban)
- As on 30.06.2020**

| Service Provider | Subscriber Base (million) | | | Percentage of Rural subscribers | Share of Rural subscription |
|------------------|------------------------------|--------------|--------------|---------------------------------------|-----------------------------------|
| | Rural | Urban | Total | | |
| BSNL | 2.00 | 6.17 | 8.18 | 24.51% | 96.00% |
| Bharti | 0.00 | 4.27 | 4.27 | -- | 0.00% |
| MTNL | 0.00 | 3.09 | 3.09 | -- | 0.00% |
| Tata Tele. | 0.04 | 1.68 | 1.73 | 2.56% | 2.11% |
| Reliance Com. | 0.001 | 0.46 | 0.46 | 0.18% | 0.04% |
| Quadrant | 0.03 | 0.14 | 0.18 | 19.56% | 1.66% |
| Vodafone Idea | 0.00 | 0.46 | 0.46 | -- | 0.00% |
| Reliance Jio | 0.004 | 1.45 | 1.46 | 0.28% | 0.19% |
| Total | 2.09 | 17.72 | 19.81 | 10.54% | 100.00% |

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

Chart 1.11: Composition of Wireline Subscriber base - Rural & Urban



1.30 Market Share of Rural wireline subscription declined from 11.09% in QE Mar-20 to 10.54% in QE Jun-20.

Table 1.21 : Service Provider wise growth in Wireline Subscriber base

| Service Provider | Subscriber Base (million) | | | Rate of change (%) | Market share-Mar-20(%) | Market share-Jun-20(%) |
|------------------|---------------------------|--------------|--------------|--------------------|------------------------|------------------------|
| | Mar-20 | Jun-20 | Net Addition | | | |
| BSNL | 8.73 | 8.18 | -0.552 | -6.33 | 43.16 | 41.27 |
| Bharti | 4.39 | 4.27 | -0.120 | -2.74 | 21.73 | 21.57 |
| MTNL | 3.09 | 3.09 | -0.008 | -0.25 | 15.30 | 15.58 |
| Tata Tele. | 1.77 | 1.73 | -0.045 | -2.52 | 8.76 | 8.71 |
| Reliance Com | 0.51 | 0.46 | -0.044 | -8.74 | 2.50 | 2.33 |
| Quadrant | 0.18 | 0.18 | -0.005 | -2.87 | 0.90 | 0.89 |
| Vodafone | 0.46 | 0.46 | 0.002 | 0.42 | 2.26 | 2.31 |
| Reliance Jio | 1.09 | 1.46 | 0.365 | 33.43 | 5.39 | 7.35 |
| Total | 20.22 | 19.81 | -0.41 | -2.02 | 100 | 100 |

Table 1.22: Service Area wise Wireline Subscriber base & Net Additions (in million)

| Service Area | Mar-20 | Jun-20 | Net Additions | Rate of Change (%) |
|----------------------|---------------|---------------|----------------------|---------------------------|
| Andhra Pradesh | 1.32 | 1.31 | -0.005 | -0.36 |
| Assam | 0.11 | 0.11 | 0.001 | 1.02 |
| Bihar | 0.18 | 0.18 | 0.001 | 0.76 |
| Delhi | 3.27 | 3.19 | -0.080 | -2.43 |
| Gujarat | 1.00 | 0.96 | -0.042 | -4.24 |
| Haryana | 0.26 | 0.29 | 0.025 | 9.40 |
| Himachal Pradesh | 0.10 | 0.09 | -0.005 | -4.91 |
| Jammu & Kashmir | 0.13 | 0.14 | 0.006 | 4.61 |
| Karnataka | 2.15 | 2.13 | -0.022 | -1.02 |
| Kerala | 1.56 | 1.50 | -0.062 | -3.97 |
| Madhya Pradesh | 0.67 | 0.62 | -0.048 | -7.22 |
| Maharashtra | 1.35 | 1.31 | -0.043 | -3.20 |
| Mumbai | 3.07 | 3.06 | -0.010 | -0.34 |
| North East | 0.10 | 0.10 | -0.001 | -0.95 |
| Orissa | 0.21 | 0.20 | -0.007 | -3.10 |
| Punjab | 0.70 | 0.68 | -0.021 | -2.97 |
| Rajasthan | 0.49 | 0.47 | -0.017 | -3.49 |
| T.N. (incl. Chennai) | 2.01 | 1.96 | -0.052 | -2.60 |
| U.P.(E) | 0.40 | 0.33 | -0.069 | -17.19 |
| U.P.(W) | 0.31 | 0.33 | 0.017 | 5.53 |
| Kolkata | 0.65 | 0.66 | 0.001 | 0.16 |
| West Bengal | 0.17 | 0.20 | 0.025 | 14.11 |
| All India | 20.22 | 19.81 | -0.408 | -2.02 |

1.31 West Bengal service area showed maximum growth of 14.11% and UP(E) service area showed maximum decline of 17.19% in their wireline subscriber base during the quarter ending Jun-20.

**Table 1.23: Service Area wise Wireline Rural-Urban
Subscriber Base (in million)**

| Service Area | Total Subscribers | Rural Subscribers | Urban Subscribers | % of Rural Subscribers |
|----------------------|------------------------------|------------------------------|------------------------------|-----------------------------------|
| Andhra Pradesh | 1.31 | 0.14 | 1.18 | 10.37% |
| Assam | 0.11 | 0.02 | 0.10 | 14.09% |
| Bihar | 0.18 | 0.02 | 0.16 | 11.38% |
| Delhi | 3.19 | 0.00 | 3.19 | 0.00% |
| Gujarat | 0.96 | 0.08 | 0.88 | 8.14% |
| Haryana | 0.29 | 0.04 | 0.24 | 15.35% |
| Himachal Pradesh | 0.09 | 0.05 | 0.04 | 54.61% |
| Jammu & Kashmir | 0.14 | 0.01 | 0.13 | 8.03% |
| Karnataka | 2.13 | 0.08 | 2.04 | 3.99% |
| Kerala | 1.50 | 0.86 | 0.64 | 57.24% |
| Madhya Pradesh | 0.62 | 0.02 | 0.60 | 3.64% |
| Maharashtra | 1.31 | 0.18 | 1.13 | 13.65% |
| Mumbai | 3.06 | 0.00 | 3.06 | 0.00% |
| North East | 0.10 | 0.01 | 0.08 | 13.77% |
| Orissa | 0.20 | 0.04 | 0.17 | 18.89% |
| Punjab | 0.68 | 0.12 | 0.55 | 18.13% |
| Rajasthan | 0.47 | 0.04 | 0.43 | 7.82% |
| T.N. (incl. Chennai) | 1.96 | 0.25 | 1.71 | 12.56% |
| U.P.(E) | 0.33 | 0.03 | 0.30 | 10.45% |
| U.P.(W) | 0.33 | 0.02 | 0.30 | 7.62% |
| Kolkata | 0.66 | 0.00 | 0.66 | 0.11% |
| West Bengal | 0.20 | 0.07 | 0.13 | 34.91% |
| All India | 19.81 | 2.09 | 17.72 | 10.54% |

1.32 Kerala service area has the maximum share (57.24%) of rural wireline subscriber in its total wireline subscriber base at the end of Jun-20.

Table 1.24: Service Area wise Wireline Tele-density

| Service Area | As on 31 st March, 2020 | | | As on 30 th June, 2020 | | |
|----------------------------------|------------------------------------|--------------------|--------------------|-----------------------------------|--------------------|--------------------|
| | Rural Tele-density | Urban Tele-density | Total Tele-density | Rural Tele-density | Urban Tele-density | Total Tele-density |
| Andhra Pradesh | 0.27 | 3.30 | 1.46 | 0.25 | 3.30 | 1.45 |
| Assam | 0.05 | 1.81 | 0.32 | 0.05 | 1.82 | 0.32 |
| Bihar | 0.02 | 0.64 | 0.11 | 0.01 | 0.64 | 0.11 |
| Delhi | - | - | 16.16 | - | - | 15.69 |
| Gujarat | 0.25 | 2.72 | 1.43 | 0.21 | 2.62 | 1.36 |
| Haryana | 0.25 | 1.87 | 0.91 | 0.26 | 2.07 | 0.99 |
| Himachal Pradesh | 0.81 | 5.94 | 1.34 | 0.77 | 5.63 | 1.27 |
| Jammu & Kashmir | 0.14 | 2.99 | 0.99 | 0.12 | 3.19 | 1.03 |
| Karnataka | 0.26 | 7.17 | 3.24 | 0.22 | 7.11 | 3.20 |
| Kerala | 8.20 | 2.70 | 4.40 | 7.95 | 2.60 | 4.22 |
| Madhya Pradesh | 0.04 | 2.02 | 0.59 | 0.03 | 1.89 | 0.55 |
| Maharashtra (incl. Mumbai)* | 0.30 | 7.04 | 3.54 | 0.27 | 6.96 | 3.49 |
| North East | 0.14 | 1.64 | 0.64 | 0.13 | 1.64 | 0.63 |
| Orissa | 0.11 | 2.10 | 0.48 | 0.11 | 2.04 | 0.46 |
| Punjab | 0.73 | 4.22 | 2.23 | 0.69 | 4.10 | 2.16 |
| Rajasthan | 0.08 | 2.16 | 0.62 | 0.06 | 2.11 | 0.60 |
| Tamil Nadu (incl. Chennai) | 0.71 | 4.28 | 2.59 | 0.67 | 4.17 | 2.52 |
| Uttar Pradesh (incl. UPE & UPW)* | 0.04 | 1.11 | 0.30 | 0.03 | 1.04 | 0.27 |
| West Bengal (incl. Kolkata)* | 0.10 | 2.17 | 0.84 | 0.11 | 2.22 | 0.87 |
| All India | 0.25 | 3.90 | 1.50 | 0.24 | 3.82 | 1.47 |

* Population data/projections are available state-wise only

- Note: 1. Tele-density figures are derived from the subscriber data provided by the operators and the population projections, for Urban and Rural areas, of the country from the Report of the technical group on population projections published by National Commission on Population, Ministry of Health & Family Welfare. (Based on Census of India 2011).
2. Data/information for Andhra Pradesh includes Telengana, Madhya Pradesh includes Chhatisgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura states.

Table 1.25: State/UT wise Wireline Subscriber base

| Sl.No. | States/UT | Wireline Subscribers (in million) | | |
|--------|--|-----------------------------------|-------------|--------------|
| | | Total | Rural | Urban |
| 1 | Andhra Pradesh | 0.72 | 0.11 | 0.61 |
| 2 | Arunachal Pradesh | 0.02 | 0.00 | 0.02 |
| 3 | Assam | 0.11 | 0.02 | 0.10 |
| 4 | Bihar | 0.09 | 0.01 | 0.08 |
| 5 | Chhattisgarh | 0.13 | 0.01 | 0.12 |
| 6 | Goa | 0.08 | 0.03 | 0.06 |
| 7 | Gujarat | 0.95 | 0.08 | 0.88 |
| 8 | Haryana | 0.31 | 0.04 | 0.27 |
| 9 | Himachal Pradesh | 0.09 | 0.05 | 0.04 |
| 10 | Jharkhand | 0.09 | 0.01 | 0.08 |
| 11 | Karnataka | 2.13 | 0.08 | 2.04 |
| 12 | Kerala | 1.49 | 0.85 | 0.64 |
| 13 | Madhya Pradesh | 0.49 | 0.01 | 0.48 |
| 14 | Maharashtra Incl. Mumbai | 4.29 | 0.15 | 4.13 |
| 15 | Manipur | 0.02 | 0.00 | 0.02 |
| 16 | Meghalaya | 0.02 | 0.002 | 0.02 |
| 17 | Mizoram | 0.01 | 0.001 | 0.01 |
| 18 | Nagaland | 0.01 | 0.000 | 0.01 |
| 19 | Odisha | 0.20 | 0.04 | 0.17 |
| 20 | Punjab | 0.51 | 0.12 | 0.39 |
| 21 | Rajasthan | 0.47 | 0.04 | 0.43 |
| 22 | Sikkim | 0.01 | 0.00 | 0.00 |
| 23 | Tamil Nadu (incl. Chennai) | 1.92 | 0.24 | 1.68 |
| 24 | Telangana | 0.60 | 0.03 | 0.57 |
| 25 | Tripura | 0.02 | 0.00 | 0.02 |
| 26 | Uttar Pradesh (UPE+UPW) | 0.60 | 0.05 | 0.55 |
| 27 | Uttarakhand | 0.08 | 0.01 | 0.07 |
| 28 | West Bengal Incl. Kolkata | 0.83 | 0.06 | 0.77 |
| | Union Territories | | | |
| 1 | Andaman & Nicobar Islands | 0.02 | 0.01 | 0.01 |
| 2 | Chandigarh | 0.17 | 0.001 | 0.17 |
| 3 | Dadra and Nagar Haveli and Daman and Diu | 0.005 | 0.002 | 0.003 |
| 4 | Delhi | 3.15 | 0.00 | 3.15 |
| 5 | Jammu & Kashmir | 0.14 | 0.01 | 0.13 |
| 6 | Ladakh | 0.00 | 0.00 | 0.00 |
| 7 | Lakshdweep | 0.004 | 0.002 | 0.003 |
| 8 | Puduchery | 0.04 | 0.01 | 0.04 |
| | Total | 19.81 | 2.09 | 17.72 |

Table 1.26: State/UT wise Wireline Tele-density

| Sl.No. | State/UT | Wireline Tele-density | | |
|--------|--|-----------------------|-------------|-------------|
| | | Total | Rural | Urban |
| 1 | Andhra Pradesh | 2.49 | 0.40 | 6.41 |
| 2 | Arunachal Pradesh | 1.41 | 0.41 | 4.40 |
| 3 | Assam | 0.32 | 0.05 | 1.82 |
| 4 | Bihar | 0.07 | 0.01 | 0.52 |
| 5 | Chhattisgarh | 0.44 | 0.04 | 1.57 |
| 6 | Goa | 5.45 | 6.05 | 5.22 |
| 7 | Gujarat | 1.38 | 0.21 | 2.67 |
| 8 | Haryana | 1.07 | 0.26 | 2.27 |
| 9 | Himachal Pradesh | 1.27 | 0.77 | 5.63 |
| 10 | Jharkhand | 0.23 | 0.02 | 0.82 |
| 11 | Karnataka | 3.20 | 0.22 | 7.11 |
| 12 | Kerala | 4.22 | 7.93 | 2.59 |
| 13 | Madhya Pradesh | 0.59 | 0.02 | 1.99 |
| 14 | Maharashtra Incl. Mumbai | 3.47 | 0.24 | 6.99 |
| 15 | Manipur | 0.62 | 0.18 | 1.58 |
| 16 | Meghalaya | 0.55 | 0.07 | 2.40 |
| 17 | Mizoram | 0.93 | 0.13 | 1.60 |
| 18 | Nagaland | 0.31 | 0.03 | 0.69 |
| 19 | Odisha | 0.46 | 0.11 | 2.04 |
| 20 | Punjab | 1.69 | 0.68 | 3.14 |
| 21 | Rajasthan | 0.60 | 0.06 | 2.11 |
| 22 | Sikkim | 0.77 | 0.06 | 1.68 |
| 23 | Tamil Nadu (incl. Chennai) | 2.52 | 0.66 | 4.19 |
| 24 | Telengana | 1.59 | 0.14 | 3.29 |
| 25 | Tripura | 0.49 | 0.07 | 1.22 |
| 26 | Uttar Pradesh (UPE + UPW) | 0.26 | 0.03 | 1.01 |
| 27 | Uttarakhand | 0.71 | 0.13 | 1.82 |
| 28 | West Bengal incl. Kolkata | 0.85 | 0.10 | 2.21 |
| | Union Territories | | | |
| 1 | Andaman & Nicobar Islands | 4.17 | 2.80 | 6.03 |
| 2 | Chandigarh | 14.10 | 33.80 | 14.03 |
| 3 | Dadra and Nagar Haveli and Daman and Diu | 0.51 | 0.86 | 0.41 |
| 4 | Delhi | 15.49 | 0.00 | 15.60 |
| 5 | Jammu & Kashmir | 0.53 | 0.06 | 1.63 |
| 6 | Ladakh | 0.00 | 0.00 | 0.00 |
| 7 | Lakshdweep | 6.23 | 63.64 | 3.89 |
| 8 | Puduchery | 2.85 | 1.34 | 3.50 |
| | Total | 1.47 | 0.24 | 3.82 |

Public Call Offices (PCO)

1.33 Total number of PCOs in the country declined from *1,77,525 at the end of Mar-20 to 1,61,937 at the end of Jun-20. Detailed table of service provider wise PCOs is available at Annexure -1.3.

Chart 1.12: Trend of Number of PCOs



1.34 Number of PCOs continued shows declining trend over the year. It has recorded a overall quarterly decline rate of 8.78% and the year-on-year Y-O-Y decline rate of 29.09% at the QE Jun-20.

Table 1.27 : Rate of change & Market share of PCOs

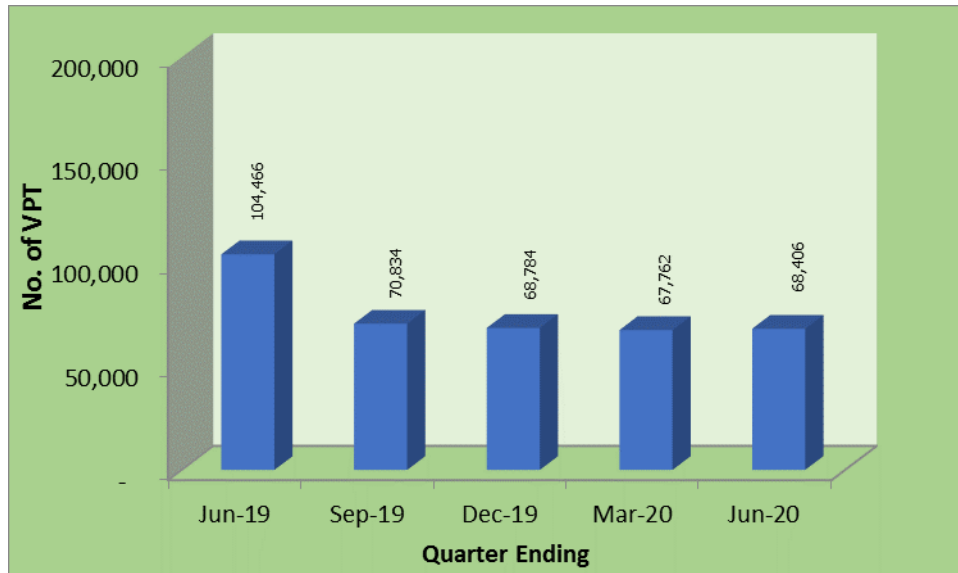
| Service Provider | Mar-20 | Jun-20 | Rate of change (%) | Market share (%) (Jun-20) |
|------------------|-----------------|-----------------|--------------------|---------------------------|
| BSNL | *1,05,003 | 9,6521 | -8.08 | 59.60 |
| MTNL | 62,464 | 56,399 | -9.71 | 34.83 |
| Bharti | 9,355 | 8,347 | -10.77 | 5.15 |
| Quadrant | 703 | 670 | -4.69 | 0.41 |
| Total | 1,77,525 | 1,61,937 | -8.78 | 100 |

*BSNL revised the PCO subscriber figure of Telangana for Dec 2019 (0 to 4097) & March 2020 (0 to 4234)

Village Public Telephones (VPTs)

- 1.35 There are 5,93,731 inhabited villages in India as per census 2001. During the Q.E. Jun-20, there are 68,406 villages having Village Public Telephones (VPTs).
- 1.36 Number of VPTs increased from 67,762 at the end of Mar-20 to 68,406 at the end of Jun-20 with quarterly growth rate of 0.95%. It shows yearly declining rate of 34.52% in QE Jun-20 over same quarter in previous year.
- 1.37 As per the information received in TRAI, at the end of Jun-20, only M/s BSNL was providing VPT in the country. Service area wise detailed table of VPT is available at Annexure -1.4.

Chart 1.13: Trend of number of VPTs



Section D: Internet Service

1.38 This section summarizes information submitted by internet service providers for the quarter ending Jun-20. **Part-I** consists of information of Internet service (narrowband+broadband), **Part-II** consists of broadband service and **Part-III** covers narrowband service.

Part-I : Internet Service (broadband + narrowband)

1.39 As per reports received from 358 operators as compared to 360 operators in last quarter, total number of internet subscribers increased from 743.19 million at the end of Mar-20 to 749.07 million at the end of Jun-20 with quarterly growth rate of 0.79%. Out of total 749.07 million internet subscribers, 698.23 million were broadband subscribers and 50.84 million were narrowband subscribers.

1.40 Wired Internet subscribers increased from 22.42 million at the end of Mar-20 to 23.06 million at the end of Jun-20 with quarterly growth rate of 2.86%. Wireless Internet subscribers increased from 720.78 million at the end of Mar-20 to 726.01 million at the end of Jun-20 with quarterly growth rate of 0.73%.

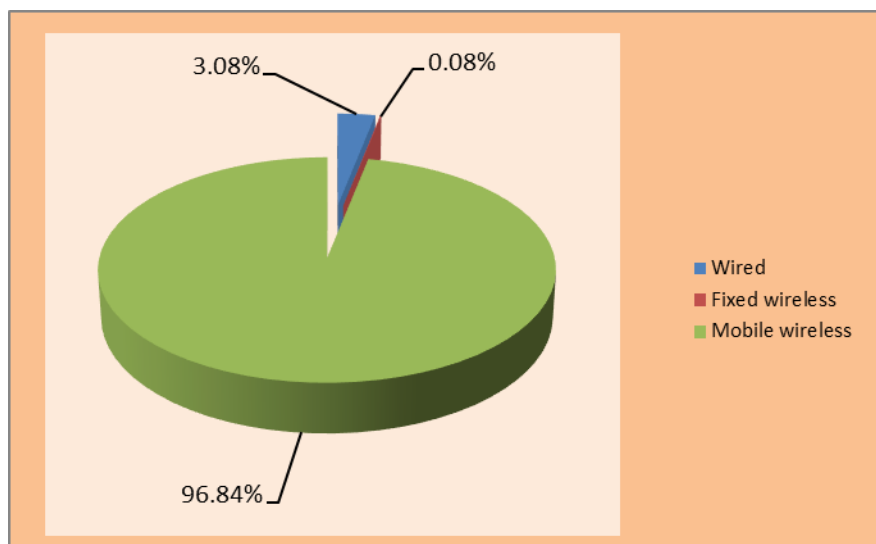
1.41 The number of Broadband subscribers increased from 687.44 million at the end of Mar-20 to 698.23 million at the end of Jun-20 with quarterly growth rate of 1.57%. However, the number of Narrowband subscribers declined from 55.75 million at the end of Mar-20 to 50.84 million at the end of Jun-20 with quarterly decline rate of 8.81%.

Table 1.28: Trend of Internet subscriber base

| Segment | Mode of Access | | | | | | | | Total Subscribers (in million) | |
|--------------|--------------------------------|--------------|--|-------------|----------------------------------|---------------|----------------|---------------|--------------------------------|---------------|
| | Wired Subscribers (in million) | | Wireless Subscribers (in million) | | | | | | | |
| | | | Fixed Wireless (Wi-Fi, Wi-Max, Radio & VSAT) | | Mobile Wireless (Phone + Dongle) | | Total Wireless | | | |
| | Mar-20 | Jun-20 | Mar-20 | Jun-20 | Mar-20 | Jun-20 | Mar-20 | Jun-20 | Mar-20 | Jun-20 |
| Broadband | 19.18 | 19.82 | 0.61 | 0.63 | 667.66 | 677.79 | 668.27 | 678.41 | 687.44 | 698.23 |
| Narrowband | 3.24 | 3.24 | 0.01 | 0.008 | 52.51 | 47.59 | 52.51 | 47.60 | 55.75 | 50.84 |
| Total | 22.41 | 23.06 | 0.61 | 0.63 | 720.17 | 725.38 | 720.78 | 726.01 | 743.19 | 749.07 |

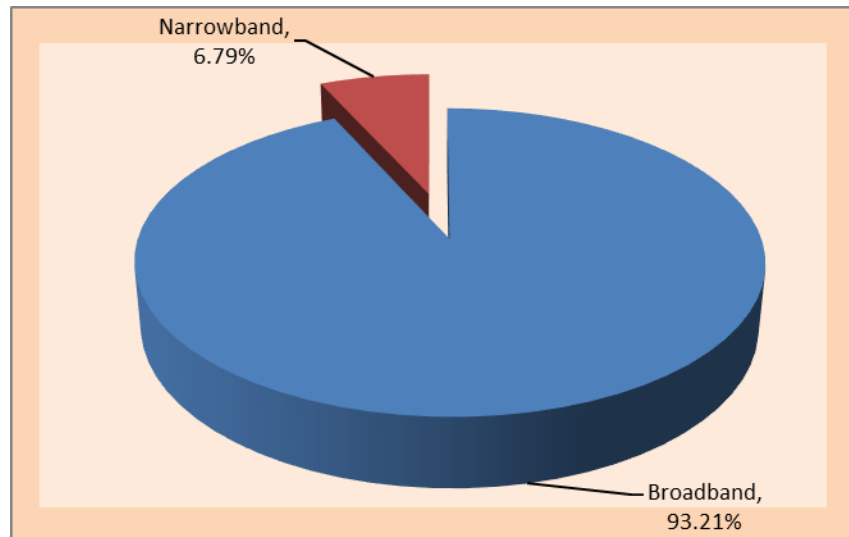
1.42 The following charts present the composition of Internet Subscribers by mode of access and composition of Broadband & Narrowband subscription as on 30th June, 2020.

Chart 1.14: Composition of Internet subscription



1.43 Out of total internet subscribers, 96.84% subscribers are using Mobile devices for access of internet service. Wired internet subscribers are only 3.08% in total internet subscribers at the end of Jun-20.

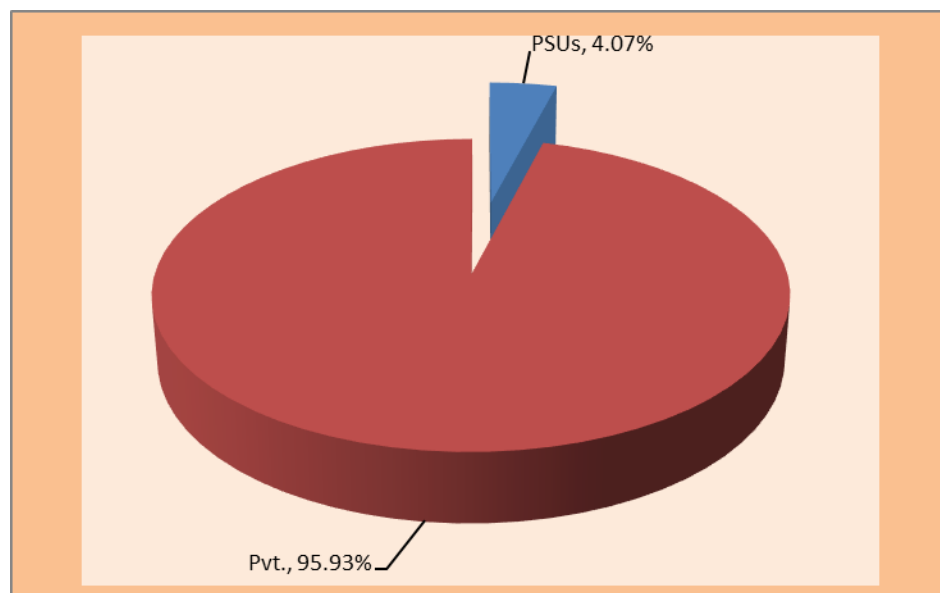
Chart 1.15 : Composition of Broadband & Narrowband subscription



1.44 Out of total internet subscribers, 93.21% subscribers are using broadband for access of internet.

1.45 Share of private internet service providers in total internet subscriber base, increased from 95.68% at QE Mar-20 to 95.93% at QE Jun-20. The following charts present the composition of market share of PSUs and Private Internet service providers.

Chart 1.16 : Market share of PSUs and Private Internet Service Providers



1.46 The urban/rural break up of internet subscribers are as per the following table: -

Table 1.29: Break up of Rural-Urban internet subscriber base (in millions)

| Telecom Service Area | Narrowband | | Broadband | | Total (June 2020) | | Total (March 2020) | |
|----------------------|---------------|---------------|----------------|----------------|-------------------|----------------|--------------------|----------------|
| | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban |
| Andhra Pradesh | 1.830 | 1.620 | 24.217 | 31.484 | 26.047 | 33.103 | 25.509 | 33.143 |
| Assam | 0.607 | 0.329 | 7.960 | 5.567 | 8.567 | 5.896 | 8.313 | 5.934 |
| Bihar | 3.045 | 1.149 | 28.634 | 16.761 | 31.679 | 17.910 | 30.533 | 17.862 |
| Delhi | 0.164 | 2.655 | 0.619 | 37.175 | 0.783 | 39.830 | 0.755 | 40.242 |
| Gujarat | 0.869 | 1.099 | 13.088 | 30.434 | 13.957 | 31.533 | 13.671 | 31.645 |
| Haryana | 0.409 | 0.495 | 6.504 | 9.924 | 6.914 | 10.419 | 6.811 | 10.368 |
| Himachal Pradesh | 0.174 | 0.140 | 3.729 | 2.041 | 3.903 | 2.180 | 3.793 | 2.207 |
| Jammu & Kashmir | 0.318 | 0.161 | 3.040 | 4.009 | 3.358 | 4.170 | 3.445 | 4.234 |
| Karnataka | 1.521 | 1.611 | 15.121 | 27.860 | 16.642 | 29.471 | 17.013 | 28.820 |
| Kerala | 0.711 | 0.947 | 10.477 | 15.316 | 11.188 | 16.263 | 10.754 | 15.793 |
| Kolkata | 0.059 | 1.150 | 1.416 | 14.902 | 1.474 | 16.052 | 1.418 | 15.987 |
| Madhya Pradesh | 1.963 | 1.736 | 18.397 | 27.892 | 20.360 | 29.628 | 19.746 | 28.971 |
| Maharashtra | 2.048 | 2.170 | 23.807 | 36.076 | 25.855 | 38.247 | 25.164 | 37.848 |
| Mumbai | 0.064 | 1.810 | 1.660 | 25.936 | 1.724 | 27.746 | 1.533 | 28.768 |
| North East | 0.279 | 0.209 | 3.831 | 3.722 | 4.110 | 3.931 | 3.973 | 3.996 |
| Orissa | 1.121 | 0.356 | 11.633 | 6.591 | 12.754 | 6.947 | 12.365 | 6.915 |
| Punjab | 0.569 | 0.864 | 7.992 | 17.033 | 8.561 | 17.897 | 8.432 | 17.698 |
| Rajasthan | 1.601 | 1.287 | 18.660 | 20.735 | 20.261 | 22.023 | 20.022 | 22.482 |
| Tamil Nadu | 1.414 | 2.286 | 12.383 | 34.959 | 13.797 | 37.245 | 13.819 | 37.819 |
| UP (East) | 3.374 | 1.337 | 26.405 | 24.107 | 29.779 | 25.445 | 28.915 | 25.681 |
| UP (West) | 1.301 | 1.263 | 13.136 | 22.131 | 14.436 | 23.394 | 13.341 | 24.458 |
| West Bengal | 1.856 | 0.868 | 15.087 | 15.780 | 16.942 | 16.648 | 16.647 | 16.353 |
| Grand Total | 25.296 | 25.544 | 267.795 | 430.435 | 293.092 | 455.979 | 285.969 | 457.225 |
| | 50.840 | | 698.231 | | 749.071 | | 743.194 | |

Table 1.30: Internet Subscriber Base and Market Share of top 10 Service Providers

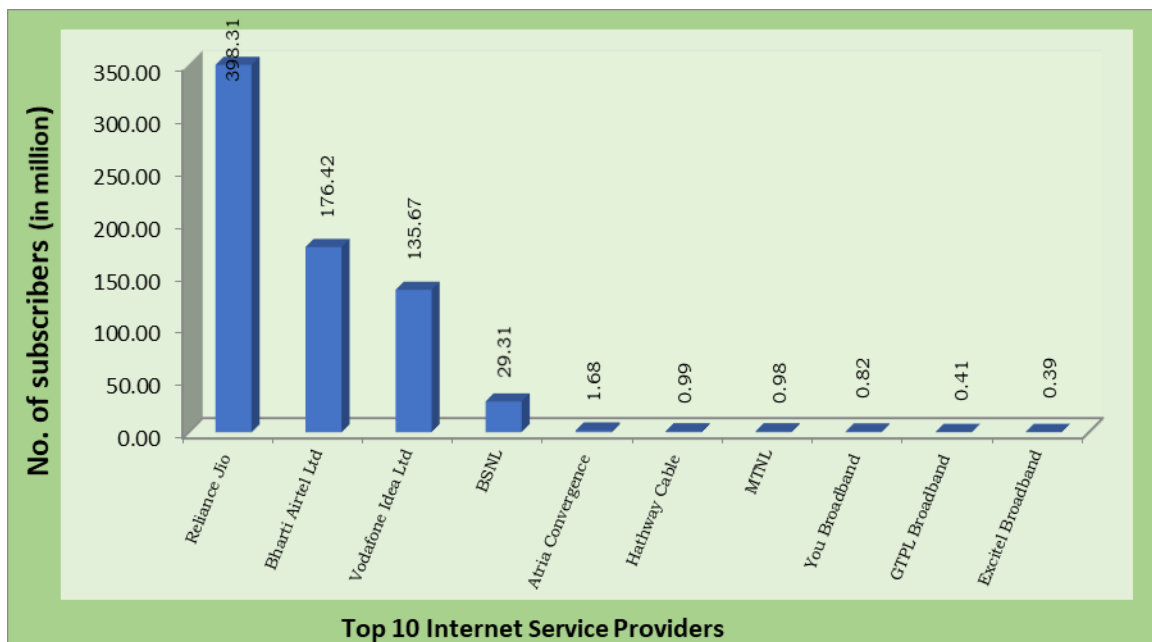
| S.No | ISP | No. of Subscribers (In million) | Share (%) |
|-------------|--|--|------------------|
| 1 | Reliance Jio Infocomm Ltd | 398.31 | 53.17 |
| 2 | Bharti Airtel Ltd. | 176.42 | 23.55 |
| 3 | Vodafone Idea Limited | 135.67 | 18.11 |
| 4 | Bharat Sanchar Nigam Ltd. | 29.31 | 3.91 |
| 5 | Atria Convergence Technologies Pvt. Ltd. | 1.68 | 0.22 |
| 6 | Hathway Cable & Datacom Pvt. Ltd. | 0.99 | 0.13 |
| 7 | Mahanagar Telephone Nigam Ltd. | 0.98 | 0.13 |
| 8 | You Broadband India Pvt. Ltd. | 0.82 | 0.11 |
| 9 | GTPL Broadband Pvt. Ltd. | 0.41 | 0.05 |
| 10 | Excitel Broadband Private Limited | 0.39 | 0.05 |
| | Total of Top 10 ISPs | 744.97 | 99.45 |
| | Others | 4.10 | 0.55 |
| | Grand Total | 749.07 | 100 |

1.47 Reliance Jio holds the top position with 53.17% of market share of internet subscribers followed by Bharti Airtel Ltd with 23.55% at the QE Jun-20. M/s Vodafone Idea Ltd held the third position in respect of internet subscriber base with market share of 18.11%.

1.48 Out of total 358 internet service providers, top 10 Service Providers together hold 99.45% of total internet subscriber base at the QE Jun-20. Detailed table of number of internet subscriber base (broadband and narrowband) of all the service providers is available at **Annexure-1.5**.

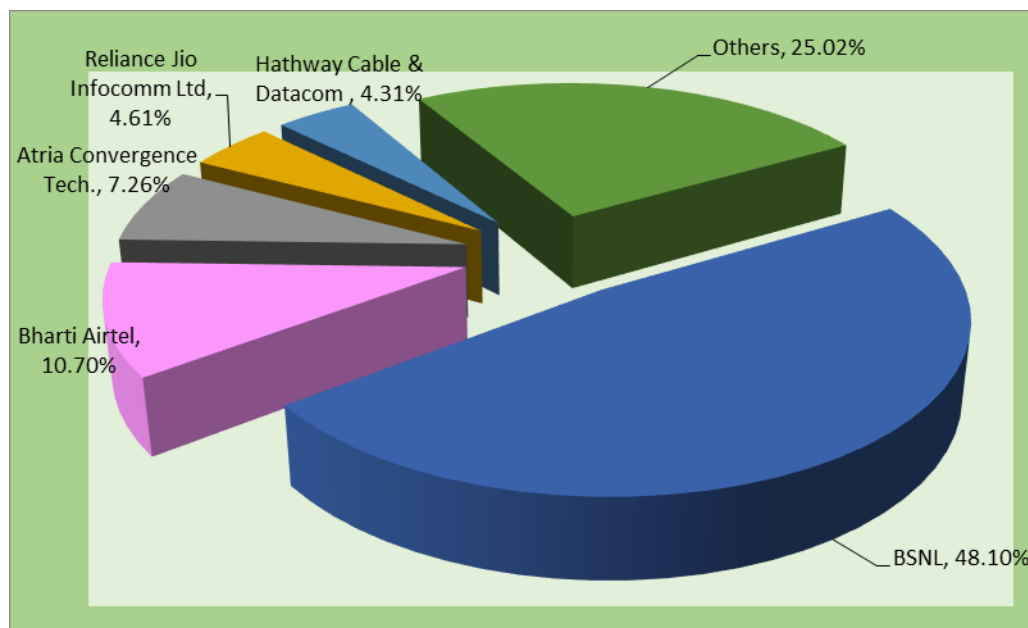
1.49 The following chart depicts the internet subscriber base of top ten Internet Service Providers (ISPs) in the QE Jun-20.

Chart 1.17 : Subscriber base of top ten ISPs



1.50 Out of total 23.06 million wired internet subscribers, BSNL holds 48.10% market share with 11.09 million subscribers, followed by Bharti with 2.47 million subscribers.

Chart 1.18 : Composition of Wired Internet subscribers



1.51 In wireless internet segment, Reliance Jio holds 54.72% market share with 397.25 million subscribers followed by Bharti Airtel Ltd with 23.96% of wireless internet subscribers at the QE Jun-20.

Chart 1.19 : Composition of Wireless Internet subscription

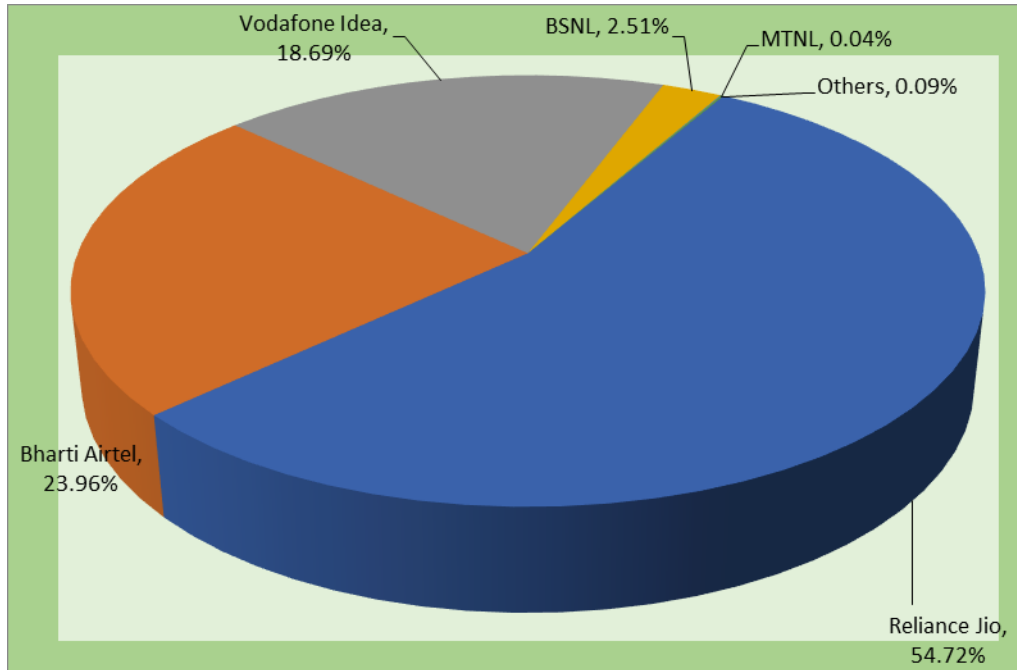


Chart 1.20 : Technology trend for Wireless Internet Access

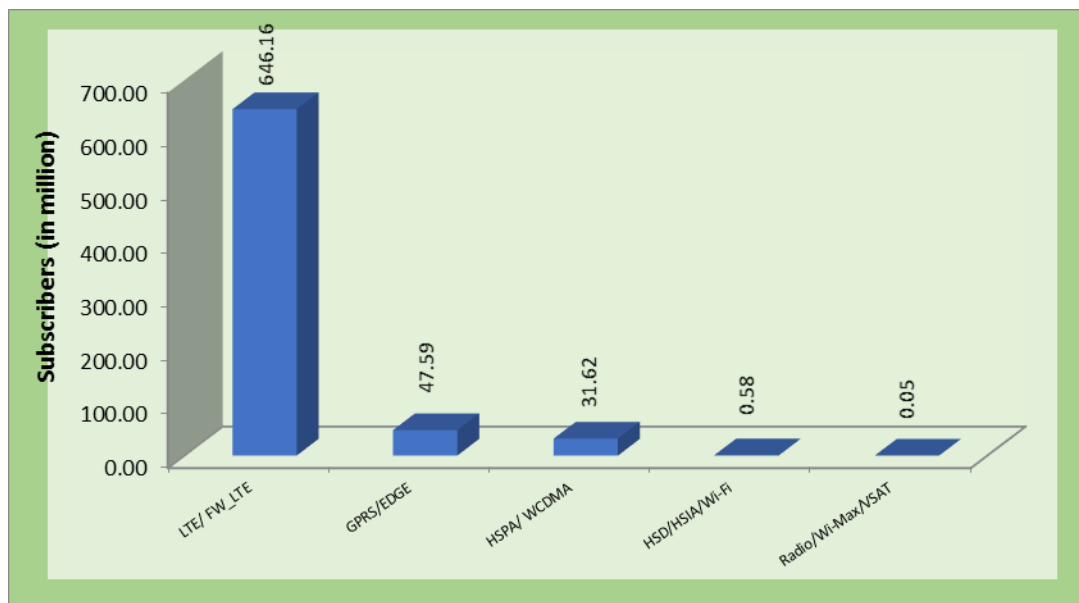
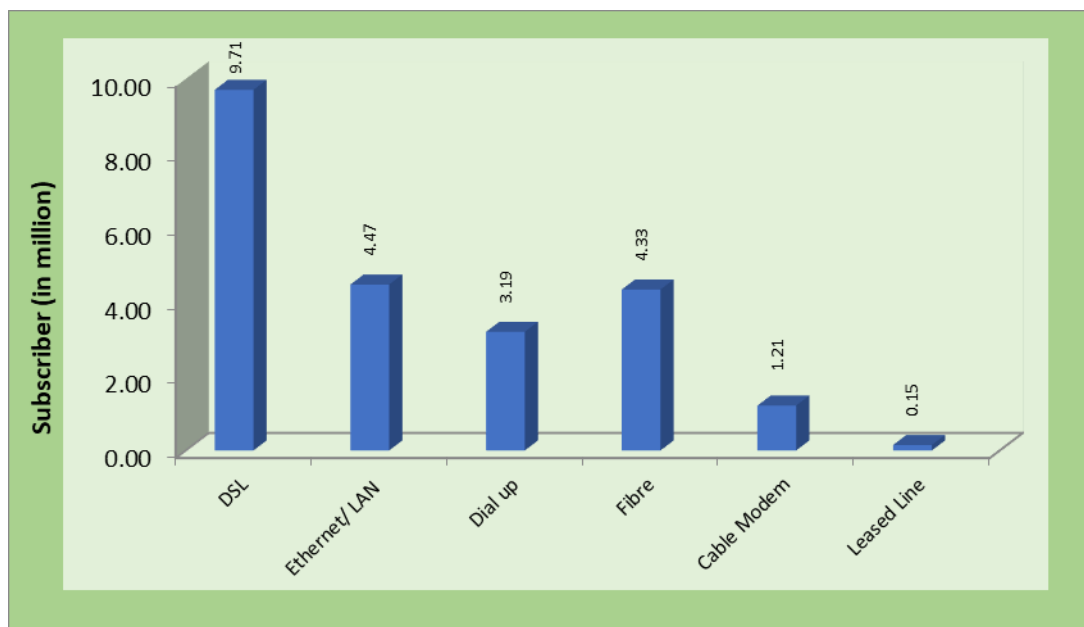


Chart 1.21: Technology trend for Wired Internet Access



1.52 Top five service areas in terms of internet subscriptions (wired+ wireless) are Maharashtra (64.10 million), Andhra Pradesh including Telengana (59.15 million), U.P.(East) (55.22 million) Tamil Nadu including Chennai (51.04 million) and Madhya Pradesh including Chhatishgarh (49.99 million).

Table 1.31 : Service Area wise number of Internet Subscribers per 100 population at the end of Jun-20

| Service Area | Internet Subscribers (in million) | | | No. of Internet subscribers per 100 population | | |
|------------------|-----------------------------------|-------|-------|--|--------|--------|
| | Rural | Urban | Total | Rural | Urban | Total |
| Andhra Pradesh | 26.05 | 33.10 | 59.15 | 47.75 | 92.97 | 65.61 |
| Assam | 8.57 | 5.90 | 14.46 | 29.05 | 111.21 | 41.57 |
| Bihar | 31.68 | 17.91 | 49.59 | 23.38 | 73.07 | 30.99 |
| Delhi | 0.78 | 39.83 | 40.61 | 528.15 | 197.47 | 199.88 |
| Gujarat | 13.96 | 31.53 | 45.49 | 38.13 | 93.85 | 64.79 |
| Haryana | 6.91 | 10.42 | 17.33 | 39.79 | 88.01 | 59.33 |
| Himachal Pradesh | 3.90 | 2.18 | 6.08 | 59.06 | 289.06 | 82.63 |
| Jammu & Kashmir | 3.36 | 4.17 | 7.53 | 35.12 | 102.50 | 55.23 |
| Karnataka | 16.64 | 29.47 | 46.11 | 44.01 | 102.75 | 69.35 |

| Service Area | Internet Subscribers (in million) | | | No. of Internet subscribers per 100 population | | |
|----------------|--------------------------------------|---------------|---------------|---|--------------|--------------|
| | Rural | Urban | Total | Rural | Urban | Total |
| Kerala | 11.19 | 16.26 | 27.45 | 103.79 | 65.96 | 77.47 |
| Madhya Pradesh | 20.36 | 29.63 | 49.99 | 25.05 | 93.41 | 44.24 |
| Maharashtra | 25.86 | 38.25 | 64.10 | 42.44 | 109.53 | 74.72 |
| Mumbai | 1.72 | 27.75 | 29.47 | | | |
| North East | 4.11 | 3.93 | 8.04 | 39.99 | 77.30 | 52.34 |
| Orissa | 12.75 | 6.95 | 19.70 | 35.59 | 86.07 | 44.87 |
| Punjab | 8.56 | 17.90 | 26.46 | 47.96 | 132.32 | 84.32 |
| Rajasthan | 20.26 | 22.02 | 42.28 | 34.94 | 106.79 | 53.79 |
| Tamil Nadu | 13.80 | 37.25 | 51.04 | 37.65 | 90.69 | 65.68 |
| UP (East) | 29.78 | 25.44 | 55.22 | 24.47 | 84.14 | 38.73 |
| UP (West) | 14.44 | 23.39 | 37.83 | | | |
| Kolkata | 1.47 | 16.05 | 17.53 | 29.02 | 92.56 | 51.74 |
| West Bengal | 16.94 | 16.65 | 33.59 | | | |
| Total | 293.09 | 455.98 | 749.07 | 33.00 | 98.35 | 55.41 |

* Population data/projections are available state-wise only.

Notes:

1. No. of total internet subscribers per 100 population is derived from the subscriber data provided by the operators and the population projections of the country from the Report of the technical group on population projections published by National Commission on Population, Ministry of Health & Family Welfare. (Based on Census of India 2011)
2. Data/information for Andhra Pradesh includes Telengana, Madhya Pradesh includes Chhatishgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura states.

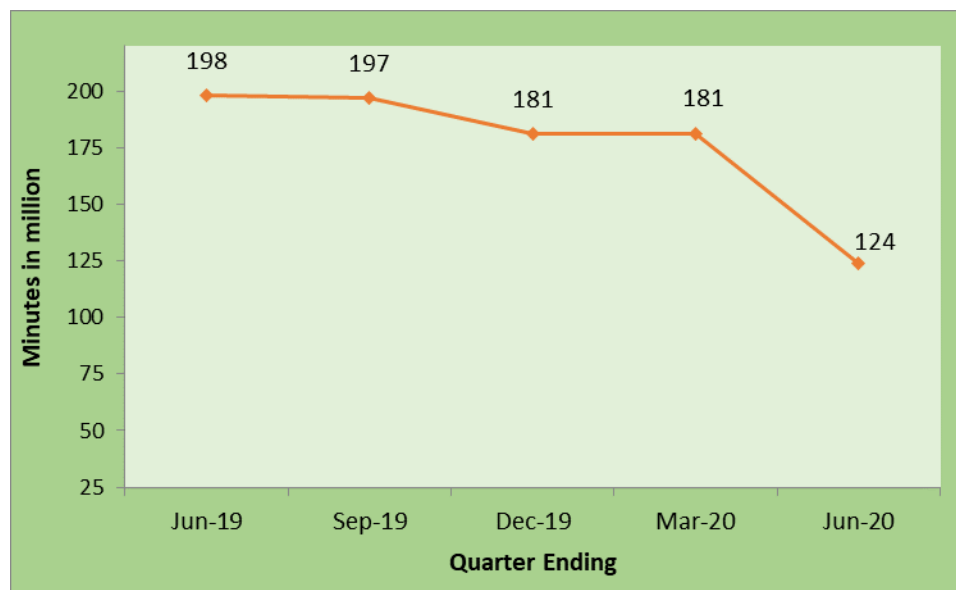
ISP Connectivity

1.53 The International Internet bandwidth owned by various service providers is reported to be 18,242 Gbps during the quarter ending June-20 as compare to 16,041 Gbps during the previous quarter.

Internet Telephony

1.54 As per the reports received from 15 service providers, providing Internet Telephony services, the total outgoing minutes of usage for internet telephony decreased from 181.34 million minutes at the end of Mar-20 to 124.07 million minutes at the end of Jun-20. List of Internet Telephony Service providers is available at Annexure-1.6.

Chart 1.22 : Trends in MOU for Internet Telephony



Part-II : Broadband Service (Download Speed \geq 512 Kbps)

1.55 The total number of broadband subscribers increased from 687.44 million at the end of Mar-20 to 698.23 million at the end of Jun-20. Out of which number of wired broadband subscribers are 19.82 million and wireless broadband subscribers are 678.41 million.

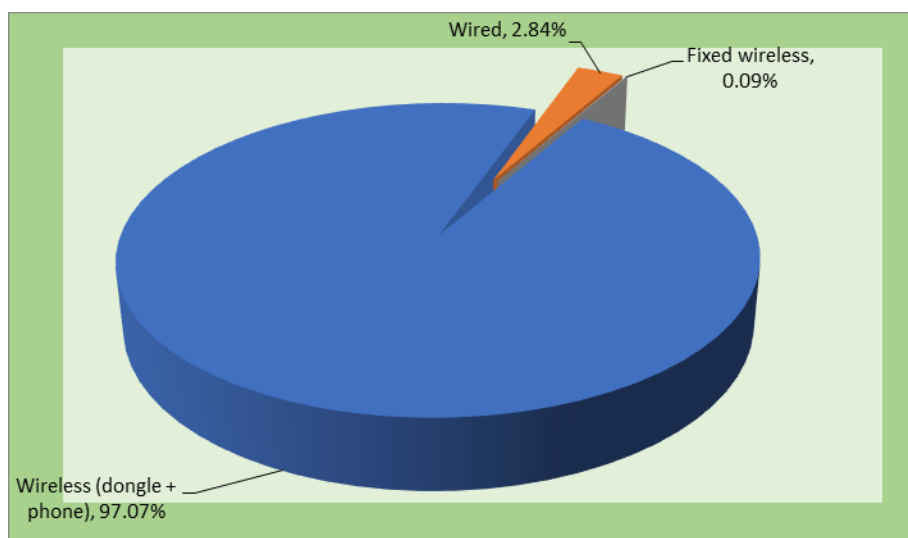
1.56 Top five broadband (wired+wireless) service providers in term of subscribers are Reliance Jio (398.31 million), Bharti Airtel (151.30 million), Vodafone Idea Ltd (116.45 million), BSNL (23 million) and Atria Convergence (1.68 million).

1.57 In wired broadband segment, BSNL holds 39.84% market share with 7.90 million subscribers followed by Bharti with 2.47 million subscribers in QE Jun-20.

1.58 In wireless broadband segment, Reliance Jio holds 58.56% market share with 397.25 million subscribers followed by Bharti Airtel Ltd (21.94%) with 148.83 million subscribers in QE Jun-20.

1.59 Top five service areas in respect of broadband subscriptions at Q.E. Jun-20 are Maharashtra (59.88 million), Andhra Pradesh including Telengana (55.70 million), U.P.-East (50.51 million), Tamil Nadu including Chennai (47.34 million) and Madhya Pradesh (46.29 million).

Chart 1.23 : Composition of Broadband subscription – Technology wise

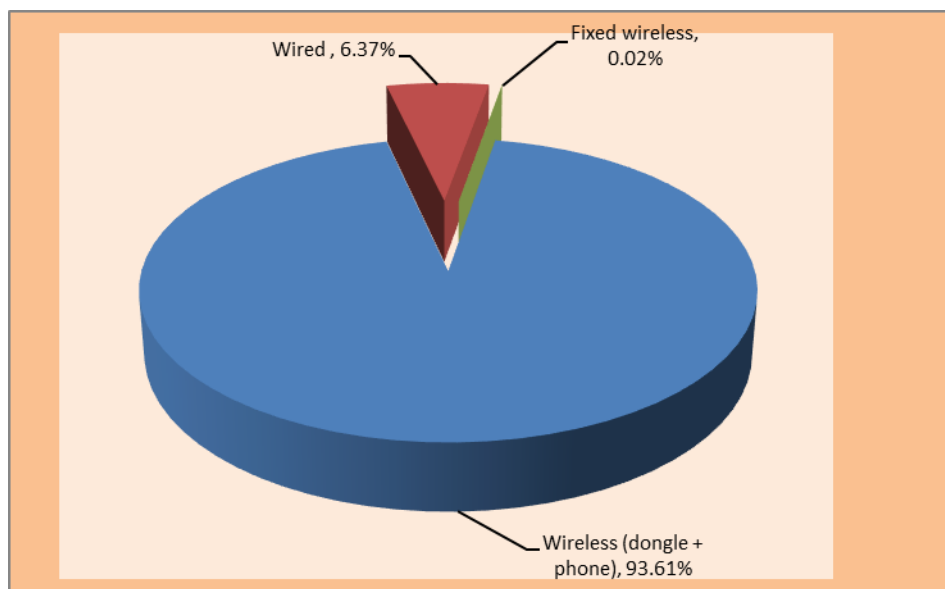


1.60 Mobile Device Users (dongle+phone) constitute 97.07% of total broadband subscribers at the end of Jun-20.

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

- 1.61 Total number of narrowband subscribers declined from 55.75 million at the end of Mar-20 to 50.84 million at the end of Jun-20 with the quarterly decline rate of 8.81%. Out of 50.84 million narrowband subscribers, Wired Narrowband subscribers are 3.24 million and Wireless Narrowband subscribers are 47.60 million.
- 1.62 The top five narrowband (wired+wireless) service providers in term of subscriber base are Bharti Airtel (25.11 million), Vodafone Idea Ltd (19.22 million), BSNL (6.31 million), MTNL (0.15 million) and You Broadband (0.02 million) at the end of Jun-20.
- 1.63 In wired narrowband segment, BSNL holds 98.61% market share with 3.20 million subscribers followed by You Broadband India Pvt Ltd with 0.02 million subscribers.
- 1.64 In wireless narrowband segment, Bharti Airtel holds 52.76% market share with 25.11 million subscribers followed by Vodafone Idea Ltd with 19.22 million subscribers.

Chart 1.24 : Composition of Narrowband subscription – Technology wise



**Section E : Other Value Added Services - PMRTS &
Public Mobile Radio Trunk Services (PMRTS)**

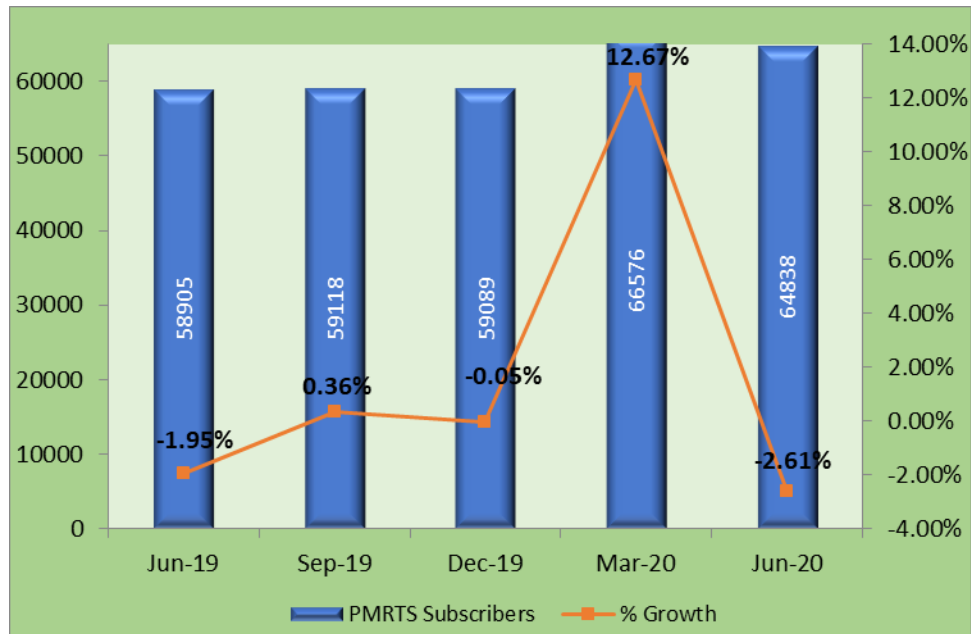
1.65 The subscriber base of PMRTS decreased from 66,576 at the end of Mar-20 to 64,833 at the end of Jun-20 with quarterly decline rate of 2.61%.

Table 1.32 : PMRTS Subscriber base - Service Provider wise

| Sl. No | Name of the Service Provider | Subscriber Base as on 31.03.2020 | Subscriber Base as on 30.06.2020 | Net Addition | % Growth in subscribers in QE Jun-20 |
|---------------|---|---|---|---------------------|---|
| 1 | Arya Omnitalk Radio Trunking Services Pvt. Ltd. | 56396 | 54515 | -1881 | -3.34 |
| 4 | Procall Ltd. | 3249 | 3297 | 48 | 1.48 |
| 2 | Quick Call | 2098 | 2087 | -11 | -0.52 |
| 3 | Inative Networks Pvt Ltd | 1820 | 1820 | 0 | 0.00 |
| 5 | Smartalk Pvt Ltd | 1193 | 1360 | 167 | 14.00 |
| 6 | Bhilwara Telenet Services Pvt Ltd | 868 | 883 | 15 | 1.73 |
| 7 | Wiwonet Solutions Pvt Ltd | 457 | 460 | 3 | 0.66 |
| 8 | Airtalk Solutions & Services Pvt Ltd | 495 | 416 | -79 | -15.96 |
| | Total | 66576 | 64838 | -1738 | -2.61 |

1.66 Detailed table on Service Area wise subscriber base of PMRTS as on 30th June, 2020 is available at **Annexure-1.7**.

Chart 1.25 : Number of PMRTS subscribers & Rate of Growth (%)



Very Small Aperture Terminal (VSAT)

1.67 The total number of VSAT subscribers decreased from 3,00,686 at the end of Mar-20 to 2,95,571 at the end of Jun-20. Net decrease during the quarter has been 5,115 at the declining rate of 1.70%.

Chart 1.26 : Number of VSAT Subscribers & Rate of Growth (%)

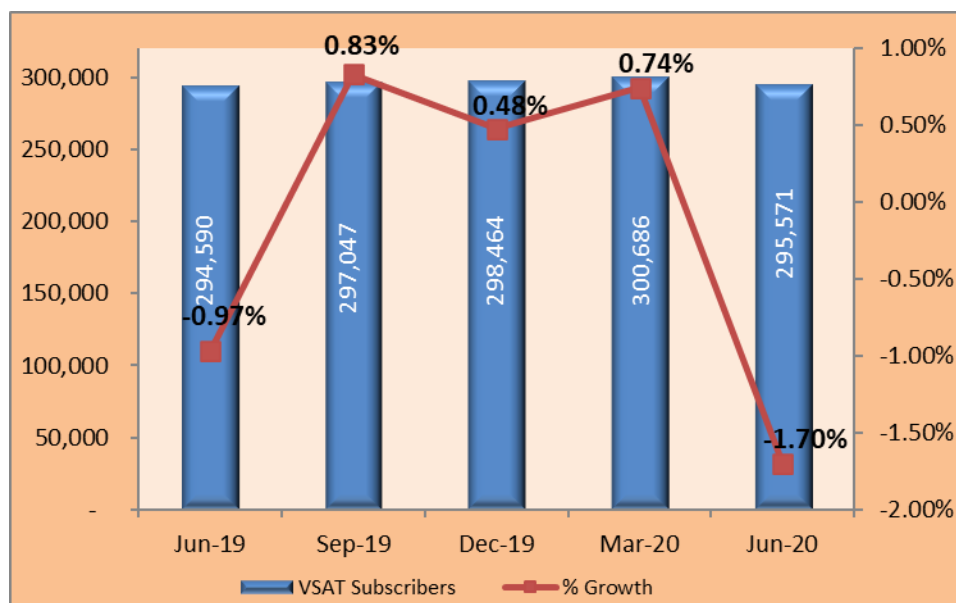


Table 1.33 : VSAT Service Providers currently providing service & their subscriber base

| Sr. No | Name of Service Providers | Subscriber base at the Quarter ending | | Net Addition | %age Growth | Market Share (%) Jun-20 |
|--------|---|---------------------------------------|-----------------|---------------|--------------|-------------------------|
| | | Mar-20 | Jun-20 | | | |
| 1 | Hughes Communications Ltd. | 1,21,221 | 1,22,087 | 866 | 0.71 | 41.31 |
| 2 | Bharti Airtel Limited | 80,094 | 78,898 | -1,196 | -1.49 | 26.69 |
| 3 | Tatanet Services | 70,207 | 71,134 | 927 | 1.32 | 24.07 |
| 4 | HCL Comnet | 15,065 | 10,888 | -4,177 | -27.73 | 3.68 |
| 5 | BSNL | 11,468 | 9,939 | -1,529 | -13.33 | 3.36 |
| 6 | Infotel Satcom | 2,581 | 2,575 | -6 | -0.23 | 0.87 |
| 7 | Cloudcast Digital Ltd (eartwhile Planetcast Media Services Ltd) | 50 | 50 | 0 | 0.00 | 0.02 |
| | Total | 3,00,686 | 2,95,571 | -5,115 | -1.70 | 100 |

1.68 Hughes Communication Limited continues to be the market leader with 41.31% share in VSAT with subscriber base of 1,22,087 followed by Bharti Airtel Ltd with 78,898 at the end of Jun-20.

1.69 In term of net addition, M/s Tatanet Services added maximum number of VSAT subscribers (927 subscribers) during the QE Jun-20. Bharti Airtel Limited, HCL Comnet, BSNL and Infotel Satcom have lost VSAT subscribers during the quarter.

Chapter 2 :

Revenue and Usage

Wireless Services

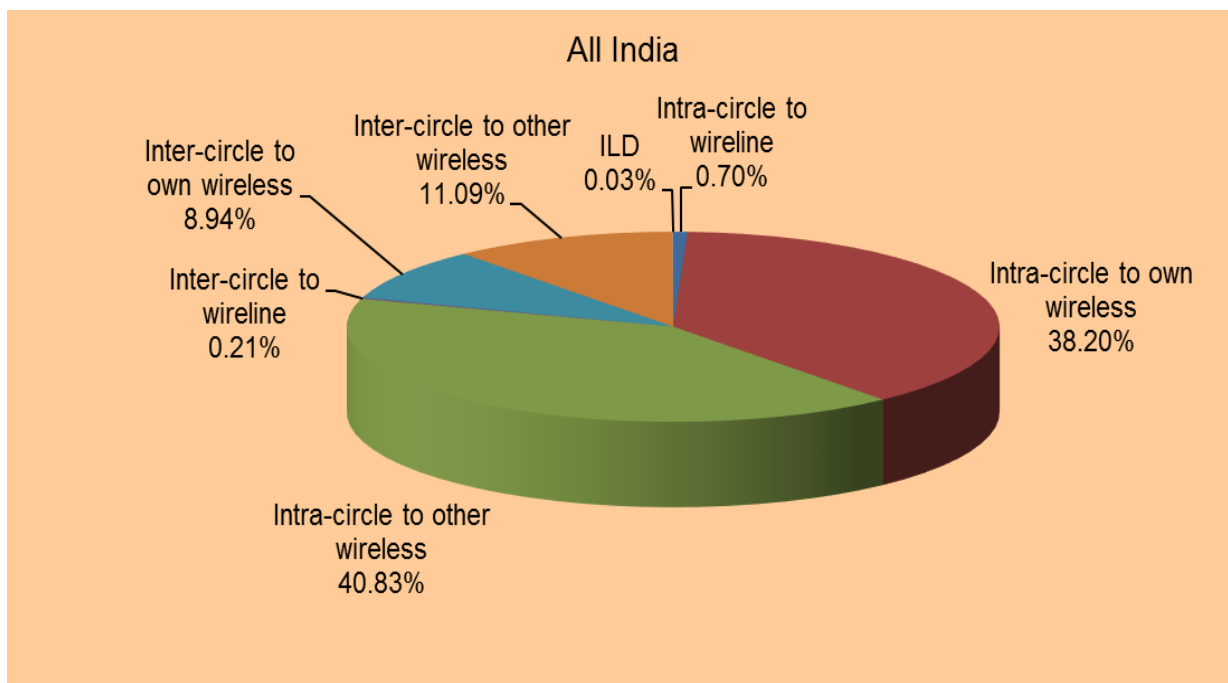
-
- For all the parameters, Metros indicate data for Delhi, Mumbai & Kolkata. Data for Chennai service area has been included in Circle A, as part of TN.
 - ARPU arrived after adjusting interconnect usage charges and roaming settlement charges.
 - The data contained in this section covers the licensees, who have been providing service during the entire period from 1st April, 2020 to 30th June, 2020 in the various service areas.

Table 2.1: Key Indicators – Wireless Services

| Parameter | Jun-20 | Mar-20 | Jun-19 | QoQ %age change | YoY %age change |
|---|--------|--------|--------|-----------------|-----------------|
| Share of Prepaid (%) | 95.48% | 95.35% | 95.65% | 0.14% | -0.18% |
| Incoming MOU per subscriber per month | 372.62 | 376.07 | 348.88 | -0.92% | 6.80% |
| Outgoing MOU per subscriber per month | 371.16 | 373.86 | 352.12 | -0.72% | 5.41% |
| No. of Outgoing SMS per subscriber per month | 15.30 | 17.26 | 17.07 | -11.36% | -10.37% |
| Average Revenue Per User (ARPU) per month (₹) | 90.12 | 91.49 | 74.30 | -1.50% | 21.29% |

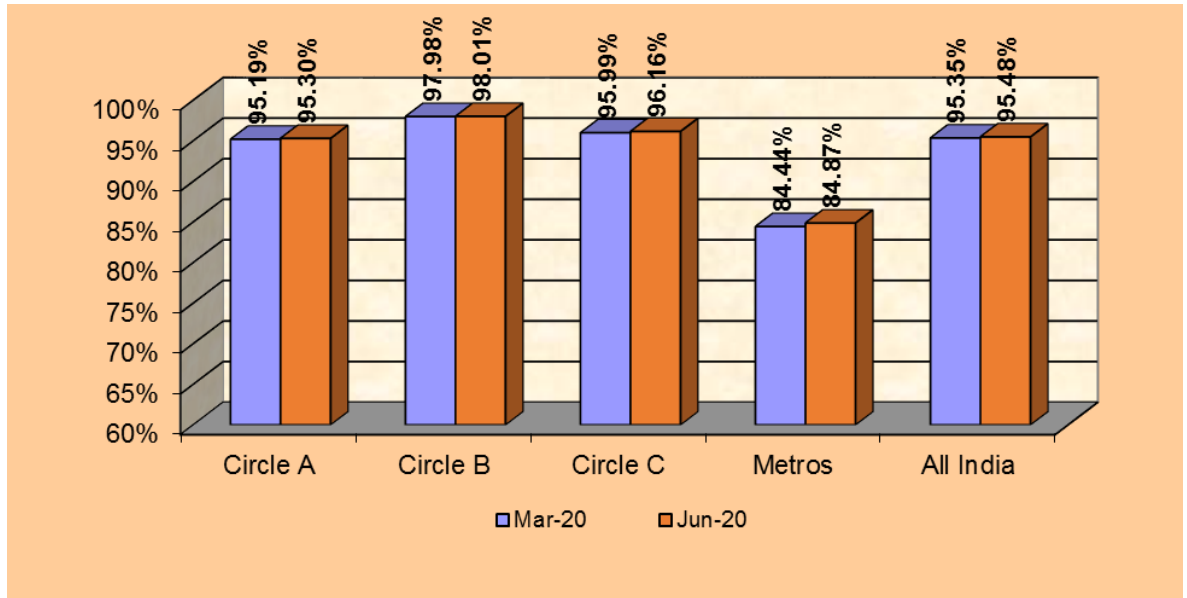
2.1 The following chart presents % break-up of outgoing minutes from Home Service Area (HSA) in the QE Jun-20.

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



2.2 The following chart presents pre-paid subscribers as a % of total subscribers as on the last day of the respective quarters for various categories of circles.

Chart 2.2: Proportion of prepaid subscribers



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

2.3 The market share of pre-paid segment has increased from 95.35% at the end of QE March-20 to 95.48% at the end of QE June-20.

2.4 The ARPU per month (all India blended) decreased from Rs.91.49 in QE March-20 to Rs.90.12 in QE Jun-20 with quarterly decline rate of 1.50%. Year-on-Year basis, ARPU per month increased by 21.30% in this quarter.

2.5 The ARPU per month for pre-paid segment is Rs.84 and ARPU per month for postpaid segment is Rs.224 in QE Jun-20.

2.6 The following table presents the ARPU per month for various categories of circles and various platforms for payment viz. post-paid and pre-paid.

Table 2.2: Monthly ARPU – Wireless Services in QE Jun-20

| Circle Category | ARPU per month (in ₹) | | |
|------------------|-----------------------|-----------|--------------|
| | Post-paid | Pre-paid | Blended |
| Circle A | 264 | 95 | 103 |
| Circle B | 236 | 82 | 85 |
| Circle C | 178 | 84 | 88 |
| Metros | 192 | 47 | 69 |
| All India | 224 | 84 | 90.12 |
| All private SPs | 226 | 90 | 96.19 |
| BSNL/MTNL | 188 | 36 | 39.56 |

2.7 The following table presents the composition of ARPU per month for QE Jun-20.

Table 2.3: Composition of ARPU per month - Wireless Services

| S. No. | Item | Revenue (excl. service tax) per subscriber per month (in ₹) | Share of total revenue from subscribers |
|--------|--|---|---|
| 1 | Usage from Home Service Area | | |
| 1.1. | Rental Revenue | 0.91 | 0.9% |
| 1.2. | Revenue from calls | 17.16 | 16.6% |
| 1.3. | Revenue from SMS | 0.80 | 0.8% |
| 1.4. | Revenue from data usage | 79.58 | 77.0% |
| 1.5. | Revenue from other VAS | 1.32 | 1.3% |
| 1.6. | Other revenue | 3.12 | 3.0% |
| 2 | Usage outside Home Service Area | | |
| 2.1. | Revenue from out-roamers | 0.49 | 0.5% |
| 3 | Total revenue from subscribers (1+2) | 103.38 | 100% |
| 4 | Net inter-operator settlement charges receivable * | -13.26 | |
| 5 | Net Revenue (ARPU) per month (3+4) | 90.12 | |

* includes Interconnect Usages Charges and roaming settlement charges

Starting from QE March-20 the TSPs started bifurcating rental revenue amongst revenue from calls and data usage

There is a difference in ARPU calculated by TRAI and the figures published by TSPs in their financial statements. This is because each TSP has a different methodology to calculate the ARPU. For example, one of the TSPs calculated ARPU by dividing the service revenue by the average number of subscribers during the quarter. Another TSP calculated ARPU by dividing operating revenue as given in the P&L account for the quarter by the average subscriber base for the current and previous quarters. Further, TRAI calculates Average Revenue Per User (ARPU) per month as Quarterly Revenue adjusted for interconnect usage charges and roaming settlement charges divided by average subscribers during the quarter for its own regulatory analysis. Therefore, the different methods result in a TRAI ARPU figure being less than what a TSP would declare in its quarterly financial results or presents to investors/Credit rating agencies.

- 2.8 From the above table, it may be seen that the net inter-operator settlement charges payable (Rs.13.26) accounts for 12.83% of the total revenue from subscribers in the Q.E. Jun-2020.
- 2.9 On an all India average, the overall MOU per subscriber per month decreased by 0.80% from 750 in Q.E. Mar-20 to 744 in Q.E. Jun-20.
- 2.10 The following table presents the total MOU (usage from, and outside, the home service area) per subscriber per month for various categories of circles and various platforms for payment.

Table 2.4: MOU per subscriber per month - QE Jun-20

| Circle category | MOU per subscriber per month | | | | | | | | |
|------------------|------------------------------|--------------|------------|--------------|--------------|------------|--------------|--------------|------------|
| | Post-paid | | | Pre-paid | | | Blended | | |
| | Outgoing MOU | Incoming MOU | Total MOU | Outgoing MOU | Incoming MOU | Total MOU | Outgoing MOU | Incoming MOU | Total MOU |
| Circle A | 360 | 314 | 674 | 335 | 326 | 661 | 336 | 326 | 662 |
| Circle B | 344 | 313 | 657 | 362 | 375 | 738 | 362 | 374 | 736 |
| Circle C | 380 | 385 | 765 | 435 | 469 | 905 | 433 | 466 | 899 |
| Metro | 315 | 254 | 569 | 453 | 409 | 862 | 432 | 386 | 817 |
| All India | 345 | 304 | 648 | 372 | 376 | 748 | 371 | 373 | 744 |

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

- 2.11 The overall ratio of incoming MOUs and outgoing MOUs for the Q.E. June-20 is 50.1: 49.9.
- 2.12 Average number of Outgoing SMS per subscriber per month is 15 in QE Jun-20. The following table presents the outgoing SMS usage (usage from and outside, the home service area) per subscriber per

month for various categories of circles and various categories of subscribers viz. post-paid and pre-paid during Q.E. June - 20.

Table 2.5: No. of Outgoing SMS per subscriber per month during QE Jun-20

| Circle category | Outgoing SMS per subscriber per month | | |
|------------------|---------------------------------------|-----------|-----------|
| | Post-paid | Pre-paid | Blended |
| Circle A | 30 | 17 | 17 |
| Circle B | 29 | 13 | 13 |
| Circle C | 19 | 18 | 18 |
| Metro | 16 | 13 | 13 |
| All India | 24 | 15 | 15 |

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

Chart 2.3 : Minutes of Usage by Out-roamers as a % of Total Minutes of Usage during Q.E. June-2020

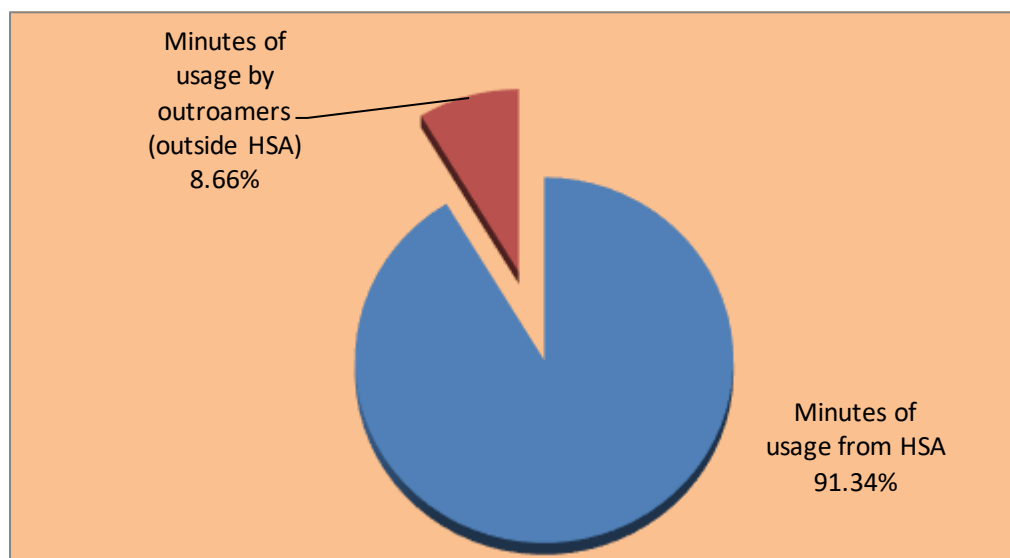
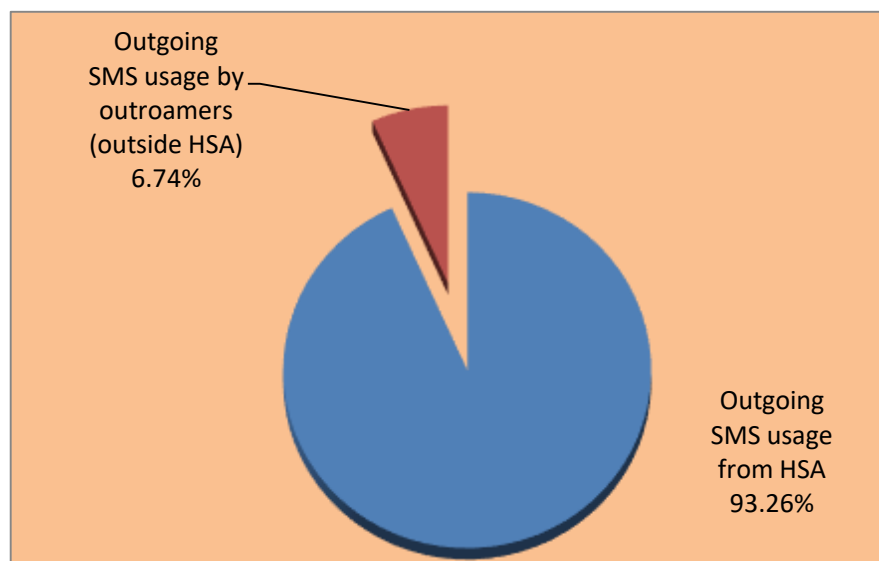


Chart 2.4: Outgoing SMS Usage by Out-roamers as a % of Total No. of Outgoing SMS Usage during Q.E. June-2020



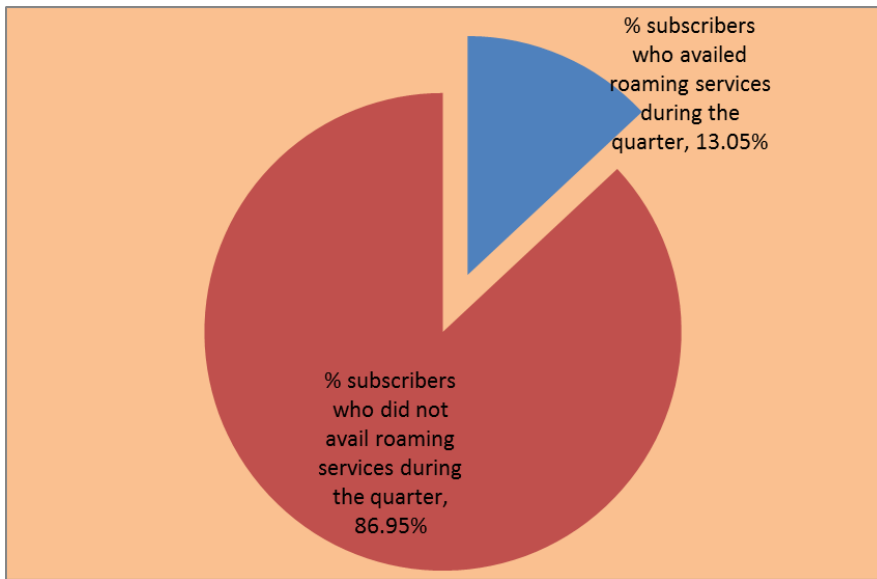
2.13 The following table presents the percentage break-up of outgoing minutes of usage from home service area between various categories of termination networks in the Q.E. June-20.

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

| Circle Category | % Intra-circle to wireline | % Intra-circle to own wireless | % Intra-circle to other wireless | % Inter-circle to wireline | % Inter-circle to own wireless | % Inter-circle to other wireless | % ILD |
|------------------|----------------------------|--------------------------------|----------------------------------|----------------------------|--------------------------------|----------------------------------|--------------|
| Circle A | 1.05% | 39.15% | 45.29% | 0.29% | 6.37% | 7.82% | 0.04% |
| Circle B | 0.52% | 38.65% | 41.50% | 0.15% | 8.37% | 10.79% | 0.02% |
| Circle C | 0.29% | 41.98% | 35.44% | 0.16% | 10.74% | 11.38% | 0.01% |
| Metros | 1.05% | 27.25% | 33.97% | 0.31% | 15.75% | 21.61% | 0.07% |
| All India | 0.70% | 38.20% | 40.83% | 0.21% | 8.94% | 11.09% | 0.03% |

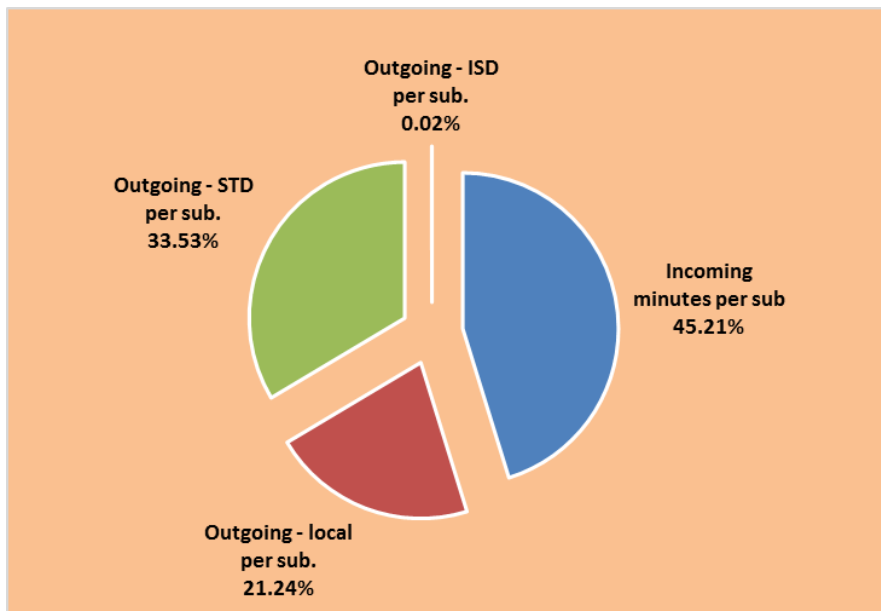
2.14 The following chart presents the percentage of subscribers who availed roaming services (out-roamers) during the QE Jun-20.

Chart 2.5: % subscribers availed roaming services during the QE Jun-20



2.15 The usage pattern of out-roamers i.e. usage from outside the home service area shows that incoming minutes accounts for 45.21% of the total minutes of usage by out-roamers in QE June-20 as against 44.54% in the March-20 quarter. The chart given below presents the break-up of minutes of usage of out-roamers.

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



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

8. Average Revenue per Outgoing Minute of usage from HSA

$$= \frac{\text{Rental revenue} + \text{Revenue from Calls}}{\text{No. of outgoing minutes from HAS}}$$

Table 2.7: Average revenue per outgoing minute from HSA in QE Jun-20

| Circle Category | (In Rs. per minute) | | |
|------------------------|----------------------------|----------------|----------------|
| | Postpaid | Prepaid | Blended |
| Circle A | 0.14 | 0.05 | 0.06 |
| Circle B | 0.14 | 0.05 | 0.05 |
| Circle C | 0.10 | 0.05 | 0.05 |
| Metros | 0.11 | 0.04 | 0.05 |
| All India | 0.13 | 0.05 | 0.05 |

2.17 All India average revenue per outgoing minute has decreased from Re. 0.06 in the QE Mar-20 to Re. 0.05 in Q.E. June-20.

Table 2.8: Trends of Key Parameters - Wireless Services

| Parameter | Jun-19 | Sep-19 | Dec-19 | Mar-20 | Jun-20 |
|--|---------------|---------------|---------------|---------------|---------------|
| 1. ARPU (₹ Per month) | 74 | 74 | 79 | 91 | 90 |
| 2. Average revenue Realization per subscriber per GB wireless data (in ₹) | 7.70 | 6.99 | 8.45 | 11.23 | 10.55 |
| 3. MOU per subscriber per month | 702 | 691 | 712 | 750 | 744 |
| 4. Outgoing MOU per subscriber per month | | | | | |
| 4.1 Local (Intra-circle) | 261 | 254 | 265 | 276 | 282 |
| 4.2 NLD (inter-circle) | 91 | 92 | 92 | 98 | 90 |
| 4.3 ILD | 0.15 | 0.16 | 0.11 | 0.10 | 0.09 |
| 5. Average no. of Outgoing SMS per subscriber per month | 17 | 18 | 18 | 17 | 15 |
| 6. Average revenue per outgoing minute from HSA (in ₹) | 0.13 | 0.13 | 0.11 | 0.06 | 0.05 |

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

Chapter 3 :

Financial Data of

Telecom Service

Sector

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

| Particulars | QE Jun-19 (₹ in Crore) | QE Mar-20 (₹ in Crore) | QE Jun-20 (₹ in Crore) | Q-O-Q % Change | Y-O-Y % Change |
|-------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|---------------------------|---------------------------|
| Gross Revenue (GR) | 61,534 | 67,534 | 66,858 | -1.00 | 8.65 |
| Adjusted Gross Revenue (AGR) | 39,123 | 44,940 | 44,128 | -1.81 | 12.79 |
| Pass Through Charges (GR-AGR) | 22,410 | 22,593 | 22,730 | 0.60 | 1.42 |
| License Fee | 3,132 | 3,604 | 3,526 | -2.16 | 12.57 |
| Spectrum Usage Charges | 1,121 | 1,424 | 1,369 | -3.84 | 22.12 |

3.1 Gross Revenue (GR) and Adjusted Gross Revenue (AGR) quarterly declined by 1% and 1.81% respectively in QE Jun-20. However, GR and AGR yearly increased by 8.65% and 12.79% respectively in QE Jun-20.

3.2 Pass through charges quarterly increased by 0.60% and yearly increased by 1.42% in the QE Jun-20.

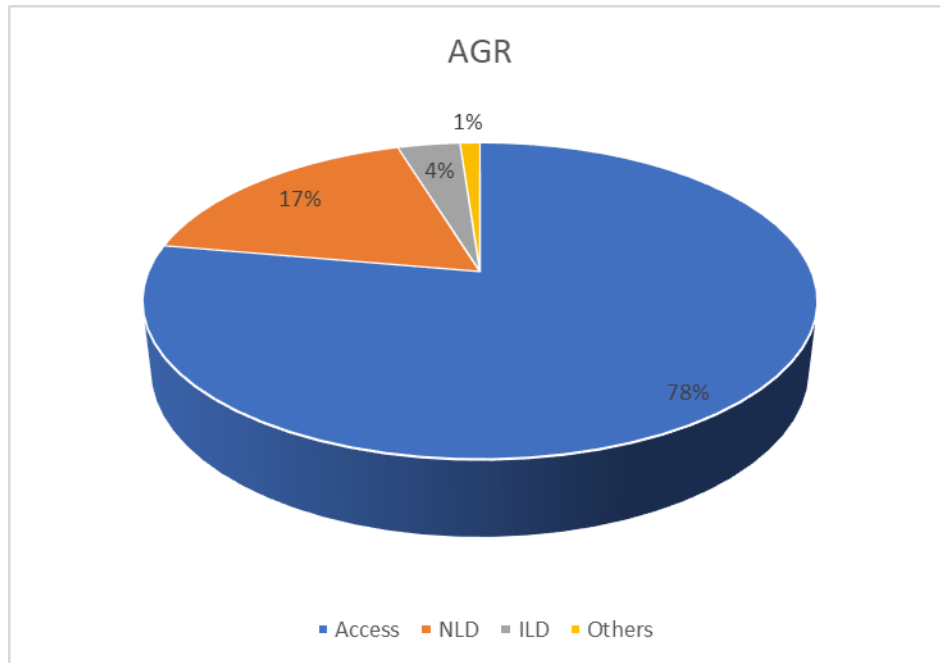
3.3 Pass-through charges as a percentage of Gross Revenue are 34% in QE Jun-20 as against 33.45% in the previous quarter.

Table 3.2: Service-wise Gross Revenue, Adjusted Gross Revenue, License Fee and Spectrum Charges for QE Jun-20

(in ₹ Crore)

| Service | GR | AGR | LF | Spectrum Usage Charges |
|-------------------------|------------------|------------------|-----------------|-------------------------------|
| Access Providers | 49,490.78 | 34,328.19 | 2,746.42 | 1,365.21 |
| NLD | 9,977.06 | 7,720.29 | 617.62 | - |
| ILD | 3,335.83 | 1,576.10 | 126.08 | - |
| Others | 4,053.94 | 503.54 | 35.95 | 4.03 |
| Total | 66,857.61 | 44,128.11 | 3,526.07 | 1,369.24 |

Chart 3.1: Composition of Adjusted Gross Revenue



3.4 Access services contributed 77.79% of the total Adjusted Gross Revenue of telecom services. In Access services, Gross Revenue (GR), Adjusted Gross Revenue (AGR), License Fee and Spectrum Usage Charges (SUC)^{†††} decreased by 0.15%, 0.49%, 0.83% and 3.83% respectively in QE Jun-20. However, Pass Through Charges quarterly increased by 0.63% during the same period.

3.5 Monthly Average Revenue per User (ARPU) for Access Services based on AGR increased from 97.64 in QE Mar-20 to 98.01 in QE Jun-20. Trend of ARPU per month for Access Services is depicted in the following chart 3.2.

^{†††} Spectrum Usage Charge is payable by the licensees providing mobile access services, as a percentage of their Adjusted Gross Revenue (AGR).

(Source – DoT License Agreement)

Chart 3.2: Trend in ARPU per month for Access Services

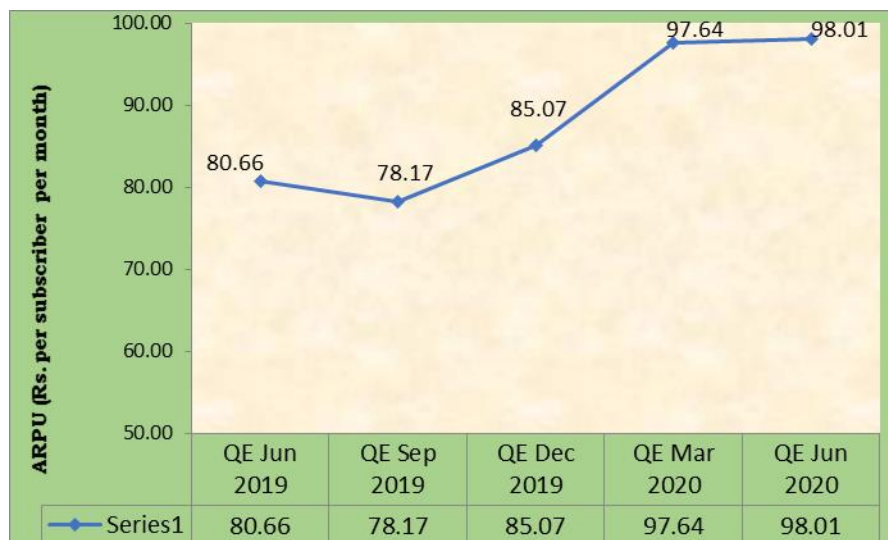


Table 3.3: Access Services - Service Provider wise Adjusted Gross Revenue

(in ₹ Crore)

| Service Provider | QE Jun-20 | QE Mar-20 | % Change |
|---|-----------------|-----------------|---------------|
| Reliance Jio | 15259.91 | 13428.07 | 13.64 |
| Bharti Airtel | 10088.46 | 9737.00 | 3.61 |
| Vodafone Idea | 5865.36 | 7866.60 | -25.44 |
| BSNL | 2140.40 | 2274.32 | -5.89 |
| Tata Tele. | 540.84 | 664.18 | -18.57 |
| MTNL | 337.04 | 453.89 | -25.74 |
| Reliance Com. | 96.27 | 69.58 | 38.36 |
| Quadrant | -0.06 | 0.06 | -205.72 |
| V-Con Mobile & Infra Pvt. Ltd. | -0.02 | 2.17 | -101.12 |
| Grand Total (Access) | 34328.19 | 34495.87 | -0.49% |

3.6 Public Sector Undertakings' share in the Access AGR of telecom services is 7.22% in the QE Jun-20.

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

| Category | AGR of Access Services for QE Jun-20 (in crore) | %age share of AGR |
|-----------------|--|--------------------------|
| Metro | 3345.8 | 9.75 |
| A | 13310.12 | 38.77 |
| B | 12780.38 | 37.23 |
| C | 4891.9 | 14.25 |
| Total | 34328.19 | 100 |

Notes :

1. Source: Figures are un-audited and as submitted by the TSPs.
2. A copy of quarterly Statement(s) of Revenue and Licence Fee and Spectrum Charges filed with the licensor(DoT) is submitted by Telecom Service Providers to TRAI in reference to TRAI's Order No.14-11/2009-FA, dated 9th August, 2010.
3. The figures have been re-grouped wherever considered necessary for analysis purpose.
4. Percentage of contribution of Five TSPs of Public Sector (BSNL, MTNL, Rail Tel, Power Grid, Oil India and Bharat Broadband) to AGR in NLD Service and two TSPs of Public Sector (BSNL/MTNL) in Access Services and BSNL in ILD Services.
5. For all the parameters metros indicate data for Delhi, Mumbai and Kolkata. Data for Chennai Service Area has been included as part of Tamil Nadu
6. M/s. V-Con Mobile & Infra Pvt. Ltd has started reporting GR/AGR with effect from Oct-Dec.,2019 onwards.

Chapter 4 : Quality of Service (QoS)

Section A: Quality of Service Performance of Wireless Service Providers

Table 4.1: QoS Summary - Wireless Service

Summary of Performance of Service providers comparative to the previous quarter against identified parameters

| S.No. | Parameters | Benchmark | Performance in respect of UASL/CMTS Licensees for the Parameters and Benchmarks | | | |
|-----------|--|-----------|---|----------------|-------------------------------|----------------|
| | | | For Quarter Ending March, 2020 | | For Quarter Ending June, 2020 | |
| | | | Out Of 110 (Nos.) | Out Of 110 (%) | Out Of 110 (Nos.) | Out Of 110 (%) |
| I. | Network Related Parameters | | | | | |
| 1 | Network Availability | | | | | |
| (i) | BS Accumulated down-time (not available for service) (%age) | ≤ 2% | 0 | 0% | 0 | 0% |
| (ii) | Worst affected BSs due to down-time (%age) | ≤ 2% | 0 | 0% | 0 | 0% |
| 2 | Connection Establishment (Accessibility) | | | | | |
| (i) | Call Set-up Success Rate and Session Establishment Success Rate for Circuit Switched Voice or VoLTE as applicable(within licensee's own network) | ≥ 95% | 0 | 0% | 0 | 0% |
| (ii) | SDCCH/ Paging Channel Congestion/ RRC Congestion (%age) | ≤ 1% | 0 | 0% | 0 | 0% |
| (iii) | TCH, RAB and E-RAB Congestion (%age) | ≤ 2% | 2 | 1.82% | 2 | 1.82% |
| 3 | Connection Maintenance (Retain ability) | | | | | |
| (i) | Network QoS DCR Spatial Distribution Measure [Network_ QSD(90,90)] | ≤ 2% | 7 | 6.36% | 5 | 4.55% |
| (ii) | Network QoS DCR Temporal Distribution Measure [Network_ QTD(97,90)] | ≤ 3% | 7 | 6.36% | 7 | 6.36% |
| 4 | Connections with good voice quality, Circuit Switched Voice Quality and VoLTE quality | ≥ 95% | 0 | 0% | 0 | 0% |

| | | | | | | |
|---|--|--|----|--------|----|--------|
| 5 | Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter) | ≤ 0.5% | 0 | 0% | 0 | 0% |
| 6 | Down Link (DL) Packet Drop Rate or DL-PDR | ≤ 2% | 0 | 0% | 0 | 0% |
| 7 | Up Link (UL) Packet Drop Rate or UL-PDR | ≤ 2% | 0 | 0% | 0 | 0% |
| II. Customer Service Quality Parameters | | | | | | |
| 6 Metering and Billing/ | | | | | | |
| (i) | Metering and billing credibility - post paid | ≤ 0.1% | 1 | 0.91% | 0 | 0% |
| (ii) | Metering and billing credibility - pre paid | ≤ 0.1% | 0 | 0% | 0 | 0% |
| (iii) | Resolution of billing/charging/validity complaints | 98% within 4 weeks | 1 | 0.91% | 1 | 0.91% |
| | Resolution of billing/charging/validity complaints | 100% within 6 weeks | 1 | 0.91% | 1 | 0.91% |
| (iv) | Period of applying credit/waiver/ adjustment to customer's account from the date of resolution of complaints | within 1 week of resolution of complaint | 1 | 0.91% | 1 | 0.91% |
| 7 Response time to the customer for assistance | | | | | | |
| (i) | Accessibility of call centre/customer care | ≥ 95% | 1 | 0.91% | 3 | 2.73% |
| (ii) | %age of calls answered by the operators (voice to voice) within 90 seconds | ≥ 95% | 23 | 20.91% | 84 | 76.36% |
| 8 Termination / closure of service | | | | | | |
| (i) | %age requests for Termination / Closure of service complied within 7 days | 100% within 7 days | 1 | 0.91% | 1 | 0.91% |
| (ii) | Time taken for refund of deposits after closures | 100% within 60 days | 11 | 10.00% | 66 | 60.00% |

4.1 The performance has improved in this quarter as compared to the previous quarter in respect of the following parameters: -

- a. Network QoS DCR Spatial Distribution Measure [Network_ QSD (90,90)]
- b. Metering and billing credibility - post paid

4.2 The performance has deteriorated in this quarter as compared to the previous quarter in respect of the following parameters: -

- a. Accessibility of call centre/ customer care
- b. %age of calls answered by the operators (voice to voice) within 90 sec
- c. Time taken for refund of deposits after closures

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

| Parameter | Benchmark | Service Provider | Service Area | Performance |
|---|----------------------|--|----------------------|-------------|
| TCH, RAB and E-RAB Congestion (%age) | ≤ 2% | VIL-Brand Idea | Uttar Pradesh (West) | 2.25 |
| | | VIL-Brand Vodafone | Uttar Pradesh (West) | 2.25 |
| Network QoS DCR Spatial Distribution Measure [Network_QSD(90,90)] | ≤ 2% | BSNL | West Bengal | 8.57 |
| | | VIL-Brand Idea | Himachal Pradesh | 2.56 |
| | | | Jammu & Kashmir | 2.44 |
| | | VIL-Brand Vodafone | Himachal Pradesh | 2.56 |
| | | | Jammu & Kashmir | 2.44 |
| | | Network QoS DCR Temporal Distribution Measure [Network_QTD(97,90)] | ≤ 3% | BSNL |
| VIL-Brand Idea | Himachal Pradesh | | | 4.13 |
| | Jammu & Kashmir | | | 4.00 |
| | Uttar Pradesh (West) | | | 3.06 |
| | Himachal Pradesh | | | 4.13 |
| VIL-Brand Vodafone | Jammu & Kashmir | | | 4.00 |
| | Uttar Pradesh (West) | | | 3.06 |
| | Uttar Pradesh (West) | | | 3.06 |
| Resolution of billing/charging complaints | 98% within 4 weeks | VIL-Brand Idea | Delhi | 97.56 |
| | 100% within 6 weeks | VIL-Brand Vodafone | Gujarat | 99.98 |

| Parameter | Benchmark | Service Provider | Service Area | Performance |
|---|--|-------------------------|---------------------|--------------------|
| Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution of complaints | within 1 week of resolution of complaint | VIL-Brand Vodafone | Gujarat | 99.94 |
| Accessibility of call centre/ customer care | ≥ 95% | VIL-Brand Idea | Gujarat | 94.00 |
| | | BSNL | Karnataka | 94.00 |
| | | BSNL | Kerala | 94.00 |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥ 95% | Airtel | Andhra Pradesh | 80.00 |
| | | | Assam | 90.00 |
| | | | Bihar | 92.00 |
| | | | Delhi | 89.00 |
| | | | Gujarat | 88.00 |
| | | | Haryana | 88.00 |
| | | | Himachal Pradesh | 89.00 |
| | | | Jammu & Kashmir | 81.00 |
| | | | Karnataka | 85.00 |
| | | | Kerala | 81.00 |
| | | | Kolkata | 91.00 |
| | | | Madhya Pradesh | 91.00 |
| | | | Maharashtra | 90.00 |
| | | | Mumbai | 89.00 |
| | | | North East | 86.00 |
| | | | Odisha | 90.00 |
| | | | Punjab | 88.00 |
| | | | Rajasthan | 92.00 |
| | | | Tamil Nadu | 62.00 |
| | | Uttar Pradesh (East) | 91.00 | |
| | | Uttar Pradesh (West) | 91.00 | |
| | | West Bengal | 85.00 | |
| | | BSNL | Karnataka | 67.39 |
| Kerala | 39.00 | | | |
| Punjab | 55.23 | | | |
| Tamil Nadu | 58.81 | | | |
| Uttar Pradesh (East) | 43.04 | | | |
| Uttar Pradesh (West) | 45.52 | | | |

| Parameter | Benchmark | Service Provider | Service Area | Performance |
|--|----------------|----------------------|----------------------|-------------|
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥ 95% | RJIL | Andhra Pradesh | 89.96 |
| | | | Bihar | 90.19 |
| | | | Delhi | 90.30 |
| | | | Gujarat | 94.31 |
| | | | Kolkata | 92.26 |
| | | | Madhya Pradesh | 90.43 |
| | | | Mumbai | 91.38 |
| | | | Odisha | 93.89 |
| | | | Punjab | 93.26 |
| | | | Rajasthan | 90.13 |
| | | | Tamil Nadu | 94.08 |
| | | | Uttar Pradesh (East) | 90.32 |
| | | | Uttar Pradesh (West) | 89.49 |
| | | West Bengal | 90.18 | |
| | | VIL-Brand Idea | Andhra Pradesh | 92.12 |
| | | | Assam | 66.78 |
| | | | Bihar | 59.84 |
| | | | Delhi | 68.07 |
| | | | Gujarat | 81.16 |
| | | | Haryana | 89.60 |
| | | | Himachal Pradesh | 70.95 |
| | | | Jammu & Kashmir | 82.94 |
| | | | Kerala | 90.73 |
| | | | Kolkata | 83.03 |
| | | | Madhya Pradesh | 83.37 |
| | | | Maharashtra | 89.71 |
| | | | Mumbai | 94.18 |
| | | | North East | 68.07 |
| | | | Odisha | 58.90 |
| | | | Punjab | 87.49 |
| | | | Rajasthan | 79.25 |
| | | Uttar Pradesh (East) | 85.11 | |
| | | Uttar Pradesh (West) | 88.03 | |
| West Bengal | 86.64 | | | |
| VIL-Brand Vodafone | Andhra Pradesh | 94.87 | | |
| | Assam | 59.16 | | |
| | Bihar | 81.42 | | |

| Parameter | Benchmark | Service Provider | Service Area | Performance |
|--|---------------------|-------------------------|----------------------|--------------------|
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥ 95% | VIL-Brand Vodafone | Delhi | 48.21 |
| | | | Gujarat | 44.66 |
| | | | Haryana | 76.95 |
| | | | Himachal Pradesh | 90.43 |
| | | | Jammu & Kashmir | 80.66 |
| | | | Karnataka | 93.69 |
| | | | Kerala | 87.39 |
| | | | Kolkata | 50.06 |
| | | | Madhya Pradesh | 83.29 |
| | | | Maharashtra | 83.21 |
| | | | Mumbai | 86.74 |
| | | | North East | 59.00 |
| | | | Odisha | 73.06 |
| | | | Punjab | 87.99 |
| | | | Rajasthan | 46.31 |
| | | | Tamil Nadu | 75.72 |
| | | | Uttar Pradesh (East) | 68.78 |
| Uttar Pradesh (West) | 84.68 | | | |
| West Bengal | 53.77 | | | |
| %age requests for Termination / Closure of service complied within 7 days | 100% within 7 days | VIL-Brand Idea | Uttar Pradesh (West) | 99.88 |
| Time taken for refund of deposits after closures | 100% within 60 days | Airtel | Andhra Pradesh | 88.00 |
| | | | Assam | 59.00 |
| | | | Bihar | 70.00 |
| | | | Delhi | 89.00 |
| | | | Gujarat | 89.00 |
| | | | Haryana | 79.00 |
| | | | Himachal Pradesh | 76.00 |
| | | | Jammu & Kashmir | 88.00 |
| | | | Karnataka | 79.00 |
| | | | Kerala | 64.00 |
| | | | Kolkata | 91.00 |
| | | | Madhya Pradesh | 81.00 |
| | | | Maharashtra | 87.00 |
| | | | Mumbai | 89.00 |

| Parameter | Benchmark | Service Provider | Service Area | Performance |
|--|---------------------|-------------------------|----------------------|--------------------|
| Time taken for refund of deposits after closures | 100% within 60 days | Airtel | North East | 50.00 |
| | | | Odisha | 90.00 |
| | | | Punjab | 85.00 |
| | | | Rajasthan | 82.00 |
| | | | Tamil Nadu | 77.00 |
| | | | Uttar Pradesh (East) | 77.00 |
| | | | Uttar Pradesh (West) | 86.00 |
| | | | West Bengal | 89.00 |
| | | VIL-Brand Idea | Andhra Pradesh | 37.56 |
| | | | Assam | 61.80 |
| | | | Bihar | 17.29 |
| | | | Delhi | 0.00 |
| | | | Gujarat | 92.36 |
| | | | Haryana | 63.05 |
| | | | Himachal Pradesh | 76.63 |
| | | | Jammu & Kashmir | 3.13 |
| | | | Karnataka | 39.35 |
| | | | Kerala | 42.86 |
| | | | Kolkata | 21.17 |
| | | | Madhya Pradesh | 39.47 |
| | | | Maharashtra | 70.87 |
| | | | Mumbai | 0.13 |
| | | | North East | 37.50 |
| | | | Odisha | 76.13 |
| | | | Punjab | 50.47 |
| | | | Rajasthan | 0.00 |
| | | | Tamil Nadu | 27.17 |
| | | | Uttar Pradesh (East) | 30.43 |
| | | | Uttar Pradesh (West) | 26.71 |
| | | | West Bengal | 15.22 |
| | | VIL-Brand Vodafone | Andhra Pradesh | 34.93 |
| | | | Assam | 63.45 |
| | | | Bihar | 42.06 |
| Delhi | 0.43 | | | |
| Gujarat | 49.31 | | | |
| Haryana | 65.68 | | | |
| Himachal Pradesh | 66.23 | | | |

| Parameter | Benchmark | Service Provider | Service Area | Performance |
|--|---------------------|-------------------------|----------------------|--------------------|
| Time taken for refund of deposits after closures | 100% within 60 days | VIL-Brand Vodafone | Jammu & Kashmir | 8.69 |
| | | | Karnataka | 51.53 |
| | | | Kerala | 66.95 |
| | | | Kolkata | 41.39 |
| | | | Madhya Pradesh | 40.43 |
| | | | Maharashtra | 0.00 |
| | | | Mumbai | 21.53 |
| | | | North East | 46.95 |
| | | | Odisha | 55.92 |
| | | | Punjab | 61.26 |
| | | | Rajasthan | 12.25 |
| | | | Tamil Nadu | 34.24 |
| | | | Uttar Pradesh (East) | 21.15 |
| Uttar Pradesh (West) | 25.86 | | | |
| West Bengal | 42.49 | | | |

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

Section B: Quality of Service Performance of Wireline Service Providers

Table 4.3: QoS Summary - Wireline Service

Summary of Performance of service providers against identified parameters

| S. No. | Parameters | Benchmark | No of license areas where operators not meeting the benchmarks | | | |
|--------|--|----------------------------|--|--------------------|-------------------|-------------------|
| | | | March, 2020 | | June, 2020 | |
| | | | Out of 104 In Nos. | Out of 104 In %age | Out of 98 In Nos. | Out of 98 In %age |
| (i) | “Fault repair” Fault incidences No. of faults per 100 subs/month) | ≤ 7 | 1 | 0.96% | 0 | 0.00% |
| (ii) | % Fault repaired by next working day (for urban areas) | ≥ 85% | 2 | 1.92% | 10 | 10.20% |
| | % Fault repaired within 5 days (for urban areas) | ≥100% | 2 | 1.92% | 2 | 2.04% |
| (iii) | % Fault repaired by next working day (for rural and hilly areas) | ≥ 75% | 0 | 0.00% | 0 | 0.00% |
| | % Fault repaired within 7 days (for rural and hilly areas) | ≥100% | 0 | 0.00% | 0 | 0.00% |
| (iv) | “Mean time to Repair” (MTTR) | ≤10Hs | 3 | 2.88% | 10 | 10.20% |
| (v) | “Point of Interconnection” (POI) Congestion (No. of PoIs not meeting benchmark) | ≤ 0.5% | 0 | 0.00% | 0 | 0.00% |
| (vi) | “Metering and Billing” Metering and billing credibility - post-paid | ≤ 0.1% | 0 | 0.00% | 1 | 1.02% |
| | Metering and Billing credibility -pre-paid | ≤ 0.1% | 0 | 0.00% | 0 | 0.00% |
| (vii) | Resolution of billing/charging /Credit & validity complaints | 98% within 4 weeks | 0 | 0.00% | 0 | 0.00% |
| | Resolution of billing/charging / Credit & validity complaints | 100% within 6 weeks | 0 | 0.00% | 0 | 0.00% |

| | | | | | | |
|---------------|---|--|----|--------|----|--------|
| (viii) | Period of applying credit /waiver/adjustment to customer's | 1 week of resolution of complaint | 0 | 0.00% | 0 | 0.00% |
| (ix) | “Response time to the customer for assistance” Accessibility of call centre/ customer care | ≥ 95% | 10 | 9.62% | 13 | 13.27% |
| | %age of calls answered by the operators (voice to voice) within 90 seconds | ≥ 95% | 26 | 25.00% | 30 | 30.61% |
| (x) | “Termination / closure of service”- %age of request for Termination / closure of service complied within 7 days | 100% within 7 days | 1 | 0.96% | 1 | 1.02% |
| (xi) | Time taken for refund of deposits after closures | 100% within 60 days | 2 | 1.92% | 13 | 13.27% |

NOTE: Most of the SPs have not reported for the parameter “Metering and billing credibility - pre paid” due to not providing pre-paid service in Basic (Wire line) service.

4.4 The performance has improved in this quarter as compared to the previous quarter in respect of the following parameters: -

❖ **“Fault repair”** Fault incidences No. of faults per 100 subs/month)

4.5 The performance has deteriorated in this quarter as compared to the previous quarter in respect of the following parameters: -

❖ **“Fault repair”** % Fault repaired by next working day (for urban areas)

❖ **“Mean time to Repair”** (MTTR)

❖ **“Metering and Billing”** Metering and billing credibility - post-paid,

❖ **“Response time to the customer for assistance”**

- Accessibility of call centre/ customer care,

- %age of calls answered by the operators (voice to voice) within 90 seconds

❖ **“Termination/closure of service”-**

Time taken for refund of deposits after closures

Table 4.4: Parameter wise Analysis of Non-compliance of QoS Benchmarks for Wireline Service Providers

| Parameters | Benchmarks | Service Provider | Service areas | Parameters not met |
|--|--|-------------------------|----------------------|---------------------------|
| % of faults repaired by next working day | For urban areas by next working day: $\geq 85\%$ | MTNL | Delhi | 66.80% |
| % of faults repaired by next working day | For urban areas by next working day: $\geq 85\%$ | MTNL | Mumbai | 46.70% |
| % of faults repaired by next working day | For urban areas by next working day: 85% | TTSL | Andhra Pradesh | 82.51 |
| % of faults repaired by next working day | For urban areas by next working day: 85% | TTSL | Delhi | 73.21% |
| % of faults repaired by next working day | For urban areas by next working day: 85% | TTSL | Gujarat | 77.72% |
| % of faults repaired by next working day | For urban areas by next working day: 85% | TTSL | Karnataka | 73.44% |
| % of faults repaired by next working day | For urban areas by next working day: 85% | TTSL | Maharashtra | 73.24% |
| % of faults repaired by next working day | For urban areas by next working day: 85% | TTSL | Mumbai | 53.80% |
| % of faults repaired by next working day | For urban areas by next working day: 85% | TTSL | Tamilnadu | 50.00% |
| % of faults repaired by next working day | For urban areas by next working day: 85% | TTSL | West Bengal | 84.62% |
| % of faults repaired within 5 days | For urban areas: $\geq 100\%$ | MTNL | Delhi | 88.49% |
| % of faults repaired within 5 days | For urban areas: $\geq 100\%$ | MTNL | Mumbai | 69.20% |
| Mean Time to Repair (MTTR) | ≤ 10 Hrs | MTNL | Delhi | 17.03 |
| Mean Time to Repair (MTTR) | ≤ 10 Hrs | MTNL | Mumbai | 45.44 |
| Mean Time to Repair (MTTR) | ≤ 10 Hrs | TTSL | Andhra Pradesh | 12.69 |
| Mean Time to Repair (MTTR) | ≤ 10 Hrs | TTSL | Delhi | 17.27 |
| Mean Time to Repair (MTTR) | ≤ 10 Hrs | TTSL | Gujarat | 13.35 |

| Parameters | Benchmarks | Service Provider | Service areas | Parameters not met |
|--|-------------------|-------------------------|----------------------|---------------------------|
| Mean Time to Repair (MTTR) | ≤ 10 Hrs | TTSL | Karnataka | 17.42 |
| Mean Time to Repair (MTTR) | ≤ 10 Hrs | TTSL | Maharashtra | 16.42 |
| Mean Time to Repair (MTTR) | ≤ 10 Hrs | TTSL | Mumbai | 27.90 |
| Mean Time to Repair (MTTR) | ≤ 10 Hrs | TTSL | Tamilnadu | 32.33 |
| Mean Time to Repair (MTTR) | ≤ 10 Hrs | TTSL | West Bengal | 12.50 |
| Metering and Billing credibility - post paid | ≤0.1% | BSNL | Haryana | 0.33% |
| Accessibility of call centre/ customer care | ≥95% | BSNL | Andhra Pradesh | 80.29% |
| Accessibility of call centre/ customer care | ≥95% | BSNL | Assam | 85.76% |
| Accessibility of call centre/ customer care | ≥95% | BSNL | Bihar | 86.90% |
| Accessibility of call centre/ customer care | ≥95% | BSNL | Gujarat | 17.98% |
| Accessibility of call centre/ customer care | ≥95% | BSNL | Kerala | 85.75% |
| Accessibility of call centre/ customer care | ≥95% | BSNL | Kolkata | 64.33% |
| Accessibility of call centre/ customer care | ≥95% | BSNL | Karnataka | 72.15% |
| Accessibility of call centre/ customer care | ≥95% | BSNL | Maharashtra | 18.88% |
| Accessibility of call centre/ customer care | ≥95% | BSNL | Madhya Pradesh | 7.05% |
| Accessibility of call centre/ customer care | ≥95% | BSNL | North East | 77.50% |
| Accessibility of call centre/ customer care | ≥95% | BSNL | Odisha | 78.26% |
| Accessibility of call centre/ customer care | ≥95% | BSNL | Tamilnadu | 69.50% |
| Accessibility of call centre/ customer care | ≥95% | BSNL | West Bengal | 71.51% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | Airtel | Andhra Pradesh | 52.00% |

| Parameters | Benchmarks | Service Provider | Service areas | Parameters not met |
|--|-------------------|-------------------------|----------------------|---------------------------|
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | Airtel | Delhi | 56.00% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | Airtel | Gujarat | 54.00% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | Airtel | Haryana | 59.00% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | Airtel | Kerala | 54.00% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | Airtel | Kolkata | 46.00% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | Airtel | Karnataka | 63.00% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | Airtel | Maharashtra | 53.00% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | Airtel | Madhya Pradesh | 56.00% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | Airtel | Mumbai | 56.00% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | Airtel | Punjab | 57.00% |

| Parameters | Benchmarks | Service Provider | Service areas | Parameters not met |
|--|-------------------|-------------------------|----------------------|---------------------------|
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | Airtel | Rajasthan | 55.00% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | Airtel | Tamilnadu | 59.00% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | Airtel | UPE | 57.00% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | Airtel | UPW | 59.00% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | BSNL | Andhra Pradesh | 87.13% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | BSNL | Gujarat | 33.75% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | BSNL | Himachal Pradesh | 61.00% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | BSNL | Haryana | 62.00% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | BSNL | Jammu & Kashmir | 56.33% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | BSNL | Kerala | 90.91% |

| Parameters | Benchmarks | Service Provider | Service areas | Parameters not met |
|--|--------------------|-------------------------|----------------------|---------------------------|
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | BSNL | Karnataka | 79.86% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | BSNL | Maharashtra | 53.79% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | BSNL | Madhya Pradesh | 2.42% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | BSNL | Punjab | 60.00% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | BSNL | Rajasthan | 60.33% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | BSNL | Tamilnadu | 64.44% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | BSNL | UPE | 62.33% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | BSNL | UPW | 60.67% |
| Percentage of calls answered by the operators (voice to voice) within 90 seconds | ≥95% | MTNL | Mumbai | 80.81% |
| %age requests for Termination / Closure of service complied within 7 days | 100% within 7 days | MTNL | Mumbai | 89.11% |

| Parameters | Benchmarks | Service Provider | Service areas | Parameters not met |
|--|---------------------|-------------------------|----------------------|---------------------------|
| Time taken for refund of deposits after closures | 100% within 60 days | Bharti Airtel | Andhra Pradesh | 89.00% |
| Time taken for refund of deposits after closures | 100% within 60 days | Bharti Airtel | Delhi | 79.00% |
| Time taken for refund of deposits after closures | 100% within 60 days | Bharti Airtel | Haryana | 82.00% |
| Time taken for refund of deposits after closures | 100% within 60 days | Bharti Airtel | Kerala | 83.00% |
| Time taken for refund of deposits after closures | 100% within 60 days | Bharti Airtel | Kolkata | 94.00% |
| Time taken for refund of deposits after closures | 100% within 60 days | Bharti Airtel | Karnataka | 84.00% |
| Time taken for refund of deposits after closures | 100% within 60 days | Bharti Airtel | Madhya Pradesh | 87.00% |
| Time taken for refund of deposits after closures | 100% within 60 days | Bharti Airtel | Punjab | 81.00% |
| Time taken for refund of deposits after closures | 100% within 60 days | Bharti Airtel | Rajasthan | 95.00% |
| Time taken for refund of deposits after closures | 100% within 60 days | Bharti Airtel | Tamilnadu | 77.00% |
| Time taken for refund of deposits after closures | 100% within 60 days | Bharti Airtel | UPE | 80.00% |
| Time taken for refund of deposits after closures | 100% within 60 days | Bharti Airtel | UPW | 83.00% |
| Time taken for refund of deposits after closures | 100% within 60 days | MTNL | Mumbai | 13.55% |

4.6 Detailed table containing QoS parameters for all the Wireline Service Providers is given in Annexure-4.2.

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

4.7 There are 305 Internet Service Providers (ISPs) providing broadband (wireline) service at the end of June, 2020. Out of these 305 ISPs, 57 Service Providers are having broadband subscriber base more than 10,000 and market share of these 57 SPs is 98.33% of total broadband subscriber base. This report covers performance of 53 broadband Service Providers vis-à-vis the QoS benchmarks prescribed by TRAI, for the QE June, 2020. One service provider namely M/s Tachyon Communications Pvt. Ltd. (New entrant) and M/s IKF Technologies Ltd., M/s K NET Solutions Pvt. Ltd., and M/s RI Networks Pvt Ltd has not submitted their Performance Monitoring Report (PMR) in this quarter.

Table 4.5 : Summary of Performance of Broadband Service Providers against identified parameters

| S. No. | Parameters | Benchmark | Quarter Ending | | Quarter Ending | |
|----------|---|---------------------------|----------------|--------------|----------------|--------------|
| | | | March, 2020 | | June, 2020 | |
| | | | Out of 111 | Out of 111 | Out of 107 | Out of 107 |
| 1 | Service Provisioning | 100% in =<15 working days | | | | |
| 1.2 | %age of connections provided within 15 days of registration of demand | 100% | 6 | 5.61% | 4 | 3.74% |
| 2 | Faults Repair | | | | | |
| 2.2 | % of faults repaired by next working day (>90%) | >90% | 4 | 3.74% | 7 | 6.54% |
| 2.3 | % of faults repaired within 3 working day | =>99% | 4 | 3.74% | 9 | 8.41% |
| 3 | Billing Performance | | | | | |
| 3.3 | %age of bills disputed | <2% | 0 | 0.00% | 0 | 0.00% |

| | | | | | | |
|----------|---|---------------------|---|--------------|----|---------------|
| 3.4 | %age of billing complaints resolved within 4 weeks | 100% within 4 weeks | 0 | 0.00% | 0 | 0.00% |
| 3.5 | %age of cases to whom refund of deposits is made within 60 days of closures | 100% within 60 days | 1 | 0.93% | 7 | 6.54% |
| 4 | Response Time to the Customer for assistance | | | | | |
| 4.2 | %age of calls answered by operator (Voice to voice) within 60 sec | >60% | 1 | 0.93% | 20 | 18.69% |
| 4.3 | %age of calls answered by operator (Voice to voice) within 90 sec | >80% | 4 | 3.74% | 22 | 20.56% |
| 5 | Bandwidth utilisation/ throughput | | | | | |
| 5.2 | No. of Intra network links having Bandwidth utilisation >90% during peak hours (TCBH) | 0 | 0 | 0.00% | 0 | 0.00% |
| 5.4 | No. of Upstream links for International connectivity having bandwidth utilisation >90% during peak hours (TCBH) | 0 | 0 | 0.00% | 0 | 0.00% |
| 5.7 | % International bandwidth utilization during peak hours (TCBH) (Enclose MRTG) <90% | <90% | 0 | 0.00% | 1 | 0.93% |
| 5.8 | Broadband Connection Speed available (download) from ISP node to user | >80% | 0 | 0.00% | 0 | 0.00% |
| 6 | Service availability /uptime (for all users) in %age | | | | | |
| 6.3 | Service availability /uptime (for all users) in %age | >98% | 0 | 0.00% | 0 | 0.00% |
| 7 | Packet loss (for wired broadband access) in %age | | | | | |
| | | <1% | 0 | 0.00% | 0 | 0.00% |

| 8 Network latency (for wired broadband access) | | | | | | |
|---|---|---------|---|--------------|---|--------------|
| 8.1 | User reference point at POP/ISP Gateway node to IGSP/NIXI | <120 ms | 0 | 0.00% | 0 | 0.00% |
| 8.2 | User reference point at ISP Gateway node to International nearest NAP port abroad (terrestrial) | <350 ms | 0 | 0.00% | 0 | 0.00% |
| 8.3 | User reference point at ISP Gateway node to International nearest NAP port abroad (satellite) | <800 ms | 0 | 0.00% | 0 | 0.00% |

Table 4.6: Parameter-wise Analysis of non-compliance of QoS benchmarks for Broadband Service Providers

| Sl. No. | Parameters | Benchmark | Name of the Service Provider not meeting the Benchmark |
|----------------|---|------------------|---|
| 1 | Service Provisioning | | |
| 1.2 | %age of connections provided within 15 days of registration of demand | 100% | MTNL - Delhi & Mum (83.75%) Airnet Cable - Maharashtra (1.00%) GTPL - All India (99.70%) You Broadband - All India (80.23.%) |
| 2 | Faults Repair | | |
| 2.2 | % of faults repaired by next working day (>90%) | >90% | MTNL - Delhi & Mum (63.71%), Intech - Mah. (85.22%), Mumbai (87.04%) Tata (TTSL) - All India (except MH) (68.27%) Tata (TTML) - Mah. & Mumbai (48.00%), Yashash - Karnataka (81.00%), You Broadband - All India (82.99%) |
| 2.3 | % of faults repaired within 3 working day | =>99% | MTNL - Delhi & Mumbai (78.11%), Atria - All India (98.43%) GTPL - All India (97.11%) Intech - Mah. (96.52%), Mumbai (97.65%) Tata (TTSL) - All India (except MH) (89.12%), TATA(TTML) - Mah. & Mumbai. (73.50%) Yashash - Karnataka (90.00%), You Broadband - All India (98.86%) |

| Sl. No. | Parameters | Benchmark | Name of the Service Provider not meeting the Benchmark |
|----------------|--|------------------|--|
| 3 | Billing Performance | | |
| 3.5 | %age of cases to whom refund of deposits is made within 60 days of closures | 100% | MTNL - Delhi & Mum (53.69%) Airtel - DL (90.00%), GUJ (78.00%), HR(81.00%), MP(76.00%),TN (79.00%),UPW (67.00%) |
| 4 | Response Time to the Customer for assistance | | |
| 4.2 | %age of calls answered by operator (Voice to voice) within 60 sec | >60% | Atria Convergence - All India (27.00%) Bharti Airtel - AP (50.00%),DL (44.00%), GJ(49.00%), HR (47.00%), KAR (54.00%), KR(43.00%), KOL (43.00%), J&K (50.00%), MP(46.00%), MH (48.00%), MUM (49.00%), PB(56.00%), RJ (58.00%), TN (56.00%), UPE(49.00%),UPW (47.00%), DEN - All India (48.01%), Yashash - Karnataka (55.51%), You Broadband - All India (38.16%) |
| 4.3 | %age of calls answered by operator (Voice to voice) within 90 sec | >80% | BSNL - All India (63.91%) Atria Convergence - All India (30.00%), Bharti Airtel - AP (57.00%),DL (53.00%),GJ (56.00%),HR (54.00%),KAR (61.00%),KR (49.00%),KOL (51.00%),J&K (58.00%),MP (54.00%),MH (55.00%),MUM (57.00%),PB (62.00%),RJ (64.00%),TN (62.00%),UPE (57.00%),UPW (55.00%), DEN - All India (52.52%) Tata Sky - All India (77.62%), Yashash - Karnataka (76.29%), You Broadband - All India (45.30%) |
| 5 | Bandwidth utilisation/ throughput | | |
| 5.7 | % International bandwidth utilization during peak hours (TCBH) (Enclose MRTG) <90% | <90% | Yashash - Karnataka (92.61%) |

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

Chapter 5 :

Performance of Cable TV, DTH and Radio Broadcasting Services

Table 5.1: Key Parameters - Broadcasting & Cable TV Services

| S.No | Parameter | QE Mar-20 | QE Jun-20 |
|------|---|-----------|-----------|
| 1 | Number of Private satellite TV channels permitted by the Ministry of Information and Broadcasting (MIB) for uplinking only/ downlinking only/both uplinking and downlinking | 926 | 909 |
| 2 | Number of Pay TV Channels as reported by broadcasters | 333 | 332 |
| 3 | Number of FM Radio Stations (excluding All India Radio) | 368 | 367 |
| 4 | Number of pay DTH Operators | 4 | 4 |
| 5 | Number of Operational Community Radio Stations | 290 | 300 |

A. Satellite TV Channels

5.1 A total of 909 private satellite TV channels have been permitted by the Ministry of Information and Broadcasting (MIB) for uplinking only/downlinking only/both uplinking and downloading, as on 30th June, 2020. The quarter-wise figures of the total number of TV channels is depicted in below chart: -

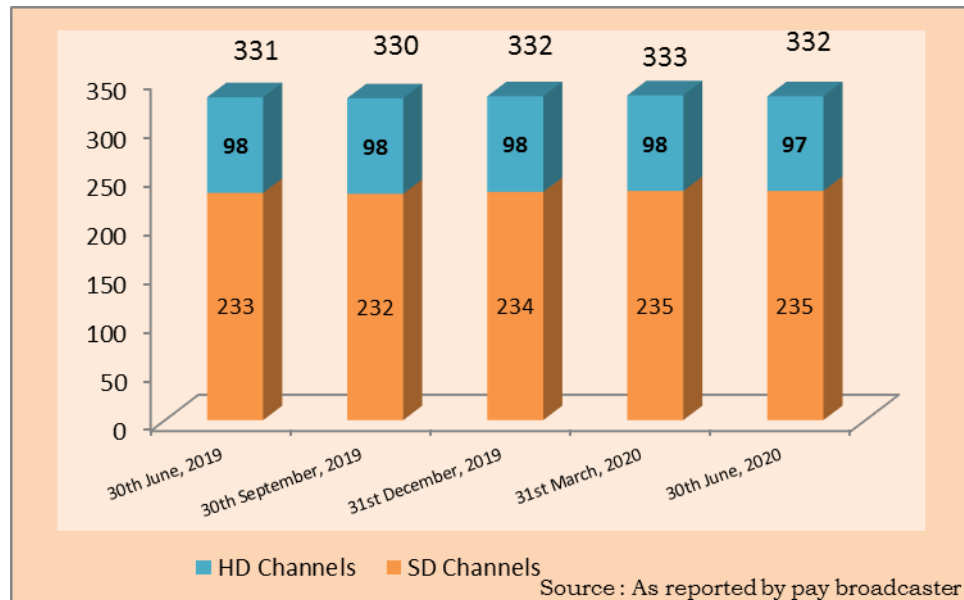
Chart 5.1: Quarterly growth in number of Satellite TV channels (FTA & Pay) registered with Ministry of I&B



B. Pay TV Channels

- 5.2 Telecom Regulatory Authority of India (TRAI), in March, 2017, notified the new regulatory framework for Broadcasting and Cable services. The framework comprises of Tariff Order 2017, Interconnection Regulations 2017 and Quality of Service & Consumer Protection Regulations 2017. The framework was duly notified vide press release no.71/2018 dated 3rd July 2018 with revised timelines for implementation. All the timelines prescribed in the above-mentioned framework commenced from 3rd July 2018. The new regulatory framework has come into effect on 29th December 2018.
- 5.3 As per the Telecommunication (Broadcasting and Cable) Services (Eighth) (Addressable Systems) Tariff Order, 2017 dated 3rd March 2017 as amended, every broadcaster has to offer all its channels on a-la-carte basis to all distributors of television channels and declare maximum retail price, per month, payable by a subscriber for each of its pay channel offered on a-la-carte basis. Further, it is also permissible for a broadcaster to offer its pay channels in the form of bouquet and declare the maximum retail price, per month, of such bouquet payable by a subscriber.
- 5.4 As per the reporting done by broadcasters in pursuance of the Tariff Order dated 3rd March 2017, as amended, there are **332** pay TV channels, as on 30th June 2020, which includes **235** SD pay TV channels and **97** HD Pay TV channels. A list of pay TV channels offered by broadcasters to subscribers as reported to TRAI is attached as **Annexure-5.1**.

Chart 5.2 : Quarterly growth in number of satellite Pay TV channels in India



C. Cable TV Sector

5.5 The country has achieved 100% digitization of Cable TV network. This is a stupendous achievement making India as the only large country where 100% digital cable has been achieved through mandatory regulations.

5.6 As on 30th June 2020, there are 1666 MSOs registered with MIB. Further, as per the data reported by MSOs/HITS operators, there are 12 MSOs & 1 HITS operator who have subscriber base greater than one million. M/s e-Infrastructure and Entertainment India Private Limited (MSO) has shut down of all MSO operation/business. A list of Major MSOs/HITS Operators is attached as Annexure 5.2. Details of the total active subscriber base of these 12 MSOs and 1 HITS operator are given in following table 5.2.

Table 5.2: Subscriber base of major MSOs/HITS operators at the end of June, 2020 (More than one million subscribers)

| Sl. No. | Name of the operator | Total Active Subscriber Base (includes subscribers who have been inactive or temporarily suspended for not more than last 90 days) |
|----------------|---|---|
| 1. | Siti Networks | 88,78,164 |
| 2. | GTPL Hathway | 77,09,349 |
| 3. | Hathway Digital | 53,23,752 |
| 4. | Den Networks | 52,39,009 |
| 5. | Tamil Nadu Arasu Cable TV | 30,49,817 |
| 6. | Kerala Communicators Cable Ltd (KCCL) | 29,19,533 |
| 7. | TCCL | 27,06,317 |
| 8. | Fastway Transmissions Pvt Ltd | 23,83,629 |
| 9. | IndusInd Media and Communication Ltd (HITS) | 21,65,400 |
| 10. | KAL Cables | 19,40,255 |
| 11. | VK Digital | 15,82,489 |
| 12. | IndusInd Media and Communication Ltd (CATV) | 12,13,182 |
| 13. | Asianet Digital Network | 12,12,099 |

D. Direct-to-Home (DTH) Sector

5.7 Since its introduction in the year 2003, Indian DTH service has displayed a phenomenal growth. During the quarter ending 30th June, 2020, there were 4 pay DTH service providers in India.

5.8 Pay DTH has attained Total active subscriber base of around 70.58 million. This is in addition to the subscribers of the DD Free Dish (free DTH services of Doordarshan). The total active subscriber base has increased from 70.26 million in March 2020 to 70.58 million in June 2020.

5.9 It is important to note that previously (upto March 2019) the subscription figure of total active subscribers included inactive and temporarily suspended subscribers for not more than last 120 days. However as per new regulatory framework of Broadcasting and Cable TV Services, the total active subscribers are counted including only those subscribers which are inactive/ temporarily suspended for not more than last 90 days. This point has been duly clarified by the Authority in the Press Release no. 86/ 2019 dated 8th October, 2019 (https://main.trai.gov.in/sites/default/files/PR_No.86of2019.pdf)

5.10 Quarterly growth in the DTH sector in terms of the total active subscriber base and market share of DTH operators in terms of percentage of total active subscribers during the quarter ending 30th June 2020 is depicted in the following charts: -

Chart 5.3 : Quarterly growth in total Active subscribers (in million) of pay DTH Sector

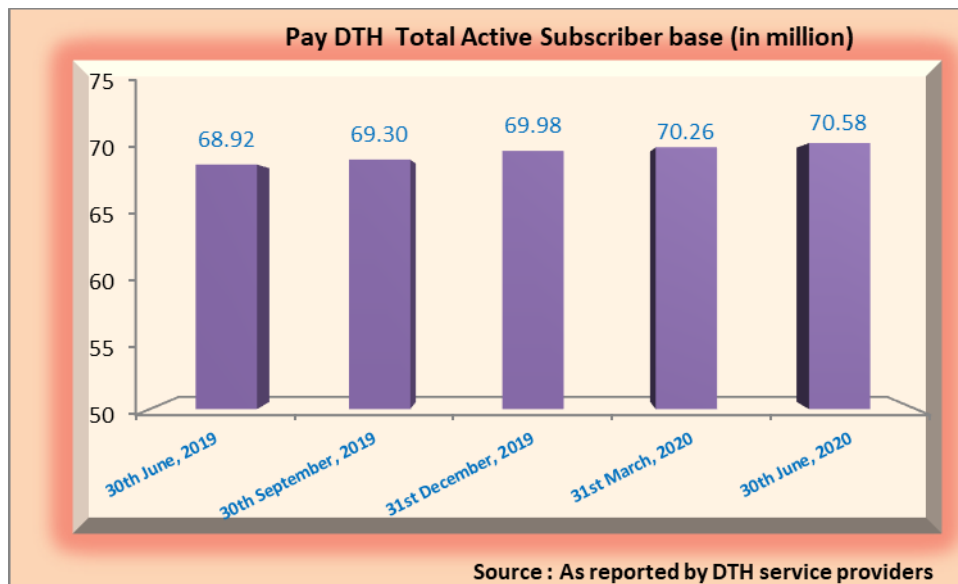
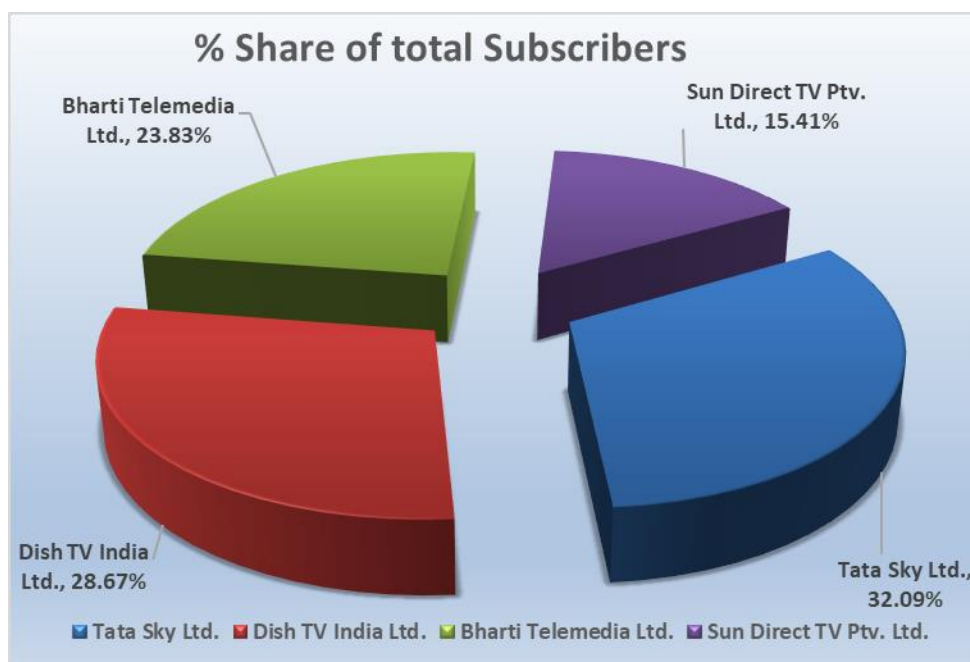


Chart 5.4 : Market share of DTH Operators

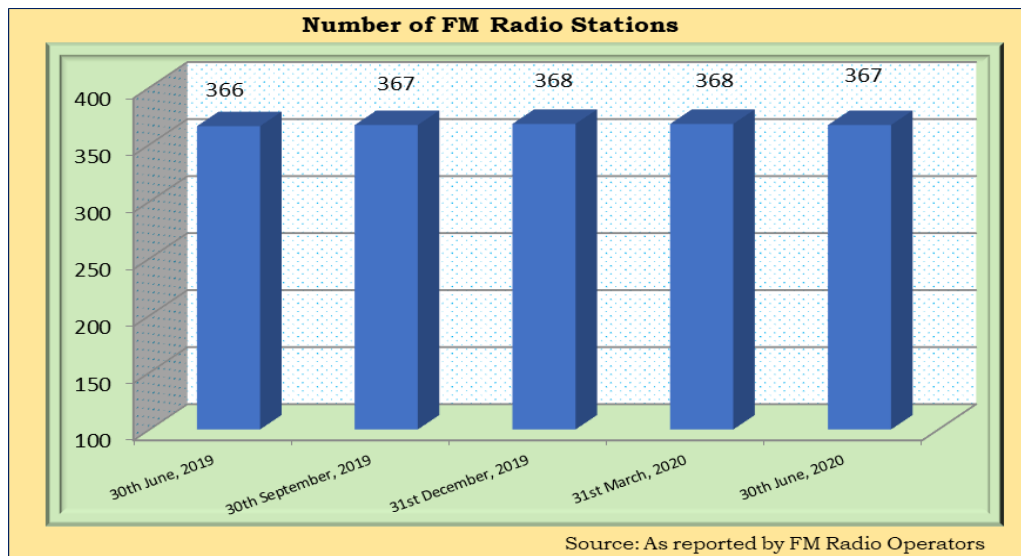


Source : As reported by DTH service providers

E. FM Radio Services

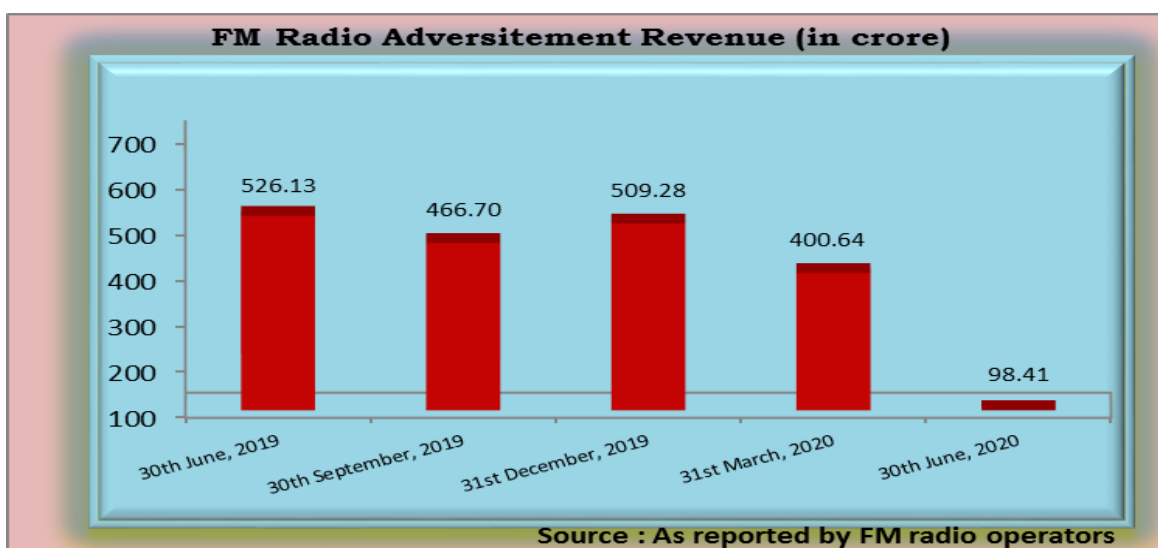
5.12 Apart from the radio stations operated by All India Radio – the public broadcaster, as on 30th June 2020, there are **367** operational private FM Radio stations in **105** cities with operational **31** Private FM Radio broadcasters as compared to **368** private FM Radio Stations in **105** cities with operational **32** FM Radio broadcasters in the previous quarter. During the quarter end 30th June 2020, M/s Muthoot Broadcasting Private Limited has ceased the operation of its single FM Radio station at Chennai. A list of 105 existing cities with operational private FM radio channels in India, as on 30th June, 2020 is placed at **Annexure 5.4**. The following chart 5.5 depicts the quarterly growth in private FM Radio stations.

Chart 5.5 : Quarterly growth in private FM Radio stations



5.13 The reported advertisement revenue during the quarter ending 30th June 2020 in respect of **366** private FM Radio stations is **₹ 98.41** crore as against **₹ 400.64** crore in respect of **367** private FM Radio stations for the previous quarter i.e 31st March 2020. One FM Radio Broadcaster, M/s Gwalior Firm Private Limited, operating in the city of **Guwahati**, has not submitted the advertisement revenue.

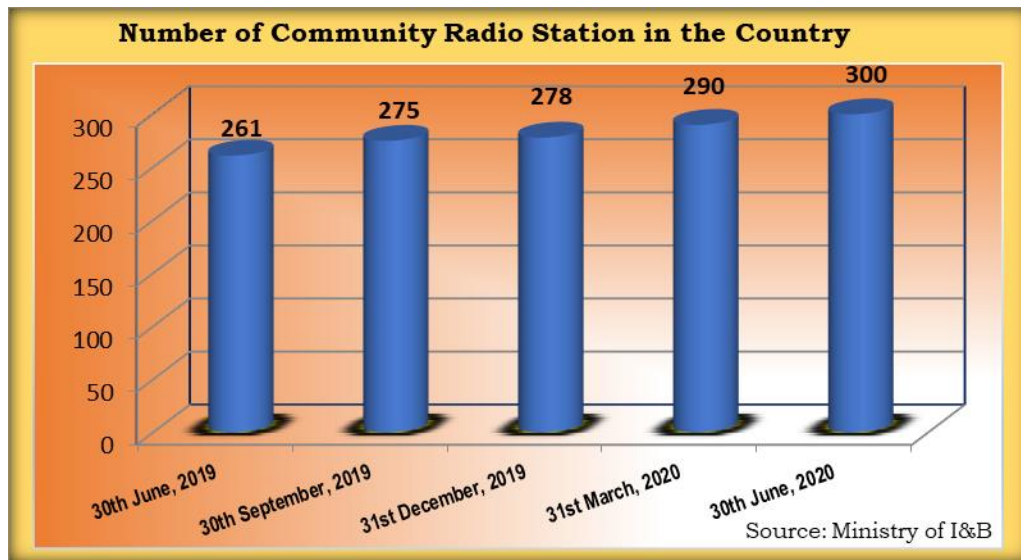
Chart 5.6: Quarterly growth in FM Radio Advertisement Revenue



F. Community Radio

5.14 As on 30th June, 2020, there are 300 Community Radio stations are operational. The quarterly growth in the number of operational community radio stations during last one year is depicted in the following chart 5.7.

Chart 5.7 : Quarterly Growth in number of Operational Community Radio Stations



Annexures

Annexure 1.1: Wireless Subscriber Base

| Service Area | Vodafone Idea | | Bharti Airtel (including Tata Teleservices) | | Reliance Com. | | BSNL | | MTNL | | Reliance Jio | | Total | | Net Additions |
|----------------------------|--------------------|--------------------|--|--------------------|---------------|---------------|--------------------|--------------------|------------------|------------------|--------------------|--------------------|---------------|---------------|------------------|
| | Mar-20 | Jun-20 | Mar-20 | Jun-20 | Mar-20 | Jun-20 | Mar-20 | Jun-20 | Mar-20 | Jun-20 | Mar-20 | Jun-20 | Mar-20 | Jun-20 | |
| Andhra Pradesh | 18117771 | 16948499 | 29,359,105 | 28513977 | 2215 | 2175 | 9,880,476 | 9855027 | | | 30496220 | 31033822 | 87,855,787 | 86,353,500 | -1502287 |
| Assam | 4183200 | 3892299 | 8,353,872 | 8285759 | 0 | 0 | 2,790,779 | 2843947 | | | 8275824 | 8465436 | 23,603,675 | 23,487,441 | -116234 |
| Bihar | 14591200 | 13652772 | 34,977,894 | 33693996 | 381 | 360 | 5,628,326 | 5701746 | | | 29526256 | 30622243 | 84,724,057 | 83,671,117 | -1052940 |
| Delhi | 17332519 | 16417191 | 15,622,321 | 15048030 | 1789 | 1751 | | 0 | 2,181,486 | 2179026 | 18259352 | 18388992 | 53,397,467 | 52,034,990 | -1362477 |
| Gujarat | 27072381 | 25892692 | 10,993,217 | 9920925 | 605 | 612 | 6,111,290 | 6106266 | | | 23755633 | 24316715 | 67,933,126 | 66,237,210 | -1695916 |
| Haryana | 8785711 | 8361858 | 4,537,398 | 4498706 | 136 | 130 | 5,003,797 | 5013844 | | | 9347510 | 9381819 | 27,674,552 | 27,256,357 | -418195 |
| Himachal Pradesh | 850315 | 788330 | 3,328,098 | 3211925 | 104 | 103 | 2,991,601 | 2997445 | | | 3620570 | 3739380 | 10,790,688 | 10,737,183 | -53505 |
| Jammu & Kashmir | 610483 | 588643 | 5,928,411 | 5720475 | 0 | 0 | 1,257,282 | 1259303 | | | 4064862 | 4220936 | 11,861,038 | 11,789,357 | -71681 |
| Karnataka | 11268724 | 10825486 | 28,721,892 | 27876260 | 1540 | 1601 | 7,318,035 | 7274657 | | | 20318123 | 20702665 | 67,628,314 | 66,680,669 | -947645 |
| Kerala | 17962231 | 17575190 | 5,609,440 | 5622201 | 634 | 690 | 10,944,293 | 10949638 | | | 8915611 | 9441962 | 43,432,209 | 43,589,681 | 157472 |
| Madhya Pradesh | 23,870,180 | 23058064 | 14,476,869 | 13315433 | 750 | 728 | 6,368,950 | 6376004 | | | 30517136 | 31814555 | 75,233,885 | 74,564,784 | -669101 |
| Maharashtra | 38,126,290 | 35920408 | 16,099,766 | 15598186 | 1050 | 912 | 7,051,528 | 7022942 | | | 31518967 | 32741143 | 92,797,601 | 91,283,591 | -1514010 |
| Mumbai | 12,712,857 | 11937699 | 9,921,502 | 9205994 | 2397 | 2318 | | 0 | 1,178,701 | 1175694 | 14013751 | 14147321 | 37,829,208 | 36,469,026 | -1360182 |
| North East | 1,721,989 | 1625330 | 5,232,246 | 5086549 | 0 | 0 | 1,422,503 | 1402201 | | | 3645578 | 3763129 | 12,022,316 | 11,877,209 | -145107 |
| Orissa | 3,159,284 | 2851806 | 11,428,399 | 10770115 | 364 | 379 | 6,227,956 | 6354332 | | | 12515137 | 12995977 | 33,331,140 | 32,972,609 | -358531 |
| Punjab | 9,328,394 | 8838348 | 10,288,523 | 9926586 | 316 | 307 | 5,779,360 | 5817451 | | | 13777111 | 13940730 | 39,173,704 | 38,523,422 | -650282 |
| Rajasthan | 13,598,361 | 12928571 | 21,115,780 | 20458171 | 368 | 385 | 6,271,217 | 6312472 | | | 24547174 | 24671680 | 65,532,900 | 64,371,279 | -1161621 |
| Tamil Nadu (incl. Chennai) | 20,335,566 | 19408811 | 25,220,269 | 24498103 | 3135 | 3132 | 12,696,544 | 10689186 | | | 23724399 | 24027784 | 81,979,913 | 78,627,016 | -3352897 |
| UP(E) | 25,719,403 | 26206694 | 30,968,581 | 30874068 | 866 | 687 | 11,693,544 | 11717082 | | | 28376042 | 29138887 | 96,758,436 | 97,937,418 | 1178982 |
| UP(W) | 23,633,309 | 22054123 | 13,933,712 | 13934826 | 301 | 283 | 5,964,689 | 6036679 | | | 19849305 | 20050305 | 63,381,316 | 62,076,216 | -1305100 |
| Kolkata | 7368356 | 7013690 | 6244080 | 5836094 | 36 | 33 | 2096657 | 2169503 | | | 10024019 | 10338362 | 25,733,148 | 25,357,682 | -375466 |
| West Bengal | 18820090 | 18317372 | 15,451,606 | 14775105 | 809 | 801 | 2,373,296 | 2409240 | | | 18428223 | 19305561 | 55,074,024 | 54,808,079 | -265945 |
| Total | 319,168,614 | 305,103,876 | 327,812,981 | 316,671,484 | 17,796 | 17,387 | 119,872,123 | 118,308,965 | 3,360,187 | 3,354,720 | 387,516,803 | 397,249,404 | 1,157,748,504 | 1,140,705,836 | -17042668 |

Annexure 1.2: Wireline Subscriber Base

| Service Area | Bharti Airtel | | Reliance Com. | | Quadrant | | Tata Tele. | | MTNL | | BSNL | | Vodafone Idea | | Reliance Jio | | Total | | Net Additions |
|----------------------------|------------------|------------------|----------------|----------------|----------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------|----------------|------------------|------------------|-------------------|-------------------|-----------------|
| | Mar-20 | Jun-20 | Mar-20 | Jun-20 | Mar-20 | Jun-20 | Mar-20 | Jun-20 | Mar-20 | Jun-20 | Mar-20 | Jun-20 | Mar-20 | Jun-20 | Mar-20 | Jun-20 | Mar-20 | Jun-20 | |
| Andhra Pradesh | 213913 | 217071 | 29286 | 26517 | | | 166571 | 161986 | | | 754108 | 710649 | 51345 | 51915 | 100686 | 142988 | 1,315,909 | 1,311,126 | -4,783 |
| Assam | | | | | | | | | | | 95015 | 91870 | 3450 | 3450 | 12875 | 17159 | 111,340 | 112,479 | 1,139 |
| Bihar | | | 2056 | 1937 | | | 8402 | 8124 | | | 146322 | 140696 | 1980 | 1830 | 17614 | 25121 | 176,374 | 177,708 | 1,334 |
| Delhi | 1491730 | 1416973 | 67232 | 62940 | | | 147802 | 144233 | 1395358 | 1391811 | - | - | 78115 | 75335 | 87626 | 97012 | 3,267,863 | 3,188,304 | -79,559 |
| Gujarat | 99478 | 101627 | 9725 | 8597 | | | 85404 | 82095 | | | 643726 | 579193 | 32052 | 32022 | 130278 | 154695 | 1,000,663 | 958,229 | -42,434 |
| Haryana | 22600 | 24810 | 1526 | 1314 | | | 38096 | 38349 | | | 175363 | 174789 | 360 | 360 | 26290 | 49461 | 264,235 | 289,083 | 24,848 |
| Himachal Pradesh | | | 1117 | 953 | | | 1933 | 1820 | | | 94579 | 89491 | 60 | 30 | 795 | 1352 | 98,484 | 93,646 | -4,838 |
| Jammu & Kashmir | | 4325 | 0 | 0 | | | | 0 | | | 120470 | 111452 | 0 | 0 | 14337 | 25251 | 134,807 | 141,028 | 6,221 |
| Karnataka | 778931 | 776627 | 97249 | 92714 | | | 272504 | 267925 | | | 863720 | 823344 | 82947 | 80357 | 51624 | 84124 | 2,146,975 | 2,125,091 | -21,884 |
| Kerala | 62520 | 60252 | 10242 | 9487 | | | 19648 | 19377 | | | 1445592 | 1379954 | 5670 | 6090 | 14857 | 21465 | 1,558,529 | 1,496,625 | -61,904 |
| Madhya Pradesh | 240632 | 234566 | 4692 | 4368 | | | 13334 | 12452 | | | 358417 | 303347 | 2310 | 2130 | 50033 | 64190 | 669,418 | 621,053 | -48,365 |
| Maharashtra | 113704 | 116173 | 35947 | 30889 | | | 257716 | 249175 | | | 877812 | 838078 | 29723 | 29223 | 36781 | 44952 | 1,351,683 | 1,308,490 | -43,193 |
| Mumbai | 398083 | 373704 | 137505 | 119526 | | | 538886 | 524705 | 1698442 | 1694184 | | 0 | 85887 | 86886 | 213724 | 263091 | 3,072,527 | 3,062,096 | -10,431 |
| North East | | | | | | | | | | | 90954 | 86189 | 270 | 270 | 6265 | 10107 | 97,489 | 96,566 | -923 |
| Orissa | | | 1651 | 1590 | | | 8697 | 8747 | | | 185731 | 174878 | 5760 | 6060 | 8160 | 12219 | 209,999 | 203,494 | -6,505 |
| Punjab | 139989 | 133009 | 9444 | 9023 | 182269 | 177039 | 12314 | 11773 | | | 314234 | 294817 | 3030 | 3180 | 37031 | 48715 | 698,311 | 677,556 | -20,755 |
| Rajasthan | 58468 | 57600 | 12659 | 11802 | | | 11599 | 11303 | | | 356233 | 328940 | 9960 | 11780 | 39655 | 50095 | 488,574 | 471,520 | -17,054 |
| Tamil Nadu (incl. Chennai) | 547423 | 531136 | 45557 | 41223 | | | 122719 | 120655 | | | 1165205 | 1102690 | 32545 | 36755 | 99310 | 128014 | 2,012,759 | 1,960,473 | -52,286 |
| U.P.(E) | 63353 | 63375 | 2745 | 2701 | | | 8308 | 7575 | | | 277783 | 193146 | 13330 | 13900 | 36200 | 51960 | 401,719 | 332,657 | -69,062 |
| U.P.(W) | 25940 | 28135 | 2118 | 2040 | | | 4820 | 4662 | | | 209990 | 186171 | 5550 | 5460 | 62279 | 101403 | 310,697 | 327,871 | 17,174 |
| Kolkata | 135817 | 133050 | 33239 | 32293 | | | 48882 | 48127 | | | 389392 | 382620 | 11480 | 10700 | 36,071 | 49137 | 654,881 | 655,927 | 1,046 |
| West Bengal | | | 1615 | 1509 | | | 2473 | 2372 | | | 162457 | 182698 | 120 | 120 | 8186 | 12831 | 174,851 | 199,530 | 24,679 |
| Total | 4,392,581 | 4,272,433 | 505,605 | 461,423 | 182,269 | 177,039 | 1,770,108 | 1,725,455 | 3,093,800 | 3,085,995 | 8,727,103 | 8,175,012 | 455,944 | 457,853 | 1,090,677 | 1,455,342 | 20,218,087 | 19,810,552 | -407,535 |

Annexure 1.3: Service Area and Service Provider-wise details of PCOs

| Name of Telecom Service Area | Service Provider | Number of PCOs as on 31.03.2020 | Number of PCOs as on 30.06.2020 | Net PCO increase/ decrease as on 30.06.2020 | Percentage Growth/ Decline as on 30.06.2020 |
|--|------------------------------|---------------------------------|---------------------------------|---|---|
| Andhra Pradesh (Excluding Telangana) | Bharat Sanchar Nigam Limited | 4,677 | 4,359 | -318 | -6.80% |
| | Bharti Airtel | 185 | 0 | -185 | -100.00% |
| Telangana | Bharat Sanchar Nigam Limited | *4,234 | 4,833 | 599 | 14.15% |
| | Bharti Airtel | 0 | 181 | 181 | 100.00% |
| Assam | Bharat Sanchar Nigam Limited | 1,173 | 957 | -216 | -18.41% |
| Bihar (Excluding Jharkhand) | Bharat Sanchar Nigam Limited | 822 | 654 | -168 | -20.44% |
| Jharkhand | Bharat Sanchar Nigam Limited | 2,440 | 2,415 | -25 | -1.02% |
| Delhi | Bharti Airtel | 330 | 330 | 0 | 0.00% |
| | MTNL | 45,602 | 39,537 | -6,065 | -13.30% |
| Gujarat | Bharat Sanchar Nigam Limited | 5,612 | 5,012 | -600 | -10.69% |
| | Bharti Airtel | 14 | 14 | 0 | 0.00% |
| Haryana | Bharat Sanchar Nigam Limited | 732 | 535 | -197 | -26.91% |
| | Bharti Airtel | 137 | 135 | -2 | -1.46% |
| Himachal Pradesh | Bharat Sanchar Nigam Limited | 719 | 641 | -78 | -10.85% |
| Jammu & Kashmir | Bharat Sanchar Nigam Limited | 840 | 478 | -362 | -43.10% |
| Karnataka | Bharat Sanchar Nigam Limited | 11,019 | 10,838 | -181 | -1.64% |
| | Bharti Airtel | 2,978 | 2,848 | -130 | -4.37% |
| Kerala | Bharat Sanchar Nigam Limited | 11,635 | 11,596 | -39 | -0.34% |
| | Bharti Airtel | 395 | 392 | -3 | -0.76% |
| Kolkata | Bharat Sanchar Nigam Limited | 2,078 | 2,061 | -17 | -0.82% |
| | Bharti Airtel | 39 | 36 | -3 | -7.69% |
| Madhya Pradesh (Excluding Chhatisgarh) | Bharat Sanchar Nigam Limited | 8,062 | 7,113 | -949 | -11.77% |
| | Bharti Airtel | 1,305 | 1,210 | -95 | -7.28% |
| Chhatisgarh | Bharat Sanchar Nigam Limited | 894 | 335 | -559 | -62.53% |
| Maharashtra (Excluding Mumbai & Goa) | Bharat Sanchar Nigam Limited | 10,235 | 8,065 | -2,170 | -21.20% |
| | Bharti Airtel | 1 | 0 | -1 | 100.00% |
| Mumbai | Bharti Airtel | 50 | 50 | 0 | 0.00% |
| | MTNL | 16,862 | 16,862 | 0 | 0.00% |
| Goa | Bharat Sanchar Nigam Limited | 589 | 174 | -415 | -70.46% |
| Arunachal Pradesh | Bharat Sanchar Nigam Limited | 908 | 1,045 | 137 | 15.09% |
| Manipur | Bharat Sanchar Nigam Limited | 772 | 772 | 0 | 0.00% |
| Meghalaya | Bharat Sanchar Nigam Limited | 255 | 255 | 0 | 0.00% |
| Mizoram | Bharat Sanchar Nigam Limited | 113 | 109 | -4 | -3.54% |
| Nagaland | Bharat Sanchar Nigam Limited | 0 | 0 | 0 | - |

Annexure 1.3 (contd.)

| Name of Telecom Service Area | Service Provider | Number of PCOs as on 31.03.2020 | Number of PCOs as on 30.06.2020 | Net PCO increase/ decrease as on 30.06.2020 | Percentage Growth/ Decline as on 30.06.2020 |
|--|------------------------------|--|--|--|--|
| Tripura | Bharat Sanchar Nigam Limited | 478 | 477 | -1 | -0.21% |
| Orissa | Bharat Sanchar Nigam Limited | 1,230 | 1,211 | -19 | -1.54% |
| Punjab | Bharat Sanchar Nigam Limited | 1,400 | 1,309 | -91 | -6.50% |
| | Bharti Airtel | 8 | 4 | -4 | -50.00% |
| | Quadrant | 703 | 670 | -33 | -4.69% |
| Rajasthan | Bharat Sanchar Nigam Limited | 1,637 | 1,378 | -259 | -15.82% |
| | Bharti Airtel | 209 | 209 | 0 | 0.00% |
| Tamil Nadu (Excluding Chennai) | Bharat Sanchar Nigam Limited | 17,519 | 16,417 | -1,102 | -6.29% |
| | Bharti Airtel | 3,631 | 2,868 | -763 | -21.01% |
| Chennai | Bharat Sanchar Nigam Limited | 6,841 | 6,841 | 0 | 0.00% |
| Uttar Pradesh East | Bharat Sanchar Nigam Limited | 5,073 | 4,052 | -1,021 | -20.13% |
| | Bharti Airtel | 73 | 70 | -3 | -4.11% |
| Uttar Pradesh West (Excluding Uttarakhand) | Bharat Sanchar Nigam Limited | 1,307 | 1,323 | 16 | 1.22% |
| Uttarakhand | Bharat Sanchar Nigam Limited | 451 | 397 | -54 | -11.97% |
| West Bengal (Excluding Andaman & Nicobar and Sikkim) | Bharat Sanchar Nigam Limited | 1,219 | 830 | -389 | -31.91% |
| Andaman & Nicobar | Bharat Sanchar Nigam Limited | 39 | 39 | 0 | 0.00% |
| Sikkim | Bharat Sanchar Nigam Limited | 0 | 0 | 0 | 0.00% |
| Total | | 1,77,525 | 1,61,937 | -15,588 | -8.78% |
| Total (In Lakhs) | | 1.78 | 1.62 | -0.16 | -8.78% |

* BSNL revised the PCO subscriber figure of Telangana for March 2020 (0 to 4234).

Annexure 1.4: Service Area and Service Provider wise details of Village Public Telephones (VPTs)

| S.No | Name of Telecom Service Area | Service Provider | Number of VPTs as on 31.03.2020 | Number of VPTs as on 30.06.2020 | Net VPTs increase/ decrease as on 30.06.2020 |
|-------------|--|------------------------------|--|--|---|
| 1 | Andhra Pradesh (Excluding Telangana) | Bharat Sanchar Nigam Limited | 2,052 | 2,052 | 0 |
| 2 | Telangana | Bharat Sanchar Nigam Limited | 0 | 844 | 844 |
| 3 | Assam | Bharat Sanchar Nigam Limited | 105 | 105 | 0 |
| 4 | Bihar (Excluding Jharkhand) | Bharat Sanchar Nigam Limited | 5,893 | 5,893 | 0 |
| 5 | Jharkhand | Bharat Sanchar Nigam Limited | 221 | 221 | 0 |
| 6 | Gujarat | Bharat Sanchar Nigam Limited | 5,278 | 5,278 | 0 |
| 7 | Haryana | Bharat Sanchar Nigam Limited | 462 | 462 | 0 |
| 8 | Himachal Pradesh | Bharat Sanchar Nigam Limited | 1,875 | 1,875 | 0 |
| 9 | Jammu & Kashmir | Bharat Sanchar Nigam Limited | 810 | 810 | 0 |
| 10 | Karnataka | Bharat Sanchar Nigam Limited | 3,656 | 3,656 | 0 |
| 11 | Kerala | Bharat Sanchar Nigam Limited | 331 | 331 | 0 |
| 12 | Kolkata | Bharat Sanchar Nigam Limited | 130 | 130 | 0 |
| 13 | Madhya Pradesh (Excluding Chhatisgarh) | Bharat Sanchar Nigam Limited | 9,907 | 9,907 | 0 |
| 14 | Chhatisgarh | Bharat Sanchar Nigam Limited | 193 | 193 | 0 |
| 15 | Maharashtra (Excluding Mumbai & Goa) | Bharat Sanchar Nigam Limited | 7,615 | 7,615 | 0 |
| 16 | Goa | Bharat Sanchar Nigam Limited | 231 | 231 | 0 |
| 17 | Arunachal Pradesh | Bharat Sanchar Nigam Limited | 623 | 623 | 0 |
| 18 | Manipur | Bharat Sanchar Nigam Limited | 93 | 93 | 0 |
| 19 | Meghalaya | Bharat Sanchar Nigam Limited | 207 | 207 | 0 |

Annexure 1.4 (contd.)

| S.No | Name of Telecom Service Area | Service Provider | Number of VPTs as on 31.03.2020 | Number of VPTs as on 30.06.2020 | Net VPTs increase/ decrease as on 30.06.2020 |
|-------------|--|------------------------------|--|--|---|
| 20 | Mizoram | Bharat Sanchar Nigam Limited | 12 | 12 | 0 |
| 21 | Nagaland | Bharat Sanchar Nigam Limited | 25 | 25 | 0 |
| 22 | Tripura | Bharat Sanchar Nigam Limited | 222 | 22 | -200 |
| 23 | Orissa | Bharat Sanchar Nigam Limited | 1,554 | 1,554 | 0 |
| 24 | Punjab | Bharat Sanchar Nigam Limited | 4,493 | 4,493 | 0 |
| 25 | Rajasthan | Bharat Sanchar Nigam Limited | 0 | 0 | 0 |
| 26 | Tamil Nadu (Excluding Chennai) | Bharat Sanchar Nigam Limited | 5,478 | 5,478 | 0 |
| 27 | Uttar Pradesh East | Bharat Sanchar Nigam Limited | 568 | 568 | 0 |
| 28 | Uttar Pradesh West (Excluding Uttarakhand) | Bharat Sanchar Nigam Limited | 1,637 | 1,637 | 0 |
| 29 | Uttarakhand | Bharat Sanchar Nigam Limited | 2,121 | 2,121 | 0 |
| 30 | West Bengal (Excluding Andaman & Nicobar and Sikkim) | Bharat Sanchar Nigam Limited | 11,557 | 11,557 | 0 |
| 31 | Andaman & Nicobar | Bharat Sanchar Nigam Limited | 93 | 93 | 0 |
| 32 | Sikkim | Bharat Sanchar Nigam Limited | 320 | 320 | 0 |
| | Total | | 67,762 | 68,406 | 644 |
| | Total (In Lakh) | | 0.68 | 0.68 | 0.01 |

**Annexure 1.5 : Internet Service Provider(ISP) wise Internet Subscriber base
as on 30.06.2020**

| S.No. | Name of the Service Provider: | Narrowband | Broadband | Total |
|--------------|---|-------------------|------------------|--------------|
| 1 | Reliance Jio Infocomm Ltd | 0 | 398311560 | 398,311,560 |
| 2 | Bharti Airtel Ltd./ Bharti Hexacom Ltd. | 25111862 | 151303479 | 176,415,341 |
| 3 | Vodafone Idea Limited | 19217746 | 116451254 | 135,669,000 |
| 4 | Bharat Sanchar Nigam Ltd. | 6308787 | 22998602 | 29,307,389 |
| 5 | Atria Convergence Technologies Pvt. Ltd. | 0 | 1675141 | 1,675,141 |
| 6 | Hathway Cable & Datacom Pvt. Ltd. | 0 | 993765 | 993,765 |
| 7 | Mahanagar Telephone Nigam Ltd. | 148315 | 827774 | 976,089 |
| 8 | You Broadband India Pvt. Ltd. | 14653 | 801976 | 816,629 |
| 9 | GTPL Broadband Pvt. Ltd. | 0 | 409775 | 409,775 |
| 10 | Excitel Broadband Private Limited | 0 | 392605 | 392,605 |
| 11 | Planet E-Shop Holdings India Ltd. | 0 | 317053 | 317,053 |
| 12 | Tikona Infinet Pvt Ltd | 0 | 294914 | 294,914 |
| 13 | Alliance Broadband Services Pvt. Ltd. | 0 | 242954 | 242,954 |
| 14 | D-Vois Broadband Private Limited | 0 | 231923 | 231,923 |
| 15 | Asianet Satellite Communications Ltd. | 0 | 226212 | 226,212 |
| 16 | INTECH ONLINE PVT LTD | 0 | 219425 | 219,425 |
| 17 | Netplus Broadband Services Pvt. Ltd | 0 | 213749 | 213,749 |
| 18 | Quadrant Televentures Ltd.(HFCL Infotel Ltd.) | 94 | 201119 | 201,213 |
| 19 | Joister Infoserve Pvt. Ltd. | 0 | 194134 | 194,134 |
| 20 | RailTel Corporation of India Ltd. | 0 | 170373 | 170,373 |
| 21 | Indinet Service Pvt Ltd | 0 | 124734 | 124,734 |
| 22 | DEN Broadband Private Limited | 0 | 114287 | 114,287 |
| 23 | Tata Sky Broadband Private Limited | 0 | 85950 | 85,950 |
| 24 | ANI network Pvt Ltd | 0 | 66210 | 66,210 |
| 25 | Five Network Solution (India) Ltd. | 0 | 63842 | 63,842 |
| 26 | Wish Net Pvt. Ltd. | 0 | 61847 | 61,847 |
| 27 | Nextra Teleservices Pvt. Ltd. | 0 | 59460 | 59,460 |
| 28 | Honesty Net Solutions (I) Pvt Ltd | 60 | 48981 | 49,041 |
| 29 | Fusionnet Web Services Pvt. Ltd. | 0 | 45899 | 45,899 |
| 30 | Tata Teleservices Limited | 283 | 69048 | 69,331 |
| 31 | Airlink Communications Pvt. Ltd | 0 | 40090 | 40,090 |
| 32 | AIRNET CABLE AND DATACOM PVT LTD | 0 | 37655 | 37,655 |
| 33 | Limras Eronet Broadband Service Pvt Ltd | 5482 | 29550 | 35,032 |
| 34 | K Net Solutions Pvt. Ltd. | 0 | 34318 | 34,318 |
| 35 | Shyam Spectra Private Limited | 0 | 33119 | 33,119 |
| 36 | Wan and Lan Internet Pvt. Ltd. | 0 | 32413 | 32,413 |
| 37 | Ishan Netsol Pvt Ltd | 0 | 31363 | 31,363 |
| 38 | Digital Satellite Connect Pvt. Ltd. | 0 | 28206 | 28,206 |

| S.No. | Name of the Service Provider: | Narrowband | Broadband | Total |
|--------------|--|-------------------|------------------|--------------|
| 39 | SITI Broadband Services Pvt. Ltd. | 0 | 26452 | 26,452 |
| 40 | Vasai Cable Pvt. Ltd. | 0 | 25409 | 25,409 |
| 41 | MICROSCAN COMPUTERS PVT LTD | 8416 | 15430 | 23,846 |
| 42 | ESTO BROADBAND Pvt. Ltd. | 0 | 23509 | 23,509 |
| 43 | DNA Infotel Pvt Ltd | 0 | 22943 | 22,943 |
| 44 | Ortel Communication Ltd. | 0 | 20448 | 20,448 |
| 45 | Sikka Broadband(P) Ltd. | 0 | 19050 | 19,050 |
| 46 | Rajesh Digital & Data Com Pvt. Ltd. | 18 | 18745 | 18,763 |
| 47 | City Online Services Ltd | 0 | 18228 | 18,228 |
| 48 | Digital Network associates Pvt. Ltd | 0 | 16925 | 16,925 |
| 49 | IKF Technologies Ltd | 0 | 15852 | 15,852 |
| 50 | World Phone Internet Services Pvt Ltd | 0 | 15824 | 15,824 |
| 51 | CSC e-Governance Services India Ltd. | 0 | 15352 | 15,352 |
| 52 | Quest Consultancy Pvt. Ltd. | 0 | 14991 | 14,991 |
| 53 | Meghbela Cable & Broadband Servies (P) Ltd | 0 | 14618 | 14,618 |
| 54 | Tata Communications Limited | 153 | 13484 | 13,637 |
| 55 | RI Networks Pvt Ltd | 0 | 12570 | 12,570 |
| 56 | Sai Prasad Internet Services Pvt. Ltd. | 0 | 12467 | 12,467 |
| 57 | Tachyon Communications Pvt. Ltd. | 0 | 12146 | 12,146 |
| 58 | Yashash Cable Network Pvt Ltd | 0 | 11992 | 11,992 |
| 59 | Shree Omkar Infocom Pvt. Ltd. | 0 | 10292 | 10,292 |
| 60 | Pioneerelabs | 351 | 9643 | 9,994 |
| 61 | United Telecoms Ltd. | 0 | 9889 | 9,889 |
| 62 | Intermedia Cable Communication Pvt Ltd | 0 | 9838 | 9,838 |
| 63 | North East Dataa Network Pvt Ltd. | 0 | 9613 | 9,613 |
| 64 | Readylink Internet Services Pvt Ltd | 0 | 9101 | 9,101 |
| 65 | Geocity Network Solutions Pvt. Ltd. | 0 | 9072 | 9,072 |
| 66 | Net 9 Online Hathway Private Limited | 0 | 8593 | 8,593 |
| 67 | WOW SOLUTIONS & SYSTEM PVT LTD | 0 | 8214 | 8,214 |
| 68 | DL GTPL BROADBAND PVT LTD | 0 | 8094 | 8,094 |
| 69 | Veloxr Telecom Pvt. Ltd. (Shree Balaji Infoway Pvt Ltd.) | 0 | 7702 | 7,702 |
| 70 | Cityzone Infonet Pvt. Ltd | 0 | 7674 | 7,674 |
| 71 | Jetway Broadband India Pvt.Ltd. | 0 | 7641 | 7,641 |
| 72 | Limerick Technologies Pvt Ltd | 0 | 7627 | 7,627 |
| 73 | Swiftmail Communications Ltd. | 2579 | 5044 | 7,623 |
| 74 | FOXTEL TELECOMMUNICATIONS PVT LTD | 7325 | 0 | 7,325 |
| 75 | Reliance Communications Limited | 192 | 7062 | 7,254 |
| 76 | SSCN PVT LTD | 0 | 7015 | 7,015 |
| 77 | Apna Telelink Ltd. | 0 | 6702 | 6,702 |
| 78 | Spiderlink Networks Pvt. Ltd. | 0 | 6561 | 6,561 |

| S.No. | Name of the Service Provider: | Narrowband | Broadband | Total |
|--------------|---|-------------------|------------------|--------------|
| 79 | Kappa Internet Services Pvt Ltd. | 0 | 6541 | 6,541 |
| 80 | Angel Air Network Solutions Private Limited | 0 | 5509 | 5,509 |
| 81 | Broadband Pacenet (I) Pvt. Ltd. | 0 | 5323 | 5,323 |
| 82 | Multicraft Digital Technologies Private Limited | 0 | 4865 | 4,865 |
| 83 | Swiftnet Broadband Pvt Ltd | 0 | 4795 | 4,795 |
| 84 | IAXN Telecom Pvt. Ltd. | 0 | 4766 | 4,766 |
| 85 | Siliguri Internet & Cable TV Pvt. Ltd. | 0 | 4742 | 4,742 |
| 86 | Sifi Online Pvt. Ltd. | 0 | 4692 | 4,692 |
| 87 | Mukand Infotel Pvt. Ltd. | 4355 | 0 | 4,355 |
| 88 | Multinet (Udaipur) Pvt. Ltd. | 0 | 4334 | 4,334 |
| 89 | SUPER SONIC BROADBAND PVT LTD | 0 | 4089 | 4,089 |
| 90 | SONALI INTERNET SERVICES PVT LTD | 0 | 4042 | 4,042 |
| 91 | LM Energy and Software Pvt. Ltd. | 0 | 4032 | 4,032 |
| 92 | Blazenet Ltd. | 0 | 4017 | 4,017 |
| 93 | Bittel Telecom Pvt.Ltd | 0 | 4015 | 4,015 |
| 94 | Shine Communications Pvt. Ltd. | 0 | 3983 | 3,983 |
| 95 | GBPS Networks Pvt. Ltd. | 0 | 3871 | 3,871 |
| 96 | Five Net Service Provider Pvt. Ltd. | 0 | 3848 | 3,848 |
| 97 | Pink Broadband Services Pvt. Ltd. | 1890 | 1890 | 3,780 |
| 98 | CHANNEL III INTERNET PVT LTD | 0 | 3671 | 3,671 |
| 99 | Juweriyah Networks Pvt Ltd | 0 | 3517 | 3,517 |
| 100 | Vision Smartlink Networking Pvt. Ltd. | 0 | 3481 | 3,481 |
| 101 | WSNS Pvt. Ltd. | 0 | 3402 | 3,402 |
| 102 | Rainbow Internet teleservices Pvt Ltd | 16 | 3184 | 3,200 |
| 103 | Star Broadband Services (I) Pvt Ltd | 0 | 3076 | 3,076 |
| 104 | GETWAY BROADBAND PVT LTD | 0 | 3056 | 3,056 |
| 105 | Spacenet Internet Services Pvt Ltd | 0 | 2932 | 2,932 |
| 106 | Airgenie Communications Pvt. Ltd. | 0 | 2877 | 2,877 |
| 107 | CANDOR INFOSOLUTION PVT LTD | 2836 | 0 | 2,836 |
| 108 | VRD Web Services Private Limited | 0 | 2782 | 2,782 |
| 109 | S.S.Netcom Pvt Ltd | 0 | 2704 | 2,704 |
| 110 | TGN NETWORKS PVT LTD | 0 | 2679 | 2,679 |
| 111 | Chandra Net Pvt. Limited | 0 | 2435 | 2,435 |
| 112 | TRANSMEDIA TECHNOLOGIES (AP) PVT LTD | 0 | 2427 | 2,427 |
| 113 | NISS INTERNET SERVICES PVT. LTD. | 0 | 2392 | 2,392 |
| 114 | Blu Ultraband Internet Services Private Limited | 0 | 2234 | 2,234 |
| 115 | INET FIBER INDIA PVT LTD | 0 | 2156 | 2,156 |
| 116 | Jetspot Networks Pvt. Ltd. | 0 | 2098 | 2,098 |
| 117 | SMARTLINK SOLUTIONS PVT. LTD. | 0 | 1965 | 1,965 |
| 118 | Symbois Creations Pvt. Ltd. | 0 | 1847 | 1,847 |

| S.No. | Name of the Service Provider: | Narrowband | Broadband | Total |
|--------------|---|-------------------|------------------|--------------|
| 119 | Speed Online.net Pvt. Ltd. | 0 | 1812 | 1,812 |
| 120 | Capture Network Systems Pvt. Ltd. | 288 | 1517 | 1,805 |
| 121 | Southern Online Bio Technologies Ltd. | 0 | 1799 | 1,799 |
| 122 | F/X Wireless Technology Services Pvt. Ltd. | 0 | 1705 | 1,705 |
| 123 | Assistive networks & technologie Pvt Ltd | 0 | 1701 | 1,701 |
| 124 | Elyzium Technologies Pvt. Ltd. | 0 | 1675 | 1,675 |
| 125 | Smart Net India Pvt Ltd | 0 | 1671 | 1,671 |
| 126 | Ultraneet Infotech Solution Private Limited | 0 | 1600 | 1,600 |
| 127 | Nettlinx Ltd. | 0 | 1591 | 1,591 |
| 128 | Radinet Info Solutions Pvt Ltd | 0 | 1581 | 1,581 |
| 129 | DNS SKYLINK PVT. LTD. | 0 | 1580 | 1,580 |
| 130 | Touch Net India Pvt. Ltd. | 0 | 1570 | 1,570 |
| 131 | Datawave IT solutions Pvt. Ltd. | 775 | 775 | 1,550 |
| 132 | delDSL Internet Pvt Ltd | 0 | 1521 | 1,521 |
| 133 | Sphier Infotech Pvt. Ltd. | 0 | 1515 | 1,515 |
| 134 | GALAXYNET CONNECTIONS PVT LTD | 0 | 1497 | 1,497 |
| 135 | Fiberzone Communications Pvt. Ltd. | 0 | 1471 | 1,471 |
| 136 | Deenet Services Pvt Ltd | 0 | 1447 | 1,447 |
| 137 | Netfirre Communications Pvt. Ltd. | 0 | 1408 | 1,408 |
| 138 | Bakcom Networks India Pvt Ltd | 0 | 1398 | 1,398 |
| 139 | GIGACAST NETWORK PVT LTD | 0 | 1360 | 1,360 |
| 140 | Click4Net Internet Services Private Limited | 0 | 1340 | 1,340 |
| 141 | Skylink Fibernet Pvt. Ltd. | 0 | 1307 | 1,307 |
| 142 | SCUD COMMUNICATION PVT LTD | 0 | 1303 | 1,303 |
| 143 | Wnet Telecom Private Limited | 0 | 1283 | 1,283 |
| 144 | MAKS COMMUNICATIONS PVT.LTD. | 0 | 1248 | 1,248 |
| 145 | Hughes Communications India Ltd. | 119 | 1096 | 1,215 |
| 146 | Zoram Business Enterprise Private Limited | 0 | 1200 | 1,200 |
| 147 | Aerocast Networks Pvt Ltd. | 0 | 1162 | 1,162 |
| 148 | DA Smartzone Pvt Ltd | 0 | 1158 | 1,158 |
| 149 | STN Infotech Pvt. Ltd | 0 | 1151 | 1,151 |
| 150 | SS FIBER NET OPTICAL COMMUNICATION PVT. LTD | 0 | 1124 | 1,124 |
| 151 | HARDWORK CABLE & INTERNET SERVICES PVT LTD | 0 | 1109 | 1,109 |
| 152 | Craze IT Solutions Pvt Ltd | 0 | 1100 | 1,100 |
| 153 | CJ Online Pvt. Ltd. | 0 | 1082 | 1,082 |
| 154 | Karunay Internet Private Limited | 0 | 1080 | 1,080 |
| 155 | Aeroway Networks Pvt Ltd. | 0 | 1063 | 1,063 |
| 156 | Rajesh Patel Net Services Pvt. Ltd. | 11 | 991 | 1,002 |
| 157 | NGC Broadband Pvt. Ltd. | 0 | 997 | 997 |

| S.No. | Name of the Service Provider: | Narrowband | Broadband | Total |
|--------------|--|-------------------|------------------|--------------|
| 158 | Correl IT Services Pvt. Ltd. | 0 | 975 | 975 |
| 159 | AHM Digital Network Pvt Ltd | 0 | 970 | 970 |
| 160 | ACN Fiber Pvt. Ltd. | 0 | 949 | 949 |
| 161 | Grace Teleinfra Pvt Ltd | 0 | 927 | 927 |
| 162 | Packenet Solutions Pvt. Ltd. | 0 | 923 | 923 |
| 163 | FASTNET COMMUNICATION PVT LTD | 225 | 694 | 919 |
| 164 | Sanchit Infocom Pvt Ltd | 0 | 909 | 909 |
| 165 | HOSTAXIS NETWORKS PVT LTD | 0 | 890 | 890 |
| 166 | Ficus Telecom Pvt. Ltd. | 0 | 873 | 873 |
| 167 | Japra Tele Link Pvt. Ltd. | 0 | 869 | 869 |
| 168 | Amar Broadband Private Limited | 0 | 863 | 863 |
| 169 | SKY ONLINE TECHNOSYSTEM PVT LTD | 0 | 863 | 863 |
| 170 | Telosity Telecom Pvt. Ltd. | 0 | 863 | 863 |
| 171 | JBN Online Private Limited. | 0 | 857 | 857 |
| 172 | DREAMLINK TECHNOLOGIES PVT LTD | 0 | 848 | 848 |
| 173 | ADRI INFOCOM PVT. LTD. | 0 | 845 | 845 |
| 174 | NetMagic Solutions(P) Ltd. | 0 | 833 | 833 |
| 175 | Touchnet Broadband Services Pvt Ltd | 0 | 804 | 804 |
| 176 | Light Air Transmission Pvt. Ltd. | 396 | 396 | 792 |
| 177 | Ani Broadband Service Pvt. Ltd. | 0 | 763 | 763 |
| 178 | SVD DIGITAL NETWORKS PVT LTD | 0 | 758 | 758 |
| 179 | Spirenet Digital Communication Pvt Ltd | 0 | 752 | 752 |
| 180 | Darer Internet Services Pvt. Ltd. | 0 | 718 | 718 |
| 181 | CLOUDNET COMMUNICATIONS PVT LTD | 0 | 714 | 714 |
| 182 | Unitel Media Pvt Ltd | 0 | 707 | 707 |
| 183 | SEFARO NETWORKS PRIVATE LTD | 0 | 700 | 700 |
| 184 | Acegen Broadband Pvt. Ltd | 0 | 683 | 683 |
| 185 | HPS DIGITAL BROADBAND PVT LTD | 0 | 672 | 672 |
| 186 | Primenet Global Ltd. | 0 | 668 | 668 |
| 187 | Rida Communication Pvt. Ltd. | 0 | 657 | 657 |
| 188 | iAIRONET COMMUNICATION PVT LTD | 0 | 631 | 631 |
| 189 | Speedmaxx Digital Networks Pvt Ltd | 0 | 628 | 628 |
| 190 | Wi-Link Network Pvt. Ltd | 0 | 614 | 614 |
| 191 | NETVISION AWADH NETWORKS PVT LTD | 137 | 474 | 611 |
| 192 | WEBRIDERS INTERNET PVT LTD | 0 | 594 | 594 |
| 193 | Reticule Infotech Pvt. Ltd. | 0 | 580 | 580 |
| 194 | Alphanet Broadband Pvt Ltd | 0 | 571 | 571 |
| 195 | DATAMAX TECHNOLOGY PVT LTD | 63 | 504 | 567 |
| 196 | Daksh Broadband Services Pvt Ltd | 0 | 555 | 555 |
| 197 | Alegra Communication Pvt Ltd | 0 | 552 | 552 |
| 198 | Digital2Virtual ISP Pvt. Ltd. | 0 | 549 | 549 |

| S.No. | Name of the Service Provider: | Narrowband | Broadband | Total |
|--------------|--|-------------------|------------------|--------------|
| 199 | Panav Network and Communications Private Limited | 0 | 548 | 548 |
| 200 | VIVA Communications Pvt Ltd | 0 | 542 | 542 |
| 201 | SOUTHNET BROADBAND PVT LTD | 0 | 540 | 540 |
| 202 | Shree Manoranjan Broadband Pvt Ltd | 0 | 538 | 538 |
| 203 | Power Grid Corporation of India Ltd. | 0 | 530 | 530 |
| 204 | VARESHA AIR WORLD NETWORKS PVT LTD | 20 | 509 | 529 |
| 205 | Data Ingenious Global Ltd | 4 | 508 | 512 |
| 206 | ELECON INFOTMATION TECHNOLOGY LTD | 0 | 484 | 484 |
| 207 | Sify Technologies Ltd. | 251 | 227 | 478 |
| 208 | HELM CONSULTANTS PVT LTD | 467 | 0 | 467 |
| 209 | Amityhua Electronics Pvt. Ltd. | 0 | 460 | 460 |
| 210 | Oasis Cable Pvt Ltd. | 0 | 445 | 445 |
| 211 | Tamana Winet Pvt. Ltd. | 0 | 436 | 436 |
| 212 | REVOLUTION BROADBAND PVT LTD | 0 | 429 | 429 |
| 213 | Quick Link Broadband And Services Pvt. Ltd | 0 | 424 | 424 |
| 214 | Lotus Broadband Pvt Ltd | 0 | 419 | 419 |
| 215 | Oistel Telecom Pvt. Ltd. | 203 | 203 | 406 |
| 216 | Spider Broadband and Cable Pvt Ltd | 0 | 404 | 404 |
| 217 | Pulse Telesystems Pvt. Ltd. | 0 | 401 | 401 |
| 218 | STN Communication & Advertising Pvt Ltd. | 0 | 401 | 401 |
| 219 | CNS INFOTEL SERVICES PVT LTD | 0 | 392 | 392 |
| 220 | MORADABAD INTERNET DERVICES PVT LTD | 0 | 384 | 384 |
| 221 | Nandini Broadband Pvt Ltd | 0 | 382 | 382 |
| 222 | SmartLink Broadband Services | 0 | 376 | 376 |
| 223 | Bhiwani Communications Pvt. Ltd. | 0 | 375 | 375 |
| 224 | Gorakhpur Net Services Pvt. Ltd. | 0 | 375 | 375 |
| 225 | WINDSOR INTERNET PVT LTD | 0 | 374 | 374 |
| 226 | Citylink Broadband Services Pvt. Ltd. | 0 | 360 | 360 |
| 227 | Bass Networks Pvt Ltd | 0 | 352 | 352 |
| 228 | BASS JOKERNET PRIVATE LIMITED | 0 | 345 | 345 |
| 229 | Sysnet Broadband Services Pvt. Ltd. | 0 | 340 | 340 |
| 230 | Sai Akshay Internet Services Pvt Ltd. | 0 | 332 | 332 |
| 231 | CATLA IT&ENGG. CO. PVT LTD. | 0 | 327 | 327 |
| 232 | Twincity Communication Private Limited | 0 | 325 | 325 |
| 233 | Gleam Worldwide Services Pvt. Ltd. | 0 | 309 | 309 |
| 234 | SHEEN TELECOM CONSULTANTS PVT LTD | 0 | 292 | 292 |
| 235 | WAVETREE NETWORKS PVT LTD | 0 | 291 | 291 |
| 236 | Dhanam Internet Services India Pvt. Ltd. | 0 | 289 | 289 |

| S.No. | Name of the Service Provider: | Narrowband | Broadband | Total |
|--------------|--|-------------------|------------------|--------------|
| 237 | ALWAR ONLINE PVT LTD | 0 | 283 | 283 |
| 238 | Antariksh Broadband & Wireless Solutions Pvt Ltd | 280 | 0 | 280 |
| 239 | Goodwill Smartlink Pvt. Ltd. | 0 | 277 | 277 |
| 240 | Sense Connect IT Pvt. Ltd. | 0 | 267 | 267 |
| 241 | PANCHSHEEL BROADBAND SERVICES'S PVT LTD. | 0 | 260 | 260 |
| 242 | Singh Internet Services Pvt. Ltd. | 0 | 260 | 260 |
| 243 | Cityline Networks Pvt Ltd | 0 | 251 | 251 |
| 244 | Faconet Internet Pvt Ltd | 0 | 245 | 245 |
| 245 | VISPUTES INTERNET PRIVATE LIMITED | 0 | 245 | 245 |
| 246 | Airmesh Communications Limited | 0 | 241 | 241 |
| 247 | AUSPICE INFRATAL PVT LTD | 0 | 232 | 232 |
| 248 | Gazillio Technologies Pvt. Ltd. | 0 | 232 | 232 |
| 249 | Allied IT Infrastructures & Services Pvt. Ltd. | 0 | 231 | 231 |
| 250 | NEXTGEN COMPUSOFT PVT LTD | 0 | 231 | 231 |
| 251 | Khetan Cable Network (P) Ltd | 0 | 228 | 228 |
| 252 | Shineplus Networks Pvt Ltd | 0 | 225 | 225 |
| 253 | VMO BROADBAND PVT LTD | 225 | 0 | 225 |
| 254 | ANUSHREE DIGITAL NETWORK PVT LTD | 0 | 222 | 222 |
| 255 | ACEBROWSE PVT LTD | 0 | 219 | 219 |
| 256 | Smart Wi5 Pvt. Ltd. | 0 | 218 | 218 |
| 257 | CIT SOLUTIONS PVT. LTD. | 0 | 217 | 217 |
| 258 | Suncity Broadband Pvt Ltd. | 0 | 215 | 215 |
| 259 | Srinagar Technology Consultants Ltd | 213 | 0 | 213 |
| 260 | Wi5 Internet Services P Limited | 0 | 212 | 212 |
| 261 | CERALINK COMMUNICATION PVT LTD | 0 | 210 | 210 |
| 262 | Imperium Digital Network Pvt. Ltd. | 0 | 209 | 209 |
| 263 | Microsense Pvt. Ltd. | 0 | 209 | 209 |
| 264 | Saibaba Broadband Pvt. Ltd. | 0 | 206 | 206 |
| 265 | JB Jain Broadband Solutions Private Limited. | 0 | 200 | 200 |
| 266 | Fastx Broadband Private Limited | 0 | 199 | 199 |
| 267 | PROLINE DATATECH SERCIVCES PVT LTD | 0 | 193 | 193 |
| 268 | Netrexo Communications Pvt. Ltd. | 0 | 191 | 191 |
| 269 | Barani Data Solutions Private Limited | 190 | 0 | 190 |
| 270 | Development Logics Solutions Pvt Ltd | 0 | 186 | 186 |
| 271 | Kataria Net Solutions Pvt. Ltd. | 0 | 183 | 183 |
| 272 | Satpar Infotech Pvt Ltd | 0 | 183 | 183 |
| 273 | Verizon Communications India Pvt. Ltd. | 0 | 178 | 178 |
| 274 | Optisky Fiber Pvt Ltd | 0 | 168 | 168 |
| 275 | AIRMAX INTERNET PVT LTD | 160 | 0 | 160 |

| S.No. | Name of the Service Provider: | Narrowband | Broadband | Total |
|--------------|--|-------------------|------------------|--------------|
| 276 | Nanjil Internet Services Pvt. Ltd. | 0 | 158 | 158 |
| 277 | PMG NETWORKD PVT LTD | 0 | 154 | 154 |
| 278 | Achiever Communication and Services Pvt. Ltd. | 0 | 139 | 139 |
| 279 | Global India Tele Infra Pvt. Ltd. | 36 | 100 | 136 |
| 280 | Texas Connect Private Limited | 112 | 24 | 136 |
| 281 | NR DATA SERVICE PVT LTD | 0 | 135 | 135 |
| 282 | AT&T Global Network Services India Private Limited | 0 | 134 | 134 |
| 283 | Shri Vinayagaa Internet Pvt Ltd | 0 | 131 | 131 |
| 284 | MLC INTERNET PVT LTD | 0 | 126 | 126 |
| 285 | Sri Ram Broadband Services Pvt. Ltd. | 0 | 126 | 126 |
| 286 | Mediatech Communication Pvt. Ltd. | 0 | 125 | 125 |
| 287 | Micronova Network Solutions Ltd | 4 | 116 | 120 |
| 288 | ROYAL WIRELESS SERVICES PVT LTD | 0 | 120 | 120 |
| 289 | V NET NETWORKS PVT. LTD | 0 | 118 | 118 |
| 290 | Shri Ram Braoadband Services Pvt Ltd | 0 | 112 | 112 |
| 291 | White Stallion Networks Pvt. Ltd. | 0 | 112 | 112 |
| 292 | Malang Solutions Pvt. Ltd. | 0 | 107 | 107 |
| 293 | Pronoc Technologies Pvt. Ltd. | 0 | 107 | 107 |
| 294 | Omkar Net Services Pvt. Ltd. | 0 | 99 | 99 |
| 295 | SATH TECHNOLOGIES PVT LTD | 0 | 99 | 99 |
| 296 | Veer Point Pvt. Ltd. | 0 | 99 | 99 |
| 297 | Shreepad Communication Pvt. Ltd. | 0 | 98 | 98 |
| 298 | DRONAGIRI INFOTECH PVT LTD | 0 | 95 | 95 |
| 299 | Cheetah Networks Pvt Ltd | 0 | 94 | 94 |
| 300 | ERNET India | 49 | 42 | 91 |
| 301 | INFINITY WIRELESS SERVICES PVT. LTD. | 0 | 89 | 89 |
| 302 | AirFiber IT Solutions Pvt. Ltd | 0 | 87 | 87 |
| 303 | Invensys Networks pvt ltd | 0 | 87 | 87 |
| 304 | KKM Broadband Internet Pvt Ltd | 0 | 87 | 87 |
| 305 | Airtechzone Services India Pvt Ltd | 85 | 0 | 85 |
| 306 | ARP INFONET PVT. LTD. | 0 | 84 | 84 |
| 307 | Vidarbha Wi-Fi & Network Services Pvt. Ltd. | 84 | 0 | 84 |
| 308 | Dream Plus Multi Services Pvt. Ltd. | 0 | 82 | 82 |
| 309 | Classic Internet and Cable Services Pvt Ltd | 81 | 0 | 81 |
| 310 | M-TEL Networks (P) Ltd | 0 | 80 | 80 |
| 311 | NETWIRE INTERNET SOLUTIONS PVT. LTD. | 0 | 79 | 79 |
| 312 | Zoram Infonet Pvt Ltd | 0 | 75 | 75 |
| 313 | Mtel Networks Pvt. Ltd. | 0 | 73 | 73 |
| 314 | TRIPLE LINK PVT LTD | 0 | 73 | 73 |

| S.No. | Name of the Service Provider: | Narrowband | Broadband | Total |
|--------------|---|-------------------|------------------|--------------|
| 315 | S A INTERNET SOLUTION PVT LTD | 0 | 72 | 72 |
| 316 | Hipath Netcom Services Pvt. Ltd. | 0 | 71 | 71 |
| 317 | BSL Technologies Pvt. Ltd. | 0 | 66 | 66 |
| 318 | Wireline Solution(India) Pvt. Ltd. | 0 | 65 | 65 |
| 319 | Infiber Broadnet Pvt. Ltd. | 0 | 56 | 56 |
| 320 | QBC Infotech Pvt. Ltd. | 0 | 53 | 53 |
| 321 | City Broadband Pvt. Ltd. | 0 | 52 | 52 |
| 322 | Divine Broadband Services Pvt Ltd | 0 | 45 | 45 |
| 323 | Edge Telecommunications Pvt. Ltd. | 0 | 42 | 42 |
| 324 | GURU NETCOMM PVT LTD | 0 | 41 | 41 |
| 325 | Sun Boardband and Data Services Pvt Ltd | 0 | 39 | 39 |
| 326 | Mesh Infranet Pvt Ltd | 0 | 36 | 36 |
| 327 | Navariya Satellite Services Pvt.Ltd. | 33 | 0 | 33 |
| 328 | Dreamnet Pvt.Ltd. | 0 | 30 | 30 |
| 329 | Sanyog Networks Pvt Ltd | 0 | 29 | 29 |
| 330 | Orange Business Services India Network Pvt. Ltd. | 0 | 28 | 28 |
| 331 | Prompt Infracom Pvt Ltd | 0 | 28 | 28 |
| 332 | WE INTERNET LIMITED | 0 | 27 | 27 |
| 333 | West Bengal Electronics Industry Development Corp. Ltd. | 0 | 25 | 25 |
| 334 | Angrow Netcomm Pvt. Ltd. | 24 | 0 | 24 |
| 335 | JAI MATA DI TELETRONIX PVT LTD | 0 | 23 | 23 |
| 336 | Pacific Internet India Pvt. Ltd. | 0 | 23 | 23 |
| 337 | SKYNETZONE WIFI SERVICES PVT LTD | 0 | 20 | 20 |
| 338 | FASTHOOK NETWORKS PVT LTD | 0 | 18 | 18 |
| 339 | Tatanet Services Ltd | 0 | 18 | 18 |
| 340 | Hienet Internet Services Pvt Ltd | 0 | 16 | 16 |
| 341 | Kartik Network Pvt. Ltd. | 0 | 16 | 16 |
| 342 | Microtel Internet Network Pvt ltd | 0 | 15 | 15 |
| 343 | Adya Tech One Services Pvt Ltd | 0 | 13 | 13 |
| 344 | Airlink Broadband Pvt Ltd | 0 | 12 | 12 |
| 345 | Marutham Networks Pvt. Ltd. | 0 | 12 | 12 |
| 346 | UBERCORE DATA LABS PVT LTD | 0 | 12 | 12 |
| 347 | Clear Beam Communication Pvt Ltd | 10 | 0 | 10 |
| 348 | A TO Z INFOLINK PVT.LTD. | 0 | 9 | 9 |
| 349 | Rajdhani Telecom Pvt. Ltd. | 2 | 6 | 8 |
| 350 | Essel Shyam Communications Limited | 0 | 7 | 7 |
| 351 | Financial Technologies Communications Ltd. | 0 | 7 | 7 |
| 352 | Critel Technologies Pvt. Ltd. | 0 | 5 | 5 |
| 353 | Mastek Infosystems OPC Pvt. Ltd. | 0 | 5 | 5 |
| 354 | Cloudcast Digital Ltd | 0 | 4 | 4 |

| S.No. | Name of the Service Provider: | Narrowband | Broadband | Total |
|--------------|--|-------------------|------------------|--------------------|
| 355 | INSTANET TECHNOLOGIES PRIVATE LIMITED | 0 | 4 | 4 |
| 356 | ABT Ltd. | 3 | 0 | 3 |
| 357 | Aristo Telenet Pvt Ltd | 0 | 3 | 3 |
| 358 | Sabse Internet Services Provider Pvt Ltd | 0 | 2 | 2 |
| | Total | 50839963 | 698230938 | 749,070,901 |
| | Total (in million) | 50.840 | 698.231 | 749.071 |

**Annexure 1.6: List of Service Providers which reported IP Telephony
Minutes for Q.E. Jun-20**

| S. No. | Name of Service Providers reported IP Telephony Minutes as on 30th June 2020 |
|---------------|--|
| 1 | Alliance Broadband Services Pvt. Ltd. |
| 2 | Asianet Satellite Communications Ltd. |
| 3 | Blazenet Ltd. |
| 4 | City Online Services Ltd. |
| 5 | Citycom Networks Pvt. Ltd. |
| 6 | delDSL Internet Pvt Ltd |
| 7 | Novanet Ltd. |
| 8 | Pulse Telesystems Pvt. Ltd. |
| 9 | Sify Technologies Ltd. |
| 10 | Tata Communications Limited |
| 11 | Trikon Electronics Pvt. Ltd. |
| 12 | VIVA Communications Pvt. Ltd. |
| 13 | World Phone Internet Services Pvt. Ltd. |
| 14 | You Broadband & Cable India Pvt. Ltd. |
| 15 | Warmconnect Internet Services Pvt. Ltd. |

Annexure 1.7: Service Area wise PMRTS subscriber Base

| S.No. | DOT Licensed Service Area | Area Served | Service Provider | Subscriber Base | |
|--------------------|---------------------------|----------------|--|-----------------|---------------|
| | | | | 31.03.2020 | 30.06.2020 |
| 1 | Andhra Pradesh | Hyderabad | Arya Omnitalk Radio Trunking Services Pvt.Ltd. | 2,771 | 2,736 |
| | | | QuickCall | 932 | 975 |
| | | Visakhapatnam | Arya Omnitalk Radio Trunking Services Pvt.Ltd. | | 4,477 |
| | | Vishakhapatnam | Arya Omnitalk Radio Trunking Services Pvt.Ltd. | 4,658 | |
| Total | | | 8,361 | 8,188 | |
| 2 | Delhi | Delhi | Arya Omnitalk Radio Trunking Services Pvt.Ltd. | 8,442 | 7,972 |
| | | | Procall Ltd. | 2,923 | 2,942 |
| | | Total | | | 11,365 |
| 3 | Gujarat | Ahmedabad | Arya Omnitalk Radio Trunking Services Pvt.Ltd. | 1,226 | 1,134 |
| | | Bharuch | Arya Omnitalk Radio Trunking Services Pvt.Ltd. | 1,491 | 1,503 |
| | | Dahej | Arya Omnitalk Radio Trunking Services Pvt.Ltd. | 1,005 | 1,005 |
| | | Jamnagar | Inative Networks Pvt. Ltd. | 360 | 360 |
| | | Kutch | Inative Networks Pvt. Ltd. | 205 | 205 |
| | | Surat | Arya Omnitalk Radio Trunking Services Pvt.Ltd. | 1,750 | 1,658 |
| | | Surat | Inative Networks Pvt. Ltd. | 895 | 895 |
| | | Vadodara | Arya Omnitalk Radio Trunking Services Pvt.Ltd. | 1,750 | 1,678 |
| | | Vadodara | Inative Networks Pvt. Ltd. | 360 | 360 |
| Total | | | 9,042 | 8,798 | |
| 4 | Karnataka | Bangalore | Arya Omnitalk Radio Trunking Services Pvt.Ltd. | 7,444 | 7,266 |
| | | | QuickCall | 642 | 604 |
| | | Total | | | 8,086 |
| 5 | Kerala | Ernakulam | Arya Omnitalk Radio Trunking Services Pvt.Ltd. | 976 | 989 |
| | | Kerala | Wiwonet Solutions Pvt. Ltd | 457 | 460 |
| | | Total | | | 1433 |
| 6 | Kolkata | Kolkata | Arya Omnitalk Radio Trunking Services Pvt.Ltd. | 2,326 | 2,236 |
| 7 | Madhya Pradesh | Indore | Arya Omnitalk Radio Trunking Services Pvt.Ltd. | 1,643 | 1,475 |
| 8 | Maharashtra | Pune | Arya Omnitalk Radio Trunking Services Pvt.Ltd. | 2,277 | 2,173 |
| | | | Smartalk Pvt Ltd. | 525 | 605 |
| | | Total | | | 6,771 |
| 9 | Mumbai | Mumbai | Airtalk Solutions & Services Pvt. Ltd. | 495 | 416 |
| | | | Arya Omnitalk Radio Trunking Services Pvt.Ltd. | 9,647 | 9,277 |
| | | | Bhilwara Telenet Services Pvt.Ltd. | 868 | 883 |
| | | | Smartalk Pvt Ltd. | 668 | 755 |
| | | | Total | | |
| 10 | Rajasthan | Jaipur | Arya Omnitalk Radio Trunking Services Pvt.Ltd. | 884 | 863 |
| | | | Procall Ltd. | 326 | 355 |
| | | Total | | | 1210 |
| 11 | Tamil Nadu | Chennai | Arya Omnitalk Radio Trunking Services Pvt.Ltd. | 8,106 | 8,073 |
| | | | QuickCall | 524 | 508 |
| | | Total | | | 8,630 |
| Grand Total | | | | 66,576 | 64,838 |

**Annexure 2.1: Wireless Revenue Service - Service Area wise Statistics for
QE June, 2020**

Key parameters for service areas of category-A

| Service Area | % of pre-paid in total subscribers | ARPU (₹ per month) | Total usage (from & outside HSA) per subscriber per month | | | |
|--------------------|------------------------------------|--------------------|---|--------------|--------------|-----------|
| | | | Outgoing SMS | Outgoing MOU | Incoming MOU | Total MOU |
| AP | 95.94 | 107 | 18 | 341 | 341 | 682 |
| Gujarat | 95.89 | 91 | 15 | 332 | 294 | 627 |
| Karnataka | 94.00 | 105 | 20 | 351 | 339 | 690 |
| MH | 95.87 | 99 | 17 | 327 | 317 | 644 |
| TN (incl. Chennai) | 94.54 | 110 | 16 | 333 | 333 | 666 |

Key parameters for service areas of category-B

| Service Area | % of pre-paid in total Subscribers | ARPU (₹ per month) | Total usage (from & outside HSA) per subscriber per month | | | |
|--------------|------------------------------------|--------------------|---|--------------|--------------|-----------|
| | | | Outgoing SMS | Outgoing MOU | Incoming MOU | Total MOU |
| Haryana | 97.12 | 77 | 10 | 343 | 336 | 678 |
| Kerala | 97.56 | 95 | 11 | 270 | 277 | 547 |
| MP | 98.25 | 88 | 17 | 363 | 367 | 730 |
| Punjab | 96.43 | 94 | 10 | 348 | 338 | 687 |
| Rajasthan | 97.96 | 92 | 13 | 343 | 344 | 687 |
| UP(E) | 98.09 | 72 | 12 | 412 | 452 | 864 |
| UP(W) | 97.99 | 84 | 13 | 360 | 365 | 725 |
| WB | 99.46 | 90 | 17 | 388 | 410 | 798 |

Key parameters for service areas of category-C

| Service Area | % of pre-paid in total subscribers | ARPU (₹ per month) | Total usage (from & outside HSA) per subscriber per month | | | |
|--------------|------------------------------------|--------------------|---|--------------|--------------|-----------|
| | | | Outgoing SMS | Outgoing MOU | Incoming MOU | Total MOU |
| Assam | 98.08 | 98 | 30 | 394 | 419 | 813 |
| Bihar | 99.09 | 82 | 12 | 472 | 524 | 996 |
| HP | 99.11 | 80 | 9 | 294 | 293 | 587 |
| J&K | 57.68 | 97 | 25 | 508 | 487 | 996 |
| NE | 98.59 | 102 | 34 | 353 | 361 | 714 |
| Odisha | 98.76 | 89 | 18 | 413 | 444 | 857 |

Key parameters for service areas of category-Metro

| Service Area | % of pre-paid in total subscribers | ARPU (₹ per month) | Total usage (from & outside HSA) per subscriber per month | | | |
|--------------|------------------------------------|--------------------|---|--------------|--------------|-----------|
| | | | Outgoing SMS | Outgoing MOU | Incoming MOU | Total MOU |
| Kolkata | 94.52 | 68 | 14 | 372 | 371 | 742 |
| Delhi | 84.12 | 60 | 14 | 452 | 401 | 852 |
| Mumbai | 79.23 | 83 | 11 | 445 | 375 | 819 |

Annexure 4.1: Performance of QoS Parameters for Cellular Mobile Service

| Name of Service Area | Name of Service Provider | Network Related Parameters | | | | | | | | | | Customer Service Quality Parameters | | | | | | | | | | |
|--|--------------------------|---|--|---|--|--------------------------------------|---|--|---|---|---|---|--|---|---|---|---|--|---|--|---------------------|-------|
| | | Network | | Connection Establishment | | | Connection Maintenance | | | POI | | Metering and billing | | Response time to the | | | Termination / closure | | | | | |
| | | BS Accumulated down-time (not available for service) (%age) | Worst affected BSs due to down-time (%age) | Call Set-up Success Rate and Session Establishment Success Rate for Circuit Switched Voice or VoLTE as applicable (within licensee's own network) | SDCCH/Paging Channel Congestion/ RRC Congestion (%age) | TCH, RAB and E-RAB Congestion (%age) | Network QoS DCR Spatial Distribution Measure [Network_QSD(90,90)] | Network QoS DCR Temporal Distribution Measure [Network_QTD(97,90)] | Connections with good voice quality, Circuit Switched Voice Quality and VoLTE quality | Point of interconnection (POI) Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter) | Down Link (DL) Packet Drop Rate or DL-PDR | Up Link (UL) Packet Drop Rate or UL-PDR | Metering and billing credibility - post paid | Metering and billing credibility - pre paid | Resolution of billing/charging complaints | Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution of complaints | Accessibility of call centre/ customer care | Percentage of calls answered by the operators (voice to voice) within 90 seconds | %age requests for Termination / Closure of service complied within 7 days | Time taken for refund of deposits after closures | | |
| | | ≤ 2% | ≤ 2% | ≥ 95% | ≤ 1% | ≤ 2% | ≤ 2% | ≤ 3% | ≥ 95% | ≤ 0.5% | ≤ 2% | ≤ 2% | ≤ 0.1% | ≤ 0.1% | 98% within 4 weeks | 100% within 6 weeks | within 1 week of resolution of complaint | ≥ 95% | ≥ 95% | 100% within 7 days | 100% within 60 days | |
| The achievement of benchmark against each parameter is to be averaged over a period of one quarter for 2G, 3G and 4G VoLTE Services (combined) as per the measurement methodology explained in Explanatory Memorandum to | | | | | | | | | | | | | | | | | | | | | | |
| Andhra Pradesh | Airtel | 0.12 | 0.43 | 99.20 | 0.14 | 0.18 | 1.40 | 1.68 | 96.75 | 0 | 0.19 | 0.20 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 80.00 | 100.00 | 88.00 | |
| | BSNL | 1.27 | 1.93 | 98.03 | 0.73 | 1.96 | 1.61 | 1.79 | 98.74 | 0 | 0.51 | 0.32 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 97.00 | 95.67 | 100.00 | 100.00 | |
| | RJIL | 0.04 | 0.03 | 99.70 | 0.00 | 0.00 | 0.23 | 0.34 | 99.95 | 0 | 0.00 | 0.10 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 96.96 | 89.96 | 100.00 | 100.00 | |
| | Idea | 0.04 | 0.86 | 99.71 | 0.63 | 0.20 | 1.71 | 2.82 | 99.51 | 0 | 0.02 | 0.20 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 97.27 | 92.12 | 100.00 | 37.56 | |
| | VIL-Brand Vodafone | 0.04 | 0.86 | 99.71 | 0.63 | 0.20 | 1.71 | 2.82 | 99.51 | 0 | 0.20 | 0.00 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 94.87 | 100.00 | 34.93 | |
| Assam | Airtel | 0.35 | 1.37 | 97.89 | 0.35 | 0.38 | 1.96 | 2.45 | 97.97 | 0 | 0.28 | 0.30 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 90.00 | 100.00 | 59.00 | |
| | BSNL | 1.88 | 1.69 | 98.56 | 0.81 | 1.71 | 1.79 | 2.24 | 97.62 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 96.00 | 97.10 | 100.00 | 100.00 | |
| | RJIL | 0.44 | 1.49 | 99.58 | 0.00 | 0.00 | 0.51 | 0.64 | 99.90 | 0 | 0.01 | 0.21 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 97.28 | 98.80 | 100.00 | 100.00 | |
| | VIL-Brand Vodafone | 0.16 | 1.39 | 97.96 | 0.63 | 1.97 | 1.72 | 2.47 | 98.44 | 0 | 0.20 | 0.21 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 66.78 | 100.00 | 61.80 | |
| | VIL-Brand Vodafone | 0.16 | 1.39 | 97.96 | 0.63 | 1.97 | 1.72 | 2.47 | 98.44 | 0 | 0.21 | 0.00 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 59.16 | 100.00 | 63.45 | |
| Bihar | Airtel | 0.04 | 0.90 | 97.93 | 0.62 | 1.32 | 1.74 | 1.82 | 97.72 | 0 | 0.09 | 0.36 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 92.00 | 100.00 | 70.00 | |
| | BSNL | 1.93 | 1.87 | 95.63 | 0.31 | 0.43 | 1.67 | 2.14 | 98.30 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 99.00 | 96.25 | 100.00 | 100.00 | |
| | RJIL | 0.24 | 0.93 | 99.32 | 0.00 | 0.00 | 0.40 | 0.49 | 99.93 | 0 | 0.01 | 0.15 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 97.46 | 90.19 | 100.00 | 100.00 | |
| | Idea | 0.57 | 1.44 | 98.83 | 0.50 | 0.30 | 1.71 | 2.08 | 99.66 | 0 | 0.01 | 0.02 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 99.31 | 59.84 | 100.00 | 17.29 | |
| | VIL-Brand Vodafone | 0.57 | 1.44 | 98.83 | 0.50 | 0.30 | 1.71 | 2.08 | 99.66 | 0 | 0.02 | 0.00 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 81.42 | 100.00 | 42.06 | |
| Delhi | Airtel | 0.59 | 0.00 | 99.09 | 0.15 | 0.22 | 1.52 | 1.96 | 95.48 | 0 | 0.63 | 0.21 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 89.00 | 100.00 | 89.00 | |
| | MTNL | 0.05 | 0.17 | 97.61 | 0.07 | 1.00 | 1.41 | 1.63 | 98.41 | 0 | NA | NA | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 99.99 | 99.95 | 100.00 | 100.00 | |
| | RJIL | 0.07 | 0.18 | 99.73 | 0.00 | 0.00 | 0.06 | 0.13 | 99.96 | 0 | 0.00 | 0.08 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 97.54 | 90.30 | 100.00 | 100.00 | |
| | Idea | 0.13 | 0.27 | 99.79 | 0.27 | 0.17 | 1.37 | 1.92 | 99.68 | 0 | 0.27 | 0.28 | 0.04 | 0.00 | 97.56 | 100.00 | 100.00 | 100.00 | 68.07 | 100.00 | 0.00 | |
| | VIL-Brand Vodafone | 0.13 | 0.27 | 99.79 | 0.27 | 0.17 | 1.37 | 1.92 | 99.68 | 0 | 0.28 | 0.00 | 0.06 | 0.03 | 100.00 | 100.00 | 100.00 | 100.00 | 48.21 | 100.00 | 0.43 | |
| Gujarat | Airtel | 0.07 | 0.18 | 99.60 | 0.59 | 0.74 | 1.54 | 1.94 | 95.78 | 0 | 0.09 | 0.17 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 88.00 | 100.00 | 89.00 | |
| | BSNL | 1.31 | 1.23 | 98.09 | 0.06 | 0.60 | 1.75 | 2.75 | 100.00 | 0 | 0.07 | 0.15 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 99.00 | 96.12 | 100.00 | 100.00 | |
| | RJIL | 0.13 | 0.45 | 99.58 | 0.00 | 0.00 | 0.19 | 0.29 | 99.94 | 0 | 0.00 | 0.11 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 97.84 | 94.31 | 100.00 | 100.00 | |
| | Idea | 0.05 | 0.18 | 99.14 | 0.21 | 0.63 | 1.47 | 2.00 | 98.91 | 0 | 0.12 | 0.15 | 0.00 | 0.00 | 99.72 | 100.00 | 100.00 | 100.00 | 94.00 | 81.16 | 100.00 | 92.36 |
| | VIL-Brand Vodafone | 0.05 | 0.18 | 99.14 | 0.21 | 0.63 | 1.47 | 2.00 | 98.91 | 0 | 0.15 | 0.00 | 0.00 | 0.01 | 99.87 | 99.98 | 99.94 | 98.11 | 44.66 | 100.00 | 49.31 | |
| Haryana | Airtel | 0.09 | 0.28 | 99.82 | 0.13 | 0.17 | 0.84 | 1.17 | 98.24 | 0 | 0.18 | 0.30 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 88.00 | 100.00 | 79.00 | |
| | BSNL | 0.58 | 0.19 | 99.02 | 0.88 | 0.12 | 1.47 | 1.72 | 97.84 | 0 | 0.14 | 0.51 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 99.00 | 99.83 | 100.00 | 100.00 | |
| | RJIL | 0.15 | 0.60 | 99.67 | 0.00 | 0.00 | 0.25 | 0.39 | 99.96 | 0 | 0.00 | 0.07 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 97.87 | 98.71 | 100.00 | 100.00 | |
| | Idea | 0.79 | 0.15 | 99.39 | 0.42 | 0.55 | 1.64 | 2.56 | 98.82 | 0 | 0.20 | 0.15 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 99.20 | 89.60 | 100.00 | 63.05 | |
| | VIL-Brand Vodafone | 0.79 | 0.15 | 99.39 | 0.42 | 0.55 | 1.64 | 2.56 | 98.82 | 0 | 0.15 | 0.00 | 0.01 | 0.01 | 100.00 | 100.00 | 100.00 | 100.00 | 76.95 | 100.00 | 65.68 | |
| Himachal Pradesh | Airtel | 0.10 | 0.39 | 99.05 | 0.13 | 0.10 | 1.33 | 1.85 | 95.77 | 0 | 0.27 | 0.21 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 89.00 | 100.00 | 76.00 | |
| | RJIL | 0.11 | 0.48 | 99.70 | 0.00 | 0.00 | 0.17 | 0.29 | 99.97 | 0 | 0.00 | 0.07 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 97.19 | 99.35 | 100.00 | 100.00 | |
| | BSNL | 1.49 | 1.50 | 98.99 | 0.44 | 0.65 | 1.94 | 2.03 | 96.42 | 0 | 0.00 | 0.00 | 0.10 | 0.00 | 100.00 | 100.00 | 100.00 | 98.00 | 95.67 | 100.00 | 100.00 | |
| | Idea | 0.10 | 0.86 | 99.45 | 0.06 | 0.17 | 2.56 | 4.13 | 98.25 | 0 | 0.26 | 0.39 | 0.06 | 0.00 | 100.00 | 100.00 | 100.00 | 98.85 | 70.95 | 100.00 | 76.63 | |
| | VIL-Brand Vodafone | 0.10 | 0.86 | 99.45 | 0.06 | 0.17 | 2.56 | 4.13 | 98.25 | 0 | 0.39 | 0.00 | 0.00 | 0.01 | 100.00 | 100.00 | 100.00 | 100.00 | 90.43 | 100.00 | 66.23 | |
| Jammu & Kashmir | Airtel | 0.14 | 0.37 | 97.95 | 0.26 | 0.02 | 1.67 | 2.70 | 97.86 | 0 | 0.20 | 0.33 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 81.00 | 100.00 | 88.00 | |
| | BSNL | 1.83 | 1.92 | 97.72 | 0.65 | 1.38 | 1.98 | 2.50 | 96.35 | 0 | 0.02 | 0.04 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 98.00 | 99.48 | 100.00 | 100.00 | |
| | RJIL | 0.07 | 0.28 | 99.71 | 0.00 | 0.00 | 0.33 | 0.43 | 99.96 | 0 | 0.00 | 0.08 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 96.27 | 99.06 | 100.00 | 100.00 | |
| | Idea | 0.52 | 1.89 | 99.24 | 0.38 | 0.41 | 2.44 | 4.00 | 98.38 | 0 | 0.24 | 0.26 | 0.02 | 0.00 | 100.00 | 100.00 | 100.00 | 96.72 | 82.94 | 100.00 | 3.13 | |
| | VIL-Brand Vodafone | 0.52 | 1.89 | 99.24 | 0.38 | 0.41 | 2.44 | 4.00 | 98.38 | 0 | 0.26 | 0.00 | 0.01 | 0.02 | 100.00 | 100.00 | 100.00 | 100.00 | 80.66 | 100.00 | 8.69 | |
| Karnataka | Airtel | 0.29 | 0.33 | 99.71 | 0.52 | 0.13 | 1.26 | 1.64 | 95.27 | 0 | 0.20 | 0.15 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 85.00 | 100.00 | 79.00 | |
| | BSNL | 1.56 | 1.91 | 97.83 | 0.58 | 0.87 | 1.81 | 1.96 | 97.45 | 0 | 0.99 | 1.17 | 0.00 | 0.00 | 99.75 | 100.00 | 100.00 | 94.00 | 67.39 | 100.00 | 100.00 | |
| | RJIL | 0.11 | 0.21 | 99.78 | 0.00 | 0.00 | 0.18 | 0.30 | 99.95 | 0 | 0.00 | 0.09 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 96.85 | 95.20 | 100.00 | 100.00 | |
| | Idea | 0.15 | 0.92 | 99.23 | 0.33 | 0.75 | 1.82 | 2.52 | 99.50 | 0 | 0.13 | 0.26 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 97.27 | 95.43 | 100.00 | 39.35 | |
| | VIL-Brand Vodafone | 0.15 | 0.92 | 99.23 | 0.33 | 0.75 | 1.82 | 2.52 | 99.50 | 0 | 0.26 | 0.00 | 0.03 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 93.69 | 100.00 | 51.53 | |

Annexure 4.1 (Contd.)

| | | | | | | | | | | | | | | | | | | | | | |
|----------------------|--------------------|------|------|-------|------|------|------|------|-------|---|------|------|------|------|--------|--------|--------|--------|-------|--------|--------|
| Kerala | Airtel | 0.07 | 0.18 | 97.92 | 0.45 | 0.51 | 1.92 | 2.78 | 98.98 | 0 | 0.16 | 0.44 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 81.00 | 100.00 | 64.00 |
| | BSNL | 0.56 | 1.32 | 98.82 | 0.26 | 1.57 | 1.92 | 2.33 | 98.26 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 99.00 | 100.00 | 100.00 | 100.00 | 94.00 | 39.00 | 100.00 |
| | RJIL | 0.06 | 0.07 | 99.73 | 0.00 | 0.00 | 0.14 | 0.42 | 99.94 | 0 | 0.00 | 0.11 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 97.65 | 96.77 | 100.00 |
| | Idea | 0.34 | 0.03 | 99.49 | 0.26 | 0.44 | 0.93 | 1.29 | 98.46 | 0 | 0.07 | 0.40 | 0.04 | 0.00 | 99.96 | 100.00 | 100.00 | 100.00 | 98.43 | 90.73 | 100.00 |
| | VIL-Brand Vodafone | 0.95 | 0.06 | 99.62 | 0.17 | 0.18 | 0.96 | 1.45 | 99.50 | 0 | 0.24 | 0.00 | 0.03 | 0.01 | 100.00 | 100.00 | 100.00 | 100.00 | 87.39 | 100.00 | 66.95 |
| Kolkata | Airtel | 1.12 | 0.00 | 99.61 | 0.54 | 0.54 | 1.71 | 2.78 | 98.35 | 0 | 0.42 | 1.33 | 0.00 | 0.00 | 98.82 | 100.00 | 100.00 | 100.00 | 91.00 | 100.00 | 91.00 |
| | BSNL | 1.28 | 1.82 | 98.20 | 0.84 | 0.40 | 1.55 | 2.98 | 96.38 | 0 | 0.00 | 0.00 | 0.00 | 0.01 | 100.00 | 100.00 | 100.00 | 100.00 | 96.00 | 95.83 | 100.00 |
| | RJIL | 0.06 | 0.12 | 99.73 | 0.00 | 0.00 | 0.13 | 0.26 | 99.96 | 0 | 0.01 | 0.08 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 97.33 | 92.26 | 100.00 |
| | Idea | 0.27 | 1.78 | 98.19 | 0.28 | 0.89 | 1.35 | 2.49 | 98.06 | 0 | 0.09 | 0.18 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 97.71 | 83.03 | 100.00 |
| | VIL-Brand Vodafone | 0.27 | 1.78 | 98.19 | 0.28 | 0.89 | 1.35 | 2.49 | 98.06 | 0 | 0.18 | 0.00 | 0.02 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 50.06 | 100.00 | 41.39 |
| Madhya Pradesh | Airtel | 0.09 | 0.17 | 99.13 | 0.32 | 0.40 | 1.94 | 2.30 | 95.84 | 0 | 0.09 | 0.16 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 91.00 | 100.00 | 81.00 |
| | RJIL | 0.27 | 1.25 | 99.66 | 0.00 | 0.00 | 0.35 | 0.45 | 99.92 | 0 | 0.01 | 0.17 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 98.01 | 90.43 | 100.00 |
| | BSNL | 1.23 | 1.41 | 98.71 | 0.32 | 1.10 | 1.89 | 2.13 | 98.21 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 99.00 | 99.42 | 100.00 |
| | Idea | 0.43 | 1.82 | 98.14 | 0.69 | 1.25 | 1.74 | 2.33 | 97.72 | 0 | 0.24 | 0.31 | 0.02 | 0.03 | 100.00 | 100.00 | 100.00 | 100.00 | 96.64 | 83.37 | 100.00 |
| | VIL-Brand Vodafone | 0.43 | 1.82 | 98.14 | 0.69 | 1.25 | 1.74 | 2.33 | 97.72 | 0 | 0.31 | 0.00 | 0.04 | 0.01 | 100.00 | 100.00 | 100.00 | 100.00 | 83.29 | 100.00 | 40.43 |
| Maharashtra | Airtel | 0.04 | 0.05 | 99.41 | 0.17 | 0.35 | 1.20 | 1.49 | 95.25 | 0 | 0.12 | 0.18 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 90.00 | 100.00 | 87.00 |
| | BSNL | 1.68 | 1.95 | 96.98 | 0.79 | 1.28 | 1.94 | 2.65 | 96.25 | 0 | 0.06 | 0.08 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 95.08 | 100.00 | 100.00 |
| | RJIL | 0.35 | 1.48 | 99.66 | 0.00 | 0.00 | 0.28 | 0.40 | 99.92 | 0 | 0.00 | 0.17 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 98.10 | 95.56 | 100.00 |
| | Idea | 0.47 | 1.95 | 96.59 | 0.91 | 1.89 | 1.75 | 2.95 | 98.45 | 0 | 0.40 | 0.26 | 0.02 | 0.00 | 99.95 | 100.00 | 100.00 | 100.00 | 98.56 | 89.71 | 100.00 |
| | VIL-Brand Vodafone | 0.49 | 0.98 | 98.21 | 0.93 | 1.60 | 1.76 | 2.96 | 98.93 | 0 | 0.37 | 0.00 | 0.04 | 0.01 | 100.00 | 100.00 | 100.00 | 100.00 | 83.21 | 100.00 | 0.00 |
| Mumbai | Airtel | 0.13 | 0.58 | 98.49 | 0.13 | 0.38 | 1.49 | 1.81 | 95.36 | 0 | 0.12 | 0.17 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 89.00 | 100.00 | 89.00 |
| | MTNL | 0.50 | 1.03 | 98.52 | 0.17 | 0.16 | 1.71 | 2.49 | 98.74 | 0 | NA | NA | 0.00 | 0.01 | 100.00 | 100.00 | 100.00 | 100.00 | 99.35 | 100.00 | 100.00 |
| | RJIL | 0.17 | 0.78 | 99.65 | 0.00 | 0.00 | 0.10 | 0.18 | 99.96 | 0 | 0.00 | 0.09 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 97.72 | 91.38 | 100.00 |
| | Idea | 0.15 | 0.38 | 99.15 | 0.05 | 0.34 | 1.69 | 2.65 | 97.26 | 0 | 0.17 | 0.32 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 96.94 | 94.18 | 100.00 |
| | VIL-Brand Vodafone | 0.14 | 0.42 | 99.28 | 0.63 | 0.62 | 1.82 | 2.50 | 98.81 | 0 | 0.27 | 0.00 | 0.02 | 0.01 | 100.00 | 100.00 | 100.00 | 100.00 | 86.74 | 100.00 | 21.53 |
| North East | Airtel | 0.70 | 1.53 | 98.02 | 0.53 | 0.37 | 1.95 | 2.27 | 97.79 | 0 | 0.34 | 0.31 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 86.00 | 100.00 | 50.00 |
| | BSNL | 1.98 | 1.92 | 98.33 | 0.84 | 0.85 | 1.79 | 1.88 | 96.00 | 0 | 0.00 | 0.00 | 0.05 | 0.05 | 100.00 | 100.00 | 100.00 | 100.00 | 96.00 | 95.61 | 100.00 |
| | RJIL | 1.10 | 1.72 | 99.55 | 0.00 | 0.00 | 0.69 | 0.94 | 99.92 | 0 | 0.01 | 0.16 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 97.26 | 99.17 | 100.00 |
| | Idea | 0.33 | 0.92 | 99.23 | 0.56 | 1.30 | 1.77 | 2.17 | 98.22 | 0 | 0.39 | 0.22 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 68.07 | 100.00 | 37.50 |
| | VIL-Brand Vodafone | 0.33 | 0.92 | 99.23 | 0.56 | 1.30 | 1.77 | 2.17 | 98.22 | 0 | 0.22 | 0.00 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 59.00 | 100.00 | 46.95 |
| Odisha | Airtel | 0.24 | 0.26 | 98.14 | 0.38 | 1.16 | 1.70 | 1.82 | 98.28 | 0 | 0.15 | 0.22 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 90.00 | 100.00 | 90.00 |
| | BSNL | 0.84 | 1.95 | 98.15 | 0.66 | 1.15 | 1.98 | 2.68 | 97.00 | 0 | 0.00 | 0.00 | 0.00 | 0.01 | 100.00 | 100.00 | 100.00 | 100.00 | 95.00 | 96.71 | 100.00 |
| | RJIL | 0.23 | 0.92 | 99.56 | 0.00 | 0.00 | 0.27 | 0.38 | 99.93 | 0 | 0.00 | 0.14 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 97.07 | 93.89 | 100.00 |
| | Idea | 0.37 | 1.42 | 99.57 | 0.25 | 0.40 | 1.75 | 2.40 | 98.74 | 0 | 0.14 | 0.20 | 0.02 | 0.01 | 100.00 | 100.00 | 100.00 | 100.00 | 97.24 | 58.90 | 100.00 |
| | VIL-Brand Vodafone | 0.37 | 1.42 | 99.57 | 0.25 | 0.40 | 1.75 | 2.40 | 98.74 | 0 | 0.20 | 0.00 | 0.02 | 0.01 | 100.00 | 100.00 | 100.00 | 100.00 | 99.53 | 73.06 | 100.00 |
| Punjab | Airtel | 0.06 | 0.15 | 99.79 | 0.11 | 0.12 | 0.50 | 0.65 | 98.86 | 0 | 0.12 | 0.38 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 88.00 | 100.00 | 85.00 |
| | BSNL | 0.24 | 1.41 | 98.66 | 0.23 | 0.21 | 1.67 | 1.87 | 97.81 | 0 | 0.00 | 0.02 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 99.00 | 55.23 | 100.00 |
| | RJIL | 0.08 | 0.26 | 99.63 | 0.00 | 0.00 | 0.10 | 0.18 | 99.97 | 0 | 0.00 | 0.07 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 97.65 | 93.26 | 100.00 |
| | Idea | 0.07 | 0.28 | 99.77 | 0.21 | 0.05 | 0.88 | 1.47 | 99.33 | 0 | 0.17 | 0.33 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 99.88 | 87.49 | 100.00 |
| | VIL-Brand Vodafone | 0.07 | 0.28 | 99.77 | 0.21 | 0.05 | 0.88 | 1.47 | 99.33 | 0 | 0.33 | 0.00 | 0.01 | 0.01 | 100.00 | 100.00 | 100.00 | 100.00 | 87.99 | 100.00 | 61.26 |
| Rajasthan | Airtel | 0.29 | 1.55 | 99.04 | 0.18 | 0.34 | 1.56 | 1.85 | 95.50 | 0 | 0.23 | 0.25 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 92.00 | 100.00 | 82.00 |
| | BSNL | 1.13 | 1.55 | 98.48 | 0.75 | 1.52 | 1.82 | 2.38 | 98.41 | 0 | 0.00 | 0.00 | 0.02 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 95.00 | 99.80 | 100.00 |
| | RJIL | 0.08 | 0.25 | 99.68 | 0.00 | 0.00 | 0.27 | 0.36 | 99.95 | 0 | 0.00 | 0.09 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 97.18 | 90.13 | 100.00 |
| | Idea | 0.25 | 1.66 | 99.35 | 0.41 | 0.46 | 1.96 | 2.86 | 99.09 | 0 | 0.16 | 0.25 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 95.37 | 79.25 | 100.00 |
| | VIL-Brand Vodafone | 0.25 | 1.66 | 99.35 | 0.41 | 0.46 | 1.96 | 2.86 | 99.09 | 0 | 0.25 | 0.00 | 0.01 | 0.01 | 100.00 | 100.00 | 100.00 | 100.00 | 46.31 | 100.00 | 12.25 |
| Tamil Nadu | Airtel | 0.04 | 0.09 | 99.74 | 0.27 | 0.29 | 1.11 | 1.54 | 97.63 | 0 | 0.17 | 0.17 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 62.00 | 100.00 | 77.00 |
| | BSNL | 0.70 | 1.30 | 98.54 | 0.52 | 0.95 | 1.87 | 2.93 | 97.81 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 58.81 | 100.00 | 100.00 |
| | RJIL | 0.02 | 0.01 | 99.70 | 0.00 | 0.00 | 0.15 | 0.26 | 99.96 | 0 | 0.00 | 0.08 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 97.38 | 94.08 | 100.00 |
| | Idea | 0.13 | 0.42 | 99.93 | 0.07 | 0.07 | 0.98 | 1.82 | 99.45 | 0 | 0.08 | 0.22 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 95.97 | 95.34 | 100.00 |
| | VIL-Brand Vodafone | 0.16 | 0.76 | 98.54 | 0.78 | 1.37 | 1.45 | 2.00 | 98.92 | 0 | 0.16 | 0.00 | 0.06 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 75.72 | 100.00 | 34.24 |
| Uttar Pradesh (East) | Airtel | 0.49 | 1.54 | 97.88 | 0.30 | 0.79 | 1.59 | 1.96 | 97.43 | 0 | 0.57 | 0.94 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 91.00 | 100.00 | 77.00 |
| | BSNL | 1.35 | 1.53 | 97.42 | 0.95 | 0.82 | 1.75 | 2.17 | 98.65 | 0 | 0.00 | 0.01 | 0.09 | 0.09 | 98.26 | 100.00 | 100.00 | 100.00 | 98.00 | 43.04 | 100.00 |
| | RJIL | 0.45 | 1.75 | 99.03 | 0.00 | 0.00 | 0.39 | 0.50 | 99.92 | 0 | 0.01 | 0.17 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 97.88 | 90.32 | 100.00 |
| | Idea | 0.29 | 1.15 | 96.56 | 0.85 | 1.97 | 1.92 | 2.91 | 98.53 | 0 | 0.11 | 0.22 | 0.01 | 0.00 | 100.00 | 100.00 | 100.00 | 100 | | | |

Annexure 4.2 : Performance of QoS Parameters for Basic (Wire-line) Service

| Sl. No. | Name of Service Area | Name of Service Provider | Faults incidences (No. of faults/100 Subs./month) | Fault Repair | | | | Rent Rebate | Mean Time to Repair (MTTR) | POI Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) | Metering and Billing | | | | Response time to the customer for Assistance | | Termination / Closure of service | | |
|---------|----------------------|--------------------------|---|--|---|--|------------------------------------|-------------|----------------------------|--|--|---|--|--|--|--|---|--|---------|
| | | | | % of faults repaired by next working day | % of faults repaired within 5 days | % of faults repaired by next working day | % of faults repaired within 7 days | | | | Metering and Billing credibility - post paid | Metering and billing credibility - pre paid | Resolution of billing/ charging/ validity complaints | Period of applying credit/waiver/ adjustment to customer's account from the date of resolution of complaints | Accessibility of call centre/ customer care | Percentage of calls answered by the operators (voice to voice) within 90 seconds | %age requests for Termination / Closure of service complied within 7 days | Time taken for refund of deposits after closures | |
| | | | | ≤7 | For urban areas by next working day: ≥85% | For urban areas: ≥ 100% | For rural and hilly areas: ≥ 75% | | | | For rural and hilly areas: ≥ 100% | ≤ 10 Hrs | ≤0.5% | ≤0.1% | ≤0.1% | 98% within 4 weeks | 100% within 6 weeks | 1 week of resolution of complaint | ≥95% |
| 1 | Andhra Pradesh | Bharti Airtel | 0.43 | 87.24% | 100.00% | NA | NA | 340 | 4.91 | 0.00% | 0.00% | NA | 100.00% | 100.00% | 100.00% | 100.00% | 52.00% | 100.00% | 89.00% |
| 2 | | BSNL | 3 | 97.00% | 100.00% | 96.00% | 100.00% | 18 | 6 | 0.00% | 0.01% | 0.00% | 100.00% | 100.00% | 100.00% | 80.29% | 87.13% | 100.00% | 100.00% |
| 3 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | NA | 0.00% | 0.00% | 0.00% | NA | NA | NA | 96.00% | 97.00% | 100.00% | 100.00% |
| 4 | | TTSL | 1.84 | 82.51% | 100.00% | NA | NA | 15 | 12.69 | 0.32% | 0.00% | NA | 100.00% | 100.00% | 100.00% | 97.59% | 97.59% | 100.00% | 100.00% |
| 5 | | VIL | 0.18 | 100.00% | 100.00% | NA | NA | NA | 2.43 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | NA |
| 6 | Assam | BSNL | 3 | 86.00% | 100.00% | 75.00% | 100.00% | 961 | 4 | 0.00% | 0.01% | 0.00% | 100.00% | 100.00% | 100.00% | 85.76% | 97.67% | 100.00% | 100.00% |
| 7 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | NA | 0.00% | 0.00% | 0.00% | NA | NA | NA | 100.00% | 100.00% | 100.00% | 100.00% |
| 8 | | VIL | 1.31 | 100.00% | 100.00% | NA | NA | NA | 7 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | NA |
| 9 | Bihar | BSNL | 4 | 95.00% | 100.00% | 95.00% | 100.00% | 43 | 6 | 0.00% | 0.09% | 0.00% | 98.00% | 100.00% | 100.00% | 86.90% | 98.67% | 100.00% | 100.00% |
| 10 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | NA | 0.00% | 0.00% | 0.00% | NA | NA | NA | 100.00% | 96.00% | 100.00% | 100.00% |
| 11 | | TTSL | 0.14 | 100.00% | 100.00% | NA | NA | 0 | 1.60 | 0.00% | NA | NA | NA | NA | NA | 98.41% | 98.41% | 100.00% | 100.00% |
| 12 | | VIL | 1.88 | 100.00% | 100.00% | NA | NA | NA | 6.4 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | NA |
| 13 | Delhi | Bharti Airtel | 0.71 | 91.24% | 100.00% | NA | NA | 357 | 5.27 | 0.00% | 0.00% | NA | 100.00% | 100.00% | 100.00% | 100.00% | 56.00% | 100.00% | 79.00% |
| 14 | | MTNL | 2.91 | 66.80% | 88.49% | NA | NA | 884 | 17.03 | 0.00% | 0.01% | 0.00% | 99.89% | 100.00% | 100.00% | 95.00% | 95.00% | 100.00 | 100.00% |
| 15 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | 0.5 | 0.00% | 0.00% | 0.00% | NA | NA | NA | 96.00% | 98.00% | 100.00% | 100.00% |
| 16 | | TTSL | 0.26 | 73.21% | 100.00% | NA | NA | 6 | 17.27 | 0.22% | NA | NA | NA | NA | NA | 96.75% | 96.75% | 100.00% | 100.00% |
| 17 | | VIL | 0.61 | 100.00% | 100.00% | NA | NA | NA | 2.46 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | NA |
| 18 | Gujarat | Bharti Airtel | 0.56 | 92.07% | 100.00% | NA | NA | 57 | 5.91 | 0.00% | 0.00% | NA | 100.00% | 100.00% | 100.00% | 100.00% | 54.00% | 100.00% | 100.00% |
| 19 | | BSNL | 4 | 95.00% | 100.00% | 93.00% | 100.00% | 119 | 5 | 0.00% | 0.01% | 0.00% | 100.00% | 100.00% | 100.00% | 17.98% | 33.75% | 100.00% | 100.00% |
| 20 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | NA | 0.00% | 0.04% | 0.00% | NA | NA | NA | 100.00% | 100.00% | 100.00% | 100.00% |
| 21 | | TTSL | 0.61 | 77.72% | 100.00% | NA | NA | 22 | 13.35 | 0.00% | 0.00% | NA | 100.00% | 100.00% | 100.00% | 99.08% | 99.08% | 100.00% | 100.00% |
| 22 | | VIL | 0.16 | 100.00% | 100.00% | NA | NA | NA | 4.22 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | NA |
| 23 | Himachal Pradesh | BSNL | 4 | 90.00% | 100.00% | 93.00% | 100.00% | 221 | 6 | 0.00% | 0.04% | 0.00% | 98.00% | 100.00% | 100.00% | 97.32% | 61.00% | 100.00% | 100.00% |
| 24 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | NA | 0.00% | 0.05% | 0.00% | NA | NA | NA | 100.00% | 100.00% | 100.00% | 100.00% |
| 25 | | VIL | 0.00 | 100.00% | 100.00% | NA | NA | NA | 0.00 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | NA | NA |

Annexure 4.2 (Contd.)

| | | | | | | | | | | | | | | | | | | | |
|----|-----------------|---------------|------|---------|---------|---------|---------|--------|-------|-------|-------|-------|---------|---------|---------|---------|---------|---------|---------|
| 26 | Haryana | Bharti Airtel | 1.29 | 89.48% | 100.00% | NA | NA | 4.71 | 4.71 | 0.00% | 0.00% | NA | 100.00% | 100.00% | 100.00% | 100.00% | 59.00% | 100.00% | 82.00% |
| 27 | | BSNL | 5 | 90.00% | 100.00% | 89.00% | 100.00% | 1572 | 5 | 0.00% | 0.33% | 0.00% | 100.00% | 100.00% | 100.00% | 98.14% | 62.00% | 100.00% | 100.00% |
| 28 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | NA | 0.00% | 0.00% | 0.00% | NA | NA | NA | 100.00% | 100.00% | 100.00% | 100.00% |
| 29 | | TTSL | 0.00 | NA | NA | NA | NA | 0 | NA | 0.00% | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | 100.00% |
| 30 | | VIL | 6.39 | 100.00% | 100.00% | NA | NA | NA | 1.27 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | NA | NA |
| 31 | Jammu & Kashmir | BSNL | 4 | 97.00% | 100.00% | 95.00% | 100.00% | 81 | 7 | 0.00% | 0.01% | 0.00% | 98.00% | 100.00% | 100.00% | 95.88% | 56.33% | 100.00% | 100.00% |
| 32 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | NA | 0.00% | 0.00% | 0.00% | NA | NA | NA | 95.00% | 100.00% | 100.00% | 100.00% |
| 33 | Kerala | Bharti Airtel | 1.76 | 90.05% | 100.00% | NA | NA | 169 | 9.21 | 0.00% | 0.00% | NA | 100.00% | 100.00% | 100.00% | 100.00% | 54.00% | 100.00% | 83.00% |
| 34 | | BSNL | 4 | 95.00% | 100.00% | 89.00% | 100.00% | 1080 | 7 | 0.00% | 0.05% | 0.00% | 100.00% | 100.00% | 100.00% | 85.75% | 90.91% | 100.00% | 100.00% |
| 35 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | NA | 0.00% | 0.00% | 0.00% | NA | NA | NA | 100% | 100.00% | 100.00% | 100.00% |
| 36 | | TTSL | 0.04 | 100.00% | 100.00% | NA | NA | 0 | 7.80 | 0.00% | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | 100.00% |
| 37 | | VIL | 0.42 | 100.00% | 100.00% | NA | NA | NA | 4.37 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | NA |
| 38 | Kolkata | Bharti Airtel | 0.80 | 90.54% | 100.00% | NA | NA | 3840 | 9.81 | 0.00% | 0.00% | NA | 100.00% | 100.00% | 100.00% | 100.00% | 46.00% | 100.00% | 94.00% |
| 39 | | BSNL | 6 | 92.00% | 100.00% | NA | NA | 390 | 8 | 0.00% | 0.00% | 0.00% | 98.00% | 100.00% | 100.00% | 64.33% | 98.33% | 100.00% | 100.00% |
| 40 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | NA | 0.00% | 0.00% | 0.00% | NA | NA | NA | 96.00% | 97.00% | 100.00% | 100.00% |
| 41 | | VIL | 0.76 | 100.00% | 100.00% | NA | NA | NA | 3.43 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | NA |
| 42 | Karnataka | Bharti Airtel | 0.73 | 85.00% | 100.00% | NA | NA | 1925 | 6.08 | 0.00% | 0.00% | NA | 100.00% | 100.00% | 100.00% | 100.00% | 63.00% | 100.00% | 84.00% |
| 43 | | BSNL | 4 | 99.00% | 100.00% | 99.00% | 100.00% | 2660 | 7 | 0.00% | 0.09% | 0.00% | 98.00% | 100.00% | 100.00% | 72.15% | 79.86% | 100.00% | 100.00% |
| 44 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | NA | 0.00% | 0.00% | 0.00% | NA | NA | NA | 97.00% | 95.00% | 100.00% | 100.00% |
| 45 | | TTSL | 0.08 | 73.44% | 100.00% | NA | NA | 4 | 17.42 | 0.38% | NA | NA | NA | NA | NA | 97.50% | 97.50% | 100.00% | 100.00% |
| 46 | | VIL | 0.47 | 100.00% | 100.00% | NA | NA | NA | 2.46 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | NA |
| 47 | Maharashtra | Bharti Airtel | 0.31 | 88.93% | 100.00% | NA | NA | 133 | 7.60 | 0.00% | 0.00% | NA | 100.00% | 100.00% | 100.00% | 100.00% | 53.00% | 100.00% | 100.00% |
| 48 | | BSNL | 5 | 92.00% | 100.00% | 79.00% | 100.00% | 774 | 7 | 0.00% | 0.01% | 0.00% | 100.00% | 100.00% | 100.00% | 18.88% | 53.79% | 100.00% | 100.00% |
| 49 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | NA | 0.00% | 0.00% | 0.00% | NA | NA | NA | 100.00% | 96.00% | 100.00% | 100.00% |
| 50 | | TTSL | 0.30 | 73.24% | 100.00% | NA | NA | 71 | 16.42 | 0.08% | NA | NA | NA | NA | NA | 97.47% | 97.47% | 100.00% | 100.00% |
| 51 | | VIL | 0.44 | 100.00% | 100.00% | NA | NA | NA | 6.4 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | NA |
| 52 | Madhya Pradesh | Bharti Airtel | 1.46 | 86.47% | 100.00% | NA | NA | 331 | 3.91 | 0.00% | 0.00% | NA | 100.00% | 100.00% | 100.00% | 100.00% | 56.00% | 100.00% | 87.00% |
| 53 | | BSNL | 6 | 89.00% | 100.00% | 88.00% | 100.00% | 574 | 4 | 0.00% | 0.06% | 0.00% | 100.00% | 100.00% | 100.00% | 7.05% | 2.42% | 100.00% | 100.00% |
| 54 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | 0 | 0.9 | 0.00% | 0.00% | 0.00% | NA | NA | NA | 96.00% | 100.00% | 100.00% | 100.00% |
| 55 | | TTSL | 1.51 | 100.00% | 100.00% | NA | NA | 0 | 3.05 | 0.00% | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | 100.00% |
| 56 | | VIL | 0.66 | 100.00% | 100.00% | NA | NA | NA | 6.44 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | NA |
| 57 | Mumbai | Bharti Airtel | 0.17 | 88.87% | 100.00% | NA | NA | 258 | 8.07 | 0.00% | 0.00% | NA | 100.00% | 100.00% | 100.00% | 100.00% | 56.00% | 100.00% | 100.00% |
| 58 | | MTNL | 1 | 46.70% | 69.20% | NA | NA | 80,672 | 45.44 | 0.16% | 0.05% | NA | 99.47% | 100.00% | 100.00% | 99.37% | 80.81% | 89.11% | 13.55% |
| 59 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | NA | 0.00% | 0.00% | 0.00% | NA | NA | NA | 95.00% | 96.00% | 100.00% | 100.00% |
| 60 | | TTSL | 0.30 | 53.80% | 100.00% | NA | NA | 166 | 27.90 | 0.36% | 0.00% | NA | 100.00% | 100.00% | 100.00% | 98.20% | 98.20% | 100.00% | 100.00% |
| 61 | | VIL | 0.25 | 100.00% | 100.00% | NA | NA | NA | 3.4 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | NA |

Annexure 4.2 (Contd.)

| | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-------------|---------------|------|---------|---------|---------|---------|------|-------|-------|-------|-------|---------|---------|---------|---------|---------|---------|---------|
| 62 | North East | BSNL | 3 | 94.00% | 100.00% | 91.00% | 100.00% | 55 | 6 | 0.00% | 0.01% | 0.00% | 99.00% | 100.00% | 100.00% | 77.50% | 96.67% | 100.00% | 100.00% |
| 63 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | NA | 0.00% | 0.00% | 0.00% | NA | NA | NA | 100.00% | 100.00% | 100.00% | 100.00% |
| 64 | | VIL | 0.00 | 100.00% | 100.00% | NA | NA | NA | 0.00 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | NA | NA |
| 65 | Odisha | BSNL | 5 | 95.00% | 100.00% | 85.00% | 100.00% | 607 | 5 | 0.00% | 0.09% | 0.00% | 99.00% | 100.00% | 100.00% | 78.26% | 98.33% | 100.00% | 100.00% |
| 66 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | NA | 0.00% | 0.00% | 0.00% | NA | NA | NA | 100.00% | 100.00% | 100.00% | 100.00% |
| 67 | | TTSL | 2.38 | 95.38% | 100.00% | NA | NA | 1 | 3.62 | 0.00% | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | 100.00% |
| 68 | | VIL | 0.24 | 100.00% | 100.00% | NA | NA | NA | 0.27 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | NA |
| 69 | Punjab | Bharti Airtel | 1.15 | 85.51% | 100.00% | NA | NA | 374 | 5.38 | 0.00% | 0.00% | NA | 100.00% | 100.00% | 100.00% | 100.00% | 57.00% | 100.00% | 81.00% |
| 70 | | BSNL | 5 | 87.00% | 100.00% | 85.00% | 100.00% | 105 | 6 | 0.00% | 0.01% | 0.00% | 98.00% | 100.00% | 100.00% | 98.00% | 60.00% | 100.00% | 100.00% |
| 71 | | Quadrant | 5.2 | 90.00% | 100.00% | 100.00% | 100.00% | 0 | 7.72 | 0.00% | 0.00% | 0.00% | 100.00% | 100.00% | 100.00% | 96.08% | 95.20% | 100.00% | 100.00% |
| 72 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | NA | 0.00% | 0.00% | 0.00% | NA | NA | NA | 100.00% | 97.00% | 100.00% | 100.00% |
| 73 | | TTSL | 0.24 | 100.00% | 100.00% | NA | NA | 0 | 0.67 | 0.00% | NA | NA | NA | NA | NA | 99.31% | 99.31% | 100.00% | 100.00% |
| 74 | | VIL | 0.21 | 100.00% | 100.00% | NA | NA | NA | 0.8 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | NA |
| 75 | Rajasthan | Bharti Airtel | 0.93 | 85.46% | 100.00% | NA | NA | 55 | 5.22 | 0.00% | 0.00% | NA | 100.00% | 100.00% | 100.00% | 100.00% | 55.00% | 100.00% | 95.00% |
| 76 | | BSNL | 5 | 95.00% | 100.00% | 95.00% | 100.00% | 335 | 6 | 0.00% | 0.00% | 0.00% | 100.00% | 100.00% | 100.00% | 98.08% | 60.33% | 100.00% | 100.00% |
| 77 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | NA | 0.00% | 0.00% | 0.00% | NA | NA | NA | 95.00% | 96.00% | 100.00% | 100.00% |
| 78 | | TTSL | 0.35 | 100.00% | 100.00% | NA | NA | 0 | 2.36 | 0.00% | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | 100.00% |
| 79 | | VIL | 0.25 | 100.00% | 100.00% | NA | NA | NA | 4.16 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | NA |
| 80 | Tamilnadu | Bharti Airtel | 1.14 | 90.24% | 100.00% | NA | NA | 2295 | 9.79 | 0.00% | 0.00% | NA | 100.00% | 100.00% | 100.00% | 100.00% | 59.00% | 100.00% | 77.00% |
| 81 | | BSNL | 4 | 89.00% | 100.00% | 84.00% | 100.00% | 1462 | 6 | 0.00% | 0.09% | 0.00% | 100.00% | 100.00% | 100.00% | 69.50% | 64.44% | 100.00% | 100.00% |
| 82 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | 0 | NA | 0.00% | 0.00% | 0.00% | NA | NA | NA | 96.00% | 96.00% | 100.00% | 100.00% |
| 83 | | TTSL | 0.01 | 50.00% | 100.00% | NA | NA | 1 | 32.33 | 0.02% | NA | NA | NA | NA | NA | 96.90% | 96.90% | 100.00% | 100.00% |
| 84 | | VIL | 0.27 | 100.00% | 100.00% | NA | NA | NA | 4.49 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | NA |
| 85 | UPE | Bharti Airtel | 0.91 | 91.91% | 100.00% | NA | NA | 24 | 4.35 | 0.00% | 0.00% | NA | 100.00% | 100.00% | 100.00% | 100.00% | 57.00% | 100.00% | 80.00% |
| 86 | | BSNL | 3 | 93.00% | 100.00% | 90.00% | 100.00% | 1050 | 4 | 0.00% | 0.09% | 0.00% | 100.00% | 100.00% | 100.00% | 97.44% | 62.33% | 100.00% | 100.00% |
| 87 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | NA | 0.00% | 0.00% | 0.00% | NA | NA | NA | 95.00% | 98.00% | 100.00% | 100.00% |
| 88 | | TTSL | 1.06 | 100.00% | 100.00% | NA | NA | 0 | 1.83 | 0.00% | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | 100.00% |
| 89 | | VIL | 0.31 | 100.00% | 100.00% | NA | NA | NA | 4.12 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | NA |
| 90 | UPW | Bharti Airtel | 0.97 | 89.50% | 100.00% | NA | NA | 11 | 4.92 | 0.00% | 0.00% | NA | 100.00% | 100.00% | 100.00% | 100.00% | 59.00% | 100.00% | 83.00% |
| 91 | | BSNL | 6 | 88.00% | 100.00% | 87.00% | 100.00% | 531 | 6 | 0.00% | 0.09% | 0.00% | 99.00% | 100.00% | 100.00% | 96.14% | 60.67% | 100.00% | 100.00% |
| 92 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | NA | 0.00% | 0.00% | 0.00% | NA | NA | NA | 95.00% | 97.00% | 100.00% | 100.00% |
| 93 | | TTSL | 0.30 | 100.00% | 100.00% | NA | NA | 0 | 3.59 | 0.00% | NA | NA | NA | NA | NA | 100.00% | 100.00% | 100.00% | 100.00% |
| 94 | | VIL | 0.93 | 100.00% | 100.00% | NA | NA | NA | 3.58 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | NA | NA |
| 95 | West Bengal | BSNL | 3 | 88.00% | 100.00% | 94.00% | 100.00% | 400 | 6 | 0.00% | 0.00% | 0.00% | 99.00% | 100.00% | 100.00% | 71.51% | 97.33% | 100.00% | 100.00% |
| 96 | | RJIL | 0.00 | 100.00% | 100.00% | 100.00% | 100.00% | NA | NA | 0.00% | 0.00% | 0.00% | NA | NA | NA | 100.00% | 100.00% | 100.00% | 100.00% |
| 97 | | TTSL | 0.13 | 84.62% | 100.00% | NA | NA | 7 | 12.50 | 0.00% | NA | NA | NA | NA | NA | 98.73% | 98.73% | 100.00% | 100.00% |
| 98 | | VIL | 1.39 | 100.00% | 100.00% | NA | NA | NA | 3.51 | NA | NA | NA | NA | NA | NA | 100.00% | 100.00% | NA | NA |
| Note: NA means Not applicable | | | | | | | | | | | | | | | | | | | |

Annexure 4.3: Quality of Service Performance of Broadband (wireline) Service Providers

| Sl. No. | Service Provider | Service area | Service Provisioning | | | Faults Repair | | | | Billing Performance | | | | Response Time to the Customer for | | Bandwidth utilisation/throughput | | | | Service availability (uptime) (for all users) in %age | Packet Loss (for wired broadband access) in %age | Network latency (for wired broadband access) | | |
|----------------------|---------------------------------------|-------------------|---|---|---|---------------|------------------------|--|---|---|---|--|---|--|---|---|---|---|------|---|--|--|------|---------|
| | | | %age of connections provided within 15 days of registration of demand | % of faults repaired by next working day (>90%) | % of faults repaired within 3 working day | Rent Rebate | %age of bills disputed | %age of billing complaints resolved within 4 weeks | %age of cases to whom refund of deposits is made within | %age of calls answered by operator (Voice to voice) within 60 sec | %age of calls answered by operator (Voice to voice) within 90 sec | No. of Intra network links having Bandwidth utilisation >90% | No. of Upstream links for International connectivity having | % International bandwidth utilization during peak hours (TCBH) | Broadband Connection Speed available (download) from ISP node to user | User reference point at POP/ISP Gateway node to International | User reference point at ISP Gateway node to International | User reference point at ISP Gateway node to International | | | | | | |
| | | | | | | | | | | | | | | | | | | | 100% | | | >90% | ≥99% | in nos. |
| 1 | Bharat Sanchar Nigam Ltd.(BSNL) | All India | 100.00% | 93.46% | 99.69% | 2407 | 0.06% | 100.00% | 100.00% | 64.46% | 63.91% | NA | 0 | 0 | 77.50% | 91.89% | 99.69% | 0.80% | 22 | 174 | NA | | | |
| 2 | Mahanagar Telephone Nigam Ltd. | Delhi & Mumbai | 83.75% | 63.71% | 78.11% | 48069 | 0.01% | 100.00% | 53.69% | 83.64% | 90.31% | Nil | 0 | 0 | 85.49% | 89.96% | 99.68% | 0.52% | 44 | 301 | NA | | | |
| 3 | Airlink Communications Pvt. Ltd. | All India | 100.00% | 90.77% | 99.99% | 0 | NA | 100.00% | NA | 93.28% | 100.00% | 0 | 0 | 87.68% | 97.39% | 98.78% | 0.47% | 120 | 350 | NA | | | | |
| 4 | Airnet Cable and Datacom Pvt.Ltd. | Maharashtra | 1.00% | 91.00% | 100.00% | 0 | 0 | 0.00% | 0.00% | 100.00% | 100.00% | 0 | 0 | 6.00% | 100.00% | 100.00% | 0.45% | 5 | 255 | NA | | | | |
| | | Mumbai | 100.00% | 90.00% | 100.00% | 0 | 0 | 0.00% | 0.00% | 100.00% | 100.00% | 0 | 0 | 32.00% | 100.00% | 100.00% | 0.52% | 5 | 250 | NA | | | | |
| 5 | Alliance Broadband Services Pvt. Ltd. | All India | 100.00% | 92.37% | 100.00% | Nil | 0.00% | 100.00% | Nil | 83.33% | 100.00% | 0 | 0 | 73.49% | 98.19% | 99.45% | 0.00% | 67 | 208 | 200 | | | | |
| 6 | ANI Network Pvt. Ltd. | Delhi | 100.00% | 92.00% | 100.00% | 0 | 0.00% | 0.00% | 0.00% | 99.00% | 100.00% | 0 | 0 | 89.00% | 100.00% | 99.90% | 0.40% | 20 | 288 | NA | | | | |
| 7 | Asianet Satellite Communications | All India | 100.00% | 90.42% | 99.58% | Nil | 1.81% | 100.00% | 100.00% | 60.53% | 80.52% | Nil | 0 | 69.47% | 90.00% | 99.50% | 1.00% | 50 | 270 | NA | | | | |
| 8 | Atria Convergence Technologies Pvt. | All India | 100.00% | 93.01% | 98.43% | 31345 | 0.97% | 100.00% | Nil | 27.00% | 30.00% | 0 | 0 | 49.00% | 90.00% | 99.85% | 1.00% | 39 | 208 | NA | | | | |
| 9 | Bharti Airtel Ltd. | Andhra Pradesh | 100.00% | 91.79% | 99.40% | 1223 | 0.18% | 100.00% | 100.00% | 50.00% | 57.00% | 0% | 0% | 38.00% | 100.00% | 99.94% | 0.00% | 38 | 44 | NA | | | | |
| | | Delhi | 100.00% | 91.80% | 99.31% | 943 | 0.18% | 100.00% | 90.00% | 44.00% | 53.00% | 0% | 0% | 51.00% | 100.00% | 99.98% | 0.00% | 38 | 73 | NA | | | | |
| | | Gujarat | 100.00% | 93.55% | 99.38% | 166 | 0.26% | 100.00% | 78.00% | 49.00% | 56.00% | 0% | NA | NA | 100.00% | 99.98% | 0.00% | 22 | NA | NA | | | | |
| | | Haryana | 100.00% | 91.59% | 99.19% | 23 | 0.13% | 100.00% | 81.00% | 47.00% | 54.00% | 0% | NA | NA | 100.00% | 99.97% | 0.00% | 69 | NA | NA | | | | |
| | | Karnataka | 100.00% | 90.03% | 100.00% | 6459 | 0.22% | 100.00% | 100.00% | 54.00% | 61.00% | 0% | 0% | 39.00% | 100.00% | 99.89% | 0.00% | 30 | 45 | NA | | | | |
| | | Kerala | 100.00% | 91.56% | 99.89% | 231 | 0.26% | 100.00% | 100.00% | 43.00% | 49.00% | 0% | NA | NA | 100.00% | 99.96% | 0.00% | 22 | NA | NA | | | | |
| | | Kolkata | 100.00% | 91.43% | 100.00% | 6374 | 0.36% | 100.00% | 100.00% | 43.00% | 51.00% | 0% | 0% | 36.00% | 100.00% | 97.07% | 0.00% | 66 | 72 | NA | | | | |
| | | Jammu & Kashmir* | 100.00% | 91.01% | 100.00% | 0 | 0.02% | 100.00% | 100.00% | 50.00% | 58.00% | 0% | NA | NA | 100.00% | 98.93% | 0.00% | 26 | NA | NA | | | | |
| | | Madhya Pradesh | 100.00% | 90.58% | 99.09% | 642 | 0.28% | 100.00% | 76.00% | 46.00% | 54.00% | 0% | 0% | 41.00% | 100.00% | 99.96% | 0.00% | 45 | 62 | NA | | | | |
| | | Maharashtra | 100.00% | 92.85% | 99.29% | 454 | 0.12% | 100.00% | 100.00% | 48.00% | 55.00% | 0% | NA | NA | 100.00% | 99.83% | 0.00% | 15 | NA | NA | | | | |
| | | Mumbai | 100.00% | 94.44% | 99.50% | 414 | 0.19% | 100.00% | 100.00% | 49.00% | 57.00% | 0% | 0% | 47.00% | 100.00% | 99.89% | 0.00% | 38 | 57 | NA | | | | |
| | | Punjab | 100.00% | 90.25% | 99.53% | 1149 | 0.21% | 100.00% | 100.00% | 56.00% | 62.00% | 0% | 0% | 59.00% | 100.00% | 99.97% | 0.00% | 57 | 78 | NA | | | | |
| | | Rajasthan | 100.00% | 90.25% | 99.79% | 87 | 0.29% | 100.00% | 100.00% | 58.00% | 64.00% | 0% | NA | NA | 100.00% | 99.97% | 0.00% | 45 | NA | NA | | | | |
| Tamilnadu | 100.00% | 90.18% | 99.93% | 6836 | 0.21% | 100.00% | 79.00% | 56.00% | 62.00% | 0% | 0% | 42.00% | 100.00% | 99.96% | 0.00% | 23 | 34 | NA | | | | | | |
| Uttar Pradesh - East | 100.00% | 93.38% | 99.11% | 58 | 0.25% | 100.00% | 100.00% | 49.00% | 57.00% | 0% | 0% | 49.00% | 100.00% | 99.94% | 0.00% | 54 | 70 | NA | | | | | | |
| Uttar Pradesh - West | 100.00% | 90.57% | 99.08% | 43 | 0.29% | 100.00% | 67.00% | 47.00% | 55.00% | 0% | NA | NA | 100.00% | 99.95% | 0.00% | 24 | NA | NA | | | | | | |
| 10 | City Online Services Ltd. | AP | 100.00% | 98.00% | 99.00% | NA | 0.00% | 100.00% | 100.00% | 95.00% | 97.60% | 0% | 0% | 64.00% | 98.00% | 98.00% | 0.50% | 25 | 280 | NA | | | | |
| | | Karnataka | 100.00% | 98.00% | 99.00% | NA | 0.00% | 100.00% | 100.00% | 95.00% | 97.60% | 0% | 0% | 47.00% | 98.00% | 98.00% | 0.50% | 25 | 280 | NA | | | | |
| 11 | DEN Broadband Pvt. Ltd. | All India | 100.00% | 93.30% | 99.63% | 0 | Nil | Nil | Nil | 48.01% | 52.52% | 0 | 0 | 79.10% | 100.00% | 99.27% | 0.00% | NA | 240 | NA | | | | |
| 12 | Digital Network Associates Pvt. Ltd | Maharashtra & Goa | 100.00% | 90.59% | 99.25% | None | 0.09% | 100.00% | Nil | 62.22% | 82.70% | Nil | 0 | 80.00% | 80.00% | 99.77% | 1.00% | 4 | 255 | 600 | | | | |
| | | Mumbai | 100.00% | 97.70% | 100.00% | None | 0.00% | 100.00% | Nil | 73.22% | 90.93% | Nil | 0 | 80.00% | 80.00% | 99.77% | 1.00% | 4 | 255 | 600 | | | | |
| 13 | Digital Satellite Connect Pvt. Ltd. | Maharashtra | 100.00% | 93.37% | 99.35% | None | 0.00% | 100.00% | Nil | 64.24% | 85.59% | Nil | 0 | 80.00% | 80.00% | 99.73% | 1.00% | 4 | 255 | 600 | | | | |
| | | Mumbai | 100.00% | 91.77% | 99.45% | None | 0.00% | 100.00% | Nil | 65.55% | 86.41% | Nil | 0 | 80.00% | 80.00% | 99.73% | 1.00% | 4 | 255 | 600 | | | | |
| 14 | DNA Infotel Pvt. Ltd. | Maharashtra | 100.00% | 90.76% | 99.22% | None | 0.02% | 100.00% | Nil | 61.17% | 83.24% | Nil | 0 | 80.00% | 80.00% | 99.77% | 1.00% | 4 | 255 | 600 | | | | |
| 15 | D-Vois Communications Pvt.Ltd. | All India | 100.00% | 92.54% | 99.45% | 0 | 0.00% | Nil | Nil | 86.66% | 94.33% | 0 | Nil | Nil | 90.00% | 100.00% | 0.10% | 24 | 28 | 59 | | | | |
| 16 | ESTO BORADNAD Pvt.Ltd. | All India | 100.00% | 96.33% | 100.00% | 0 | 0.00% | 0.00% | 0.00% | 80.00% | 93.33% | 0 | 0 | 60.94% | 90.00% | 99.00% | 0.00% | 40 | 100 | 720 | | | | |
| 17 | Excitel Broadband Pvt.Ltd. | Andhra Pradesh | 100.00% | 91.00% | 99.00% | Nil | NA | NA | NA | 75.10% | 90.00% | 0 | Nil | 79.00% | 98.50% | 98.48% | 0.00% | 12 | 199 | NIL | | | | |
| | | Delhi | 100.00% | 90.10% | 99.10% | Nil | NA | NA | NA | 60.00% | 80.00% | 0 | Nil | 79.00% | 98.50% | 98.48% | 0.00% | 4 | 199 | NIL | | | | |
| | | Karnataka | 100.00% | 90.30% | 99.10% | Nil | NA | NA | NA | 60.00% | 80.00% | 0 | Nil | 50.90% | 98.50% | 98.48% | 0.00% | 12 | 199 | NIL | | | | |
| | | Rajasthan | 100.00% | 90.30% | 99.10% | Nil | NA | NA | NA | 60.00% | 80.00% | 0 | Nil | 79.00% | 98.50% | 98.48% | 0.00% | 4 | 199 | NIL | | | | |
| | | UP(East) | 100.00% | 90.30% | 99.10% | Nil | NA | NA | NA | 60.00% | 80.00% | 0 | Nil | 79.50% | 98.50% | 98.48% | 0.00% | 4 | 199 | NIL | | | | |

Annexure 4.3 (Contd.)

| | | | | | | | | | | | | | | | | | | | | |
|----------------------|--|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----|---------|--------|---------|---------|-------|-------|-------|-----|
| 18 | Five Networks Solution (India) Ltd. | All India | 100.00% | 99.50% | 100.00% | NA | 0.00% | 100.00% | 100.00% | NA | NA | NA | 0 | NA | 90.00% | 99.00% | 1.00% | NA | NA | NA |
| 19 | Fusionnet Web Services Pvt. Ltd. | All India | 100.00% | 93.00% | 99.20% | 98 | 0.00% | 100.00% | 100.00% | 84.50% | 88.10% | 0 | 0 | 88.00% | 100.00% | 100.00% | 1.00% | 120 | 350 | NA |
| 20 | GTPL Broadband Pvt.Ltd. | All India | 99.70% | 91.38% | 97.11% | 148 | 0.01% | 100.00% | 100.00% | 60.23% | 80.94% | NA | 0 | 62.47% | 91.43% | 99.51% | 0.00% | 11 | 300 | NA |
| 21 | Hathway Cable & Datacom Ltd. | All India | 100.00% | 92.62% | 99.43% | 6540 | 1.05% | 100.00% | 100.00% | 69.06% | 82.27% | 0 | 0 | 79.79% | 90.00% | 99.95% | 0.05% | 75 | 264 | NA |
| 22 | Honesty Net Solutions (I) Pvt. Ltd. | Mumbai | 100.00% | 93.00% | 100.00% | 0 | Nil | 100.00% | 0.00% | 67.00% | 100.00% | 0 | NA | NA | 95.00% | 100.00% | 1.00% | NA | 66 | NA |
| 23 | Indinet Service Pvt Ltd | All India | 100.00% | 91.67% | 100.00% | 0 | 0.00% | 100.00% | 100.00% | 64.00% | 83.00% | 0 | 0 | 88.00% | 90.00% | 98.76% | 1.00% | 46 | 253 | 0 |
| 24 | Intech Online Pvt.Ltd. | Maharashtra | 100.00% | 85.22% | 96.52% | 22 | 1.59% | 100.00% | 0.00% | 73.32% | 80.60% | 0 | 0 | 78.17% | 84.66% | 99.16% | 1.00% | 15 | 89.33 | 452 |
| | | Mumbai | 100.00% | 87.04% | 97.65% | 30 | 0.77% | 100.00% | 0.00% | 76.67% | 82.31% | 0 | 0 | 58.95% | 84.66% | 99.16% | 1.00% | 1 | 76 | 453 |
| 25 | Ishan Netsol Pvt Ltd | Gujarat | 100.00% | 91.99% | 100.00% | 0 | 0.00% | 100.00% | 100.00% | 67.59% | 86.57% | 0 | 0 | 54.63% | 91.00% | 98.77% | 1.00% | 100 | 250 | NA |
| 26 | Joister Inforserve Pvt. Ltd. (Formerly Syscon Infoway Pvt. Ltd.) | Mumbai | 100.00% | 93.00% | 100.00% | Nil | 0.00% | 100.00% | 0.00% | 86.00% | 87.00% | 0 | 0 | 76.00% | 99.00% | 100.00% | 0.00% | 1 | 47 | 265 |
| | | Maharashtra | 100.00% | 96.00% | 100.00% | Nil | 0.00% | 100.00% | NA | 85.00% | 86.00% | 0 | 0 | 81.00% | 99.00% | 100.00% | 1.00% | 1 | 225 | 265 |
| 27 | Limras Eronet Broadband Service Pvt. | All India | 100.00% | 99.00% | 100.00% | 0 | 1.00% | 100.00% | 0.00% | 90.00% | 100.00% | 0 | 0 | 0.00% | 95.00% | 99.40% | 1.00% | 32 | 261 | 0 |
| 28 | Meghbela Cable & Broadband | All India | 100.00% | 95.00% | 100.00% | 0 | 0.00% | 100.00% | 100.00% | 95.00% | 100.00% | Nil | Nil | 74.00% | 95.00% | 99.90% | 0.00% | 60 | 150 | 0 |
| 29 | Microscan Infocommtech Pvt. Ltd. (Formerly - Microscan Computers Pvt Ltd) | Mumbai | 100.00% | 95.00% | 99.67% | 0 | 0.00% | 0.00% | 0.00% | 100.00% | 100.00% | 0 | 0 | 29.13% | 100.00% | 100.00% | 0.47% | 5 | 255 | NA |
| | | Maharashtra | 100.00% | 95.00% | 99.00% | 0 | 0.00% | 0.00% | 0.00% | 100.00% | 100.00% | 0 | 0 | 6.83% | 100.00% | 100.00% | 0.45% | 5 | 255 | NA |
| 30 | Netplus Broadband Services Pvt. Ltd. | Delhi | 100.00% | 100.00% | 100.00% | 0 | 0.00% | 100.00% | 100.00% | 74.00% | 87.00% | 0 | 0 | 67.65% | 95.53% | 100.00% | 0.10% | 98 | 193 | NA |
| | | Haryana | 100.00% | 95.67% | 100.00% | 0 | 0.84% | 100.00% | 100.00% | 74.00% | 87.00% | 0 | 0 | 74.00% | 95.87% | 100.00% | 0.10% | 88 | 183 | NA |
| | | Himachal Pradesh | 100.00% | 94.00% | 100.00% | 0 | 0.81% | 100.00% | 100.00% | 74.00% | 87.00% | 0 | 0 | 76.00% | 95.73% | 100.00% | 0.10% | 84 | 190 | NA |
| | | Jammu & Kashmir | 100.00% | 100.00% | 100.00% | 0 | 0.76% | 100.00% | 100.00% | 74.00% | 87.00% | 0 | 0 | 73.05% | 95.33% | 100.00% | 0.10% | 96 | 194 | NA |
| | | Punjab | 100.00% | 91.97% | 100.00% | 0 | 0.70% | 100.00% | 100.00% | 74.00% | 87.00% | 0 | 0 | 78.00% | 96.30% | 100.00% | 0.10% | 85 | 105 | NA |
| | | Rajasthan | 100.00% | 100.00% | 100.00% | 0 | 0.15% | 100.00% | 100.00% | 79.00% | 85.00% | 0 | 0 | 76.00% | 95.90% | 100.00% | 0.10% | 95 | 196 | NA |
| | | UP-West | 100.00% | 96.00% | 100.00% | 0 | 0.45% | 100.00% | 100.00% | 74.00% | 87.00% | 0 | 0 | 77.84% | 95.63% | 100.00% | 0.10% | 92 | 189 | NA |
| 31 | Nextra Teleservices Pvt. Ltd. | Delhi | 100.00% | 91.37% | 99.20% | 1055 | 1.00% | 100.00% | 100.00% | 66.00% | 83.00% | 0 | 0 | 83.00% | 100.00% | 100.00% | 1.00% | 120 | 350 | NA |
| 32 | Ortel Communications Ltd. | All India | 100.00% | 95.33% | 99.46% | 0 | NA | NA | NA | 100.00% | 100.00% | 0 | 0 | 52.75% | 91.00% | 98.59% | 0.00% | 87 | 173 | NA |
| 33 | ONEOTT Entertainment Limited (formerly Planet E-shop Holdings India) | All India | 100.00% | 97.00% | 99.00% | 22 | 1.53% | 100.00% | 100.00% | 100.00% | 100.00% | 0 | 0 | 88.67% | 100.00% | 99.60% | 0.50% | 65 | 257 | NA |
| 34 | Quadrant Televentures Ltd. | Punjab | 100.00% | 93.00% | 99.36% | 0 | 0.00% | 100.00% | 100.00% | 71.40% | 81.00% | 0 | 0 | 77.63% | 100.00% | 99.98% | 0.00% | 80 | 280 | 0 |
| 35 | Quest Consultancy Pvt Ltd. | Gujarat | 100.00% | 95.00% | 100.00% | Nil | Nil | 100.00% | Nil | 89.00% | 99.00% | 0 | Nil | 82.00% | 99.00% | 99.00% | 0.30% | 13 | 267 | NA |
| 36 | RailTel Corporation of India Ltd. | All India (Pan India) | 100.00% | 97.60% | 100.00% | Nil | 0.00% | Nil | Nil | 72.66% | 80.66% | 0 | 0 | 54.14% | 100.00% | 99.95% | 1.00% | 120 | 350 | NA |
| 37 | Rajesh Digital Datacom Pvt.Ltd. | Mumbai | 100.00% | 97.00% | 100.00% | 0 | 0.00% | 100.00% | 100.00% | 97.00% | 97.00% | 0 | 0 | 88.00% | 83.00% | 99.00% | 0.00% | 46 | 250 | 500 |
| 38 | Reliance Jio Infocomm Ltd. | Andhra Pradesh | 100.00% | 90.89% | 99.95% | 0 | 0.00% | 100.00% | 100.00% | 95.40% | 96.60% | 0% | NA | NA | 100.00% | 99.99% | NA | NA | NA | NA |
| | | Assam | 100.00% | 91.25% | 99.62% | 0 | 0.00% | 100.00% | 100.00% | 95.40% | 96.90% | NA | NA | NA | 100.00% | 99.99% | NA | NA | NA | NA |
| | | Bihar | 100.00% | 90.56% | 99.85% | 0 | 0.00% | 100.00% | 100.00% | 94.60% | 96.20% | NA | NA | NA | 100.00% | 99.98% | NA | NA | NA | NA |
| | | Delhi | 100.00% | 91.00% | 99.95% | 0 | 0.00% | 100.00% | 100.00% | 85.80% | 86.80% | 0% | 0% | 50.00% | 100.00% | 99.94% | 0.00% | 1.10% | NA | NA |
| | | Gujarat | 100.00% | 91.14% | 99.90% | 0 | 0.00% | 100.00% | 100.00% | 96.90% | 98.00% | 0% | NA | NA | 100.00% | 100.00% | NA | NA | NA | NA |
| | | Haryana | 100.00% | 92.35% | 99.84% | 0 | 0.00% | 100.00% | 100.00% | 94.70% | 96.10% | NA | NA | NA | 100.00% | 99.94% | NA | NA | NA | NA |
| | | Himachal Pradesh | 100.00% | 100.00% | 100.00% | 0 | 0.00% | 100.00% | 100.00% | 93.30% | 93.30% | NA | NA | NA | 100.00% | 98.80% | NA | NA | NA | NA |
| | | Jammu & Kashmir | 100.00% | 90.33% | 99.91% | 0 | 0.00% | 100.00% | 100.00% | 94.30% | 95.90% | NA | NA | NA | 100.00% | 99.92% | NA | NA | NA | NA |
| | | Karnataka | 100.00% | 90.96% | 99.84% | 0 | 0.00% | 100.00% | 100.00% | 95.80% | 97.00% | 0% | 0% | 26.00% | 100.00% | 99.97% | NA | NA | NA | NA |
| | | Kerala | 100.00% | 91.24% | 99.72% | 0 | 0.00% | 100.00% | 100.00% | 95.10% | 97.00% | NA | NA | NA | 100.00% | 99.99% | NA | NA | NA | NA |
| | | Kolkata | 100.00% | 90.51% | 99.83% | 0 | 0.00% | 100.00% | 100.00% | 93.30% | 95.40% | NA | NA | NA | 100.00% | 99.97% | NA | NA | NA | NA |
| | | Madhya Pradesh | 100.00% | 90.94% | 99.93% | 0 | 0.00% | 100.00% | 100.00% | 95.80% | 97.10% | NA | NA | NA | 100.00% | 99.99% | NA | NA | NA | NA |
| | | Maharashtra | 100.00% | 90.51% | 99.74% | 0 | 0.00% | 100.00% | 100.00% | 96.30% | 97.30% | 0% | NA | NA | 100.00% | 99.97% | NA | NA | NA | NA |
| | | Mumbai | 100.00% | 90.81% | 99.82% | 0 | 0.00% | 100.00% | 100.00% | 97.30% | 98.30% | 0% | 0% | 50.00% | 100.00% | 99.97% | 0.00% | 1.83% | 102 | NA |
| | | North East | 100.00% | 90.10% | 100.00% | 0 | 0.00% | 100.00% | 100.00% | 95.90% | 97.10% | NA | NA | NA | 100.00% | 99.94% | NA | NA | NA | NA |
| | | Orissa | 100.00% | 90.21% | 99.69% | 0 | 0.00% | 100.00% | 100.00% | 95.50% | 96.60% | NA | NA | NA | 100.00% | 100.00% | NA | NA | NA | NA |
| | | Punjab | 100.00% | 92.12% | 100.00% | 0 | 0.00% | 100.00% | 100.00% | 94.60% | 96.10% | NA | NA | NA | 100.00% | 99.95% | NA | NA | NA | NA |
| | | Rajasthan | 100.00% | 91.21% | 99.72% | 0 | 0.00% | 100.00% | 100.00% | 95.20% | 96.50% | NA | NA | NA | 100.00% | 99.96% | NA | NA | NA | NA |
| | | Tamilnadu | 100.00% | 91.02% | 99.67% | 0 | 0.00% | 100.00% | 100.00% | 96.10% | 97.20% | 0% | 0% | 44.00% | 100.00% | 100.00% | 0.02% | 1.64% | 29 | NA |
| Uttar Pradesh - East | 100.00% | 92.16% | 99.82% | 0 | 0.00% | 100.00% | 100.00% | 95.00% | 96.40% | 0% | NA | NA | 100.00% | 99.95% | NA | NA | NA | NA | | |
| Uttar Pradesh - West | 100.00% | 90.76% | 99.82% | 0 | 0.00% | 100.00% | 100.00% | 95.30% | 96.70% | NA | NA | NA | 100.00% | 99.94% | NA | NA | NA | NA | | |
| West Bengal | 100.00% | 90.98% | 99.55% | 0 | 0.00% | 100.00% | 100.00% | 94.20% | 95.70% | NA | NA | NA | 100.00% | 99.90% | NA | NA | NA | NA | | |

Annexure 4.3 (Contd.)

| | | | | | | | | | | | | | | | | | | | | |
|----|--|-----------------------|-----------------------------|---------|---------|------|---|---------|---------|--------|---------|-----|---------------------|--------|---------|--|-------|----|-------|-----|
| 39 | Sai Prasad Internet Services Pvt.Ltd. | Maharashtra | 100.00% | 90.44% | 99.20% | 0 | 0.00% | 100.00% | Nil | 62.00% | 82.27% | Nil | 0 | 80.00% | 80.00% | 99.73% | 1.00% | 4 | 255 | 600 |
| 40 | Shree Omkar Infocom Pvt. Ltd. | Mumbai | 100.00% | 98.00% | 100.00% | 11 | 0.00% | 100.00% | 100.00% | 90.00% | 95.00% | 0 | 0 | 70.00% | 94.00% | 99.90% | 1.00% | 2 | 125 | 650 |
| 41 | Shyam Spectra Pvt. Ltd. (formerly Citycom Networks Pvt. Ltd.) | All India | 100.00% | 91.69% | 99.09% | 662 | 1.25% | 100.00% | 100.00% | 78.80% | 80.30% | 0 | 0 | 23.60% | 96.90% | 99.70% | 0.00% | 10 | 116 | NA |
| 42 | Sikka Broadband(P) Ltd. | UP (East) | 100.00% | 91.00% | 99.26% | 0 | 0.00% | 0.00% | 0.00% | 88.00% | 98.70% | 0% | 0% | 81.48% | 86.60% | 99.50% | 1.00% | 10 | 290 | 400 |
| 43 | Siti Broadband Services Pvt.Ltd. | All India (Pan India) | 100.00% | 91.65% | 99.07% | 43 | Nil | Nil | 100.00% | 85.00% | 99.00% | 0 | 0 | 89.14% | 95.00% | 99.44% | 0.00% | 3 | 144 | NA |
| 44 | Tata Communications Ltd. <small>(Ceased broadband services, hence NIL report)</small> | All India | NA | 0.00% | 0.00% | 0 | 0.00% | 0.00% | 0.00 | 0.00% | 0.00% | Nil | Nil | 0.00% | 0.00% | 0.00% | 0.00% | 15 | 253 | 0 |
| 45 | Tata Sky Broadband Pvt. Ltd. | All India | 100.00% | 95.54% | 99.36% | NA | NA | NA | NA | 74.85% | 77.62% | 0 | 0 | 56.00% | 100.00% | 99.91% | 0.00% | 1 | NA | NA |
| 46 | Tata Tele.Ltd. (TTSL) | All India (except MH) | 100.00% | 68.27% | 89.12% | 48 | 0.03% | 100.00% | 100.00% | 93.32% | 97.03% | 0 | 0 | 68.10% | 91.75% | 99.57% | 0.00% | 69 | 65.22 | Nil |
| 47 | Tata Tele.(Mah) Ltd. (TTML) | Mah. & Mumbai | 100.00% | 48.00% | 73.50% | 0 | 0.03% | 100.00% | 100.00% | 92.68% | 95.96% | 0 | 0 | 78.00% | 91.00% | 99.65% | 0.02% | 83 | 241 | Nil |
| 48 | Vasai Cable Pvt. Ltd. | Maharashtra | 100.00% | 95.10% | 100.00% | None | 0.13% | 100.00% | Nil | 63.70% | 82.87% | Nil | 0 | 63.00% | 90.00% | 100.00% | 1.00% | 4 | 255 | NA |
| 49 | Wan and Lan Internet Pvt. Ltd. | Mumbai | 100.00% | 100.00% | 100.00% | 0 | 0.00% | 100.00% | 0.00% | 90.00% | 90.00% | 0 | 0 | 90.00% | 90.00% | 99.90% | 0.00% | 20 | 40 | 80 |
| 50 | Wish Net Pvt. Ltd. | Kolkata | 100.00% | 98.74% | 100.00% | 0 | 0.00% | 100.00% | NA | 89.36% | 99.00% | 0 | 0 | 46.07% | 100.00% | 99.96% | 1.00% | 20 | NA | NA |
| | | West Bengal | 100.00% | 98.88% | 100.00% | 0 | 0.00% | 100.00% | NA | 89.28% | 98.53% | 0 | 0 | 46.07% | 100.00% | 99.94% | 1.00% | 20 | NA | NA |
| 51 | World Phone Internet Services Pvt Ltd. | All India | 100.00% | 91.67% | 100.00% | 0 | 0.00% | 0.00% | 0.00% | 99.00% | 100.00% | 0 | NA | NA | 85.00% | 99.83% | 1.00% | 25 | NA | NA |
| 52 | Yashash Cable Network Pvt Ltd | Karnataka | 100.00% | 81.00% | 90.00% | 251 | 0.00% | 0.00% | 0.00% | 55.51% | 76.29% | 0 | 0 | 92.61% | 80.00% | 99.44% | 1.00% | 30 | 301 | 0 |
| 53 | You Broadband India Pvt. Ltd. | All India | 80.23% | 82.99% | 98.86% | 49 | 0.00% | 0.00% | 0.00% | 38.16% | 45.30% | 0 | 0 | 76.56% | 87.15% | 98.94% | 0.00% | 9 | 277 | 0 |
| | | | DNF= Data not as per Format | | | | NR= Data not reported by the Service Provider | | | | | | NA = Not Applicable | | | C/DNF= Complied the parameter but Data is not in the required format | | | | |

Annexure 5.1: List of pay channels, offered by broadcasters to subscribers as reported to TRAI (New Regulatory Framework) -as on 30th June 2020)

| S. No | Name of the broadcaster | Sl. No | Name of the channel | Genre as per new Regulatory framework | Language | Declared as SD or HD |
|--------------|---|---------------|----------------------------|--|-------------------|-----------------------------|
| 1 | AETN 18 Media Pvt Limited | 1 | The History Channel | Infotainment | Hindi | SD |
| | | 2 | FY1 TV18 | Infotainment | English | SD |
| | | 3 | FY1 TV18 (HD) | Infotainment | English | HD |
| | | 4 | Histry TV 18 HD | Infotainment | Hindi | HD |
| 2 | Asianet Star Communications Private Limited | 5 | Vijay TV | GEC | Tamil | SD |
| | | 6 | Vijay Super | GEC | Tamil | SD |
| | | 7 | Vijay HD | GEC | Tamil | HD |
| | | 8 | Asianet | GEC | Malayalam | SD |
| | | 9 | Asianet Plus | GEC | Malayalam | SD |
| | | 10 | Asianet Movies | Movies | Malayalam | SD |
| | | 11 | Suvarna Plus | Movies | Kannada | SD |
| | | 12 | Star Suvarna HD | GEC | Kannada | HD |
| | | 13 | Asianet HD | GEC | Malayalam | HD |
| | | 14 | Star Suvarna | GEC | Kannada | SD |
| 3 | Bangla Entertainment Private Limited | 15 | AATH | GEC | Bangla | SD |
| | | 16 | SONY Marathi | GEC | Marathi | SD |
| 4 | BBC Global News India Private Limited | 17 | BBC World News | News | English | SD |
| | | 18 | Cbeebies | Kids | English | SD |
| 5 | Bennett, Coleman & Company Limited | 19 | Zoom | GEC | Hindi | SD |
| | | 20 | Romedy Now | Movies | English | SD |
| | | 21 | MN + | Movies | English | HD |
| | | 22 | Mirror Now | News | English/ Hindi | SD |
| | | 23 | ET NOW | News | English/ Hindi | SD |
| | | 24 | Times Now | News | English/ Hindi | SD |
| | | 25 | Romedy Now HD | Movies | English | HD |
| | | 26 | Movies Now HD | Movies | English | HD |
| | | 27 | MNX HD | Movies | English | HD |

Annexure 5.1(Contd.)

| S. No | Name of the broadcaster | Sl. No | Name of the channel | Genre as per new Regulatory framework | Language | Declared as SD or HD |
|--------------|-------------------------------------|---------------|---|--|-------------------|-----------------------------|
| | | 28 | MNX | Movies | English | SD |
| | | 29 | Times Now World | News | English | HD |
| 6 | Celebrities Management Pvt Limited | 30 | Travel XP HD | Lifestyle | English | HD |
| | | 31 | Travel XP Tamil | Lifestyle | Tamil | SD |
| 7 | CSL Info Media Private Limited | 32 | JAN TV PLUS | News | Hindi | SD |
| 8 | Direct New Private Limited | 33 | News X | News | English | SD |
| 9 | Discovery Communications India | 34 | Animal Planet | Infotainment | English/ Hindi | SD |
| | | 35 | Discovery Channel | Infotainment | English/ Hindi | SD |
| | | 36 | DTAMIL | Infotainment | Tamil | SD |
| | | 37 | Discovery Kids Channel | Kids | English | SD |
| | | 38 | Discovery Science | Infotainment | English/ Hindi | SD |
| | | 39 | Discovery Turbo | Infotainment | English/ Hindi | SD |
| | | 40 | Investigation Discovery | GEC | Hindi | SD |
| | | 41 | Discovery HD | Infotainment | English | HD |
| | | 42 | Animal Planet HD World | Infotainment | English/ Hindi | HD |
| | | 43 | TLC HD | Infotainment | English/ Hindi | HD |
| | | 44 | Investigation Discovery HD | GEC | Hindi | HD |
| | | 45 | TLC | Infotainment | English/ Hindi | SD |
| | | 46 | EUROSPORT HD (Earlier name "Dsport HD") | Sports | English | HD |
| | | 47 | EUROSPORT (Earlier name "Dsport") | Sports | English | SD |
| 10 | Disney Broadcasting (India) Limited | 48 | Disney Junior | Kids | English | SD |
| | | 49 | UTV Movies | Movies | Hindi | SD |
| | | 50 | Marvel HQ | Kids | English/ Hindi | SD |
| | | 51 | Disney International HD | GEC | English | HD |

Annexure 5.1(Contd.)

| S. No | Name of the broadcaster | Sl. No | Name of the channel | Genre as per new Regulatory framework | Language | Declared as SD or HD |
|--------------|--|---------------|----------------------------|--|-------------------|-----------------------------|
| | | 52 | Hungama TV | Kids | English/ Hindi | SD |
| | | 53 | The Disney Channel | Kids | English/ Hindi | SD |
| | | 54 | UTV HD | Movies | Hindi | HD |
| | | 55 | UTV Bindass | GEC | Hindi | SD |
| | | 56 | UTV Action | Movies | Hindi | SD |
| 11 | Eenadu Televisoin Private Limited | 57 | ETV | GEC | Telugu | SD |
| | | 58 | ETV Andhra Pradesh | News | Telugu | SD |
| | | 59 | ETV - Telangana | News | Telugu | SD |
| | | 60 | ETV Cinema | Movies | Telugu | SD |
| | | 61 | ETV Life | GEC | Telugu | SD |
| | | 62 | ETV Plus | GEC | Telugu | SD |
| | | 63 | ETV Abhiruchi | GEC | Telugu | SD |
| | | 64 | ETV HD | GEC | Telugu | HD |
| | | 65 | ETV Plus HD | GEC | Telugu | HD |
| | | 66 | ETV Cinema HD | Movies | Telugu | HD |
| | | 67 | ETV Abhiruchi HD | GEC | Telugu | HD |
| | | 68 | ETV Life HD | GEC | Telugu | HD |
| 12 | IN 10 Media Private Limited | 69 | EPIC TV | Infotainment | English/ Hindi | SD |
| 13 | Fame Media Private Limited | 70 | 4tv News | News | Urdu/ Hindi | SD |
| 14 | Greycells18 Media Limited | 71 | Topper TV | Miscellaneous | English | SD |
| 15 | IBN Lokmat News Private Ltd | 72 | News 18 Lokmat | News | Hindi | SD |
| 16 | Living Entertainment Enterprises Private Ltd | 73 | Living Foodz HD | Infotainment | Hindi | HD |
| | | 74 | Living Travelz | Infotainment | Hindi | SD |
| 17 | Lifestyle and Media Broadcasting Limited | 75 | Good Times | Lifestyle | English | SD |
| 18 | Lex Sportel Vision Private Limited | 76 | 1SPORTS | Sports | English | SD |

| S. No | Name of the broadcaster | Sl. No | Name of the channel | Genre as per new Regulatory framework | Language | Declared as SD or HD |
|--------------|--|---------------|-------------------------------------|--|-------------------|-----------------------------|
| 19 | Mavis Satcom Limited | 77 | J Movies | Movies | Tamil | SD |
| | | 78 | Jaya Max | Music | Tamil | SD |
| | | 79 | Jaya Plus | News | Tamil | SD |
| | | 80 | Jaya TV HD | GEC | Tamil | HD |
| 20 | MSM World Wide Factual Media Private Limited | 81 | SONY BBC EARTH | Infotainment | English/ Hindi | SD |
| | | 82 | SONY BBC EARTH HD | Infotainment | English/ Hindi | HD |
| 21 | Media World Wide Limited | 83 | Travel XP | Lifestyle | English | SD |
| 22 | New Delhi Television Limited | 84 | NDTV 24*7 | News | English | SD |
| | | 85 | NDTV India | News | Hindi | SD |
| | | 86 | NDTV Profit | News | English | SD |
| 23 | NGC Network (India) Pvt Limited | 87 | Fox Life | Infotainment | English/ Hindi | SD |
| | | 88 | National Geographic Channel (NGC) | Infotainment | English/ Hindi | SD |
| | | 89 | Fox Life HD | Infotainment | English/ Hindi | HD |
| | | 90 | Nat Geo Wild | Infotainment | English/ Hindi | SD |
| | | 91 | National Geographic HD | Infotainment | English/ Hindi | HD |
| | | 92 | Nat Geo Wild HD | Infotainment | English/ Hindi | HD |
| | | 93 | Baby TV HD | Kids | English/ Hindi | HD |
| 24 | NOIDA Software Technology Park Limited | 94 | NHK World Premium (HD Distribution) | Infotainment | Japanese | HD |
| 25 | Odisha Television Limited | 95 | Prarthana | Devotional | Odia | SD |
| | | 96 | Tarang | GEC | Odia | SD |
| | | 97 | Tarang Music | Music | Odia | SD |
| | | 98 | Alankar | Movies | Odia | SD |
| 26 | Raj Television Network Limited | 99 | Raj Digital Plus | Movies | Tamil | SD |
| | | 100 | Raj Musix | Music | Tamil | SD |
| | | 101 | Raj News | News | Tamil | SD |
| | | 102 | Raj TV | GEC | Tamil | SD |

Annexure 5.1(Contd.)

| S. No | Name of the broadcaster | Sl. No | Name of the channel | Genre as per new Regulatory framework | Language | Declared as SD or HD |
|--------------|--|---------------|----------------------------------|--|-------------------|-----------------------------|
| 27 | Silverstar Communications Limited | 103 | Mega 24 | GEC | Tamil | SD |
| | | 104 | Mega Musiq | Music | Tamil | SD |
| | | 105 | Mega TV | GEC | Tamil | SD |
| 28 | Sony Pictures Networks India Private Limited | 106 | Sony YAY! | Kids | English | SD |
| | | 107 | SET MAX | Movies | Hindi | SD |
| | | 108 | SAB | GEC | Hindi | SD |
| | | 109 | SONY ENTERTAINMENT CHANNEL (SET) | GEC | Hindi | SD |
| | | 110 | PIX | Movies | English | SD |
| | | 111 | SIX | Sports | English/ Hindi | SD |
| | | 112 | MAX 2 | Movies | Hindi | SD |
| | | 113 | PAL | GEC | Hindi | SD |
| | | 114 | SET HD | GEC | Hindi | HD |
| | | 115 | SIX HD | Sports | English/ Hindi | HD |
| | | 116 | PIX HD | Movies | English | HD |
| | | 117 | MAX HD | Movies | Hindi | HD |
| | | 118 | Ten 2 HD | Sports | English/ Hindi | HD |
| | | 119 | Ten 3 HD | Sports | English/ Hindi | HD |
| | | 120 | Ten 2 | Sports | English/ Hindi | SD |
| | | 121 | Ten 1 | Sports | English | SD |
| | | 122 | Ten 3 | Sports | English/ Hindi | SD |
| | | 123 | Ten 1 HD | Sports | English | HD |
| 124 | SONY Wah | Movies | Hindi | SD | | |
| 125 | SAB HD | GEC | Hindi | HD | | |
| 29 | Star India Private Limited | 126 | Star Sports 3 | Sports | English/ Hindi | SD |
| | | 127 | Star Sports 1 Tamil | Sports | Tamil | SD |
| | | 128 | Star Sports Select 2 | Sports | English/ Hindi | SD |

Annexure 5.1(Contd.)

| S. No | Name of the broadcaster | Sl. No | Name of the channel | Genre as per new Regulatory framework | Language | Declared as SD or HD |
|--------------|--------------------------------|---------------|----------------------------|--|-------------------|-----------------------------|
| | | 129 | Star Bharat | GEC | Hindi | SD |
| | | 130 | Star Gold 2 (Movies OK) | Movies | Hindi | SD |
| | | 131 | Star Sports 1 Hindi | Sports | Hindi | SD |
| | | 132 | Star Gold | Movies | Hindi | SD |
| | | 133 | Star Jalsha | GEC | Bangla | SD |
| | | 134 | Star Movies | Movies | English | SD |
| | | 135 | Star Gold Select | Movies | Hindi | SD |
| | | 136 | Star Plus | GEC | Hindi | SD |
| | | 137 | Star Pravah | GEC | Marathi | SD |
| | | 138 | Star Sports 1 | Sports | English/ Hindi | SD |
| | | 139 | Star Sports 2 | Sports | English/ Hindi | SD |
| | | 140 | Star World | GEC | English | SD |
| | | 141 | Jalsha Movies | Movies | Bangla | SD |
| | | 142 | Star Sports HD 2 | Sports | English/ Hindi | HD |
| | | 143 | Star Sports HD 1 | Sports | English/ Hindi | HD |
| | | 144 | Star Bharat HD | GEC | Hindi | HD |
| | | 145 | Star Gold HD | Movies | Hindi | HD |
| | | 146 | Star Movies HD | Movies | English | HD |
| | | 147 | Star Plus HD | GEC | Hindi | HD |
| | | 148 | Star Sports 1 HD Hindi | Sports | Hindi | HD |
| | | 149 | Star Sports Select 1 | Sports | English/ Hindi | SD |
| | | 150 | Star Movies Select HD | Movies | English | HD |
| | | 151 | Star World HD | GEC | English | HD |
| | | 152 | Star Sports First | Sports | English/ Hindi | SD |
| | | 153 | MAA Gold | Movies | Telugu | SD |
| | | 154 | MAA Movies | Movies | Telugu | SD |
| | | 155 | MAA Music | Music | Telugu | SD |

Annexure 5.1(Contd.)

| S. No | Name of the broadcaster | Sl. No | Name of the channel | Genre as per new Regulatory framework | Language | Declared as SD or HD |
|--------------|--------------------------------|---------------|----------------------------|--|-------------------|-----------------------------|
| | | 156 | MAA TV | GEC | Telugu | SD |
| | | 157 | Star Pravah HD | GEC | Marathi | HD |
| | | 158 | Star Jalsha HD | GEC | Bangla | HD |
| | | 159 | Jalsha Movies HD | Movies | Bangla | HD |
| | | 160 | Star Sports Select HD 1 | Sports | English/ Hindi | HD |
| | | 161 | Star Sports Select HD 2 | Sports | English/ Hindi | HD |
| | | 162 | MAA HD | GEC | Telugu | HD |
| | | 163 | Star Gold Select HD | Movies | Hindi | HD |
| | | 164 | MAA Movies HD | Movies | Telugu | HD |
| | | 165 | National Geographic Tamil | Infotainment | Tamil | SD |
| | | 166 | National Geographic Telugu | Infotainment | Telugu | SD |
| | | 167 | Star World Premiere HD | GEC | English | HD |
| | | 168 | Star Sport 1 Telugu | Sports | Telugu | SD |
| | | 169 | Star Sport 1 Kannada | Sports | Kannada | SD |
| | | 170 | Star Sports 1 Bangla | Sports | Bangla | SD |
| | | 171 | Star Utsav | GEC | Hindi | SD |
| | | 172 | Star Sports 1 Marathi | Sports | Marathi | SD |
| | | 173 | Star Utsav Movies | Movies | Hindi | SD |
| 30 | SUN TV Network Limited | 174 | Adithya TV | GEC | Tamil | SD |
| | | 175 | Chintu TV | Kids | Kannada | SD |
| | | 176 | Chutti TV | Kids | Tamil | SD |
| | | 177 | Gemini Comedy | GEC | Telugu | SD |
| | | 178 | Gemini Life | GEC | Telugu | SD |
| | | 179 | Gemini Movies | GEC | Telugu | SD |
| | | 180 | Gemini Music | Music | Telugu | SD |
| | | 181 | Gemini News | News | Telugu | SD |
| | | 182 | Gemini TV | GEC | Telugu | SD |
| | | 183 | KTV | GEC | Tamil | SD |
| | | 184 | Surya Movies | GEC | Malayalam | SD |
| | | 185 | Kushi TV | Kids | Telugu | SD |
| | | 186 | SUN Life | GEC | Tamil | SD |
| | | 187 | Sun Music | Music | Tamil | SD |

Annexure 5.1(Contd.)

| S. No | Name of the broadcaster | Sl. No | Name of the channel | Genre as per new Regulatory framework | Language | Declared as SD or HD |
|--------------|---------------------------------------|---------------|----------------------------|--|-----------------|-----------------------------|
| | | 188 | Sun News | News | Tamil | SD |
| | | 189 | Surya Music | Music | Malayalam | SD |
| | | 190 | SUN TV | GEC | Tamil | SD |
| | | 191 | Surya Comedy | GEC | Malayalam | SD |
| | | 192 | Surya TV | GEC | Malayalam | SD |
| | | 193 | Udaya Comedy | GEC | Kannada | SD |
| | | 194 | Udaya Movies | GEC | Kannada | SD |
| | | 195 | Udaya Music | Music | Kannada | SD |
| | | 196 | Udaya News | News | Kannada | SD |
| | | 197 | Udaya TV | GEC | Kannada | SD |
| | | 198 | Kochu TV | Kids | Malayalam | SD |
| | | 199 | Sun TV HD | GEC | Tamil | HD |
| | | 200 | KTV HD | GEC | Tamil | HD |
| | | 201 | Sun Music HD | Music | Tamil | HD |
| | | 202 | Gemini TV HD | GEC | Telugu | HD |
| | | 203 | Gemini Music HD | Music | Telugu | HD |
| | | 204 | Gemini Movies HD | GEC | Telugu | HD |
| | | 205 | Surya TV HD | GEC | Malayalam | HD |
| | | 206 | Udaya TV HD | GEC | Kannada | HD |
| 31 | Suryansh Broadcasting Private Limited | 207 | Flowers | GEC | Malayalam | SD |
| 32 | Turner International India Pvt Ltd | 208 | Cartoon Network | Kids | Hindi | SD |
| | | 209 | CNN International | News | English | SD |
| | | 210 | HBO | Movies | English | SD |
| | | 211 | POGO | Kids | Hindi | SD |
| | | 212 | Cartoon Network HD+ | Kids | Hindi | HD |
| | | 213 | WB | Movies | English | SD |
| | | 214 | HBO HD | Movies | English | HD |
| 33 | TV 18 Broadcast Limited | 215 | CNN News 18 | News | English | SD |
| | | 216 | CNBC Bazaar | News | Gujarati | SD |

Annexure 5.1(Contd.)

| S. No | Name of the broadcaster | Sl. No | Name of the channel | Genre as per new Regulatory framework | Language | Declared as SD or HD |
|--------------|---------------------------------|---------------|--|--|-----------------|-----------------------------|
| | | 217 | CNBC TV 18 Prime HD | News | English | HD |
| | | 218 | CNBC Awaaz | News | Hindi | SD |
| | | 219 | News 18 Tamil Nadu | News | Tamil | SD |
| | | 220 | News 18 Kerala | News | Malayalam | SD |
| | | 221 | News 18 Assam / North East | News | Assamese | SD |
| | | 222 | News 18 India | News | Hindi | SD |
| | | 223 | CNBC TV 18 | News | English | SD |
| | | 224 | News 18 Bihar Jharkhand | News | Hindi | SD |
| | | 225 | News 18 Madhya Pradesh / Chattisgarh | News | Hindi | SD |
| | | 226 | News 18 Rajasthan | News | Hindi | SD |
| | | 227 | News 18 Uttar Pradesh/ Uttaranchal | News | Hindi | SD |
| | | 228 | News 18 Urdu | News | Urdu | SD |
| | | 229 | News 18 Kannada | News | Kannada | SD |
| | | 230 | News 18 Bangla | News | Bangla | SD |
| | | 231 | News 18 Punjab / Haryana / Himanchal Pradesh | News | Punjabi | SD |
| | | 232 | News 18 Gujarati | News | Gujarati | SD |
| | | 233 | News 18 Odia | News | Odia | SD |
| 34 | TV Today Network Limited | 234 | Aaj Tak | News | Hindi | SD |
| | | 235 | India Today | News | English | SD |
| | | 236 | AAJ Tak HD | News | Hindi | HD |
| | | 237 | Aaj Tak Tez | News | Hindi | SD |
| 35 | Viacom 18 Media Private Limited | 238 | Colors | GEC | Hindi | SD |
| | | 239 | Comedy Central (HD) | GEC | English | HD |
| | | 240 | MTV | Music | Hindi | SD |
| | | 241 | NICK | Kids | Hindi | SD |
| | | 242 | NICK JR | Kids | English | SD |
| | | 243 | SONIC | Kids | Hindi | SD |

Annexure 5.1(Contd.)

| S. No | Name of the broadcaster | Sl. No | Name of the channel | Genre as per new Regulatory framework | Language | Declared as SD or HD |
|--------------|---------------------------------|---------------|----------------------------|--|-----------------|-----------------------------|
| | | 244 | VH 1 (HD Distribution) | Music | English | HD |
| | | 245 | Colors Infinity HD | GEC | English | HD |
| | | 246 | Colors Infinity | GEC | English | SD |
| | | 247 | Colors HD | GEC | Hindi | HD |
| | | 248 | NICKS HD+ | Kids | Hindi | HD |
| | | 249 | Colors Cineplex | Movies | Hindi | SD |
| | | 250 | MTV Beats | Music | Hindi | SD |
| | | 251 | Colors Kannada HD | GEC | Kannada | HD |
| | | 252 | Colors Marathi HD | GEC | Marathi | HD |
| | | 253 | Colors Bangla HD | GEC | Bangla | HD |
| | | 254 | Colors Super | GEC | Kannada | SD |
| | | 255 | Colors Bangla | GEC | Bangla | SD |
| | | 256 | Colors Gujarati | GEC | Gujarati | SD |
| | | 257 | Colors Kannada | GEC | Kannada | SD |
| | | 258 | Colors Marathi | GEC | Marathi | SD |
| | | 259 | Colors Oriya | GEC | Oriya | SD |
| | | 260 | MTV Beats HD | Music | Hindi | HD |
| | | 261 | Colors Tamil | GEC | Tamil | SD |
| | | 262 | Colors Cineplex HD | Movies | Hindi | HD |
| | | 263 | VH 1 | Music | English | SD |
| | | 264 | Colors Tamil HD | GEC | Tamil | HD |
| | | 265 | MTV HD+ | Music | Hindi | HD |
| | | 266 | Colors Rishtey | GEC | Hindi | SD |
| | | 267 | Colors Kannada Cinema | Movies | Kannada | SD |
| | | 268 | Colors Gujarati Cinema | Movies | Gujarati | SD |
| | | 269 | Comedy Central | GEC | English | SD |
| | | 270 | Colors Bangla Cinema | Movies | Bangla | SD |
| 36 | Zee Akaash News Private Limited | 271 | Zee 24 Ghanta | News | Bangla | SD |

Annexure 5.1(Contd.)

| S. No | Name of the broadcaster | Sl. No | Name of the channel | Genre as per new Regulatory framework | Language | Declared as SD or HD |
|--------------|---------------------------------------|---------------|----------------------------|--|-----------------|-----------------------------|
| 37 | Zee Entertainment Enterprises Limited | 272 | Zee Bollywood | Movies | Hindi | SD |
| | | 273 | Zee Action | Movies | Hindi | SD |
| | | 274 | Zee Bangla Cinema | Movies | Bangla | SD |
| | | 275 | Zee Café HD | GEC | English | HD |
| | | 276 | Zee Café | GEC | English | SD |
| | | 277 | Zee Cinema | Movies | Hindi | SD |
| | | 278 | Zee Talkies | Movies | Marathi | SD |
| | | 279 | Zee TV | GEC | Hindi | SD |
| | | 280 | Zing | Music | Hindi | SD |
| | | 281 | & Picture | Movies | Hindi | SD |
| | | 282 | Zee Bangla | GEC | Bangla | SD |
| | | 283 | Zee Marathi | GEC | Marathi | SD |
| | | 284 | Living Foodz | Infotainment | English/Hindi | SD |
| | | 285 | Zee TV HD | GEC | Hindi | HD |
| | | 286 | Zee Cinema HD | Movies | Hindi | HD |
| | | 287 | & TV | GEC | Hindi | SD |
| | | 288 | & TV HD | GEC | Hindi | HD |
| | | 289 | Zee Kannada | GEC | Kannada | SD |
| | | 290 | Zee Telugu | GEC | Telugu | SD |
| | | 291 | & Pictures HD | Movies | English/Hindi | HD |
| | | 292 | Zee Cinemalu | Movies | Telugu | SD |
| | | 293 | Zee Yuva | GEC | Marathi | SD |
| | | 294 | Zee Marathi HD | GEC | Marathi | HD |
| | | 295 | & Prive HD | Movies | English | HD |
| | | 296 | Zee Bangla HD | GEC | Bangla | HD |
| | | 297 | Zee Tamil HD | GEC | Tamil | HD |
| | | 298 | Zee Cinemalu HD | Movies | Telugu | HD |

Annexure 5.1(Contd.)

| S. No | Name of the broadcaster | Sl. No | Name of the channel | Genre as per new Regulatory framework | Language | Declared as SD or HD |
|--------------|--------------------------------|---------------|--------------------------------|--|-----------------|-----------------------------|
| | | 299 | Zee Telugu HD | GEC | Telugu | HD |
| | | 300 | Zee Tamil | GEC | Tamil | SD |
| | | 301 | Zee Kannada HD | GEC | Kannada | HD |
| | | 302 | Zee Anmol Cinema | Movies | Hindi | SD |
| | | 303 | & Flix HD | Movies | English | HD |
| | | 304 | & Flix | Movies | English | SD |
| | | 305 | Zee Keralam HD | GEC | Malayalam | HD |
| | | 306 | Zee Keralam | GEC | Malayalam | SD |
| | | 307 | Zee ETC | Music | Hindi | SD |
| | | 308 | Zee Anmol | GEC | Hindi | SD |
| | | 309 | Big Magic | GEC | Hindi | SD |
| | | 310 | Big Ganga | GEC | Bhojpuri | SD |
| | | 311 | Zee Classic | Movies | Hindi | SD |
| | | 312 | &Xplore HD | Movies | Hindi | HD |
| | | 313 | ZEE Sarthak | GEC | Odia | SD |
| | | 314 | Zee Talkies HD | Movies | Marathi | HD |
| | | 315 | Zee Punjabi | GEC | Punjabi | SD |
| | | 316 | Zee Thirai | Movies | Tamil | SD |
| | | 317 | Zee Picchar | Movies | Kannada | SD |
| | | 318 | Zee Biskope | Movies | Bhojpuri | SD |
| 38 | Zee Media Corporation Limited | 319 | Zee 24 Taas | News | Marathi | SD |
| | | 320 | Zee Odisha | News | Odia | SD |
| | | 321 | Zee Business | News | Hindi | SD |
| | | 322 | Zee Punjab Haryana Himachal | News | Hindi | SD |
| | | 323 | Zee Madhya Pradesh Chattisgarh | News | Hindi | SD |
| | | 324 | Zee Salaam | News | Urdu | SD |
| | | 325 | Zee 24 Kalak | News | Hindi | SD |
| | | 326 | WION | News | Hindi | SD |
| | | 327 | Zee Uttar Pradesh Uttrakhand | News | Hindi | SD |

Annexure 5.1(Contd.)

| S. No | Name of the broadcaster | Sl. No | Name of the channel | Genre as per new Regulatory framework | Language | Declared as SD or HD |
|--------------|------------------------------------|---------------|----------------------------|--|-----------------|-----------------------------|
| | | 328 | Zee Hindustan | News | Hindi | SD |
| | | 329 | Zee Bihar Jharkhand | News | Hindi | SD |
| | | 330 | Zee News | News | Hindi | SD |
| | | 331 | Zee Rajasthan News | News | Hindi | SD |
| 39 | Zoom Entertainment Network Limited | 332 | Movies Now | Movies | English | SD |

List of Major MSOs / HITS Operators

- 1. M/s. Siti Networks Limited.,**
Siti Networks Limited
1st Floor, FC-09, Gate No.03,
Sector-16-A Film City,
Noida-201301,
Tel: 0120-4526700
Website : www.sitinetworkslimited
Toll Free No. 1800 1234 001

- 2. M/s Den Networks Limited.**
Den Networks Limited
236, Ground Floor, Okhla Industrial Estate,
Phase-III, New Delhi-110020
Website: www.den-networks.com
Toll Free No. 1800 419 2020

- 3. M/s Hathway Digital Private Limited.**
Hathway Digital Private Limited
805/606, 8th Floor, Windsor
Off CST Road, Kalina, Santacruz (East),
Mumbai-400098 (Maharashtra)
PH: 022-26001306,
Fax No: 022-26001307
Website : www.hathway.com
Toll Free No. 1800 4197 900

- 4. M/s GTPL Hathway.**
GTPL Hathway 202, 2nd Floor,
Sahajanad Shopping Center
Opp. Swaminarayan Mandir
Shahibaug, Ahmedabad-38004
Ph: 079-30280340 / 41, 079-25626476 / 77
Website : www.gtpl.net
Toll Free No. 1800-419-0419

- 5. M/s NXT Digital Limited.**
IndusInd Media & Communication Limited
IN Centre, 49/50 MIDC
12th Road, Andheri
MUMBAI-400093 (Maharashtra)
Ph: 022-28208585
Website : www.nxtdigital.co.in
Toll Free No. 18602120400 18002100400

- 6. M/s Fastway Transmission Pvt. Ltd.**
Fastway Transmission Pvt. Ltd.
SCO-16-17, Top Floor
Sector-34-A, Chandigarh
Ph: 0161-4044444
Website : www.fastway.in
Toll Free No. 18001026602
- 7. M/s Tamil Nadu ARASU Cable TV Corporation Ltd.**
Tamil Nadu ARASU Cable TV Corporation Ltd.
11/22, Mangadusamy Street, Nungambakkam,
Chennai-600034
Ph: 044-2843 2911
Fax : 044-2843 2913
Website : www.tactv.in
Toll Free No. 1800 425 2911
- 8. M/s Kerala Communicators Cable Ltd.**
Kerala Communicators Cable Ltd.
CC -22/491, Girnar, Kadavanthara,
Cochin-682020 (Kerala)
Ph: 0484-2316441
Website : www.kccl.tv
Toll Free No. 18004195755
- 9. M/s Thamizhaga Cable TV Communication Pvt. Ltd.**
Thamizhaga Cable TV Communication Pvt. Ltd.
Old No. 150, New No. 48, Sami Naicken Street,
Chinthadripet, Chennai-6000002 (T.N.)
Ph: 044-49272222
Website : www.tccl.co.in
Toll Free No. 1800-102-9845
- 10. M/s Asianet Digital Network Pvt. Network**
Asianet Digital Network Pvt. Network
2A, 2nd Floor, Leela Infopark
Technopark, Kazahakuttom,
Thiruvananthapuram-695581 (Kerala)
Ph: 0471-2700995
Fax : 0471-2527878
Website : www.asianetdigital.co.in
Toll Free No. 1800 425 4725

- 11. M/s Kal Cable Private Ltd.**
Kal Cable Private Ltd.
No. 229, Kutchery Road, Mylapore,
Chennai-600004 (T.N.)
Ph: 044-49616161
Fax : 044-49616171
Website : www.scv.in
Toll Free No. 1800-102-0728
- 13. M/s V.K. Digital Network Pvt. Ltd.**
V.K. Digital Network Pvt. Ltd.
3-A-29, Willow Crest,
6th Main Road, R.A. Puram,
Chennai-600029 (T.N.)
Ph: 044-4242 8282
Website : www.vkdigital.co.in
Toll Free No. 18004199908

List of Pay DTH Operators

- 1. M/s. Tata Sky Ltd.,**
Tata Communications Complex,
Mandi Road, PO Chattarpur,
New Delhi – 110 074
Tel: 011-6616 3000
Fax-022-6616 3030
Website : www.tatasky.com
Toll Free No. 18002086633
- 2. M/s Dish TV India Ltd.**
FC-19, Sector-16A, Film City,
Noida-201301
Tel: 91-120-2467005 / 2467000
Fax: 91-120-4357082
Toll Free No. 18002583474 (Dish), 1800212212 (d2h)
Website : www.dishtv.in
- 3. SUN Direct TV(P) Ltd.**
Murasoli Maran Towers, 73, MRC Nagar,
Main Road, MRC Nagar, Chennai – 28
PH: 044-44676767, Fax No 044-40679191
Website : www.sundirect.in
Toll Free No. 18001037575
- 4. Bharti Telemedia Ltd.**
Airtel Centre, Plot No 16,
Udyog Vihar Phase IV,
Gurgaon – 122 015
Ph: 0124-4222222
Fax : 0124-4248063
Website : www.airtel.in
Toll Free No. 18001036065

Annexure 5.4: List of 105 existing cities with operational FM Radio Channels in India as on 30th June, 2020

| Sl.No. | City | Category | Stations |
|---------------|----------------|-----------------|-----------------|
| 1 | Agartala | D | 2 |
| 2 | Agra | B | 4 |
| 3 | Ahmedabad | A | 7 |
| 4 | Ahmednagar | C | 3 |
| 5 | Aizwal | D | 3 |
| 6 | Ajmer | C | 4 |
| 7 | Akola | C | 4 |
| 8 | Alappuzha | C | 2 |
| 9 | Aligarh | C | 3 |
| 10 | Allahabad | B | 4 |
| 11 | Amravati | C | 1 |
| 12 | Amritsar | B | 4 |
| 13 | Asansol | B | 3 |
| 14 | Aurangabad | C | 4 |
| 15 | Bareily | C | 4 |
| 16 | Bengaluru | A | 8 |
| 17 | Bharuch | D | 1 |
| 18 | Bhavangar | C | 1 |
| 19 | Bhopal | B | 4 |
| 20 | Bhubaneshwar | C | 4 |
| 21 | Bikaner | C | 4 |
| 22 | Bilaspur | C | 3 |
| 23 | Chandigarh | C | 4 |
| 24 | Chennai | A+ | 7 |
| 25 | Cochin | B | 4 |
| 26 | Coimbatore | B | 4 |
| 27 | Dehradun | C | 1 |
| 28 | Delhi | A+ | 9 |
| 29 | Dhule | C | 3 |
| 30 | Dhubri | Others | 1 |
| 31 | Durg-Bhillaina | D | 1 |
| 32 | Erode | C | 2 |
| 33 | Gangtok | D | 2 |
| 34 | Gorakhpur | C | 4 |
| 35 | Gulbarga | C | 1 |
| 36 | Guwahati | C | 4 |
| 37 | Gwalior | C | 4 |

Annexure 5.4 (Contd.)

| Sl.No. | City | Category | Stations |
|---------------|-----------------|-----------------|-----------------|
| 38 | Haflong | D | 1 |
| 39 | Hissar | D | 4 |
| 40 | Hubli - Dharwad | C | 2 |
| 41 | Hyderabad | A | 8 |
| 42 | Indore | B | 4 |
| 43 | Itanagar | D | 2 |
| 44 | Jabalpur | B | 4 |
| 45 | Jaipur | A | 6 |
| 46 | Jalandhar | C | 4 |
| 47 | Jalgaon | C | 4 |
| 48 | Jammu | C | 3 |
| 49 | Jamnagar | C | 1 |
| 50 | Jamshedpur | B | 4 |
| 51 | Jhansi | C | 4 |
| 52 | Jodhpur | C | 4 |
| 53 | Junagarh | D | 1 |
| 54 | Kannur | C | 3 |
| 55 | Kanpur | A | 6 |
| 56 | Karnal | D | 3 |
| 57 | Kolhapur | C | 4 |
| 58 | Kolkata | A+ | 7 |
| 59 | Kota | C | 4 |
| 60 | Kozhikode | C | 4 |
| 61 | Lucknow | A | 6 |
| 62 | Madurai | B | 4 |
| 63 | Mangalore | C | 3 |
| 64 | Mehsana | D | 1 |
| 65 | Mumbai | A+ | 9 |
| 66 | Muzaffarpur | C | 4 |
| 67 | Mysore | C | 3 |
| 68 | Nagpur | A | 6 |
| 69 | Nanded | C | 3 |
| 70 | Nasik | C | 4 |
| 71 | Nellore | C | 1 |
| 72 | Palampur | D | 1 |
| 73 | Panaji | D | 2 |
| 74 | Patiala | C | 4 |
| 75 | Patna | B | 4 |

Annexure 5.4 (Contd.)

| Sl.No. | City | Category | Stations |
|---------------|--------------------|-----------------|-----------------|
| 76 | Puducherry | C | 4 |
| 77 | Pune | A | 6 |
| 78 | Raigarh | D | 1 |
| 79 | Raipur | C | 3 |
| 80 | Rajahmundry | C | 2 |
| 81 | Rajkot | B | 4 |
| 82 | Ranchi | C | 4 |
| 83 | Rourkela | C | 3 |
| 84 | Salem | C | 2 |
| 85 | Sangli | C | 5 |
| 86 | Shillong | D | 3 |
| 87 | Shimla | D | 3 |
| 88 | Sholapur | C | 4 |
| 89 | Siliguri | C | 3 |
| 90 | Srinagar | C | 4 |
| 91 | Surat | A | 6 |
| 92 | Thiruvananthapuram | C | 4 |
| 93 | Thrissur | C | 3 |
| 94 | Tiruchy | C | 3 |
| 95 | Tirunelveli | C | 3 |
| 96 | Tirupati | C | 2 |
| 97 | Tuticorin | C | 2 |
| 98 | Udaipur | C | 4 |
| 99 | Ujjain | C | 1 |
| 100 | Vadodra | B | 4 |
| 101 | Varanasi | B | 5 |
| 102 | Vellore | C | 2 |
| 103 | Vijayawada | B | 2 |
| 104 | Vishakapatnam | B | 3 |
| 105 | Warrangal | C | 2 |
| | | | 367 |

Source: As reported by Private FM Radio Service Providers to TRAI

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