

Information Note to the Press (Press Release No.74/2023)

TELECOM REGULATORY AUTHORITY OF INDIA

New Delhi, the 21st August, 2023

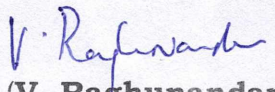
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Website: - www.trai.gov.in

“Indian Telecom Services Performance Indicator Report” for the Quarter January-March, 2023

TRAI today has released the **“Indian Telecom Services Performance Indicator Report”** for the Quarter ending 31st March, 2023. This Report provides a broad perspective of the Telecom Services in India and presents the key parameters and growth trends of the Telecom Services as well as Cable TV, DTH & Radio Broadcasting services in India for the period covering 1st January, 2023 to 31st March, 2023 compiled mainly on the basis of information furnished by the Service Providers.

Executive Summary of the Report is enclosed. The complete Report is available on TRAI’s website (www.trai.gov.in and under the link <http://www.trai.gov.in/release-publication/reports/performance-indicators-reports>). Any suggestion or any clarification pertaining to this report, Shri Amit Sharma, Advisor (F&EA), TRAI may be contacted on Tel. +91-11-23234367 and e-mail: advfea2@traigov.in.


(V. Raghunandan)
Secretary, TRAI

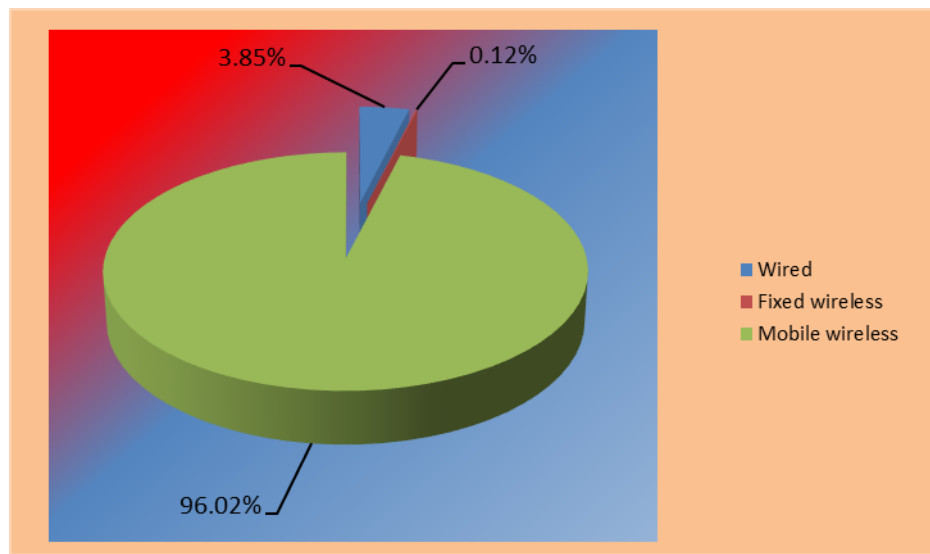
The Indian Telecom Services Performance Indicators

January–March, 2023

Executive Summary

1. Total number of Internet subscribers increased from 865.90 million at the end of Dec-22 to 881.25 million at the end of Mar-23, registering a quarterly growth rate of 1.77%. Out of 881.25 million internet subscribers, number of Wired Internet subscribers are 33.94 million and number of Wireless Internet subscribers are 847.31 million.

Composition of internet subscription

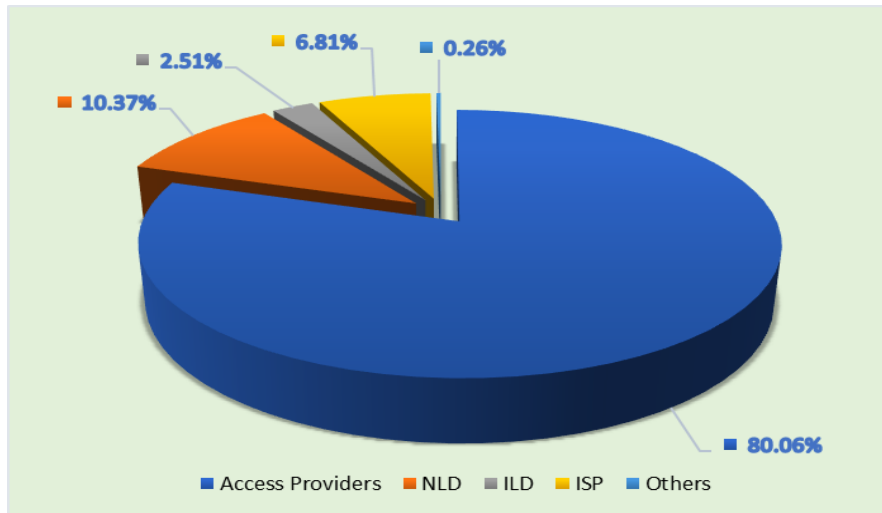


2. The Internet subscriber base is comprised of Broadband Internet subscriber base of 846.57 million and Narrowband Internet subscriber base of 34.69 million.
3. The broadband Internet subscriber base increased by 1.73% from 832.20 million at the end of Dec-22 to 846.57 million at the end of Mar-23. The narrowband Internet subscriber base increased by 2.94% from 33.70 million at the end of Dec-22 to 34.69 million at the end of Mar-23.

4. Wireline subscribers increased from 27.45 million at the end of Dec-22 to 28.41 million at the end of Mar-23 with a quarterly growth rate of 3.48% and, on Y-O-Y basis, wireline subscriptions also increased by 14.37% at the end of QE Mar-23.
5. Wireline Tele-density increased from 1.98% at the end of Dec-22 to 2.05% at the end of Mar-23 with quarterly growth rate of 3.25%.
6. Monthly Average Revenue per User (ARPU) for wireless service increased by 0.83%, from Rs.141.14 in QE Dec-22 to Rs.142.32 in QE Mar-23. On Y-O-Y basis, monthly ARPU for wireless service increased by 11.91% in this quarter.
7. Prepaid ARPU per month increased from Rs.137.71 in QE Dec-22 to Rs.139.63 in QE Mar-23, however, Postpaid ARPU per month decreased from Rs.182.30 in QE Dec-22 to Rs.173.50 in QE Mar-23.
8. On an all-India average, the overall MOU per subscriber per month increased by 2.97% from 919 in Q.E. Dec-2022 to 946 in Q.E. Mar-2023.
9. Prepaid MOU per subscriber per month increased from 950 in QE Dec-22 to 983 in QE Mar-23. Postpaid MOU per subscriber per month decreased from 542 in QE Dec-22 to 518 in QE Mar-23.
10. Gross Revenue (GR), Applicable Gross Revenue (ApGR) and Adjusted Gross Revenue (AGR) of Telecom Service Sector for the Q.E. Mar-23 has been Rs.85,356/- Crore, Rs.78,631 crore and Rs.64,494/- Crore respectively. GR decreased by 3.19%, ApGR increased by 2.62% and AGR increased by 2.53% in Q.E. Mar-23, as compared to previous quarter.
11. The Y-O-Y rate of growth in GR, ApGR and AGR in Q.E. Mar-23 over the same quarter in last year has been 11.69%, 11.12% and 9.52% respectively.

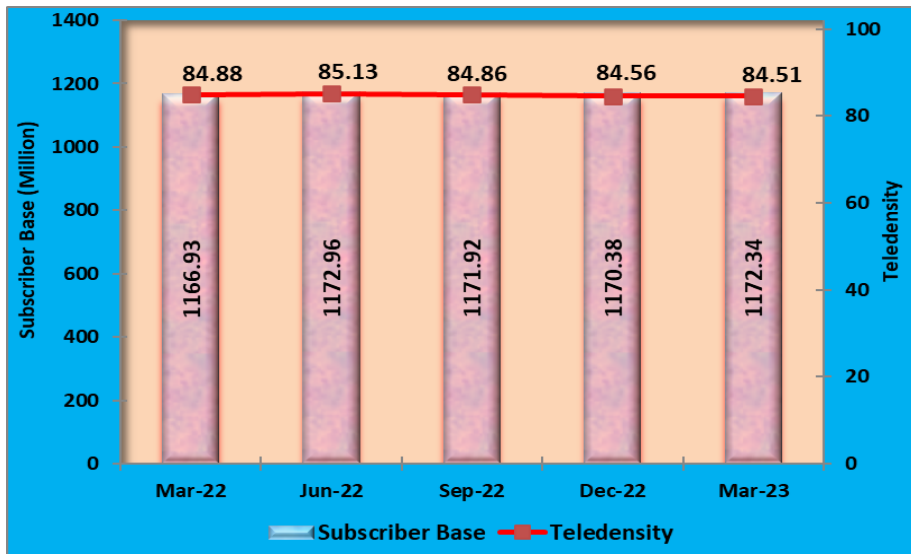
12. Pass-through charges increased from Rs.14,381 Crore in QE Dec-22 to Rs.14,725 Crore in QE Mar-23 with quarterly growth rate of 2.39%. The Y-O-Y rate of growth 8.53% has been recorded in pass-through charges for QE Mar-23.
13. The License Fee increased from Rs.5,031 Crore for the QE Dec-22 to Rs.5,159 Crore for the QE Mar-23. The quarterly and the Y-O-Y rates of growth in license fee are 2.53% and 9.47% respectively in this quarter.

Service-wise composition of Adjusted Gross Revenue



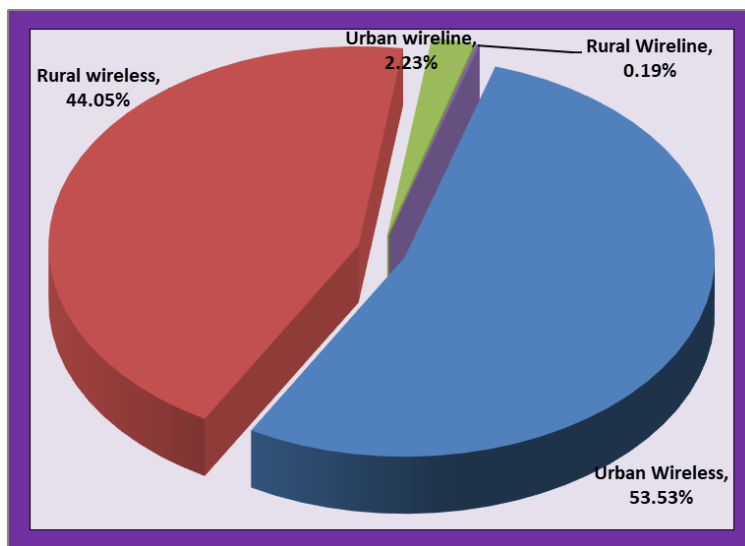
14. Access services contributed 80.06% of the total Adjusted Gross Revenue of telecom services. In Access services, Gross Revenue (GR), Applicable Gross Revenue (ApGR), Adjusted Gross Revenue (AGR), License Fee, Spectrum Usage Charges (SUC) and Pass Through Charges increased by -5.14%, 1.60%, 1.19%, 1.19%, -6.99% and 3.51% respectively in QE Mar-23.
15. The number of telephone subscribers in India increased from 1,170.38 million at the end of Dec-22 to 1,172.34 million at the end of Mar-23, registering a growth rate of 0.17% over the previous quarter. This reflects Year-On-Year (Y-O-Y) rate of growth 0.46% over the same quarter of the last year. The overall Tele-density in India decreased from 84.56% as in QE Dec-22 to 84.51% as in QE Mar-23.

Trends in Telephone subscribers and Tele-density in India



- 16. Telephone subscribers in Urban areas increased from 652.39 million at the end of Dec-22 to 653.71 million at the end of Mar-23 however, Urban Tele-density decreased from 134.16% to 133.81% during the same period.
- 17. Rural telephone subscribers increased from 517.99 million at the end of Dec-22 to 518.63 million at the end of Mar-23 and Rural Tele-density also increased from 57.69% to 57.71% during the same period.
- 18. Out of the total subscription, the share of Rural subscription decreased from 44.26% at the end of Dec-22 to 44.24% at the end of Mar-23.

Composition of Telephone Subscribers



19. With a net increase of 1 million subscribers during the quarter, the total wireless subscriber base increased from 1,142.93 million at the end of Dec-22 to 1,143.93 million at the end of Mar-23, registering a growth rate of 0.09% over the previous quarter. On Y-O-Y basis, wireless subscriptions increased at the rate of 0.16% during the year.
20. Wireless Tele-density decreased from 82.57% at the end of Dec-22 to 82.46% at the end of Mar-23 with quarterly decline rate of 0.14%.
21. During this quarter, the following parameters in terms of QoS benchmarks have been fully complied by wireline service providers: -
 - i. 'Fault repair' Fault incidences No. of faults per 100 subs/month) ≤ 7
 - ii. Point of Interconnection'(POI) Congestion (No. of POIs not meeting benchmark) $\leq 0.5\%$
 - iii. 'Metering and Billing 'Metering and billing credibility- post-paid $\leq 0.1\%$
 - iv. Metering and billing credibility- pre-paid $\leq 0.1\%$
 - v. Resolution of billing/charging/Credit & validity complaints 98% within 4 weeks
 - vi. Resolution of billing/charging Credit & validity complaints 100% within 4 weeks
 - vii. Period of applying credit/waiver/adjustment to customer's 100% within 1 week of resolution of complaint
22. The following parameters have shown improvement, as compared to the previous quarter, in QoS by wireline service providers: -
 - ❖ % Fault repaired within 5 days (for urban areas) 100%
 - ❖ % Fault repaired within 7 days (for rural and hilly areas) 100%
 - ❖ Time taken for refund of deposits after closures 100% within 60 days

23. The following parameters have shown deterioration as compared to the previous quarter, in QoS by wireline service providers: -

- ❖ % Fault repaired by next working day (for urban areas) $\geq 85\%$
- ❖ 'Mean time to Repair' (MTTR) $\leq 10\text{Hs}$
- ❖ Accessibility of call centre/ customer care $\geq 95\%$
- ❖ % age of calls answered by the operators (voice to voice) within ninety seconds $\geq 95\%$
- ❖ Termination / closure of service ≤ 7 days

24. During this quarter, list of Parameters which are fully complied, as compared to the previous quarter, by all the Cellular Mobile service providers: -

- i. BS Accumulated down-time (not available for service) (%age) $\leq 2\%$
- ii. Worst affected BSs due to down-time (%age) $\leq 2\%$
- iii. Call Set-up Success Rate and Session Establishment Success Rate for Circuit Switched Voice or VoLTE as applicable (within licensee's own network) $\geq 95\%$
- iv. SDCCH/ Paging Channel Congestion/ RRC Congestion (% age) $\leq 1\%$
- v. TCH, RAB and E-RAB congestion (%age) $\leq 2\%$
- vi. Network QoS DCR Spatial Distribution Measure [Network_QSD (90,90)] $\leq 2\%$
- vii. Network QoS DCR Temporal Distribution Measure [Network_QTD (97,90)] $\leq 3\%$
- viii. Connections with good voice quality, Circuit Switched Voice Quality and VoLTE quality $\geq 95\%$
- ix. Down Link (DL) Packet Drop Rate or DL-PDR $\leq 2\%$
- x. Up Link (UL) Packet Drop Rate or UL-PDR $\leq 2\%$
- xi. Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) $\leq 0.5\%$
- xii. Metering and billing credibility - postpaid $\leq 0.1\%$
- xiii. Metering and billing credibility – prepaid $\leq 0.1\%$

- xiv. Resolution of billing/charging/validity complaints - 98% within 4 weeks
 - xv. Resolution of billing/charging/validity complaints - 100% within 6 weeks
 - xvi. Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution - within 1 week of resolution of complaint
 - xvii. Termination / Closure of service < 7 days
 - xviii. Time taken for refund of deposits after closures (100% within 60 days)
25. The following parameters have shown deteriorated, as compared to the previous quarter, in QoS by Cellular Mobile service providers: -
- ❖ Accessibility of call centre/customer care $\geq 95\%$
 - ❖ % age of calls answered by the operators (voice to voice) within ninety seconds $\geq 95\%$
26. A total of approximately 903 private satellite TV channels have been permitted by the Ministry of Information and Broadcasting (MIB) for uplinking only/downlinking only/both uplinking & downlinking.
27. As per the reporting done by broadcasters in pursuance of the Tariff Order dated 3rd March 2017 as amended, out of 892 permitted satellite TV channels which are available for downlinking in India, there are 358 satellite pay TV channels as on 31st March 2023. Out of 358 pay channels, 254 are SD satellite pay TV channels and 104 are HD satellite pay TV channels.
28. Since the introduction of DTH Sector in the year 2003, Indian DTH (direct-to-home) services have displayed a phenomenal growth. During the QE 31st March 2023, there were 4 pay DTH service providers in the country.
29. Pay DTH has attained total active subscriber base of around 65.25 million. This is in addition to the subscribers of the DD Free Dish (free DTH

services of Doordarshan). The total active subscriber base has decreased from 66.62 million in QE December 2022 to 65.25 million in QE March 2023.

30. Apart from the radio channels operated by All India Radio – the public broadcaster, as per the data reported by FM Radio operators to TRAI, as on 31st March 2023, there are 388 operational private FM Radio channels in 113 cities operated by 36 private FM Radio operators. As compared to the previous quarter, there is no change in the number of operational private FM Radio channels, cities and FM Radio operators.
31. The advertisement revenue reported by FM Radio operators during the quarter ending 31st March 2023 in respect of 388 private FM Radio channels is Rs 388.97 crore as against Rs 427.18 crore in respect of 388 private FM Radio channels for the previous quarter.
32. As on 31st March 2023, 427 Community Radio stations are operational.

SNAPSHOT

(Data as on Q.E. 31st March, 2023)

Telecom Subscribers (Wireless+Wireline)	
Total Subscribers	1,172.34 Million
% change over the previous quarter	0.17%
Urban Subscribers	653.71 Million
Rural Subscribers	518.63 Million
Market share of Private Operators	90.15%
Market share of PSU Operators	9.85%
Tele-density	84.51%
Urban Tele-density	133.81%
Rural Tele-density	57.71%
Wireless Subscribers	
Total Wireless Subscribers	1,143.93 Million
% change over the previous quarter	0.09%
Urban Subscribers	627.54 Million
Rural Subscribers	516.38 Million
Market share of Private Operators	90.73%
Market share of PSU Operators	9.27%
Tele-density	82.46%
Urban Tele-density	128.45%
Rural Tele-density	57.46%
Total Wireless Data Usage during the quarter	41,790 PB
Number of Public Mobile Radio Trunk Services (PMRTS)	67,820
Number of Very Small Aperture Terminals (VSAT)	2,56,170
Wireline Subscribers	
Total Wireline Subscribers	28.41 Million
% change over the previous quarter	3.48%
Urban Subscribers	26.16 Million
Rural Subscribers	2.25 Million
Market share of PSU Operators	33.15%
Market share of Private Operators	66.85%
Tele-density	2.05%
Rural Tele-density	0.25%
Urban Tele-density	5.36%
No. of Village Public Telephones (VPT)	68,606
No. of Public Call Office (PCO)	42,135

Telecom Financial Data	
Gross Revenue (GR) during the quarter	Rs. 85,356 Crore
% change in GR over the previous quarter	-3.19%
Applicable Gross Revenue (ApGR) during quarter	Rs. 78,631 Crore
% change in ApGR over the previous quarter	2.62%
Adjusted Gross Revenue (AGR) during the quarter	Rs. 64,494 Crore
% change in AGR over the previous quarter	2.53%
Share of Public sector undertakings in Access AGR	4.39%
Internet/Broadband Subscribers	
Total Internet Subscribers	881.25 Million
% change over previous quarter	1.77%
Narrowband subscribers	34.69 Million
Broadband subscribers	846.57 Million
Wired Internet Subscribers	33.94 Million
Wireless Internet Subscribers	847.31 Million
Urban Internet Subscribers	523.26 Million
Rural Internet Subscribers	357.99 Million
Total Internet Subscribers per 100 population	63.53
Urban Internet Subscribers per 100 population	107.11
Rural Internet Subscribers per 100 population	39.84
No. of Public Wi-Fi Hotspots	1,66,020
Aggregate Data Consumed (GB)	53,42,792
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	903
Number of Pay TV Channels as reported by broadcasters	358
Number of private FM Radio Stations (excluding All India Radio)	388
Number of total active subscribers with pay DTH operators	65.25 Million
Number of Operational Community Radio Stations	427
Number of pay DTH Operators	4
Revenue & Usage Parameters	
Monthly ARPU of Wireless Service	Rs.142.32
Minutes of Usage (MOU) per subscriber per month - Wireless Service	946 Minutes
Total Outgoing Minutes of Usage for Internet Telephony	78.08 Million
Wireless Data Usage	
Average Wireless Data Usage per wireless data subscriber per month	17.36 GB
Average revenue realization per GB for wireless data usage during the quarter	Rs.9.94



Telecom Regulatory Authority of India

The Indian Telecom Services Performance Indicators

January – March, 2023

New Delhi, India

21st August, 2023

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Disclaimer

The Information and Statistics contained in this report are derived from variety of sources, but are mainly reliant on data obtained from Service Providers. This report does not constitute any commercial or other advice. No warranty, representation or undertaking of any kind, expressed or implied, is given in relation to the information and statistics contained in this report.

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Snapshot

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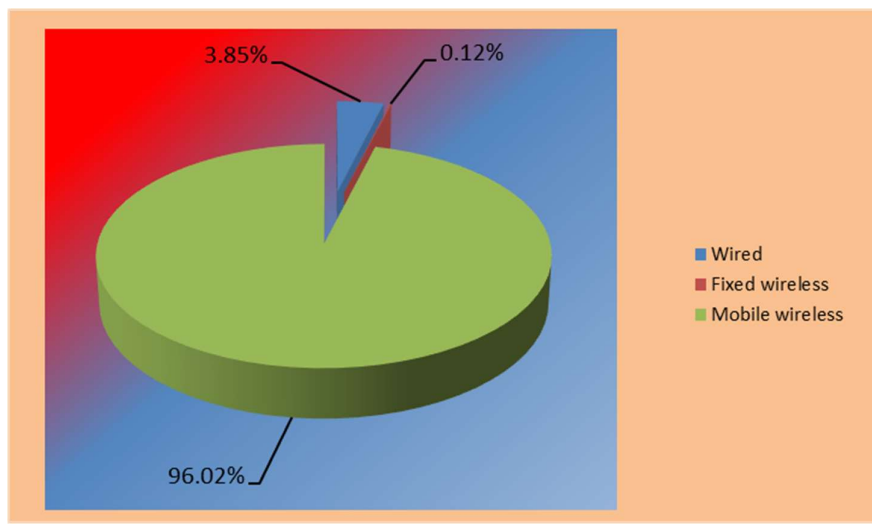
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Average Wireless Data Usage per wireless data subscriber per month	17.36 GB
Average revenue realization per GB for wireless data usage during the quarter	Rs.9.94

* For ARPU explanation please refer to footnote on Page 52

Executive Summary

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Composition of internet subscription



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

² Broadband: Internet access with a minimum capacity of greater or equal 2Mbps in one or both directions.

³ Narrowband: Internet access with a capacity of less than 2Mbps in one or both directions.

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

10. Gross Revenue⁵ (GR), Applicable Gross Revenue (ApGR) and Adjusted Gross Revenue⁶ (AGR) of Telecom Service Sector for the Q.E. Mar-23 has been Rs.85,356/- Crore, Rs.78,631 crore and Rs.64,494/- Crore respectively. GR decreased by 3.19%, ApGR increased by 2.62% and AGR increased by 2.53% in Q.E. Mar-23, as compared to previous quarter.
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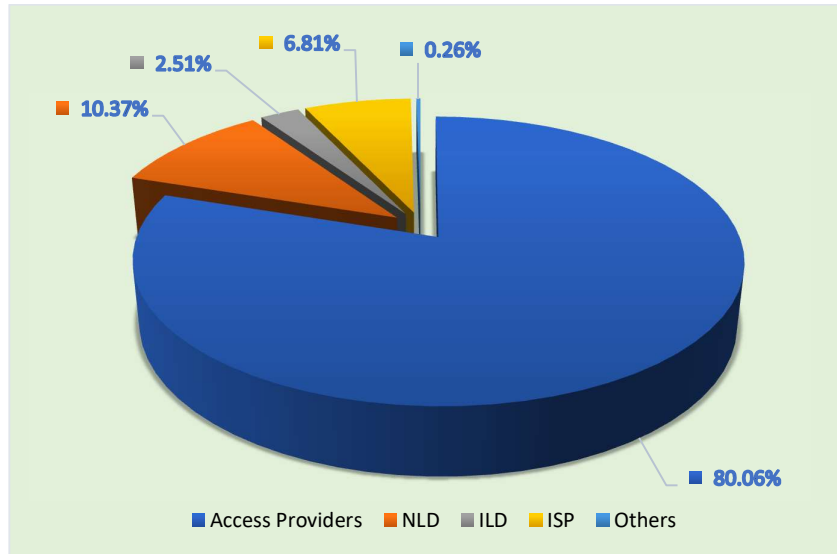
⁵ Gross Revenue is inclusive of installation charges, late fees, sale proceeds of handsets (or any other terminal equipment etc.), revenue on account of interest, dividend, value added services, supplementary services, access or interconnection charges, roaming charges, revenue from permissible sharing of infrastructure and any other miscellaneous revenue, without any set-off for related item of expense etc.

⁶ 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

⁷ 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



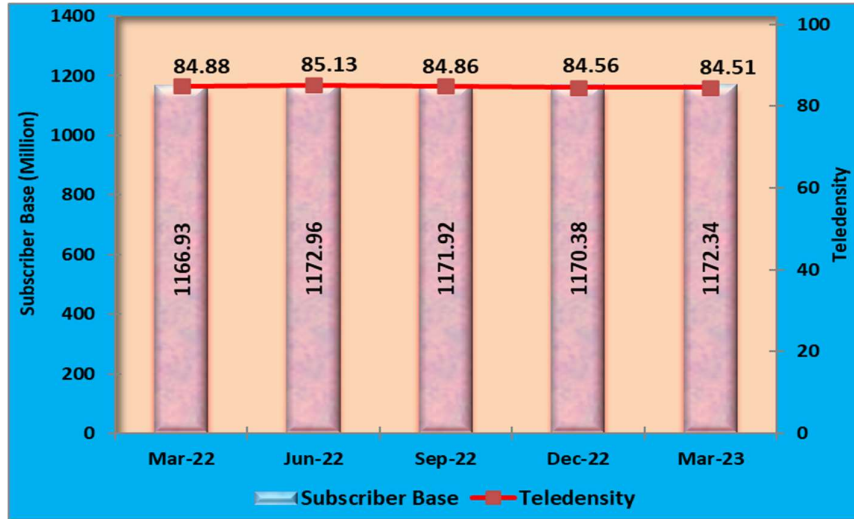
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⁸ Spectrum Usage Charge is payable by the licensees providing mobile access services, as a percentage of their Adjusted Gross Revenue (AGR).

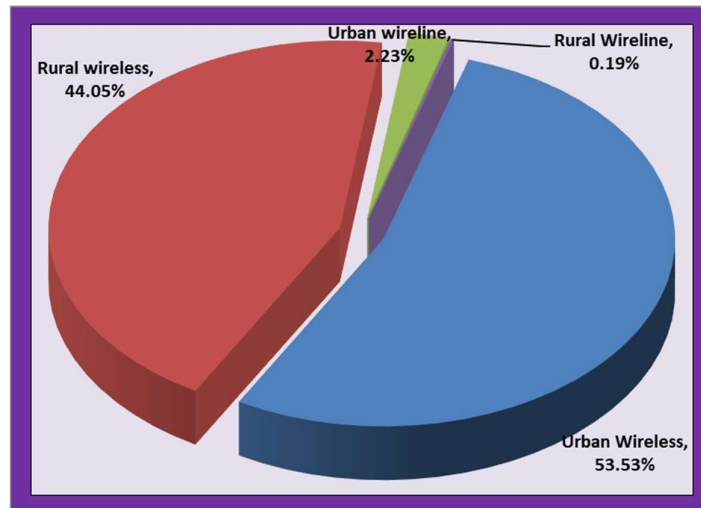
(Source – DoT License Agreement)

Trends in Telephone subscribers and Tele-density in India



- 16. Telephone subscribers in Urban areas increased from 652.39 million at the end of Dec-22 to 653.71 million at the end of Mar-23 however, Urban Tele-density decreased from 134.16% to 133.81% during the same period.
- 17. Rural telephone subscribers increased from 517.99 million at the end of Dec-22 to 518.63 million at the end of Mar-23 and Rural Tele-density also increased from 57.69% to 57.71% during the same period.
- 18. Out of the total subscription, the share of Rural subscription decreased from 44.26% at the end of Dec-22 to 44.24% at the end of Mar-23.

Composition of Telephone Subscribers



19. With a net increase of 1 million subscribers during the quarter, the total wireless subscriber base increased from 1,142.93 million at the end of Dec-22 to 1,143.93 million at the end of Mar-23, registering a growth rate of 0.09% over the previous quarter. On Y-O-Y basis, wireless subscriptions increased at the rate of 0.16% during the year.

20. Wireless Tele-density decreased from 82.57% at the end of Dec-22 to 82.46% at the end of Mar-23 with quarterly decline rate of 0.14%.

21. During this quarter, the following parameters in terms of QoS benchmarks have been fully complied by wireline service providers: -
 - i. 'Fault repair' Fault incidences No. of faults per 100 subs/month) ≤ 7
 - ii. Point of Interconnection'(POI) Congestion (No. of PoIs not meeting benchmark) $\leq 0.5\%$
 - iii. 'Metering and Billing 'Metering and billing credibility- post-paid $\leq 0.1\%$
 - iv. Metering and billing credibility- pre-paid $\leq 0.1\%$
 - v. Resolution of billing/charging/Credit & validity complaints 98% within 4 weeks
 - vi. Resolution of billing/charging Credit & validity complaints 100% within 4 weeks
 - vii. Period of applying credit/waiver/adjustment to customer's 100% within 1 week of resolution of complaint

22. The following parameters have shown improvement, as compared to the previous quarter, in QoS by wireline service providers: -
 - ❖ % Fault repaired within 5 days (for urban areas) 100%
 - ❖ % Fault repaired within 7 days (for rural and hilly areas) 100%

- ❖ Time taken for refund of deposits after closures 100% within 60 days

23. The following parameters have shown deterioration as compared to the previous quarter, in QoS by wireline service providers: -

- ❖ % Fault repaired by next working day (for urban areas) $\geq 85\%$
- ❖ 'Mean time to Repair' (MTTR) ≤ 10 Hs
- ❖ Accessibility of call centre/ customer care $\geq 95\%$
- ❖ % age of calls answered by the operators (voice to voice) within ninety seconds $\geq 95\%$
- ❖ Termination / closure of service ≤ 7 days

24. During this quarter, list of Parameters which are fully complied, as compared to the previous quarter, by all the Cellular Mobile service providers: -

- i. BS Accumulated down-time (not available for service) (%age) $\leq 2\%$
- ii. Worst affected BSs due to down-time (%age) $\leq 2\%$
- iii. Call Set-up Success Rate and Session Establishment Success Rate for Circuit Switched Voice or VoLTE as applicable (within licensee's own network) $\geq 95\%$
- iv. SDCCH/ Paging Channel Congestion/ RRC Congestion (% age) $\leq 1\%$
- v. TCH, RAB and E-RAB congestion (%age) $\leq 2\%$
- vi. Network QoS DCR Spatial Distribution Measure [Network_ QSD (90,90)] $\leq 2\%$
- vii. Network QoS DCR Temporal Distribution Measure [Network_ QTD (97,90)] $\leq 3\%$
- viii. Connections with good voice quality, Circuit Switched Voice Quality and VoLTE quality $\geq 95\%$
- ix. Down Link (DL) Packet Drop Rate or DL-PDR $\leq 2\%$
- x. Up Link (UL) Packet Drop Rate or UL-PDR $\leq 2\%$
- xi. Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) $\leq 0.5\%$

- xii. Metering and billing credibility - postpaid $\leq 0.1\%$
- xiii. Metering and billing credibility – prepaid $\leq 0.1\%$
- xiv. Resolution of billing/charging/validity complaints - 98% within 4 weeks
- xv. Resolution of billing/charging/validity complaints - 100% within 6 weeks
- xvi. Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution - within 1 week of resolution of complaint
- xvii. Termination / Closure of service < 7 days
- xviii. Time taken for refund of deposits after closures (100% within 60 days)

25. The following parameters have shown deteriorated, as compared to the previous quarter, in QoS by Cellular Mobile service providers: -

- ❖ Accessibility of call centre/customer care $\geq 95\%$
- ❖ % age of calls answered by the operators (voice to voice) within ninety seconds $\geq 95\%$

26. A total of approximately 903 private satellite TV channels have been permitted by the Ministry of Information and Broadcasting (MIB) for uplinking only/downlinking only/both uplinking & downlinking.

27. As per the reporting done by broadcasters in pursuance of the Tariff Order dated 3rd March 2017 as amended, out of 892 permitted satellite TV channels which are available for downlinking in India, there are 358 satellite pay TV channels as on 31st March 2023. Out of 358 pay channels, 254 are SD satellite pay TV channels and 104 are HD satellite pay TV channels.

28. Since the introduction of DTH Sector in the year 2003, Indian DTH (direct-to-home) services have displayed a phenomenal

growth. During the QE 31st March 2023, there were 4 pay DTH service providers in the country.

29. Pay DTH has attained total active subscriber base of around 65.25 million. This is in addition to the subscribers of the DD Free Dish (free DTH services of Doordarshan). The total active subscriber base has decreased from 66.62 million in QE December 2022 to 65.25 million in QE March 2023.
30. Apart from the radio channels operated by All India Radio – the public broadcaster, as per the data reported by FM Radio operators to TRAI, as on 31st March 2023, there are 388 operational private FM Radio channels in 113 cities operated by 36 private FM Radio operators. As compared to the previous quarter, there is no change in the number of operational private FM Radio channels, cities and FM Radio operators.
31. The advertisement revenue reported by FM Radio operators during the quarter ending 31st March 2023 in respect of 388 private FM Radio channels is Rs 388.97 crore as against Rs 427.18 crore in respect of 388 private FM Radio channels for the previous quarter.
32. As on 31st March 2023, 427 Community Radio stations are operational.

Trends at a Glance

A. Access Service (Wireline + Wireless)									
	QE Mar 2022	QE Jun 2022	QE Sep 2022	QE Dec 2022	QE Mar 2023	%age change over Mar- 2022	%age change over Jun- 2022	%age change over Sep- 2022	%age change over Dec- 2022
						(12 months)	(9 months)	(6 months)	(3 months)
1) Subscriber Base (in million)									
Wireline	24.84	25.57	26.47	27.45	28.41	14.37%	11.13%	7.33%	3.48%
Wireless	1142.09	1147.39	1145.45	1142.93	1143.93	0.16%	-0.30%	-0.13%	0.09%
Total	1166.93	1172.96	1171.92	1170.38	1172.34	0.46%	-0.05%	0.04%	0.17%
Rural	519.82	523.87	520.30	517.99	518.63	-0.23%	-1.00%	-0.32%	0.12%
Urban	647.11	649.09	651.61	652.39	653.71	1.02%	0.71%	0.32%	0.20%
2) Tele-density									
Wireline	1.81	1.86	1.92	1.98	2.05	13.35%	10.38%	6.85%	3.25%
Wireless	83.07	83.27	82.94	82.57	82.46	-0.74%	-0.97%	-0.58%	-0.14%
Total	84.88	85.13	84.86	84.56	84.51	-0.44%	-0.72%	-0.41%	-0.06%
Rural	58.07	58.46	58.01	57.69	57.71	-0.61%	-1.28%	-0.51%	0.03%
Urban	134.94	134.72	134.62	134.16	133.81	-0.84%	-0.68%	-0.60%	-0.26%
3) Service Provider wise Subscribers Base (in Million) (wireless+wireline)									
Reliance Jio	410.17	419.99	427.62	432.92	439.35	7.11%	4.61%	2.74%	1.48%
Bharti Airtel	366.18	369.00	370.62	374.39	378.06	3.24%	2.46%	2.01%	0.98%
Vodafone Idea	261.35	257.32	249.82	242.04	237.45	-9.14%	-7.72%	-4.95%	-1.90%
BSNL	121.25	118.73	116.45	113.82	110.79	-8.63%	-6.68%	-4.86%	-2.66%
MTNL	5.94	5.87	5.35	5.17	4.66	-21.53%	-20.58%	-12.93%	-9.76%
Tata Tele.	1.60	1.59	1.58	1.57	1.54	-3.73%	-2.84%	-2.40%	-1.86%
Reliance Com.	0.18	0.17	0.16	0.15	0.15	-16.38%	-14.04%	-7.79%	-1.94%
Quadrant	0.27	0.30	0.30	0.32	0.34	26.66%	13.23%	12.05%	6.15%
Total	1166.93	1172.96	1171.92	1170.38	1172.34	0.46%	-0.05%	0.04%	0.17%

B. Internet Services									
	QE Mar 2022	QE Jun 2022	QE Sep 2022	QE Dec 2022	QE Mar 2023	%age change over Mar-2022 (12 months)	%age change over Jun-2022 (9 months)	%age change over Sep-2022 (6 months)	%age change over Dec-2022 (3 months)
1) Subscriber's Base (in million)									
A. Wired Internet Subscribers	27.27	28.73	30.82	32.41	33.94	24.45%	18.15%	10.14%	4.73%
B. Wireless Internet Subscribers	797.61	808.13	820.13	833.49	847.31	6.23%	4.85%	3.31%	1.66%
i. Mobile Wireless (Mobile & Dongle)	796.43	807.02	818.98	832.35	846.21	6.25%	4.86%	3.33%	1.66%
ii. Fixed Wireless (Wi-Fi, Wi-Max, Point-to-Point Radio & VSAT)	1.18	1.11	1.16	1.13	1.10	-6.90%	-0.76%	-4.75%	-2.96%
Total Internet Subscribers	824.89	836.86	850.95	865.90	881.25	6.83%	5.31%	3.56%	1.77%
2) No. of Internet Subs per 100 Population	60.00	60.73	61.62	62.56	63.53	5.88%	4.60%	3.10%	1.55%
C. Usage and Revenue for Wireless Services									
Traffic (MOU) (minutes of uses/ subscriber/month)	955	914	894	919	946	-0.99%	3.54%	5.80%	2.97%
ARPU (Rs./sub/month)	127	133.55	137.31	141.14	142.32	11.91%	6.57%	3.65%	0.83%
D. Telecom Financial Data									
	QE Mar 2022	QE Jun 2022	QE Sep 2022	QE Dec 2022	QE Mar 2023	%age change over Mar-2022 (12 months)	%age change over Jun-2022 (9 months)	%age change over Sep-2022 (6 months)	%age change over Dec-2022 (3 months)
1. Telecom Sector									
i) Gross Revenue (Rs.in Crores)	76420	76408	83767	88166	85356	11.69%	11.71%	1.90%	-3.19%
ii) Adjusted Gross Revenue (Rs. in Crores)	58886	60530	61981	62904	64494	9.52%	6.55%	4.05%	2.53%
2. Access Services									
Adjusted Gross Revenue (Rs. in Crores)	46421	48999	50327	51023	51631	11.22%	5.37%	2.59%	1.19%

;

Introduction

This Report presents the Key Parameters and growth trends for the Telecom Services in India for the quarter ending 31st March, 2023. 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 and under the link <http://www.trai.gov.in/release-publication/reports/performance-indicators-reports>). Any suggestion or any clarification pertaining to this report, Advisor (F&EA), TRAI may be contacted on Tel. +91-23234367 and e-mail: advfea2@traigov.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 projection of population from the 'Report of the Technical Group on Population Projections for India and States 2011–2036', which is available under the link https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-%20upload_compressed_0.pdf

Section A : Access Service - An Overview

1.1 The number of telephone subscribers in India increased from 1,170.38 million at the end of Dec-22 to 1,172.34 million at the end of Mar-23, registering a growth rate of 0.17% over the previous quarter. This reflects year-on-year (Y-O-Y) rate of growth 0.46% over the same quarter of last year. The overall Tele-density in India decreased from 84.56% as on 31st December, 2022 to 84.51% as on 31st March, 2023 with quarterly decline rate of 0.06%.

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

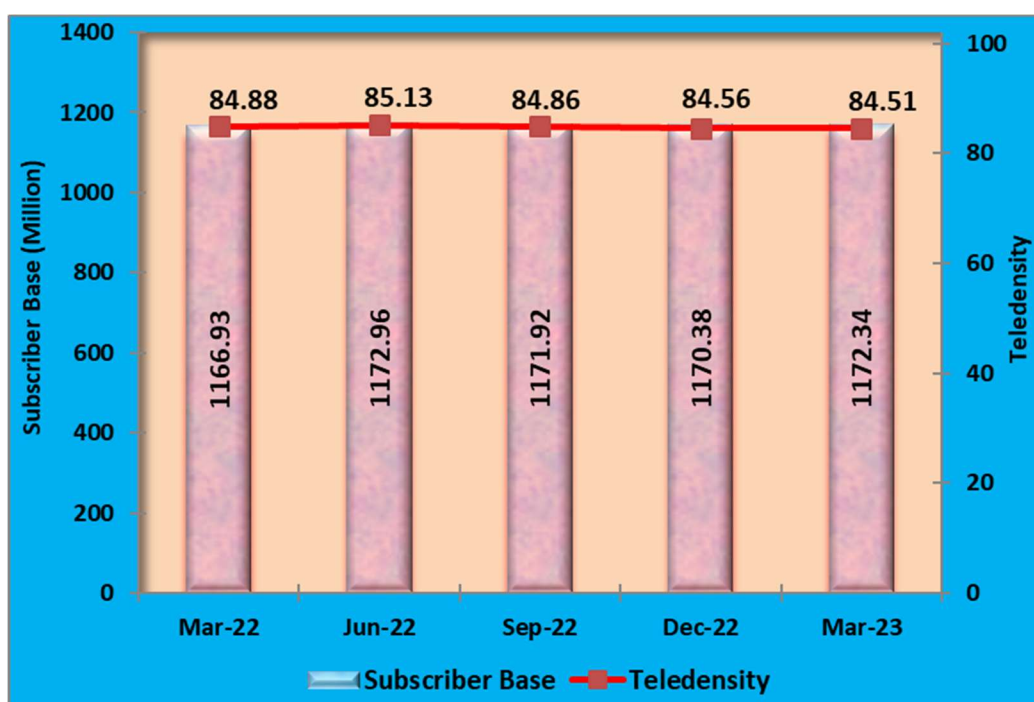
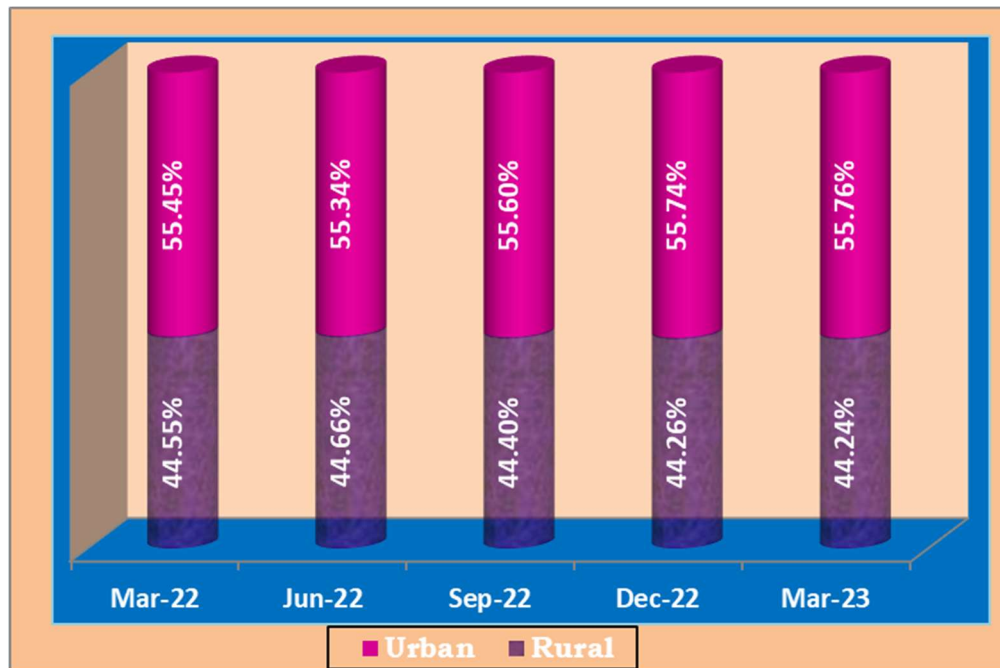


Table 1.1: Subscriber Base & Tele-density - Rural & Urban

Quarter ending	Subscriber Base (million)		Tele-density (%)	
	Rural	Urban	Rural	Urban
Mar-22	519.82	647.11	58.07	134.94
Jun-22	523.87	649.09	58.46	134.72
Sep-22	520.30	651.61	58.01	134.62
Dec-22	517.99	652.39	57.69	134.16
Mar-23	518.63	653.71	57.71	133.81

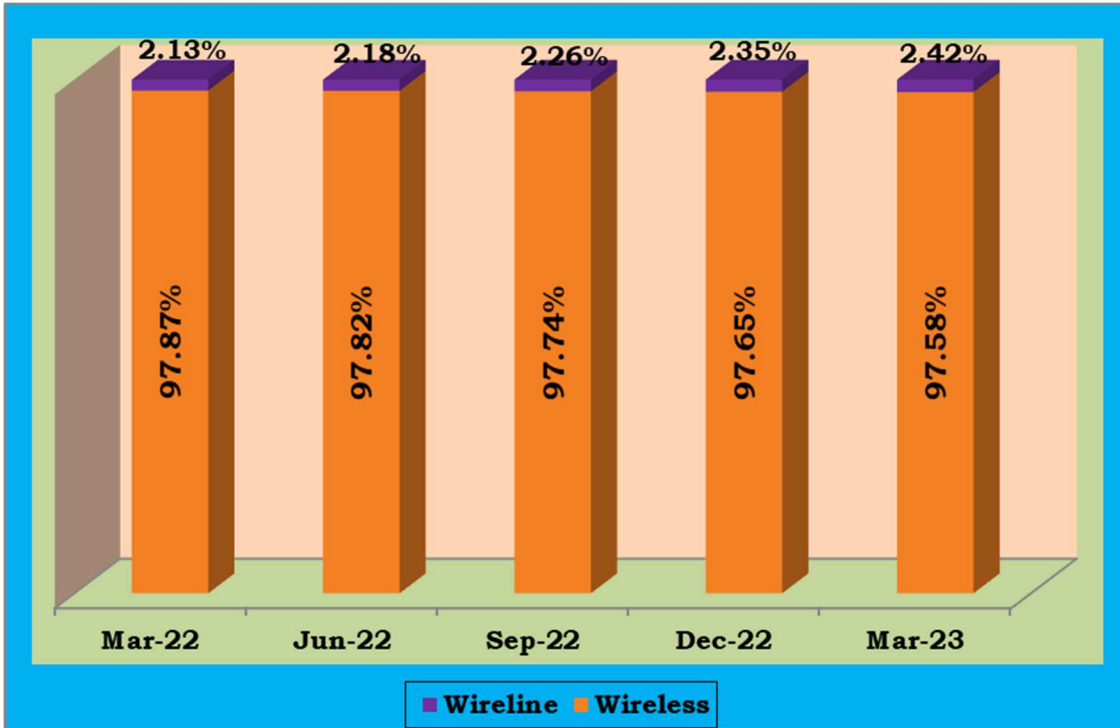
- 1.2 Telephone subscription in Urban areas increased from 652.39 million at the end of Dec-22 to 653.71 million at the end of Mar-23 however, Urban Tele-density decreased from 134.16% to 133.81% at the end of the quarter.
- 1.3 Rural telephone subscription increased from 517.99 million at the end of Dec-22 to 518.63 million at the end of Mar-23 and Rural Tele-density also increased from 57.69% to 57.71% at the end of the quarter.
- 1.4 The Y-O-Y rates of growth in Urban and Rural telephone subscriptions from Mar-22 to Mar-23 are 1.02% and -0.23% respectively. The Y-O-Y rates of decline in Urban and Rural Tele-density from Mar-22 to Mar-23 are 0.84% and 0.61% respectively.

Chart 1.2: Market Share - Rural & Urban Subscribers



- 1.5 Share of subscriptions of rural areas in the total telephone subscriptions decreased from 44.26% at the end of Dec-22 to 44.24% at the end of Mar-23.

Chart 1.3: Composition of Access subscription - Wireline & Wireless



1.6 Share of wireline subscription in total telephone subscription increased from 2.35% at the end of Dec-22 to 2.42% at the end of Mar-23.

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

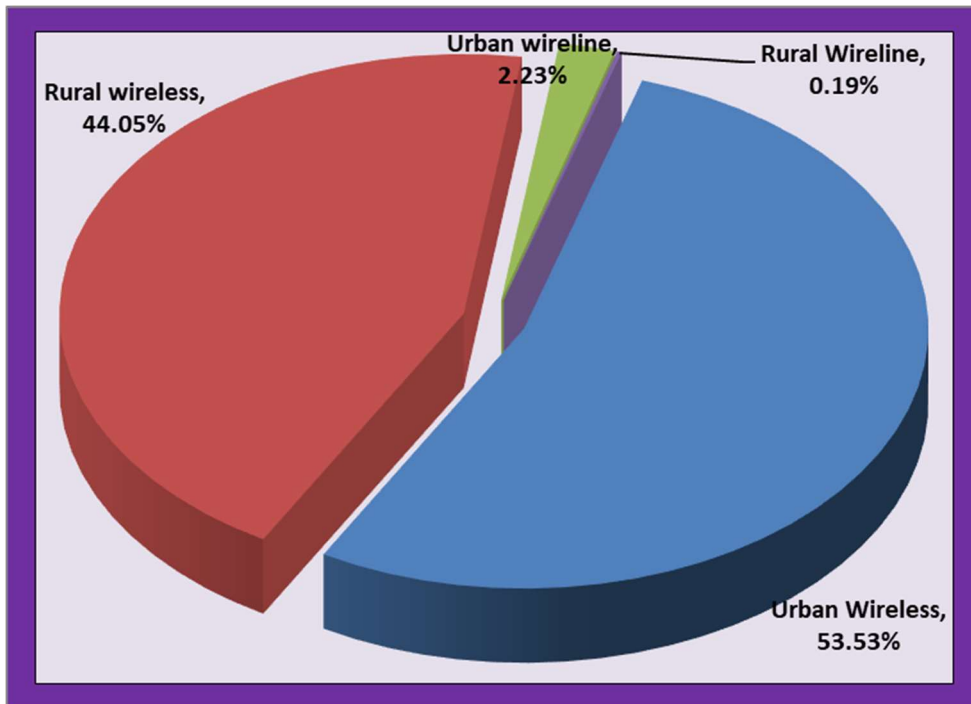


Table 1.2: Service Area wise Access (Wireless+Wireline) Subscriber base

Service Area	Subscribers (million)			
	Dec-22	Mar-23	Net Additions	Rate of Growth
Andhra Pradesh	84.70	84.91	0.21	0.25%
Assam	24.97	25.28	0.30	1.21%
Bihar	91.51	91.92	0.41	0.44%
Delhi	57.91	58.54	0.63	1.09%
Gujarat	67.24	67.44	0.21	0.31%
Haryana	27.13	27.10	-0.03	-0.11%
Himachal Pradesh	9.73	8.94	-0.79	-8.07%
Jammu & Kashmir	12.39	12.37	-0.02	-0.17%
Karnataka	69.33	69.02	-0.31	-0.45%
Kerala	43.85	43.79	-0.05	-0.12%
Madhya Pradesh	77.49	77.99	0.50	0.64%
Maharashtra	92.92	92.96	0.04	0.04%
Mumbai	37.26	37.59	0.32	0.87%
North East	12.33	12.56	0.23	1.87%
Odisha	33.66	33.55	-0.11	-0.33%
Punjab	36.94	36.88	-0.06	-0.17%
Rajasthan	63.93	64.43	0.50	0.78%
Tamil Nadu	81.00	81.25	0.25	0.31%
Uttar Pradesh(E)	100.58	100.19	-0.39	-0.39%
Uttar Pradesh(W)	63.70	63.49	-0.21	-0.33%
Kolkata	24.85	24.74	-0.11	-0.43%
West Bengal	56.94	57.39	0.45	0.78%
All India	1,170.38	1,172.34	1.96	0.17%

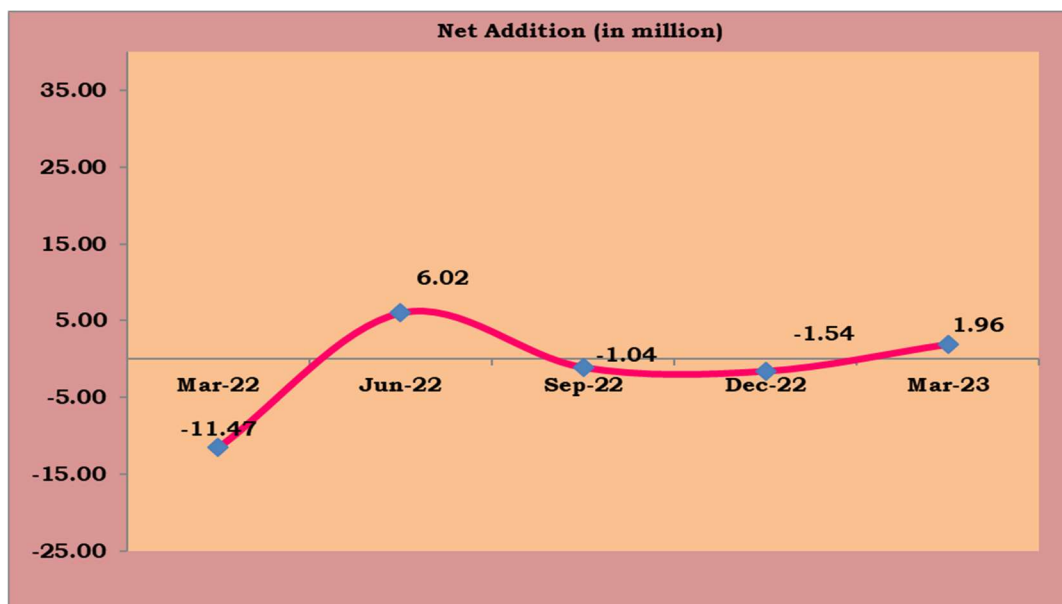
1.7 All service areas, except Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Odisha, Punjab, Uttar Pradesh(E), Uttar Pradesh(W) and Kolkata showed growth in their subscriber base during the quarter ending Mar-23. North East service area showed maximum growth of 1.87% during the quarter.

Table 1.3: Service Area wise Rural-Urban Subscribers at QE Mar-23

Service Area	Number of Subscribers (in million)			
	Total	Rural	Urban	% of Rural Subscribers
Andhra Pradesh	84.91	40.96	43.95	48.24%
Assam	25.28	15.91	9.36	62.96%
Bihar	91.92	60.83	31.09	66.17%
Delhi	58.54	1.73	56.81	2.96%
Gujarat	67.44	26.04	41.41	38.61%
Haryana	27.10	12.05	15.04	44.48%
Himachal Pradesh	8.94	5.78	3.16	64.67%
Jammu & Kashmir	12.37	5.96	6.41	48.18%
Karnataka	69.02	25.61	43.41	37.10%
Kerala	43.79	19.56	24.23	44.67%
Madhya Pradesh	77.99	34.89	43.10	44.73%
Maharashtra	92.96	41.70	51.26	44.86%
Mumbai	37.59	1.18	36.41	3.14%
North East	12.56	6.49	6.08	51.62%
Odisha	33.55	21.90	11.65	65.28%
Punjab	36.88	12.25	24.62	33.23%
Rajasthan	64.43	34.03	30.40	52.81%
Tamil Nadu	81.25	23.34	57.91	28.73%
U.P.(E)	100.19	61.70	38.49	61.58%
U.P.(W)	63.49	30.26	33.23	47.66%
Kolkata	24.74	1.62	23.12	6.55%
West Bengal	57.39	34.83	22.56	60.70%
All India	1,172.34	518.63	653.71	44.24%

1.8 Only eight service areas have more than 50% share of rural subscribers in their total number of subscribers. Bihar service area has maximum share of rural subscribers of 66.17% in its total telephone subscribers.

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



1.9 The net increase in telephone subscription is 1.96 million during QE Mar-23 as compared to the net decrease of 1.54 million during QE Dec-22.

Table 1.4 : Service Area wise Tele-density

Service Area/ States	As on 31 st Dec, 2022			As on 31 st Mar, 2023		
	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)
Andhra Pradesh	75.91	116.99	92.79	76.31	116.59	92.93
Assam	52.06	167.78	70.04	52.74	168.25	70.72
Bihar	43.11	120.70	55.18	43.30	119.87	55.23
Delhi	-	-	271.97	-	-	273.67
Gujarat	70.67	115.24	92.60	70.56	115.19	92.58
Haryana	68.24	120.00	89.98	68.90	118.04	89.61
Himachal Pradesh	94.76	440.14	130.36	86.31	410.01	119.69
J&K	61.77	151.88	89.25	61.71	150.78	88.94
Karnataka	69.83	143.60	102.53	68.06	144.22	101.91
Kerala	219.09	90.19	122.40	223.06	89.45	122.13

Service Area/ States	As on 31 st Dec, 2022			As on 31 st Mar, 2023		
	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)
Madhya Pradesh	41.34	129.67	66.50	41.76	129.30	66.73
Maharashtra (incl. Mumbai)*	66.08	139.39	101.87	65.53	140.05	101.96
North East	62.20	109.07	78.42	63.06	110.97	79.71
Orissa	61.15	140.17	76.04	60.96	139.14	75.74
Punjab	68.46	175.82	115.70	68.54	174.62	115.31
Rajasthan	56.74	140.63	79.05	57.18	140.79	79.45
Tamil Nadu	64.35	136.42	103.23	64.71	136.39	103.46
Uttar Pradesh (incl. UPE & UPW)*	49.20	119.79	66.53	49.27	117.79	66.12
West Bengal (incl. Kolkata)*	57.40	123.41	81.71	57.68	123.39	81.95
All India	57.69	134.16	84.56	57.71	133.81	84.51

* 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 projection of population from the 'Report of the Technical Group on Population Projections for India and States 2011 – 2036', which is available under the link https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-%20upload_compressed_0.pdf
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 223.06 followed by Himachal Pradesh service area of 86.31. Madhya Pradesh service area has the lowest Rural Tele-density of 41.76 followed by Bihar service area with rural tele-density of 43.30 in QE Mar-23.

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

Sl. No.	States/UT	Total Telephone Subscription (million)		
		Total	Rural	Urban
1	Andhra Pradesh	43.83	24.17	19.66
2	Arunachal Pradesh	1.27	0.83	0.44
3	Assam	25.28	15.91	9.36
4	Bihar	68.05	47.61	20.44
5	Chhattisgarh	20.09	9.61	10.48
6	Goa	2.46	0.83	1.62
7	Gujarat	66.48	25.69	40.79
8	Haryana	33.44	12.10	21.34
9	Himachal Pradesh	8.94	5.78	3.16
10	Jharkhand	23.87	13.22	10.66
11	Karnataka	69.02	25.61	43.41
12	Kerala	43.72	19.54	24.18
13	Madhya Pradesh	57.91	25.28	32.62
14	Maharashtra Incl. Mumbai	128.09	42.05	86.04
15	Manipur	2.48	1.00	1.48
16	Meghalaya	2.56	1.59	0.97
17	Mizoram	1.43	0.57	0.86
18	Nagaland	1.65	0.84	0.81
19	Odisha	33.55	21.90	11.65
20	Punjab	34.86	12.21	22.65
21	Rajasthan	64.43	34.03	30.40
22	Sikkim	0.92	0.55	0.37
23	Tamil Nadu	80.02	22.98	57.03
24	Telangana	41.07	16.79	24.29
25	Tripura	3.18	1.66	1.52
26	Uttar Pradesh (UPE + UPW)	159.78	85.76	74.01
27	Uttarakhand	12.60	6.20	6.40
28	West Bengal Incl. Kolkata	80.65	35.68	44.97
Union Territories				
1	Andaman & Nicobar Islands	0.57	0.23	0.34
2	Chandigarh	2.02	0.05	1.97
3	Dadra and Nagar Haveli and Daman and Diu	0.97	0.35	0.62
4	Delhi	43.50	1.68	41.82
5	Jammu & Kashmir	11.88	5.69	6.19
6	Ladakh	0.49	0.27	0.22
7	Lakshdweep	0.07	0.02	0.05
8	Puduchery	1.23	0.36	0.87
Total		1172.34	518.63	653.71

Table 1.6 : State/UT wise total Tele-density

Sl.No.	State/UT	Total Tele-density (%)		
		Total	Rural	Urban
1	Andhra Pradesh	82.44	121.35	226.31
2	Arunachal Pradesh	81.16	71.64	108.76
3	Assam	70.72	52.74	168.25
4	Bihar	53.62	42.77	131.07
5	Chhattisgarh	66.49	43.65	127.79
6	Goa	156.01	219.63	135.80
7	Gujarat	92.87	70.06	116.84
8	Haryana	110.60	69.18	167.45
9	Himachal Pradesh	119.69	86.31	410.01
10	Jharkhand	60.43	45.33	102.98
11	Karnataka	101.91	68.06	144.22
12	Kerala	122.16	222.86	89.48
13	Madhya Pradesh	66.82	41.09	129.80
14	Maharashtra Incl. Mumbai	101.28	64.63	140.13
15	Manipur	76.77	45.88	141.10
16	Meghalaya	76.36	59.64	140.65
17	Mizoram	115.34	101.73	126.47
18	Nagaland	73.83	69.74	78.64
19	Odisha	75.74	60.96	139.14
20	Punjab	113.37	68.28	176.00
21	Rajasthan	79.45	57.18	140.79
22	Sikkim	132.90	157.40	107.64
23	Tamil Nadu (incl. Chennai)	104.08	64.59	138.10
24	Telangana	107.53	84.26	132.91
25	Tripura	76.67	65.80	93.47
26	Uttar Pradesh (UPE +UPW)	67.73	47.86	130.53
27	Uttarakhand	108.19	83.08	152.94
28	West Bengal Incl. Kolkata	81.36	56.97	123.21
Union Territories				
1	Andaman & Nicobar Islands	140.65	101.21	190.43
2	Chandigarh	163.81	-	-
3	Dadra and Nagar Haveli and Daman and Diu	76.11	147.63	59.69
4	Delhi	203.35	-	-
5	Jammu & Kashmir	87.30	60.24	148.80
6	Ladakh	162.74	128.54	238.99
7	Lakshdweep	104.98	-	-
8	Puduchery	74.76	73.10	75.47
Total		84.51	57.71	133.81

Table 1.7 : Service Provider wise Growth in Subscriber base

Service Provider	Subscriber base (millions)			Rate of Growth (%)	Market Share in QE Dec-22 (%)	Market Share in QE Mar-23 (%)
	Dec-22	Mar-23	Net Additions			
Reliance Jio	432.92	439.35	6.43	1.48	36.99	37.48
Bharti Airtel	374.39	378.06	3.66	0.98	31.99	32.25
Vodafone Idea Ltd	242.04	237.45	-4.59	-1.90	20.68	20.25
BSNL	113.82	110.79	-3.03	-2.66	9.72	9.45
MTNL	5.17	4.66	-0.50	-9.76	0.44	0.40
Tata Teleservices	1.57	1.54	-0.03	-1.86	0.13	0.13
Quadrant	0.32	0.34	0.02	6.15	0.03	0.03
Reliance Com.	0.15	0.15	0.00	-1.94	0.01	0.01
Total	1,170.38	1,172.34	1.96	0.17	100	100

Note: 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 37.48% in the access segment in terms of number of subscribers with 439.35 million subscribers at the end of Mar-23 followed by M/s Bharti Airtel Ltd with 378.06 million subscribers.

1.12 In term of net addition, Reliance Jio became the biggest gainer with net addition of 6.43 million telephone subscribers during the QE Mar-23.

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
Reliance Jio	439.35	188.84	42.98%	36.41%
Bharti Airtel	378.06	179.79	47.56%	34.67%
Vodafone Idea Ltd	237.45	115.37	48.59%	22.25%
BSNL	110.79	34.55	31.19%	6.66%
MTNL	4.66	0.04	0.76%	0.01%
Tata Teleservices	1.54	0.02	1.61%	0.005%
Quadrant	0.34	0.02	5.75%	0.004%
Reliance Com.	0.15	0.0004	0.24%	0.00%
Total	1,172.34	518.63	44.24	100

1.13 M/s Vodafone Idea Ltd is the telecom service provider with highest proportion of rural telephone subscribers of 48.59% followed by Bharti Airtel of 47.56% to their total telephone subscribers at the end of Mar-23.

Section B : Wireless Service

Table 1.9: List of Wireless Access Service Providers currently providing service

[As on 31st March, 2023]

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	All India (except Assam & NE)

Source : DoT website

UL Access Services Licensees Virtual Network Operators (VNOs) who are providing services as on 31st March, 2023

1	AdPay Mobile Payment India Pvt. Ltd	Tamil Nadu including Chennai
2	SurÖelecomPrivateLimited	TamilNaduincludingChennai

Source : As reported by telecom service providers

- 1.14 Number of total wireless (Mobile and WLL (F)) subscribers increased from 1,142.93 million at the end of Dec-22 to 1,143.93 million at the end of Mar-23, thereby showing a quarterly growth rate of 0.09%. During the quarter, net increase of 1 million wireless subscribers has been recorded.
- 1.15 The total wireless subscriber base recorded a Y-O-Y rate of growth 0.16% in QE Mar-23 over the same quarter in the previous year.
- 1.16 Wireless Teledensity in the country decreased from 82.57% at the end of Dec-22 to 82.46% at the end of Mar-23.

Chart 1.6: Wireless Subscriber Base and Teledensity

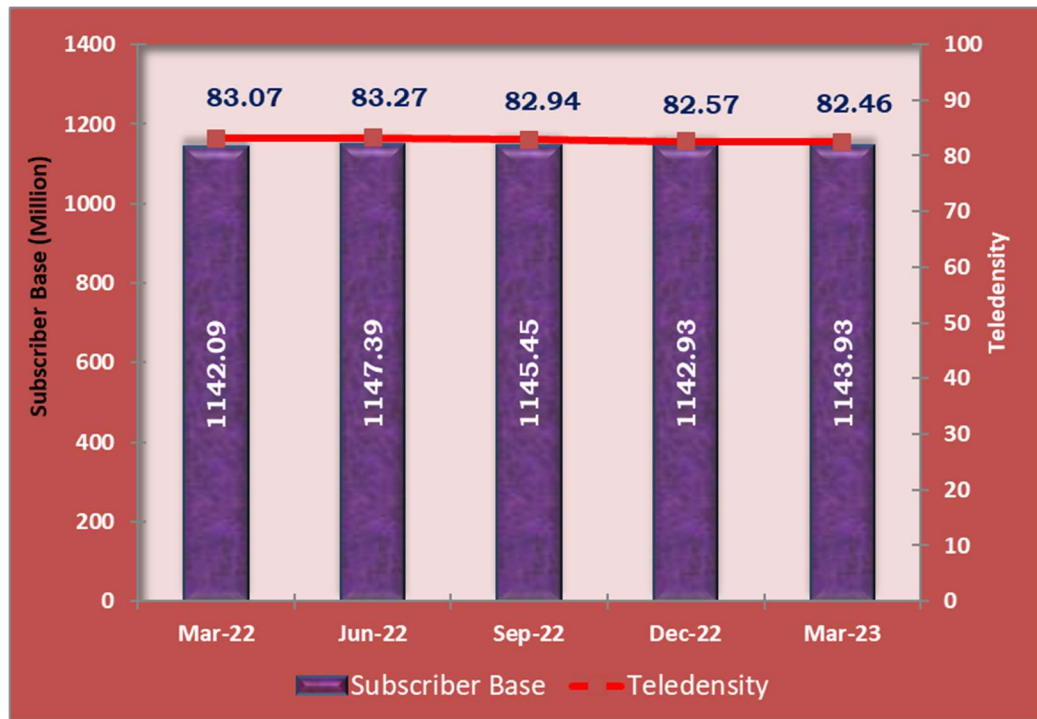


Table 1.10: Wireless Subscriber Base & Tele-density - Rural & Urban

Quarter ending	Subscriber Base (million)		Tele-density (%)	
	Rural	Urban	Rural	Urban
Mar-22	517.86	624.23	57.85	130.17
Jun-22	521.90	625.49	58.24	129.82
Sep-22	518.31	627.14	57.79	129.56
Dec-22	515.89	627.03	57.46	128.94
Mar-23	516.38	627.54	57.46	128.45

1.17 Number of Rural Wireless subscribers increased from 515.89 million at the end of Dec-22 to 516.38 million at the end of Mar-23 and number of urban wireless subscribers also increased from 627.03 million to 627.54 million during the quarter. Quarterly growth rates of Rural and Urban wireless subscriptions are 0.10% and 0.08% respectively during QE Mar-23.

1.18 The share of rural wireless subscription remained same i.e. 45.14% in total wireless subscription during QE Mar-23.

Chart 1.7: Wireless Market Share - Rural & Urban

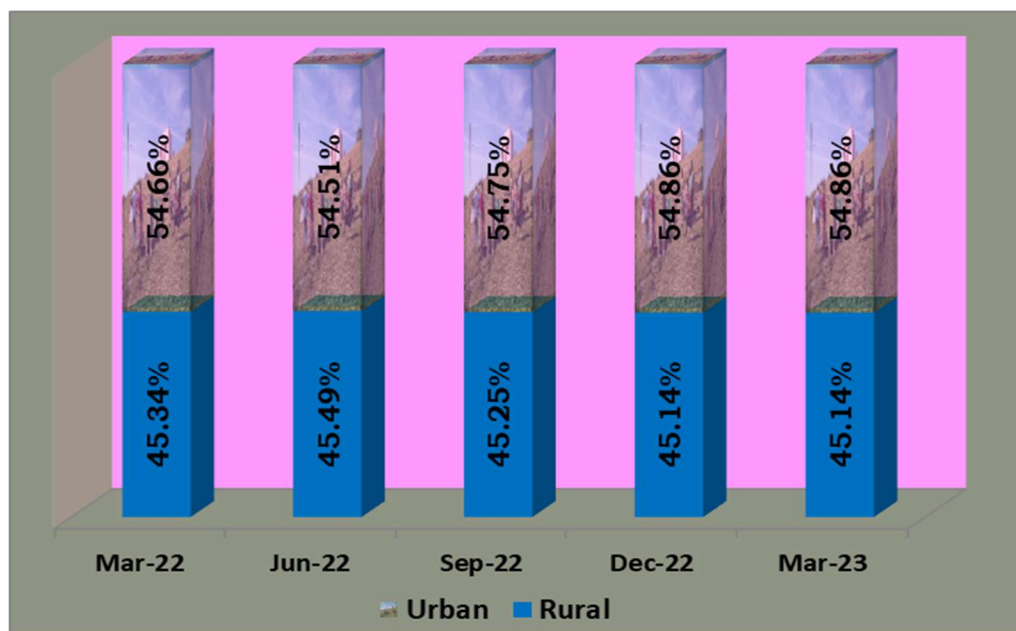


Table 1.11: Growth in Wireless Subscriber base

Service Provider	Subscriber Base (millions)			Rate of Growth	Market Share Dec-22	Market Share Mar-23
	Dec-22	Mar-23	Net Addition			
Reliance Jio	424.52	430.23	5.71	1.35%	37.14%	37.61%
Bharti Airtel	367.61	370.91	3.30	0.90%	32.16%	32.42%
Vodafone Idea Ltd	241.32	236.75	-4.57	-1.90%	21.11%	20.70%
BSNL	106.71	103.68	-3.03	-2.84%	9.34%	9.06%
MTNL	2.76	2.35	-0.41	-14.80%	0.24%	0.21%
Reliance Com.	0.003	0.003	0.00	-3.59%	0.0002%	0.0002%
Total	1,142.93	1,143.93	1.00	0.09%	100	100

1.19 M/s RJIL Limited is the market leader with a wireless subscriber base of 430.23 million which translates into market share of 37.61% w.r.t total wireless

subscriber base. M/s Bharti Airtel Ltd. is at 2nd position with a total subscriber base of 370.91 million and market share of 32.42%.

- 1.20 In terms of net additions during QE Mar-23, except M/s Reliance Jio and M/s Bharti Airtel 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)			
	Dec-22	Mar-23	Net Additions	Rate of change (%)
Andhra Pradesh	82.37	82.45	0.08	0.09%
Assam	24.71	24.99	0.29	1.16%
Bihar	90.87	91.22	0.35	0.38%
Delhi	53.88	54.48	0.60	1.12%
Gujarat	66.07	66.23	0.17	0.25%
Haryana	26.70	26.64	-0.06	-0.23%
Himachal Pradesh	9.59	8.80	-0.79	-8.24%
Jammu & Kashmir	12.06	12.02	-0.04	-0.30%
Karnataka	66.31	65.91	-0.40	-0.61%
Kerala	42.50	42.41	-0.09	-0.21%
Madhya Pradesh	76.25	76.67	0.42	0.55%
Maharashtra	91.48	91.51	0.02	0.02%
Mumbai	34.02	34.30	0.28	0.83%
North East	12.13	12.35	0.22	1.83%
Orissa	33.29	33.16	-0.13	-0.39%
Punjab	35.81	35.66	-0.15	-0.42%
Rajasthan	63.13	63.59	0.46	0.73%
Tamil Nadu	78.45	78.62	0.18	0.22%
U.P.(E)	99.87	99.44	-0.43	-0.43%
U.P.(W)	62.97	62.72	-0.25	-0.40%
Kolkata	24.00	24.08	0.08	0.35%
West Bengal	56.47	56.66	0.19	0.34%
All India	1,142.93	1,143.93	1.00	0.09%

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	82.45	40.75	41.70	49.42%
Assam	24.99	15.89	9.10	63.58%
Bihar	91.22	60.76	30.46	66.61%
Delhi	54.48	1.73	52.75	3.18%
Gujarat	66.23	25.97	40.26	39.21%
Haryana	26.64	11.96	14.68	44.89%
Himachal Pradesh	8.80	5.74	3.06	65.20%
Jammu & Kashmir	12.02	5.94	6.08	49.44%
Karnataka	65.91	25.48	40.42	38.66%
Kerala	42.41	18.90	23.51	44.57%
Madhya Pradesh	76.67	34.83	41.84	45.43%
Maharashtra	91.51	41.56	49.94	45.42%
Mumbai	34.30	1.17	33.13	3.41%
North East	12.35	6.47	5.88	52.40%
Orissa	33.16	21.86	11.30	65.93%
Punjab	35.66	12.09	23.57	33.90%
Rajasthan	63.59	33.97	29.62	53.42%
T.N. (incl. Chennai)	78.62	23.07	55.55	29.34%
U.P.(E)	99.44	61.67	37.77	62.02%
U.P.(W)	62.72	30.21	32.51	48.17%
Kolkata	24.08	1.62	22.46	6.73%
West Bengal	56.66	34.72	21.94	61.27%
All India	1,143.93	516.38	627.54	45.14%

1.21 Detailed table on service provider wise wireless 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 December, 2022			As on 31 st March, 2023		
	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density(%)
A.P.	75.54	111.33	75.54	75.92	110.63	90.24
Assam	51.98	163.34	51.98	52.66	163.59	69.93
Bihar	43.07	118.41	43.07	43.26	117.41	54.81
Delhi	-	-	-	-	-	254.68
Gujarat	70.48	112.15	70.48	70.36	112.02	90.92
Haryana	67.79	117.26	67.79	68.36	115.20	88.10
H.P.	94.10	427.92	94.10	85.62	397.33	117.77
J&K	61.62	144.30	61.62	61.54	142.94	86.42
Karnataka	69.51	133.91	69.51	67.73	134.28	97.31
Kerala	211.95	87.56	211.95	215.52	86.79	118.28
M.P.	41.29	126.05	41.29	41.69	125.51	65.60
Maharashtra (incl. Mumbai)*	65.84	132.13	98.21	65.30	132.71	98.25
North East	62.06	105.58	62.06	62.91	107.34	78.35
Orissa	61.04	136.11	61.04	60.85	134.93	74.85
Punjab	67.73	168.74	67.73	67.63	167.17	111.52
Rajasthan	56.65	137.12	56.65	57.09	137.17	78.41
Tamil Nadu	63.61	131.02	63.61	63.96	130.85	100.12
Uttar Pradesh (incl. UPE&UPW)*	49.17	117.52	65.95	49.23	115.42	65.51
West Bengal (incl. Kolkata)*	57.24	120.11	80.39	57.50	119.97	80.57
All India	57.46	128.94	82.57	57.46	128.45	82.46

* 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 projection of population from the 'Report of the Technical Group on Population Projections for India and States 2011 - 2036', which is available under the link https://main.mohfw.gov.in/sites/default/files/_Population%20Projection%20Report%202011-2036%20-%20upload_compressed_0.pdf
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 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.

Table 1.15 : State/UT wise Wireless Subscriber Base

Sl. No.	States/UT	Wireless Subscribers (in million)		
		Total	Rural	Urban
1	Andhra Pradesh	42.52	24.02	18.50
2	Arunachal Pradesh	1.25	0.83	0.42
3	Assam	24.99	15.89	9.10
4	Bihar	67.66	47.57	20.09
5	Chhattisgarh	19.78	9.59	10.19
6	Goa	2.40	0.82	1.58
7	Gujarat	65.27	25.62	39.65
8	Haryana	32.82	12.01	20.82
9	Himachal Pradesh	8.80	5.74	3.06
10	Jharkhand	23.57	13.20	10.37
11	Karnataka	65.91	25.48	40.42
12	Kerala	42.34	18.88	23.46
13	Madhya Pradesh	56.89	25.24	31.65
14	Maharashtra	123.41	41.92	81.50
15	Manipur	2.43	1.00	1.43
16	Meghalaya	2.51	1.58	0.92
17	Mizoram	1.40	0.57	0.83
18	Nagaland	1.63	0.84	0.78
19	Odisha	33.16	21.86	11.30
20	Punjab	33.87	12.05	21.82
21	Rajasthan	63.59	33.97	29.62
22	Sikkim	0.91	0.55	0.36
23	Tamil Nadu	77.45	22.72	54.73
24	Telangana	39.93	16.73	23.20
25	Tripura	3.14	1.65	1.49
26	Uttar Pradesh	158.32	85.71	72.60
27	Uttarakhand	12.32	6.18	6.14
28	West Bengal	79.31	35.58	43.73
Union Territories				
1	Andaman & Nicobar Islands	0.53	0.21	0.32
2	Chandigarh	1.80	0.04	1.75
3	Dadra and Nagar Haveli and Daman and Diu	0.96	0.35	0.61
4	Delhi	39.82	1.68	38.14
5	Jammu & Kashmir	11.54	5.68	5.86
6	Ladakh	0.49	0.27	0.22
7	Lakshdweep	0.07	0.02	0.05
8	Puduchery	1.17	0.35	0.82
Total		1143.93	516.38	627.54

Table 1.16 : State/UT wise Wireless Tele-density

Sl.No.	State/UT	Wireless Tele-density (%)		
		Total	Rural	Urban
1	Andhra Pradesh	79.97	71.17	95.26
2	Arunachal Pradesh	80.05	71.31	105.38
3	Assam	69.93	52.66	163.59
4	Bihar	53.31	42.73	128.85
5	Chhattisgarh	65.49	43.59	124.29
6	Goa	152.05	215.43	131.92
7	Gujarat	91.19	69.87	113.58
8	Haryana	108.55	68.63	163.35
9	Himachal Pradesh	117.77	85.62	397.33
10	Jharkhand	59.65	45.26	100.19
11	Karnataka	97.31	67.73	134.28
12	Kerala	118.32	215.34	86.82
13	Madhya Pradesh	65.64	41.02	125.91
14	Maharashtra	97.58	64.42	132.72
15	Manipur	75.29	45.74	136.80
16	Meghalaya	74.83	59.55	133.56
17	Mizoram	112.70	101.61	121.78
18	Nagaland	72.72	69.70	76.27
19	Odisha	74.85	60.85	134.93
20	Punjab	110.15	67.40	169.53
21	Rajasthan	78.41	57.09	137.17
22	Sikkim	131.96	157.33	105.79
23	Tamil Nadu	100.74	63.86	132.52
24	Telangana	104.54	83.97	126.96
25	Tripura	75.70	65.61	91.30
26	Uttar Pradesh	67.12	47.84	128.04
27	Uttarakhand	105.81	82.81	146.83
28	West Bengal	80.01	56.82	119.81
Union Territories				
1	Andaman & Nicobar Islands	130.98	92.52	179.53
2	Chandigarh	145.82	-	-
3	Dadra and Nagar Haveli and Daman and Diu	75.58	146.72	59.25
4	Delhi	186.14	-	-
5	Jammu & Kashmir	84.76	60.08	140.84
6	Ladakh	161.81	128.17	236.83
7	Lakshdweep	99.16	-	-
8	Puduchery	71.08	70.74	71.22
All India Tele-density		82.46	57.46	128.45

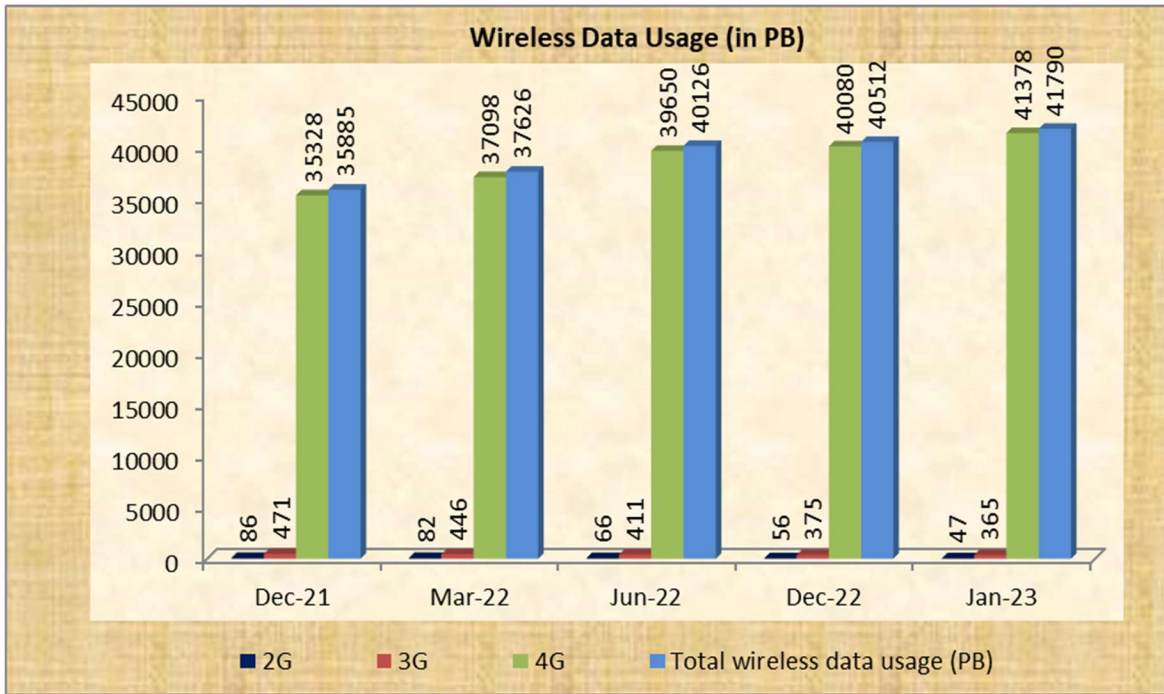
**Table 1.17 : Rural Wireless Subscriber base and Market Share
(as on 31.03.2023)**

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	430.23	188.67	43.85%	36.54%
Bharti Airtel	370.91	179.79	48.47%	34.82%
Vodafone Idea Ltd	236.75	115.37	48.73%	22.34%
BSNL	103.68	32.52	31.36%	6.30%
MTNL	2.35	0.04	1.50%	0.01%
Reliance Com.	0.003	0.00	0.00%	0.000%
Total	1,143.93	516.38	45.14%	100.00%

Wireless Data Usage

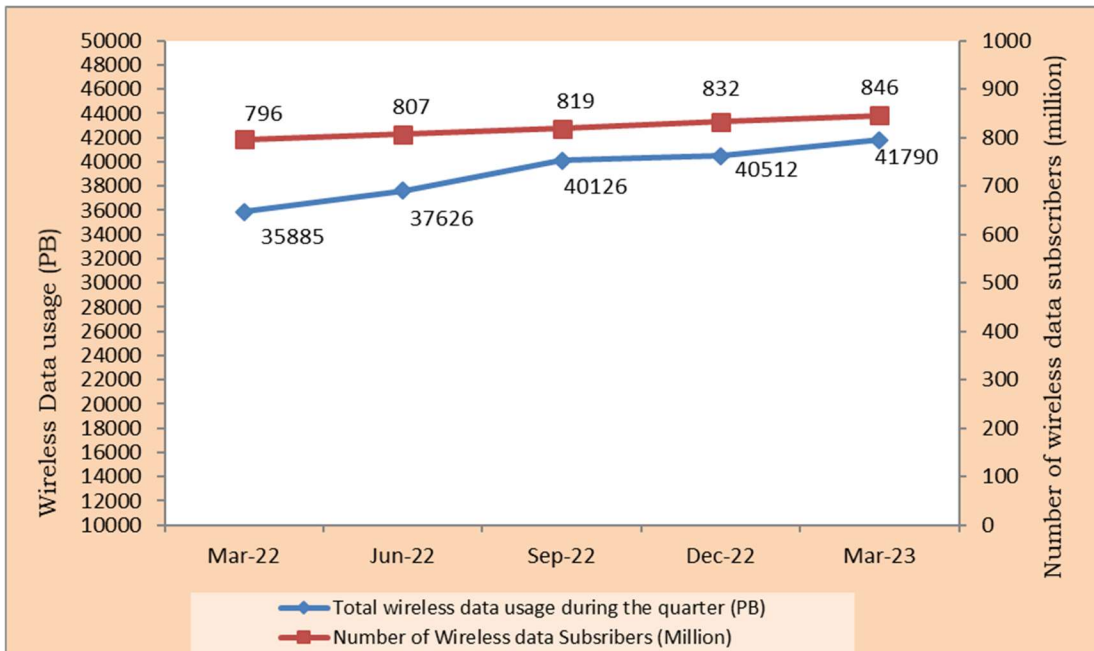
- 1.22 Volume of total wireless data usage increased from 40,512 PB during Q.E. December-22 to 41,790 PB during Q.E. Mar-23 with quarterly growth rate of 3.15%. Out of total data wireless usage, 2G data usage was 47 PB, 3G data usage was 365 PB and 4G data usage was 41,378 PB during the quarter.
- 1.23 Total number of wireless data subscribers increased from 832.36 million at the end of December-22 to 846.21 million at the end of Mar-23.
- 1.24 The contribution of 2G, 3G and 4G data usage in total volume of wireless data usage are about 0.11%, 0.87% and 99.01% respectively during the QE Mar-23.
- 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 PB)



1.26 The following chart depicts the trend of number of wireless data subscribers and volume of wireless data usage in QE Mar-23.

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



Section C : Wireline Service

***Table 1.18 : Service Providers providing Wireline Service**

[As on 31st March, 2023]

Sl. No.	Name of the Service Provider	Area of Operation
1	Bharti Airtel Ltd	Andhra Pradesh, Assam, Bihar, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Punjab, Rajasthan, Tamil Nadu (including Chennai), UP-East, UP-West and West Bengal.
2	BSNL	All India except Delhi & Mumbai
3	MTNL	Delhi & Mumbai
4	Quadrant Televentures Ltd.	Punjab
5	Reliance Communications Ltd.	Andhra Pradesh, Bihar, Delhi, Gujarat, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Odisha, Punjab, Rajasthan, Tamil Nadu (including Chennai), UP-East, UP-West and West Bengal
6.	Tata Teleservices Ltd. & Tata Teleservices (Maharashtra) Ltd	Andhra Pradesh, Bihar, Delhi, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Odisha, Punjab, Rajasthan, Tamil Nadu (including Chennai), UP-East, UP- West and West Bengal.
7	Vodafone Idea Ltd	Andhra Pradesh, Assam, Bihar, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, North-East, Odisha, Punjab, Rajasthan, Tamil Nadu (including Chennai), UP-East, UP-West and West Bengal.
8	Reliance Jio Infocomm Ltd.	Andhra Pradesh, Assam, Bihar, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, North-East, Odisha, Punjab, Rajasthan, Tamil Nadu (including Chennai), UP-East, UP-West and West Bengal.

1.27 Total number of Wireline subscribers increased from 27.45 million at the end of Dec-22 to 28.41 million at the end of Mar-23 with quarterly growth rate of 3.48%. Overall Wireline Teledensity in the country increased from 1.98% at the end of Dec-22 to 2.05% at the end of Mar-23.

1.28 Urban wireline subscriber base increased by 3.18% from 25.35 million at the end of Dec-22 to 26.16 million at the end of Mar-23. Rural wireline subscription also increased by 7.05%, from 2.10 million to 2.25 million during the same period.

Chart 1.10: Wireline Subscriber Base and Tele-density

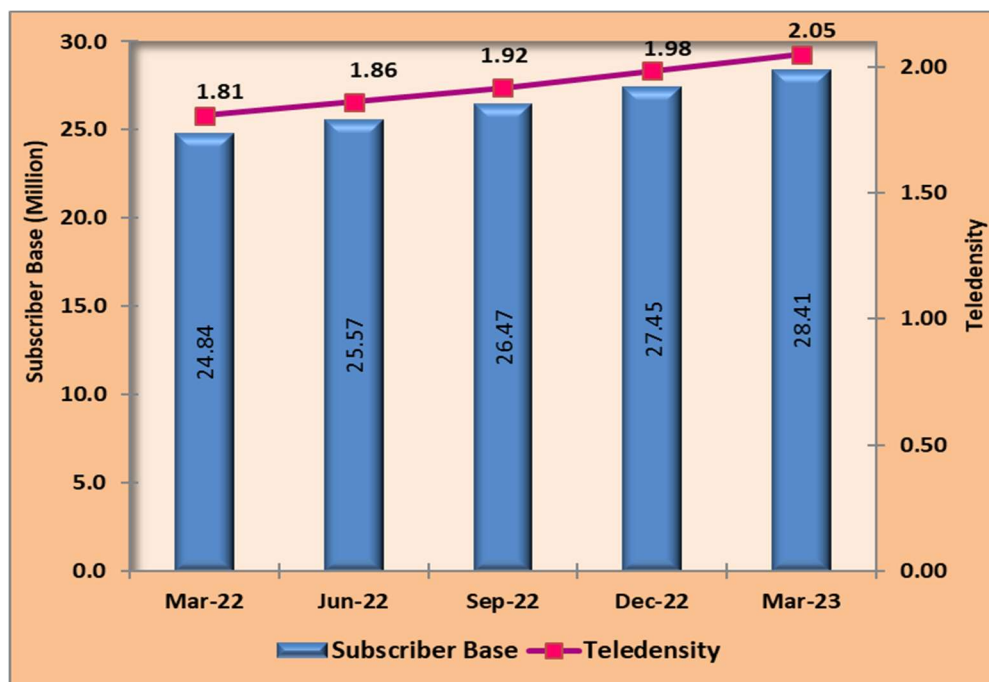


Table 1.19: Wireline Subscriber Base & Tele-density - Rural & Urban

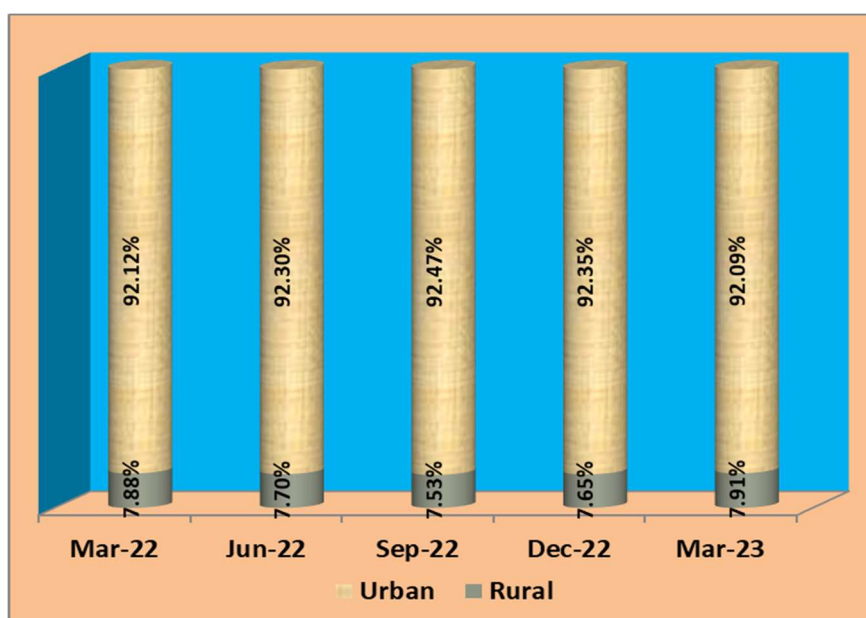
Quarter ending	Subscriber Base (million)		Tele-density (%)	
	Rural	Urban	Rural	Urban
Mar-22	1.96	22.88	0.22	4.77
Jun-22	1.97	23.60	0.22	4.90
Sep-22	1.99	24.48	0.22	5.06
Dec-22	2.10	25.35	0.23	5.21
Mar-23	2.25	26.16	0.25	5.36

**Table 1.20 : Service Provider wise Wireline Subscriber base
(Rural - Urban) – As on 31.03.2023**

Service Provider	Subscriber Base (million)			Percentage of Rural subscribers	Share of Rural subscription
	Rural	Urban	Total		
BSNL	2.03	5.07	7.11	28.64%	90.52%
Bharti	--	7.15	7.15	--	0.00%
MTNL	--	2.31	2.31	--	0.00%
Tata Tele.	0.02	1.52	1.54	1.61%	1.10%
Reliance Com.	0.0004	0.15	0.15	0.25%	0.02%
Quadrant	0.02	0.32	0.34	5.75%	0.86%
Vodafone Idea	--	0.70	0.70	--	0.00%
Reliance Jio	0.17	8.95	9.12	1.85%	7.50%
Total	2.25	26.16	28.41	7.91%	100.00%

1.29 Detailed table on service provider wise wireline 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 increased from 7.65% in QE Dec-22 to 7.91% in QE Mar-23.

Table 1.21 : Service Provider wise growth in Wireline Subscriber base

Service Provider	Subscriber Base (million)			Rate of change (%)	Market share- Dec-22	Market share- Mar-23
	Dec-22	Mar-23	Net Addition			
Reliance Jio	8.40	9.12	0.71	8.50	30.60	32.09
BSNL	7.10	7.11	0.00	0.02	25.88	25.01
Bharti Airtel	6.79	7.15	0.36	5.33	24.72	25.16
MTNL	2.41	2.31	-0.10	-3.99	8.77	8.14
Vodafone Idea	0.72	0.70	-0.01	-1.90	2.61	2.48
Tata Tele.	1.57	1.54	-0.03	-1.86	5.72	5.42
Quadrant	0.32	0.34	0.02	6.15	1.16	1.19
Reliance Com	0.15	0.15	0.00	-1.91	0.54	0.51
Total	27.45	28.41	0.95	3.48	100	100

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

Service Area	Dec-22	Mar-23	Net Additions	Rate of Change (%)
Andhra Pradesh	2.32	2.46	0.13	5.70
Assam	0.27	0.28	0.02	5.64
Bihar	0.64	0.70	0.06	9.36
Delhi	4.04	4.06	0.03	0.70
Gujarat	1.17	1.21	0.04	3.52
Haryana	0.42	0.46	0.03	7.74
Himachal Pradesh	0.14	0.14	0.01	3.78
Jammu & Kashmir	0.34	0.35	0.01	4.20
Karnataka	3.03	3.11	0.09	2.95
Kerala	1.35	1.38	0.03	2.59

Service Area	Dec-22	Mar-23	Net Additions	Rate of Change (%)
Madhya Pradesh	1.24	1.32	0.08	6.18
Maharashtra	1.44	1.46	0.02	1.13
Mumbai	3.24	3.28	0.04	1.32
North East	0.20	0.21	0.01	4.64
Orissa	0.38	0.40	0.02	4.77
Punjab	1.13	1.21	0.09	7.74
Rajasthan	0.81	0.84	0.03	4.27
Tamil Nadu	2.55	2.63	0.07	2.89
U.P.(E)	0.71	0.75	0.04	5.65
U.P.(W)	0.72	0.76	0.04	5.45
Kolkata	0.85	0.66	-0.19	-22.39
West Bengal	0.47	0.73	0.25	53.50
All India	27.45	28.41	0.95	3.48

1.31 West Bengal service area showed maximum growth of 53.50% and only Kolkata service area showed decline of 22.39% in their wireline subscriber base during the quarter ending Mar-23.

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	2.46	0.21	2.25	8.46
Assam	0.28	0.02	0.26	8.43
Bihar	0.70	0.06	0.64	8.98
Delhi	4.06	0.00	4.06	0.07
Gujarat	1.21	0.07	1.14	5.96
Haryana	0.46	0.09	0.36	20.65
Himachal Pradesh	0.14	0.05	0.10	32.01
Jammu & Kashmir	0.35	0.02	0.33	4.66
Karnataka	3.11	0.12	2.99	3.97

Service Area	Total Subscribers	Rural Subscribers	Urban Subscribers	% of Rural Subscribers
Kerala	1.38	0.66	0.72	47.85
Madhya Pradesh	1.32	0.06	1.26	4.28
Maharashtra	1.46	0.14	1.32	9.54
Mumbai	3.28	0.01	3.27	0.31
North East	0.21	0.02	0.20	7.03
Orissa	0.40	0.04	0.35	10.75
Punjab	1.21	0.16	1.05	13.40
Rajasthan	0.84	0.06	0.78	6.76
Tamil Nadu	2.63	0.27	2.36	10.33
U.P.(E)	0.75	0.03	0.72	3.80
U.P.(W)	0.76	0.04	0.72	5.34
Kolkata	0.66	0.00	0.66	0.08
West Bengal	0.73	0.11	0.61	15.63
All India	28.41	2.25	26.16	7.91

1.32 Kerala service area has the maximum share 47.85% of rural wireline subscriber in its total wireline subscriber base at the end of Mar-23.

Table 1.24: Service Area wise Wireline Tele-density

Service Area	As on 31 st December, 2022			As on 31 st March, 2023		
	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)
Andhra Pradesh	0.37	5.66	2.55	0.39	5.97	2.69
Assam	0.07	4.44	0.75	0.08	4.66	0.79
Bihar	0.03	2.30	0.39	0.04	2.45	0.42
Delhi	-	-	18.95	-	-	18.99
Gujarat	0.19	3.08	1.61	0.20	3.17	1.66
Haryana	0.44	2.74	1.41	0.54	2.85	1.51
Himachal Pradesh	0.66	12.22	1.85	0.69	12.67	1.92
Jammu & Kashmir	0.15	7.57	2.42	0.17	7.84	2.51
Karnataka	0.31	9.70	4.47	0.33	9.94	4.60
Kerala	7.14	2.63	3.76	7.54	2.66	3.85
Madhya Pradesh	0.05	3.62	1.07	0.07	3.79	1.13
Maharashtra (incl. Mumbai)*	0.23	7.26	3.66	0.23	7.34	3.70
North East	0.14	3.49	1.30	0.15	3.64	1.36
Orissa	0.10	4.07	0.85	0.12	4.21	0.89
Punjab	0.73	7.08	3.53	0.91	7.45	3.79
Rajasthan	0.09	3.51	1.00	0.10	3.63	1.04
Tamil Nadu (incl. Chennai)	0.75	5.39	3.25	0.75	5.55	3.35
Uttar Pradesh (incl. UPE & UPW)*	0.03	2.27	0.58	0.04	2.37	0.61
West Bengal (incl. Kolkata)*	0.16	3.30	1.32	0.18	3.43	1.38
All India	0.23	5.21	1.98	0.25	5.36	2.05

* Population data/projections are available state-wise only

- Note: -
1. Tele-density figures are derived from the subscriber data provided by the operators and projection of population from the 'Report of the Technical Group on Population Projections for India and States 2011 – 2036', which is available under the link https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-%20upload_compressed_0.pdf
 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.

Table 1.25: State/UT wise Wireline Subscriber base

Sl. No.	States/UT	Wireline Subscribers (in million)		
		Total	Rural	Urban
1	Andhra Pradesh	1.31	0.15	1.16
2	Arunachal Pradesh	0.02	0.004	0.01
3	Assam	0.28	0.02	0.26
4	Bihar	0.39	0.04	0.35
5	Chhattisgarh	0.30	0.01	0.29
6	Goa	0.06	0.02	0.05
7	Gujarat	1.21	0.07	1.14
8	Haryana	0.62	0.10	0.52
9	Himachal Pradesh	0.14	0.05	0.10
10	Jharkhand	0.31	0.02	0.29
11	Karnataka	3.11	0.12	2.99
12	Kerala	1.38	0.66	0.72
13	Madhya Pradesh	1.02	0.04	0.98
14	Maharashtra Incl. Mumbai	4.68	0.13	4.55
15	Manipur	0.05	0.003	0.04
16	Meghalaya	0.05	0.002	0.05
17	Mizoram	0.03	0.001	0.03
18	Nagaland	0.02	0.000	0.02
19	Odisha	0.40	0.04	0.35
20	Punjab	0.99	0.16	0.83
21	Rajasthan	0.84	0.06	0.78
22	Sikkim	0.006	0.0002	0.01
23	Tamil Nadu	2.57	0.26	2.31
24	Telangana	1.14	0.06	1.09
25	Tripura	0.04	0.005	0.04
26	Uttar Pradesh (UPE+UPW)	1.46	0.05	1.41
27	Uttarakhand	0.28	0.02	0.26
28	West Bengal Incl. Kolkata	1.34	0.09	1.24
Union Territories				
1	Andaman & Nicobar Islands	0.04	0.02	0.02
2	Chandigarh	0.22	0.004	0.22
3	Dadra and Nagar Haveli and Daman and Diu	0.007	0.002	0.005
4	Delhi	3.68	0.0002	3.68
5	Jammu & Kashmir	0.35	0.02	0.33
6	Ladakh	0.003	0.001	0.002
7	Lakshdweep	0.004	0.002	0.002
8	Puduchery	0.06	0.01	0.05
Total		28.41	2.25	26.16

Table 1.26: State/UT wise Wireline Tele-density

Sl.No.	State/UT	Wireline Tele-density		
		Total (%)	Rural (%)	Urban (%)
1	Andhra Pradesh	4.62	0.62	11.58
2	Arunachal Pradesh	1.11	0.33	3.37
3	Assam	0.79	0.08	4.66
4	Bihar	0.31	0.04	2.22
5	Chhattisgarh	0.99	0.06	3.50
6	Goa	3.96	4.21	3.88
7	Gujarat	1.68	0.19	3.25
8	Haryana	2.05	0.56	4.10
9	Himachal Pradesh	1.92	0.69	12.67
10	Jharkhand	0.78	0.06	2.80
11	Karnataka	4.60	0.33	9.94
12	Kerala	3.85	7.52	2.66
13	Madhya Pradesh	1.18	0.07	3.89
14	Maharashtra Incl. Mumbai	3.70	0.20	7.40
15	Manipur	1.49	0.14	4.30
16	Meghalaya	1.53	0.08	7.09
17	Mizoram	2.64	0.12	4.70
18	Nagaland	1.11	0.04	2.37
19	Odisha	0.89	0.12	4.21
20	Punjab	3.22	0.89	6.47
21	Rajasthan	1.04	0.10	3.63
22	Sikkim	0.94	0.07	1.84
23	Tamil Nadu	3.34	0.73	5.58
24	Telangana	2.99	0.29	5.95
25	Tripura	0.97	0.19	2.17
26	Uttar Pradesh (UPE + UPW)	0.62	0.03	2.48
27	Uttarakhand	2.37	0.28	6.12
28	West Bengal incl. Kolkata	1.35	0.15	3.41
Union Territories				
1	Andaman & Nicobar Islands	9.67	8.70	10.90
2	Chandigarh	17.99	453.60	17.67
3	Dadra and Nagar Haveli and Daman and Diu	0.53	0.92	0.45
4	Delhi	17.21	0.27	17.28
5	Jammu & Kashmir	2.55	0.16	7.96
6	Ladakh	0.93	0.38	2.16
7	Lakshdweep	5.82	172.15	3.59
8	Puduchery	3.69	2.35	4.25
Total		2.05	0.25	5.36

Public Call Offices (PCO)

1.33 Total number of PCOs in the country decreased from 50,188 at the end of Dec-22 to 42,135 at the end of Mar-23. 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 show declining trend over the year. It has recorded a overall quarterly decline rate of 16.05% and on Y-O-Y basis rate of decline 36.31% at the QE Mar-23.

Table 1.27: Rate of change & Market share of PCOs

Service Provider	Dec-22	Mar-23	Rate of change (%)	Market share (%) (Mar-23)
BSNL	36,661	32301	-11.89	76.66
MTNL	13,165	9492	-27.90	22.53
Quadrant	362	342	-5.52	0.81
Total	50,188	42135	-16.05	100

Village Public Telephones (VPTs)

- 1.35 There are 6,40,930 inhabited villages in India as per census 2011. During the Q.E. Mar-23, there are 68,606 villages having Village Public Telephones (VPTs).
- 1.36 Number of VPTs remained same i.e. 68,606 at the end of Mar-23 as were at the end of Dec-22.
- 1.37 As per the information received in TRAI, at the end of Mar-23, 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 Mar-23. **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 This report is compiled on the revised definition of Broadband Speed i.e. minimum download speed is 2Mbps. As per reports received from 1031 operators as compared to 921 operators in last quarter, total number of internet subscribers increased from 865.90 million at the end of Dec-22 to 881.25 million at the end of Mar-23 with quarterly growth rate of 1.77%. Out of total 881.25 million internet subscribers, 846.57 million were broadband subscribers and 34.69 million were narrowband subscribers.

1.40 Wired Internet subscribers increased from 32.41 million at the end of Dec-22 to 33.94 million at the end of Mar-23 with quarterly growth rate of 4.73%. Wireless Internet subscribers increased from 833.49 million at the end of Dec-22 to 847.31 million at the end of Mar-23 with quarterly growth rate of 1.66%.

1.41 The number of Broadband subscribers increased from 832.20 million at the end of Dec-22 to 846.57 million at the end of Mar-23 with quarterly growth rate of 1.73%. Number of Narrowband subscribers increased from 33.70 million at the end of Dec-22 to 34.69 million at the end of Mar-23 with quarterly growth rate of 2.94%.

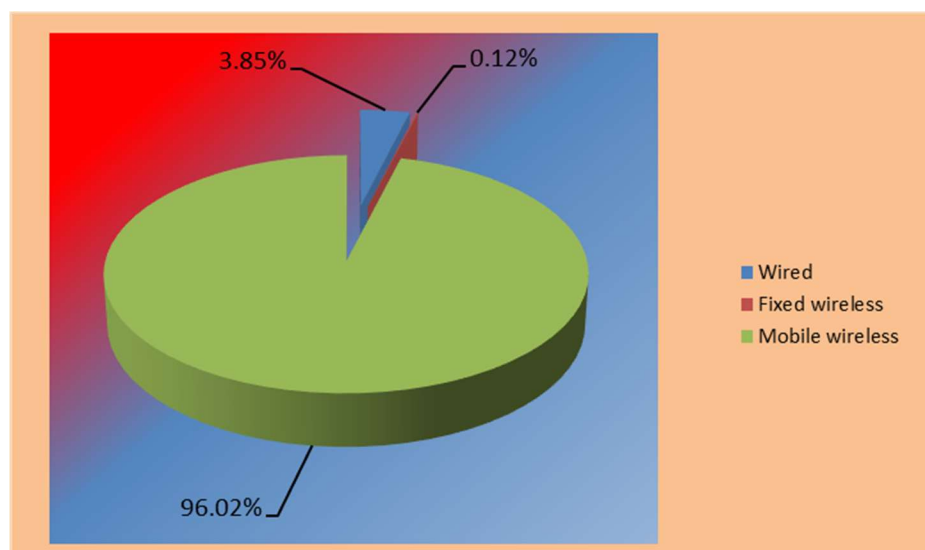
Table 1.28: Trend of Internet subscriber base

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			
	Dec-22	Mar-23	Dec-22	Mar-23	Dec-22	Mar-23	Dec-22	Mar-23	Dec-22	Mar-23
Broadband	32.38	33.49	1.13	1.09	798.69	811.98	799.82	813.08	832.20	846.57
Narrowband	0.02	0.45*	0.01	0.01	33.67	34.23	33.67	34.24	33.70	34.69
Total	32.41	33.94	1.13	1.10	832.35	846.21	833.49	847.31	865.90	881.25

Note: *Due to revision of broadband speed

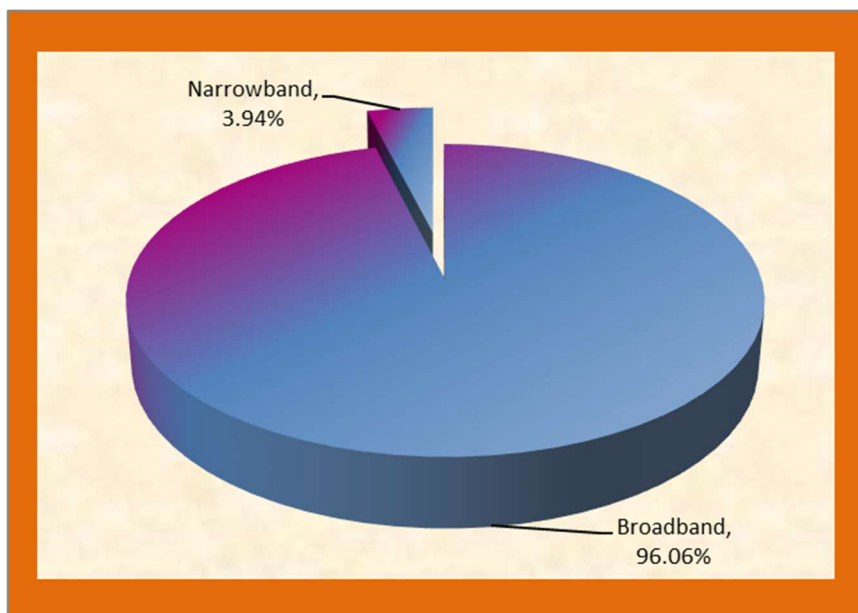
1.42 The following charts present the composition of Internet Subscribers by mode of access and composition of Broadband & Narrowband subscription as on 31st March, 2023.

Chart 1.14: Composition of Internet subscription



1.43 Out of total internet subscribers, 96.02% subscribers are using Mobile devices for access of internet service. Wired internet subscribers are only 3.85% in total internet subscribers at the end of March-23.

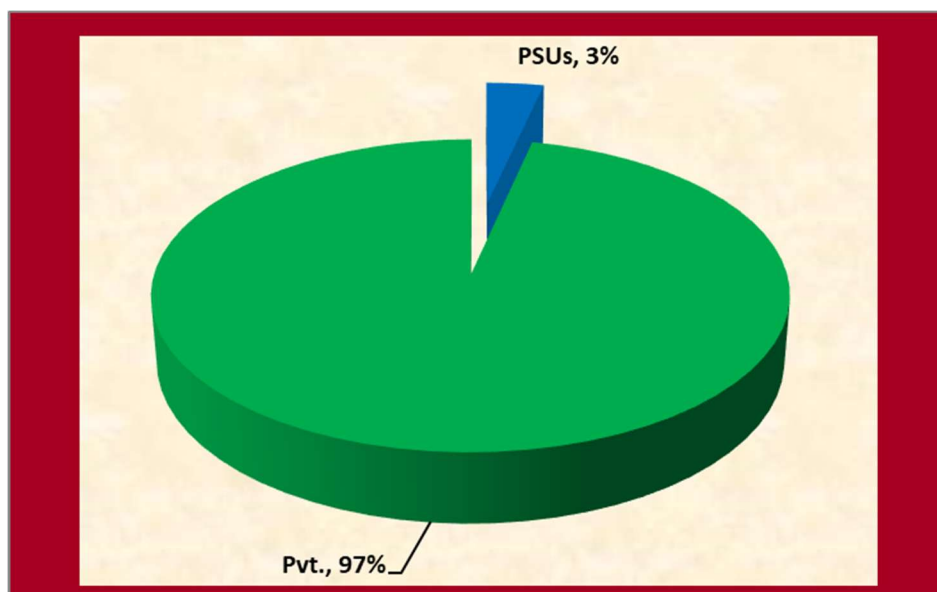
Chart 1.15 : Composition of Broadband & Narrowband subscription



1.44 Out of total internet subscribers, 96.06% subscribers are using broadband for access of internet.

1.45 Share of private internet service providers in total internet subscriber base is 97%, at QE Mar-23. 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: Service Area wise Break up of Rural-Urban internet subscriber base (in millions)

Telecom Service Area	Narrowband		Broadband		Total (Mar-2023)		Total (Dec-2022)	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Andhra Pradesh	1.22	1.29	27.72	36.05	28.95	37.34	28.07	36.93
Assam	0.32	0.13	10.66	6.48	10.98	6.61	10.46	6.45
Bihar	1.78	0.57	40.32	23.12	42.11	23.68	40.38	23.11
Delhi	0.29	6.14	0.54	45.77	0.83	51.91	0.77	50.54
Gujarat	0.40	0.70	16.89	35.19	17.29	35.88	16.94	35.55
Haryana	0.28	0.51	8.19	10.02	8.48	10.54	8.21	10.46
Himachal Pradesh	0.08	0.07	3.79	2.35	3.87	2.42	3.80	2.37
Jammu & Kashmir	0.13	0.08	4.24	5.10	4.36	5.18	4.25	5.08
Karnataka	1.38	2.46	17.90	31.23	19.29	33.69	19.10	33.04
Kerala	0.55	0.48	14.54	16.35	15.08	16.83	15.01	16.73
Kolkata	0.04	0.51	1.32	16.97	1.35	17.48	1.31	17.23
Madhya Pradesh	0.87	0.67	24.50	34.28	25.37	34.94	24.87	34.83
Maharashtra	1.06	1.06	30.21	42.42	31.27	43.48	31.11	42.72
Mumbai	0.01	1.00	1.07	28.45	1.09	29.44	1.05	29.38
North East	0.12	0.10	4.86	4.58	4.97	4.68	4.87	4.51
Orissa	0.42	0.15	14.37	7.65	14.79	7.79	14.42	7.66
Punjab	0.25	0.46	8.84	17.82	9.09	18.28	8.88	18.06
Rajasthan	0.72	0.72	21.47	23.98	22.19	24.70	21.62	24.26
Tamil Nadu	0.78	1.34	15.51	40.62	16.29	41.96	16.14	41.77
UP (East)	2.12	0.74	37.41	29.60	39.53	30.34	38.46	30.01
UP (West)	0.77	0.63	18.12	25.81	18.89	26.44	18.43	26.23
West Bengal	1.02	0.29	20.92	19.34	21.93	19.62	21.37	19.42
Grand Total	14.60	20.09	343.40	503.17	357.99	523.26	349.53	516.37
	34.69		846.57		881.25		865.90	

*The information is compiled based on the reports being received from the Internet Service Providers.

Table 1.30: State/UT wise Break up of Rural-Urban internet subscriber base (in millions)

S.No.	State(s)	Narrowband		Broadband		Total (Mar-2023)	
		Rural	Urban	Rural	Urban	Rural	Urban
1	Andhra Pradesh	0.69	0.68	16.10	15.72	16.79	16.39
2	Arunachal Pradesh	0.01	0.01	0.44	0.31	0.46	0.32
3	Assam	0.32	0.13	10.66	6.48	10.98	6.61
4	Bihar	1.49	0.37	30.78	15.23	32.27	15.60
5	Chattisgarh	0.18	0.15	7.31	8.12	7.48	8.27
6	Goa	0.04	0.05	0.67	1.41	0.71	1.46
7	Gujarat	0.40	0.68	16.64	34.82	17.04	35.50
8	Haryana	0.28	0.51	8.24	13.24	8.53	13.75
9	Himachal Pradesh	0.08	0.07	3.79	2.35	3.87	2.42
10	Jharkhand	0.29	0.20	9.54	7.88	9.84	8.08
11	Karnataka	1.38	2.46	17.90	31.30	19.29	33.76
12	Kerala	0.52	0.48	14.51	16.34	15.03	16.82
13	Madhya Pradesh	0.69	0.52	17.19	26.16	17.88	26.67
14	Maharashtra incl. Mumbai	1.03	2.01	30.62	69.46	31.64	71.47
15	Manipur	0.02	0.02	0.88	1.25	0.91	1.27
16	Meghalaya	0.03	0.01	1.19	0.69	1.22	0.71
17	Mizoram	0.01	0.01	0.48	0.66	0.49	0.67
18	Nagaland	0.02	0.01	0.91	0.64	0.93	0.65
19	Odisha	0.42	0.15	14.37	7.65	14.79	7.79
20	Punjab	0.25	0.44	8.80	16.98	9.04	17.42
21	Rajasthan	0.72	0.72	21.47	23.98	22.19	24.70
22	Sikkim	0.01	0.00	0.38	0.39	0.39	0.39
23	Tamil Nadu incl. Chennai	0.77	1.34	15.27	40.18	16.04	41.52
24	Telangana	0.53	0.61	11.62	20.33	12.15	20.95
25	Tripura	0.03	0.03	0.95	1.02	0.98	1.05
26	Uttar Pradesh (UPE+UPW)	2.81	1.27	51.36	54.27	54.16	55.54
27	Uttarakhand	0.08	0.10	4.17	4.72	4.26	4.83
28	West Bengal incl. Kolkata	1.04	0.79	21.64	35.68	22.68	36.47
Union Territories							
1	Andaman & Nicobar Islands	0.00	0.00	0.21	0.24	0.21	0.25
2	Chandigarh	0.00	0.01	0.04	0.84	0.04	0.85
3	Dadar & Nagar Haweli (incl. Daman & Diu)	0.00	0.01	0.25	0.37	0.25	0.38
4	Delhi	0.29	6.14	0.49	38.98	0.77	45.12
5	Jammu & Kashmir	0.13	0.08	4.08	5.01	4.21	5.09
6	Ladakh	0.00	0.00	0.16	0.02	0.16	0.03
7	Lakshdweep	0.03	0.00	0.02	0.00	0.05	0.00
8	Puduchery	0.01	0.01	0.25	0.44	0.26	0.45
	Total	14.60	20.09	343.40	503.17	357.99	523.26
	Grand Total	34.69		846.57		881.25	

Table 1.31: Internet Subscriber Base and Market Share of top 10 Service Providers

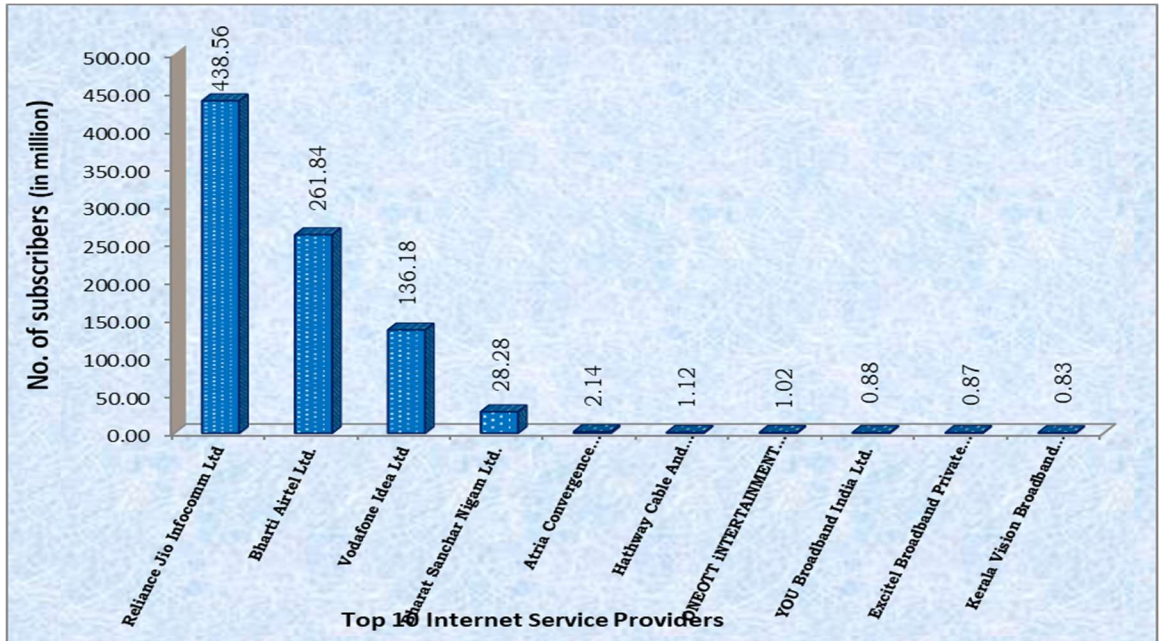
S.No	ISP	No. of Subscribers (In million)	Share (%)
1	Reliance Jio Infocomm Ltd	438.56	49.77
2	Bharti Airtel Ltd.	261.84	29.71
3	Vodafone Idea Ltd	136.18	15.45
4	Bharat Sanchar Nigam Ltd.	28.28	3.21
5	Atria Convergence Technologies Pvt. Ltd.	2.14	0.24
6	Hathway Cable And Datacom Limited	1.12	0.13
7	ONEOTT iNTERTAINMENT LIMITED	1.02	0.12
8	YOU Broadband India Ltd.	0.88	0.10
9	Excitel Broadband Private Limited	0.87	0.10
10	Kerala Vision Broadband Ltd.	0.83	0.09
Total of Top 10 ISPs		871.73	98.92
Others		9.53	1.08
Grand Total		881.25	100

1.47 Reliance Jio holds the top position with 49.77% of market share of internet subscribers followed by Bharti Airtel Ltd with 29.71% at the QE Mar-23. M/s Vodafone Idea Ltd held the third position in respect of internet subscriber base with market share of 15.45%.

1.48 Out of total 1031 internet service providers, top 10 Service Providers together hold 98.92% of total internet subscriber base at the QE Mar-23. Detailed table of number of internet subscriber base (broadband and narrowband) of all the service providers is available at **Annexure-1.5**.

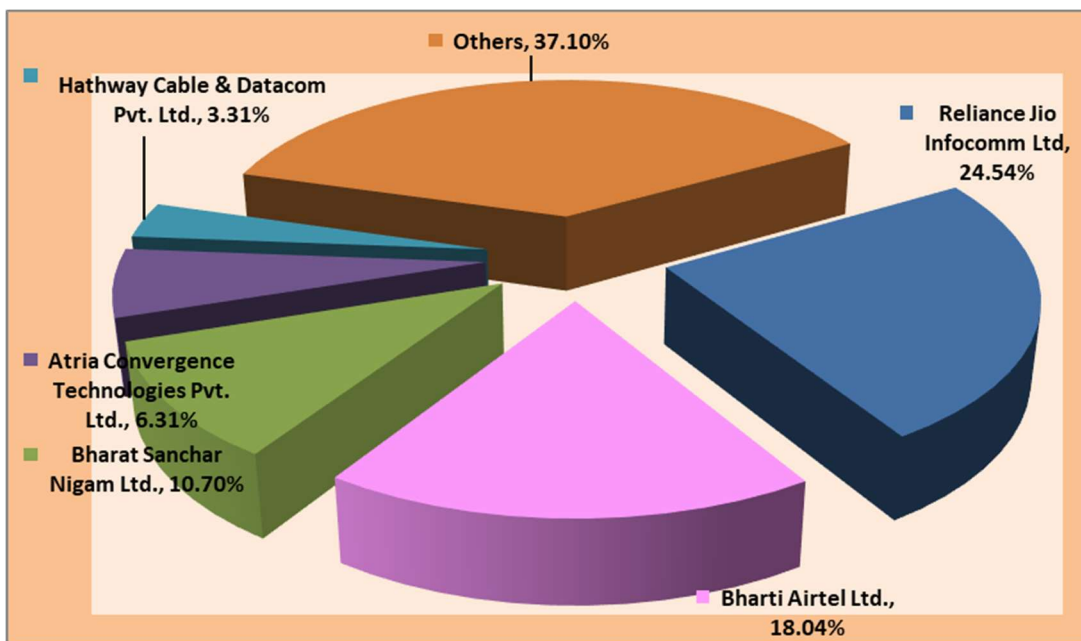
1.49 The following chart depicts the internet subscriber base of top ten Internet Service Providers (ISPs) in the QE Mar-23.

Chart 1.17 : Subscriber base of top ten ISPs



1.50 Out of total 33.94 million wired internet subscribers, Reliance Jio Infocomm Ltd holds 24.54% market share with 8.33 million subscribers, followed by Bharti with 6.12 million subscribers.

Chart 1.18 : Composition of Wired Internet subscribers



1.51 In wireless internet segment, Reliance Jio holds 50.78% market share with 430.23 million subscribers followed by Bharti Airtel Ltd with 30.18% and 255.72 million wireless internet subscribers at the QE Mar-23.

Chart 1.19 : Composition of Wireless Internet subscription

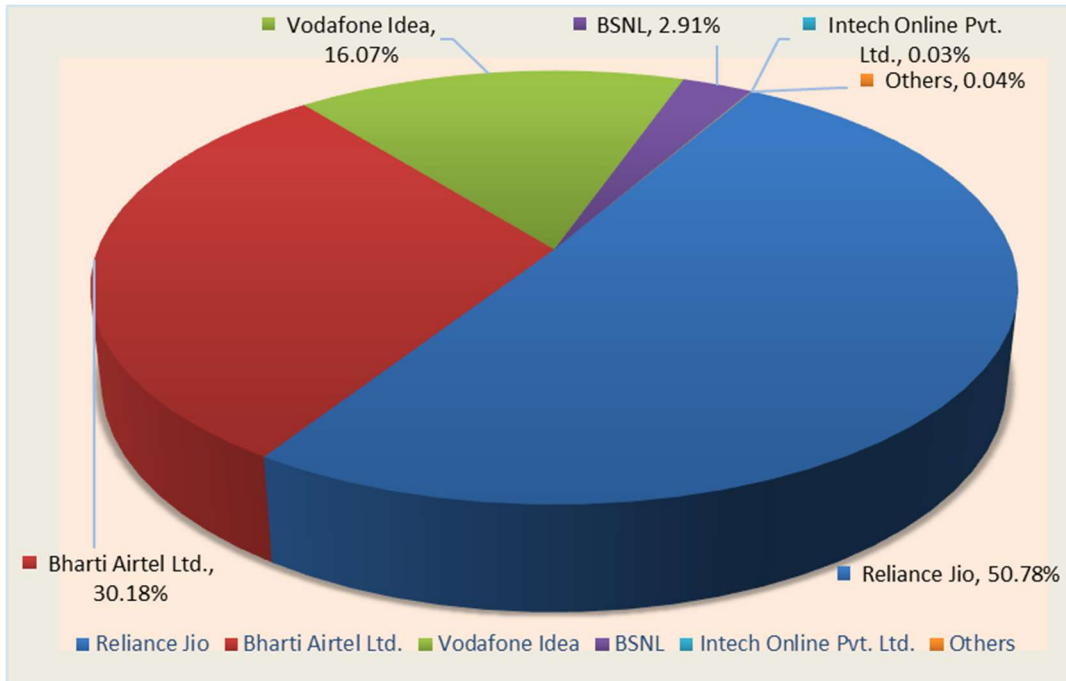


Chart 1.20 : Technology trend for Wireless Internet Access

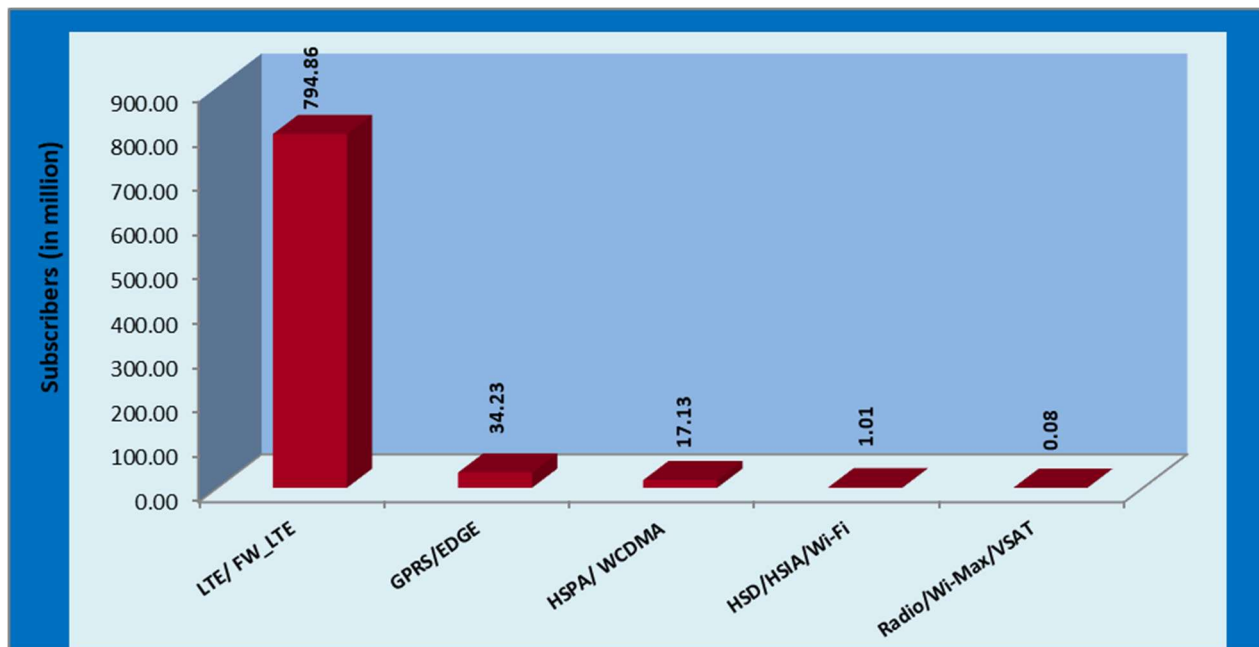
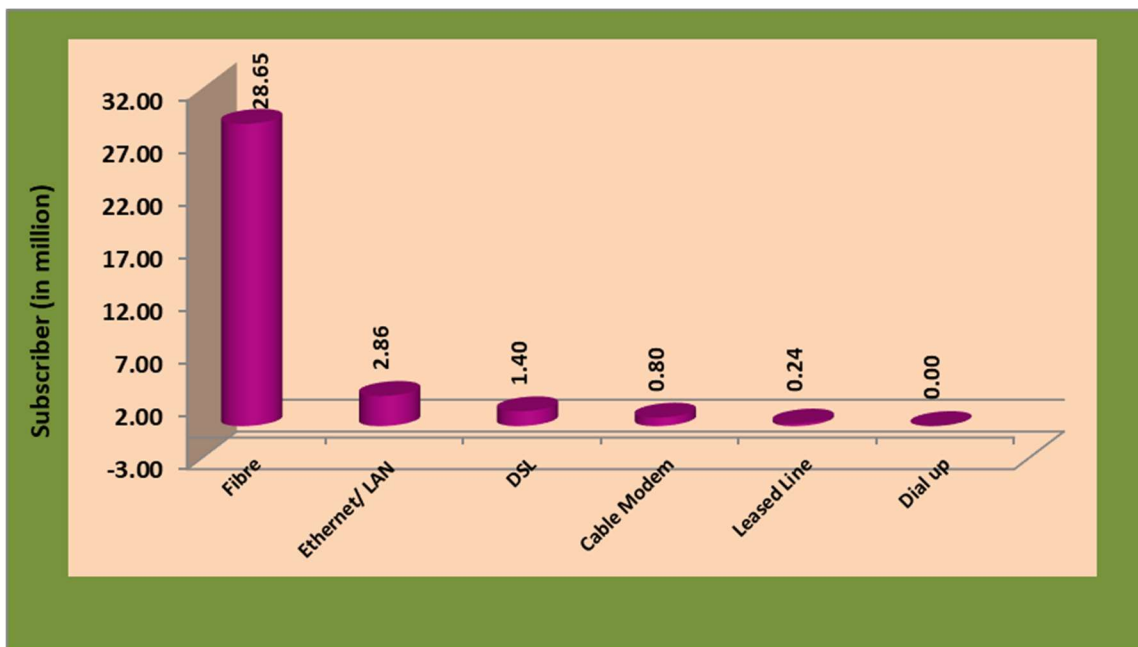


Chart 1.21: Technology trend for Wired Internet Access



1.52 Top five service areas in terms of internet subscriptions (wired+wireless) are Maharashtra 74.75 million, U.P.(East) 69.87 million, Andhra Pradesh 66.29 million, Bihar 65.79 million and Madhya Pradesh 60.31 million.

Table 1.32 : Service Area wise number of Internet Subscribers per 100 population at the end of Mar-23

Service Area	Internet Subscribers (in million)			No. of Internet subscribers per 100 population		
	Rural	Urban	Total	Rural	Urban	Total
Andhra Pradesh	28.95	37.34	66.29	53.93	99.07	72.55
Assam	10.98	6.61	17.59	36.39	118.72	49.21
Bihar	42.11	23.68	65.79	29.97	91.30	39.53
Delhi	0.83	51.91	52.74	-	-	246.55
Gujarat	17.29	35.88	53.18	46.86	99.83	73.00
Haryana	8.48	10.54	19.01	48.46	82.67	62.88
Himachal Pradesh	3.87	2.42	6.29	57.73	314.20	84.18
Jammu & Kashmir	4.36	5.18	9.55	45.19	121.83	68.62
Karnataka	19.29	33.69	52.98	51.27	111.93	78.23
Kerala	15.08	16.83	31.91	171.98	62.12	89.00
Madhya Pradesh	25.37	34.94	60.31	30.37	104.82	51.60
Maharashtra	31.27	43.48	74.75	49.44	116.50	82.23
Mumbai	1.09	29.44	30.53			
North East	4.97	4.68	9.65	48.35	85.37	61.21
Orissa	14.79	7.79	22.58	41.17	93.05	50.97
Punjab	9.09	18.28	27.37	50.83	129.64	85.58
Rajasthan	22.19	24.70	46.89	37.29	114.40	57.83
Tamil Nadu	16.29	41.96	58.25	45.16	98.84	74.18
UP (East)	39.53	30.34	69.87	31.30	93.26	46.54
UP (West)	18.89	26.44	45.33			
Kolkata	1.35	17.48	18.84	36.84	100.24	60.26
West Bengal	21.93	19.62	41.56			
Total	357.99	523.26	881.25	39.84	107.11	63.53

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

Notes:

- No. of total internet subscribers per 100 population is derived from the subscriber data provided by the operators and the and the projection of population from the 'Report of the Technical Group on Population Projections for India and States 2011 - 2036', which is available under the link https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-%20upload_compressed_0.pdf
- 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.

Table 1.33 : State/UT wise number of Internet Subscribers per 100 population at the end of Mar-23

S.N.	State(s)	Total Subscribers (In million)			Tele-density (%)		
		Rural	Urban	Total	Rural	Urban	Total
1	Andhra Pradesh	16.79	16.39	33.18	49.75	84.41	62.41
2	Arunachal Pradesh	0.46	0.32	0.78	39.20	80.26	49.73
3	Assam	10.98	6.61	17.59	36.39	118.75	49.21
4	Bihar	32.27	15.60	47.87	28.99	100.03	37.72
5	Chattisgarh	7.48	8.27	15.75	34.01	100.80	52.14
6	Goa	0.71	1.46	2.17	188.21	121.84	137.83
7	Gujarat	17.04	35.50	52.54	46.48	101.69	73.41
8	Haryana	8.53	13.75	22.28	48.75	107.90	73.68
9	Himachal Pradesh	3.87	2.42	6.29	57.73	313.99	84.16
10	Jharkhand	9.84	8.08	17.92	33.73	78.09	45.35
11	Karnataka	19.29	33.76	53.05	51.27	112.14	78.33
12	Kerala	15.03	16.82	31.86	171.40	62.27	89.01
13	Madhya Pradesh	17.88	26.67	44.56	29.07	106.12	51.41
14	Maharashtra	31.64	71.47	103.11	48.63	116.40	81.53
15	Manipur	0.91	1.27	2.18	41.56	121.30	67.43
16	Meghalaya	1.22	0.71	1.93	45.82	102.33	57.48
17	Mizoram	0.49	0.67	1.15	87.09	98.12	93.16
18	Nagaland	0.93	0.65	1.58	76.92	63.64	70.82
19	Odisha	14.79	7.79	22.58	41.17	93.05	50.97
20	Punjab	9.04	17.42	26.47	50.58	135.40	86.09
21	Rajasthan	22.19	24.70	46.90	37.29	114.41	57.83
22	Sikkim	0.39	0.39	0.79	111.97	115.94	113.92
23	Tamil Nadu incl. Chennai	16.04	41.52	57.55	45.07	100.53	74.86
24	Telangana	12.15	20.95	33.10	61.00	114.63	86.66
25	Tripura	0.98	1.05	2.03	38.86	64.66	48.99
26	Uttar Pradesh (UPE+UPW)	54.16	55.54	109.70	30.23	97.95	46.51
27	Uttarakhand	4.26	4.83	9.08	57.03	115.34	77.98
28	West Bengal incl. Kolkata	22.68	36.47	59.15	36.21	99.91	59.67
Union Territories							
1	Andaman & Nicobar Islands	0.21	0.25	0.46	94.83	139.07	114.39
2	Chandigarh	0.04	0.85	0.90	-	-	72.88
3	Dadar & Nagar Haweli (incl. Daman & Diu)	0.25	0.38	0.63	105.99	37.07	49.94
4	Delhi	0.77	45.12	45.89	-	-	214.53
5	Jammu & Kashmir	4.21	5.09	9.29	44.49	122.34	68.28
6	Ladakh	0.16	0.03	0.19	76.68	30.58	62.41
7	Lakshdweep	0.05	0.00	0.05	-	-	73.48
8	Puduchery	0.26	0.45	0.71	51.93	39.10	42.92
Total		357.99	523.26	881.25	39.84	107.11	63.53

ISP Connectivity

1.53 The International Internet bandwidth owned by various service providers is reported to be 35,855 Gbps during the quarter ending Mar-23 as compared to 33,973 Gbps during the previous quarter.

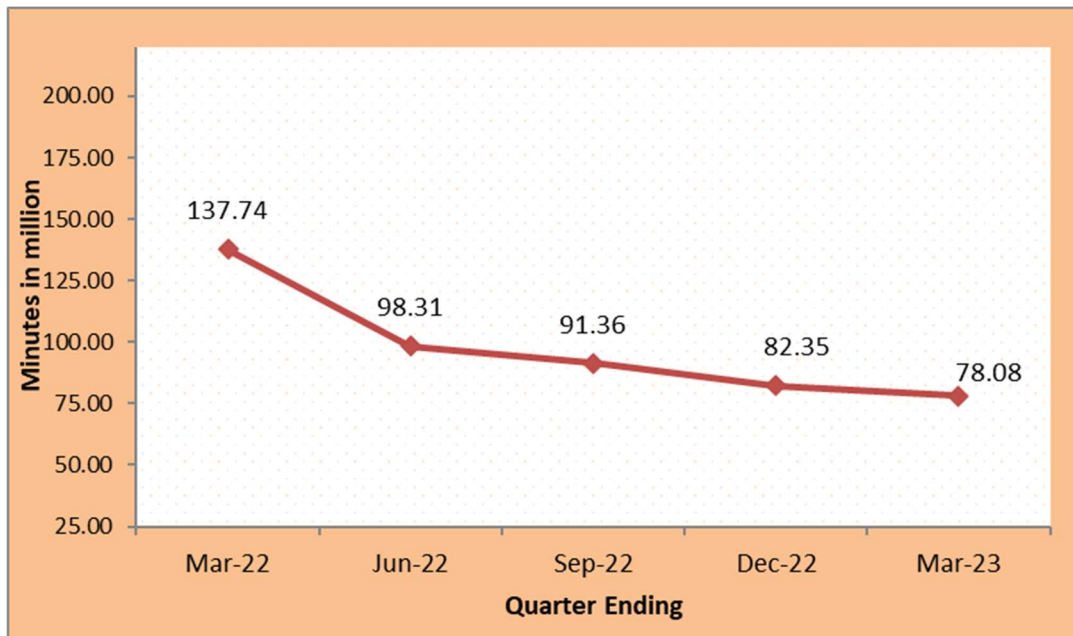
Public WiFi Hotspot

1.54 A public Wi-Fi hotspot is an area where you can access Wi-Fi enabled internet. These areas are usually created in places such as malls, coffee shops, airports, stadiums, and parks to name a few. This report also includes information on Public Wi-Fi Hotspots, as on 31st March, 2023, available at **Annexure-1.6**.

Internet Telephony

1.55 As per the reports received from 13 service providers, providing Internet Telephony services, the total outgoing minutes of usage for internet telephony decreased from 82.35 million minutes at the end of Dec-22 to 78.08 million minutes at the end of Mar-23. List of Internet Telephony Service providers is available at **Annexure-1.7**.

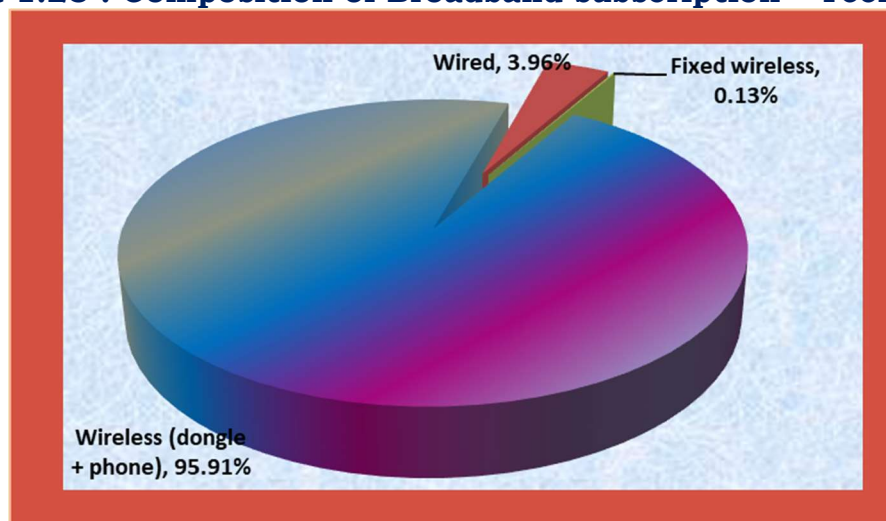
Chart 1.22 : Trends in MOU for Internet Telephony



Part-II : Broadband Service (Download Speed >=2Mbps)

- 1.56 The total number of broadband subscribers increased from 832.20 million at the end of Dec-22 to 846.57 million at the end of Mar-23. Out of which number of wired broadband subscribers are 33.49 million and wireless broadband subscribers are 813.08 million.
- 1.57 Top five broadband (wired+wireless) service providers in term of subscribers are Reliance Jio 438.56 million, Bharti Airtel 241.90 million, Vodafone Idea Ltd 124.83 million, BSNL 25.37 million and Atria Convergence 2.14 million.
- 1.58 In wired broadband segment, Reliance Jio Infocomm Ltd. holds 24.87% market share with 8.33 million subscribers followed by Bharti Airtel Ltd. with 6.12 million subscribers in QE Mar-23.
- 1.59 In wireless broadband segment, Reliance Jio holds 52.91% market share with 430.23 million subscribers followed by Bharti Airtel Ltd 29% with 235.78 million subscribers in QE Mar-23.
- 1.60 Top five service areas in respect of broadband subscriptions at Q.E. Mar-23 are Maharashtra 72.63 million, U.P.-East 67.01 million, Andhra Pradesh 63.77 million, Bihar 63.44 million and Madhya Pradesh 58.78 million.

Chart 1.23 : Composition of Broadband subscription – Technology wise



1.61 Mobile Device Users (dongle+phone) constitute 95.91% of total broadband subscribers at the end of Mar-23.

Part-III : Narrowband Service (Download Speed <2 Mbps)

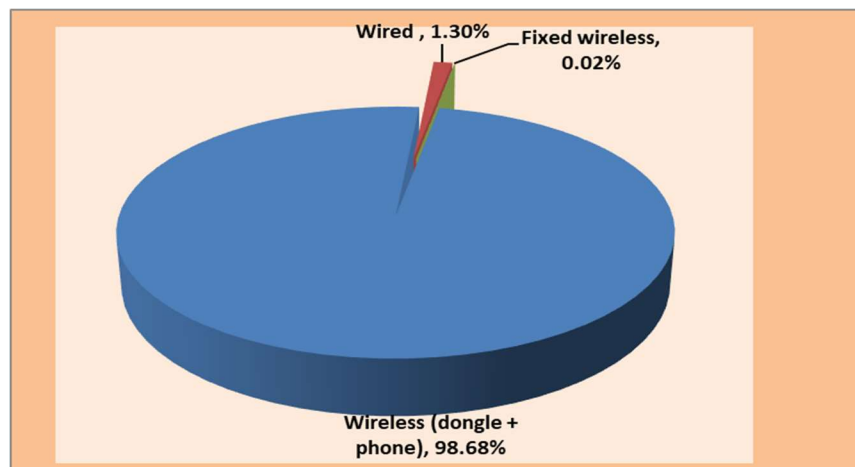
1.62 Total number of narrowband subscribers increased from 33.70 million at the end of Dec-22 to 34.69 million at the end of Mar-23 with the quarterly growth rate of 2.94%. Out of 34.69 million narrowband subscribers, Wired Narrowband subscribers are 0.45 million and Wireless Narrowband subscribers are 34.24 million.

1.63 The top five narrowband (wired+wireless) service providers in term of subscriber base are Bharti Airtel 19.94 million, Vodafone Idea Ltd 11.35 million, BSNL 2.92 million, YOU Broadband India Ltd. 0.40 and MTNL 0.06 million and million at the end of Mar-23.

1.64 In wired narrowband segment, YOU Broadband India Ltd. hold 89.14% market share with 0.40 million subscribers followed by BSNL with 0.03 million subscribers.

1.65 In wireless narrowband segment, Bharti Airtel holds 58.24% market share with 19.94 million subscribers followed by Vodafone Idea Ltd with 11.35 million subscribers.

Chart 1.24 : Composition of Narrowband subscription – Technology wise



Section E : Other Value Added Services - PMRTS & VSAT

Public Mobile Radio Trunk Services (PMRTS)

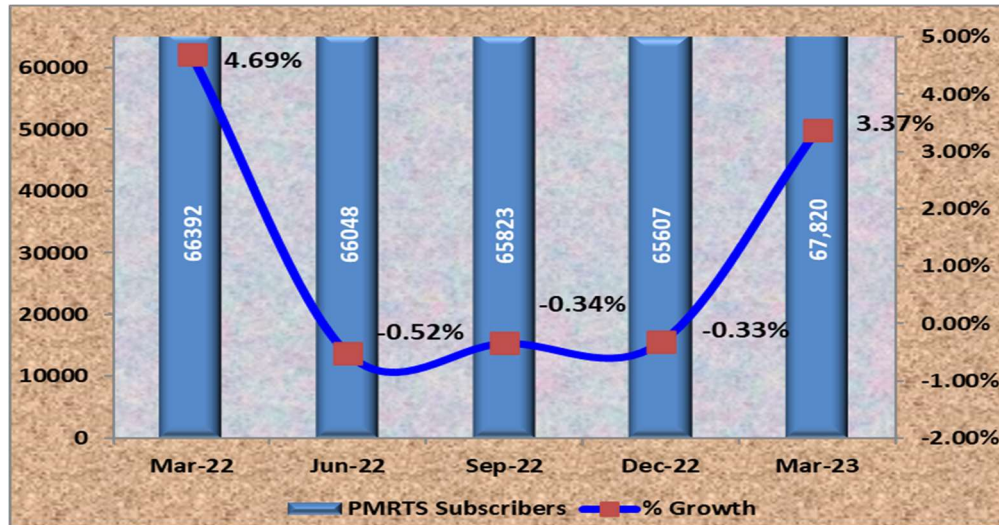
1.66 The subscriber base of PMRTS increased from 65,607 at the end of Dec-22 to 67,820 at the end of Mar-23 with quarterly growth rate of 3.37%.

Table 1.34 : PMRTS Subscriber base - Service Provider wise

Sl. No	Name of the Service Provider	Subscriber Base as on 31.12.2022	Subscriber Base as on 31.03.2023	Net Addition	% Growth in subscribers in QE Mar-23
1	Arya Omnitalk Radio Trunking Services Pvt. Ltd.	53,720	55,506	1786	3.32%
2	Procall Ltd.	4,158	4,246	88	2.12%
3	Quick Call	1,836	1,836	0	0.00%
4	Inative Networks Pvt Ltd	1,825	1,820	-5	-0.27%
5	Smartalk Pvt Ltd	1,501	1,691	190	12.66%
6	Bhilwara Telenet Services Pvt Ltd	889	883	-6	-0.67%
7	Wiwonet Solutions Pvt Ltd	1,048	1,053	5	0.48%
8	Airtalk Solutions & Services Pvt Ltd	630	785	155	24.60%
Total		65,607	67820	2213	3.37%

1.67 Detailed table on Service Area wise subscriber base of PMRTS as on 31st March, 2023 is available at **Annexure-1.8**.

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



Very Small Aperture Terminal (VSAT)

1.68 The total number of VSAT subscribers decreased from 2,63,066 at the end of Dec-22 to 2,56,170 at the end of Mar-23. Net decrease during the quarter has been 6,896 at the decline rate of 2.62%.

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

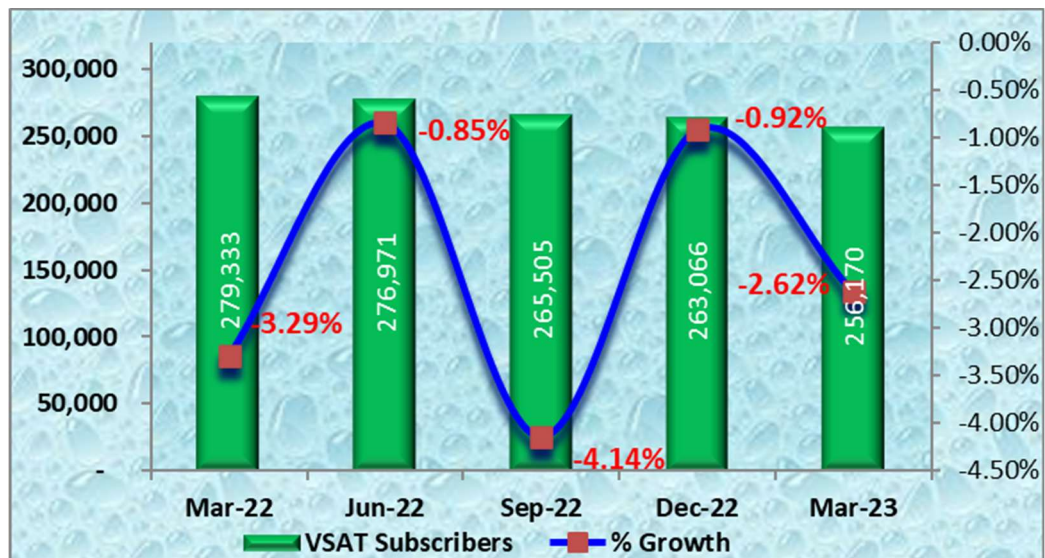


Table 1.35 : VSAT Service Providers currently providing service & their subscriber base

Sr. No	Name of Service Providers	Subscriber base at the Quarter ending		Net Addition	%age Growth	Market Share (%) Mar-23
		Dec-22	Mar-23			
1	Hughes Communications Ltd.	1,78,791	1,76,150	-2,641	-1.48	68.76
2	Nelco Ltd.	75,126	70,750	-4,376	-5.82	27.62
3	BSNL	6,526	6,556	30	0.46	2.56
4	Infotel Satcom	2,616	2,707	91	3.48	1.06
5	Cloudcast Digital (earthwhile Planetcast Media Services)	7	7	0	0.00	0.00
Total		2,63,066	256170	-6896	-2.62	100

1.69 Hughes Communications Ltd. is the market leader having 1,76,150 subscribers with market share of 68.76% followed by Nelco Ltd. having 70,750 subscribers with market share of 27.62% at the end of Mar-23.

1.70 In term of net addition except BSNL, Infotel Satcom and Cloudcast Digital all other service providers have registered decline in their VSAT subscribers during this quarter.

Chapter 2 :

Revenue and Usage

Wireless Services

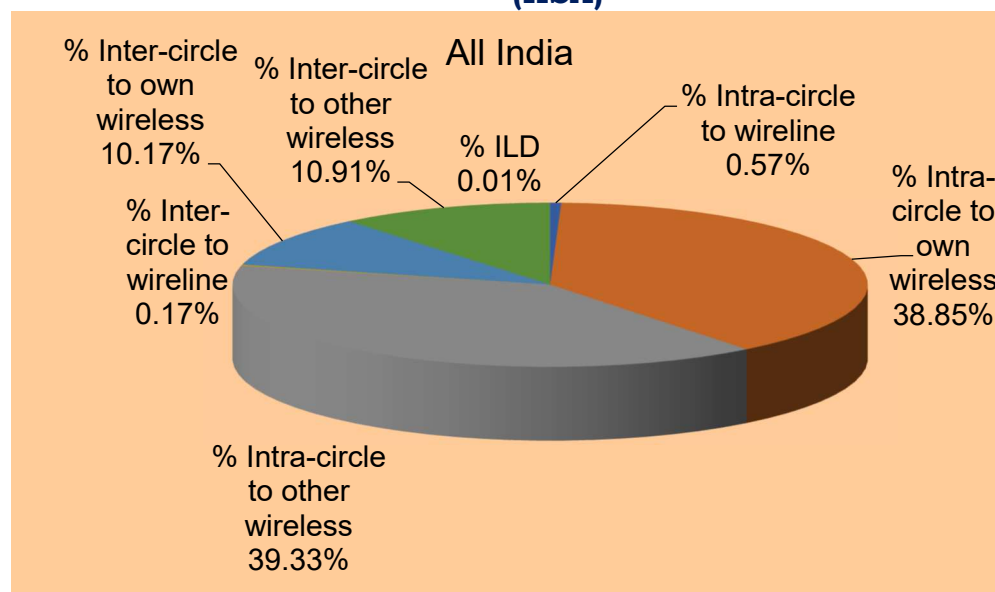
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- For all the parameters, Metros indicate data for Delhi, Mumbai & Kolkata. Data for Chennai service area has been included in Circle A, as part of TN.
 - ARPU arrived after adjusting interconnect usage charges and roaming settlement charges.
 - The data contained in this section covers the licensees, who have been providing service during the entire period from 1st January, 2023 to 31st March, 2023 in the various service areas.

Table 2.1: Key Indicators – Wireless Services

Parameter	Mar-23	Dep-22	Mar-22	QoQ %age change	YoY %age change
Share of Prepaid (%)	91.92%	92.21%	93.05%	-0.32%	-1.22%
Incoming MOU per subscriber per month	472.70	459.57	447.23	2.86%	5.69%
Outgoing MOU per subscriber per month	473.25	459.07	508.19	3.09%	-6.87%
No. of Outgoing SMS per subscriber per month	11.91	12.26	13.46	-2.86%	-11.48%
Average Revenue Per User (ARPU) per month (Rs.)	142.32	141.14	127.17	0.83%	11.91%

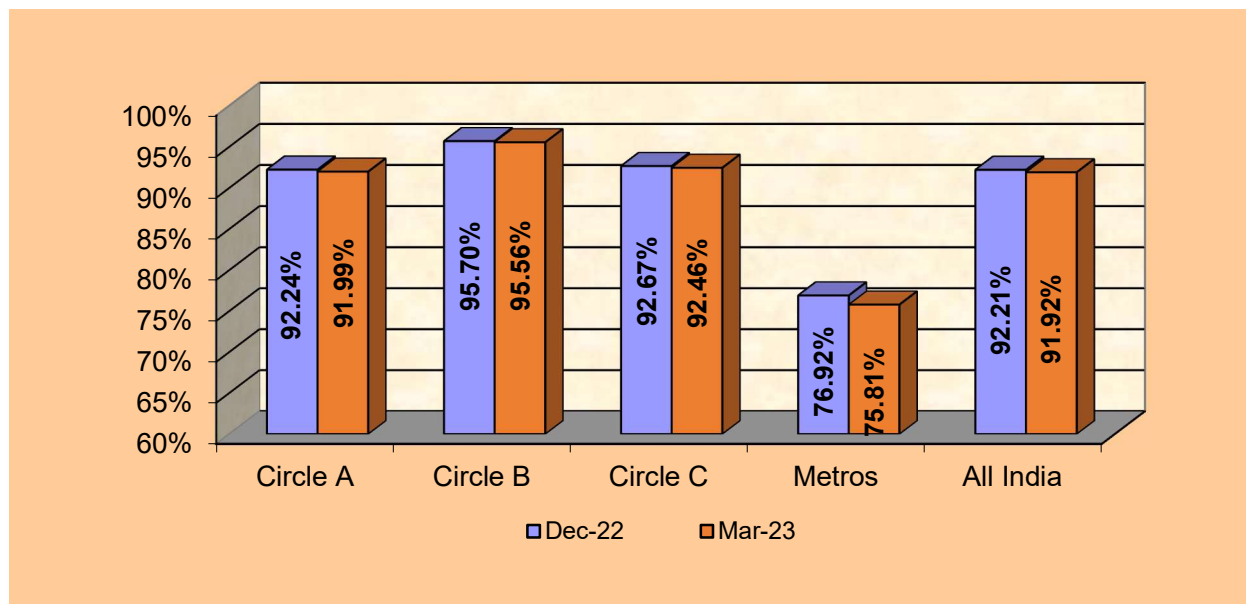
2.1 The following chart presents % break-up of outgoing minutes from Home Service Area (HSA) in the QE Mar-23.

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 decreased from 92.21% at the end of December-2022 to 91.92% at the end of March- 2023.
- 2.4 The ARPU increased by 0.83% from Rs. 141.14 in Q.E. December-2022 to Rs.142.32 in Q.E. March-2023. The ARPU for private service providers increased by 0.66% from Rs. 149.84 in Q.E. December-2022 to Rs.150.83 in Q.E. March-2023 and for PSUs (BSNL/MTNL) increased by 1.27% from Rs.60.11 in Q.E. December-2022 to Rs. 60.87 in Q.E. March-2023.
- 2.5 The ARPU per month for the pre-paid segment is Rs. 139.63 and the ARPU per month for the post-paid segment is Rs.173.50 for Q.E. March-2023.
- 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 Dec-22

Circle Category	ARPU per month (in Rs.)		
	Post-paid	Pre-paid	Blended
Circle A	211.30	158.25	162.42
Circle B	157.26	130.77	131.92
Circle C	155.16	134.45	135.99
Metros	152.25	118.81	126.72
All India	173.50	139.63	142.32
All private SPs	176.29	148.52	150.83
BSNL/MTNL	117.96	58.48	60.87

2.7 The following table presents the composition of ARPU per month for QE March-23.

Table 2.3: Composition of ARPU per month - Wireless Services

S. No.	Item	Revenue (excl. service tax) per subscriber per month (in Rs.)	Share of total revenue from subscribers
1	Usage from Home Service Area		
1.1.	Rental Revenue	0.82	0.6%
1.2.	Revenue from calls	15.25	10.2%
1.3.	Revenue from SMS	0.21	0.1%
1.4.	Revenue from data usage	126.70	85.1%
1.5.	Revenue from other VAS	1.31	0.9%
1.6.	Other revenue	3.52	2.4%
2	Usage outside Home Service Area		
2.1.	Revenue from out-roamers	1.31	0.9%
3	Total revenue from subscribers (1+2)	146.96	100%
4	Net inter-operator settlement charges receivable *	-6.54	
5	Net Revenue (ARPU) per month (3+4)	142.32	

* includes Interconnect Usages Charges (IUC) and Roaming Settlement Charges (RSC).

#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 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 incl. other income (Rs. 6.54) accounted for 4.39% of the total revenue from subscribers in the Q.E. March-2023.

2.9 On an all-India average, the overall MOU per subscriber per month increased by 2.97% from 919 in Q.E. December-2022 to 946 in Q.E. March-2023.

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 viz. post-paid and pre-paid during Q.E. Mar-23.

Table 2.4: MOU per subscriber per month - QE Mar-23

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	271	252	523	437	430	867	424	416	840
Circle B	294	290	584	485	491	975	476	482	958
Circle C	386	360	746	608	631	1239	592	611	1202
Metro	181	164	345	516	478	994	437	404	841
All India	267	251	518	491	492	983	473	473	946

2.11 overall ratio of incoming MOUs and outgoing MOUs for the Q.E. Mar-2023 is 50:50.

2.12 Average number of Outgoing SMS per subscriber per month is 12 in Q.E. March-2023. 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. March -2023.

Table 2.5: No. of Outgoing SMS per subscriber per month during QE Mar-23

Circle category	Outgoing SMS per subscriber per month		
	Post-paid	Pre-paid	Blended
Circle A	15	12	12
Circle B	9	11	11
Circle C	14	16	16
Metro	5	10	9
All India	10	12	12

Chart 2.3 : Minutes of Usage by Out-roamers as a % of Total Minutes of Usage during Q.E. Mar-2023

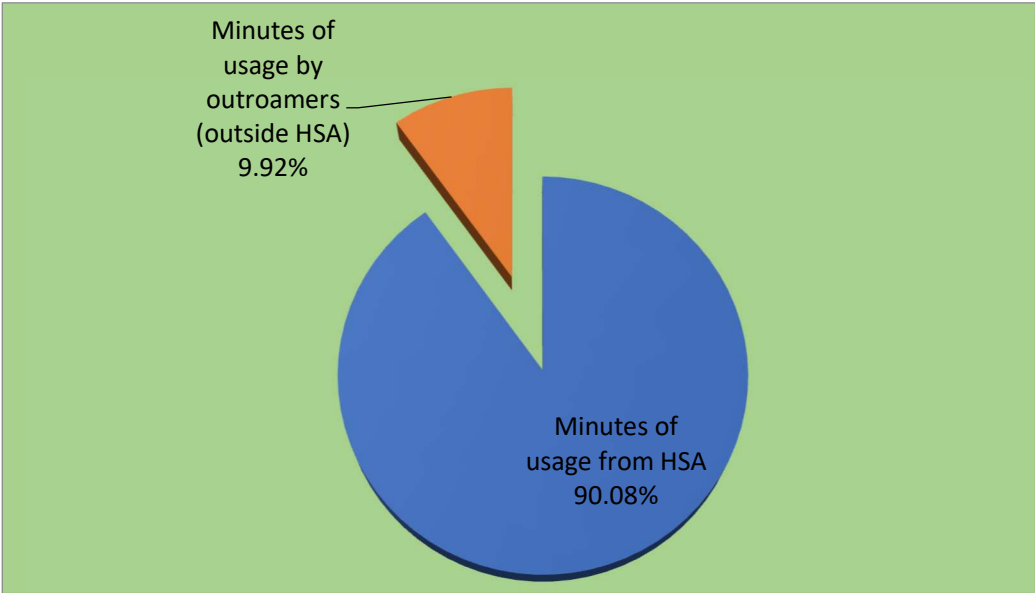
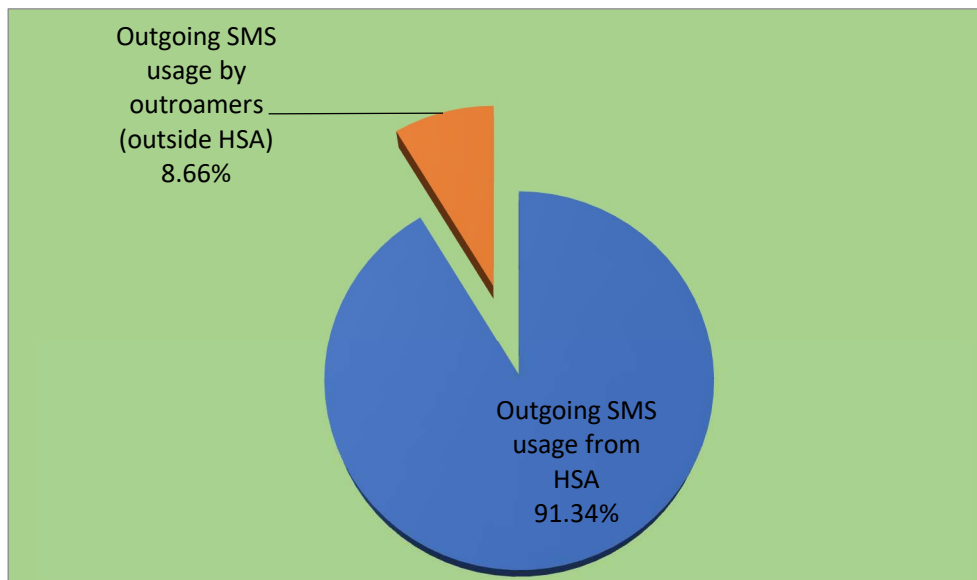


Chart 2.4: Outgoing SMS Usage by Out-roamers as a % of Total No. of Outgoing SMS Usage during Q.E. Mar-2023



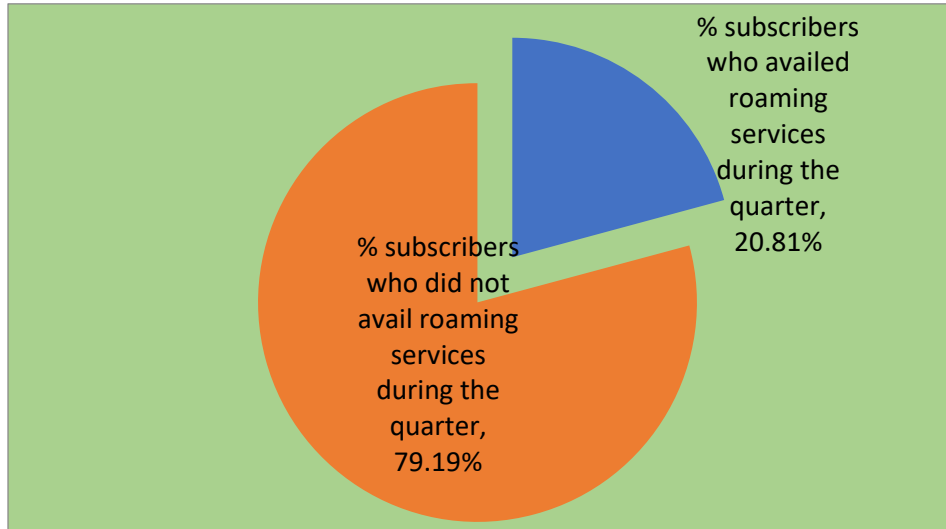
2.13 The following table presents the percentage break-up of outgoing minutes of usage from home service area between various categories of termination networks in the Q.E. Mar-23.

Table 2.6: % Break-up of Outgoing minutes from Home Service Area (HSA) during the Q.E. Mar-2023

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	0.49%	41.14%	43.75%	0.15%	6.95%	7.50%	0.01%
Circle B	0.59%	37.89%	40.36%	0.15%	9.98%	11.02%	0.01%
Circle C	0.54%	41.71%	33.59%	0.16%	12.16%	11.83%	0.00%
Metros	0.82%	28.22%	31.29%	0.34%	18.36%	20.93%	0.03%
All India	0.57%	38.85%	39.33%	0.17%	10.17%	10.91%	0.01%

2.14 The following chart presents the share of outroamers (who had availed roaming services) as a percentage of total subscribers during Q.E. Mar-23.

Chart 2.5: % Share of outroamers as a percentage of total subscribers during Q.E. Mar-2023



2.15 The usage pattern of outroamers i.e. usage from outside the home service area shows that incoming minutes accounts for 47.70% of the total minutes of usage by outroamers in Q.E. March- 2023 as against 47.30% in the Q.E. December- 2022. The chart given below presents the break-up of minutes of usage of outroamers.

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

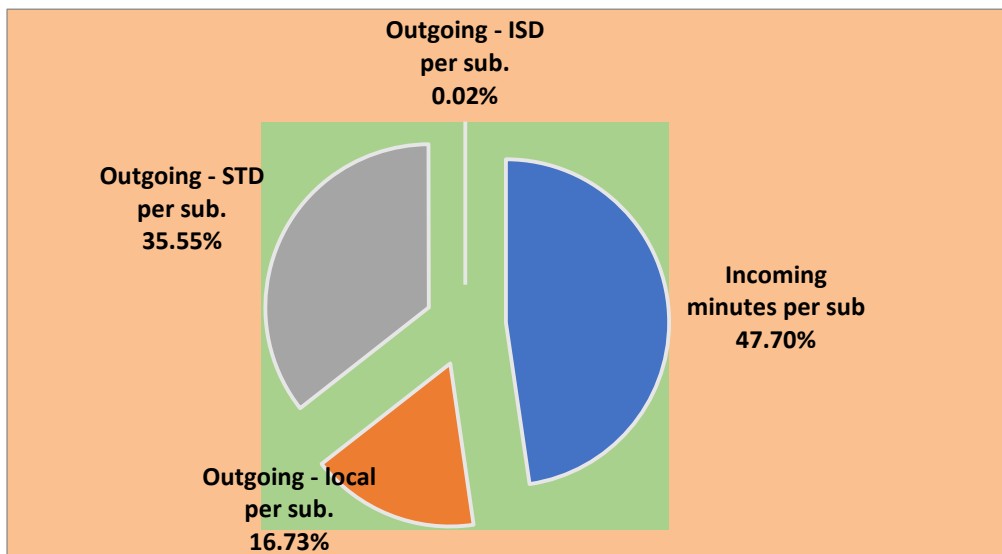


Table 2.7: Trends of Key Parameters - Wireless Services

Parameter	Mar-22	Jun-22	Sep-22	Dec-22	
1. ARPU (Rs. Per month)	127.17	133.55	137.31	141.14	142.32
2. Average revenue Realization per subscriber per GB wireless data (in Rs.)	10.47	10.29	9.94	10.10	9.92
3. MOU per subscriber per month	955	914	894	919	946
4. Outgoing MOU per subscriber per month					
4.1 Local (Intra-circle)	332	342	331	339	350
4.2 NLD (inter-circle)	176	115	115	120	123
4.3 ILD	0.05	0.05	0.05	0.05	0.05
5. Average no. of Outgoing SMS per subscriber per month	13	14	13	12	12

2.16 Service Area wise statistics are available at **Annexure-2.1**.

Chapter 3 :

Financial Data of Telecom Service Sector

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

Particulars	QE Mar-22 (Rs. in Crore)	QE Dec-22 (Rs. in Crore)	QE Mar-23 (Rs. in Crore)	Q-O-Q % Change	Y-O-Y % Change
Gross Revenue (GR)	76,420	88,166	85,356	-3.19%	11.69
Applicable Gross Revenue (ApGR)	70,760	76,627	78,631	2.62%	11.12
Adjusted Gross Revenue (AGR)	58,886	62,904	64,494	2.53%	9.52
Pass Through Charges (PTC)	13,568	14,381	14,725	2.39%	8.53
License Fee (LF)	4,712	5,031	5,159	2.53%	9.47
Spectrum Usage Charges (SUC)	1,926	811	755	-6.94%	-60.79

3.1 Gross Revenue (GR) decreased by 3.19%, Applicable Gross Revenue (ApGR) increased by 2.62% and Adjusted Gross Revenue (AGR) increased by 2.53% during QE Mar-23. On YoY basis GR increased by 11.69%, ApGR increased by 11.12% and AGR increased by 9.52% in QE Mar-23.

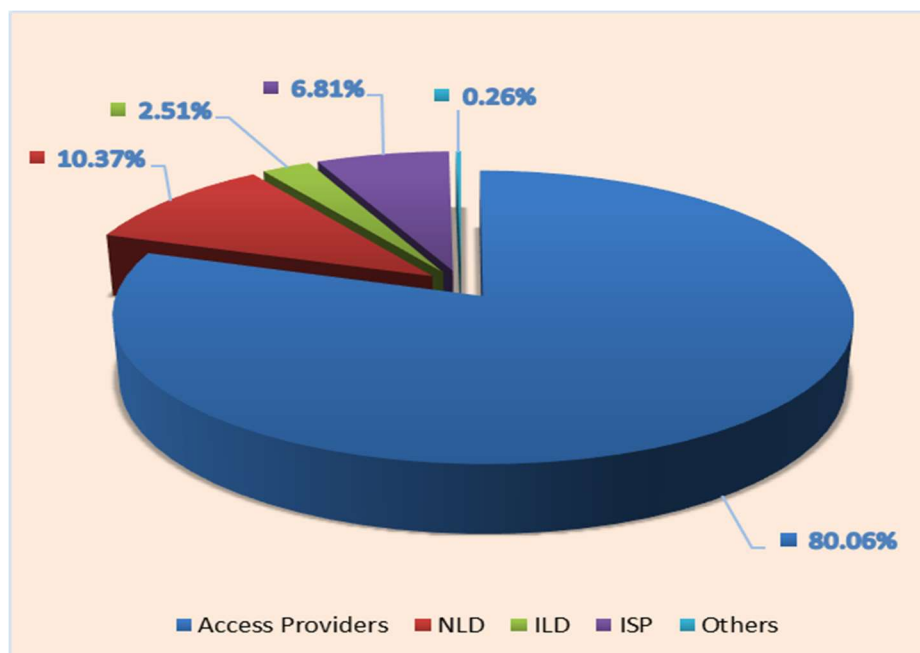
3.2 Pass through charges increased by 2.39% in QE Mar-23 and on YoY basis it also increased by 8.53%.

3.3 Pass-through charges as a percentage of Gross Revenue are 17.25% in QE Mar-23 as against 16.31% in the previous quarter.

**Table 3.2: Service-wise GR, ApGR, AGR, LF, SUC and PTC for QE Mar-23
(in Rs. Crore)**

Service	GR	ApGR	AGR	LF	SUC	PTC
Access Providers	68,227.54	62,750.64	51,630.91	4,130.84	750.43	11,359.65
NLD	7,693.25	6,702.67	6,686.36	535.00	-	245.09
ILD	3,607.31	3,541.51	1,620.20	129.66	-	1,928.58
ISP	5,647.24	5,461.54	4,390.66	351.32	-	1,181.62
Others	180.54	175.13	165.49	11.68	4.75	9.64
Total	85,355.89	78,631.49	64,493.63	5,158.51	755.18	14,724.58

Chart 3.1: Composition of Adjusted Gross Revenue



3.4 Access services contributed 80.06% of the total Adjusted Gross Revenue of telecom services. In Access services, Gross Revenue (GR), Applicable Gross Revenue (ApGR), Adjusted Gross Revenue (AGR), License Fee (LF), Spectrum Usage (SUC)⁹ and Pass Through Charges (PTC) increased by -5.14%, 1.60%, 1.19%, 1.19%, -6.99%, and 3.51% respectively in QE Mar-23.

Table 3.3: Access Services - Service Provider wise Adjusted Gross Revenue
(Rs.in Crore)

Service Provider	AGR			Q-o-Q Growth (%)	Y-o-Y Growth (%)
	(Rs. in Crore)				
	Q.E. Mar. 2022	Q.E. Dec. 2022	Q.E. Mar. 2023		
Reliance Jio	20659.90	22586.32	22985.00	1.70	11.25
Bharti Airtel	16005.16	18290.13	18500.36	1.15	15.29
Vodafone Idea	7209.57	7328.74	7210.63	-1.61	0.01
BSNL	1750.58	1985.74	2083.59	4.93	19.02
Tata	533.74	574.18	599.34	4.38	12.29
MTNL	183.24	188.61	181.64	-3.70	-0.87

⁹ 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)

Reliance	68.80	51.22	52.38	2.26	-23.86
V-Con Mobile & Infra	14.69	14.98	12.24	-18.30	-16.70
Quadrant	-5.53	0.75	5.23	598.20	194.56
Shyam Spectra	0.00	0.08	0.14	86.23	--
Tata Play Broadband	0.95	0.00	0.46	--	-52.17
GPX Services	0.00	2.04	0.00	-100.00	--
Fusionnet	0.00	0.01	-0.10	956.52	3933.60
Total	46421.09	51022.80	51630.91		

3.5 Public Sector Undertakings' share in the Access AGR of telecom services is 4.39% in the QE Mar-23.

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

LSA	Q.E. March, 2022		Q.E. Dec., 2022		Q.E. March, 2023	
Category	AGR	%	AGR	%	AGR	% share
	(Rs. in crore)	share of AGR	(Rs.in crore)	share of AGR	(Rs. In crore)	of AGR
Metro	4,697.08	10.12	5,369.74	10.52	5,384.61	10.43
A	17,748.25	38.23	19,415.37	38.05	19,511.15	37.79
B	17,238.14	37.13	18,744.22	36.74	19,079.12	36.95
C	6,737.61	14.51	7,493.48	14.69	7,656.02	14.83
Total	46,421.09		51,022.80		51,630.91	

Notes: -

1. 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.RP-5/13/(8)/2022/FEA-II, dated 12th December, 2022.
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

Chapter 4 : Quality of Service (QoS)

Section A: Quality of Service of Cellular Mobile Service Providers

Table 4.1: QoS Summary - Cellular Mobile Service

Summary of Performance of Service providers against prescribed parameters

S. No.	Parameters	Bench mark	Performance in respect of UASL/CMTS Licensees for the Parameters and Benchmarks			
			For Quarter Ending Dec, 2022		For Quarter Ending March, 2023	
			Out of 88 (Nos.)	Out of 88 (%)	Out of 88 (Nos.)	Out of 88 (%)
I.	Network Related Parameters					
1	Network Availability					
(a)	BS Accumulated down-time (not available for service) (%age)	≤ 2%	0	0.00%	0	0.00%
(b)	Worst affected BS due to down-time (%age)	≤ 2%	0	0.00%	0	0.00%
2	Connection Establishment (Accessibility)					
(a)	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	0.00%	0	0.00%
(b)	SDCCH/ Paging Channel Congestion/ RRC Congestion (% age)	≤ 1%	0	0.00%	0	0.00%
(c)	TCH, RAB and E-RAB congestion (%age)	≤ 2%	0	0.00%	0	0.00%
3	Connection Maintenance (Retain ability)					
(a)	Network QoS DCR Spatial Distribution Measure [Network_ QSD (90,90)]	≤ 2%	0	0.00%	0	0.00%
(b)	Network QoS DCR Temporal Distribution Measure [Network_ QTD (97,90)]	≤ 3%	0	0.00%	0	0.00%
(c)	Connections with good voice quality, Circuit Switched Voice Quality and VoLTE quality	≥ 95%	0	0.00%	0	0.00%
(d)	Down Link (DL) Packet Drop Rate or DL-PDR	≤ 2%	0	0.00%	0	0.00%

(e)	Up Link (UL) Packet Drop Rate or UL-PDR	≤ 2%	0	0.00%	0	0.00%
4	Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark)	≤ 0.5%	0	0.00%	0	0.00%
II. Customer Service Quality Parameters						
5	Metering and billing credibility - post paid	≤ 0.1%	0	0.00%	0	0.00%
6	Metering and billing credibility - prepaid	≤ 0.1%	0	0.00%	0	0.00%
7 (a)	Resolution of billing/charging/validity complaints	98% within 4 weeks	0	0.00%	0	0.00%
	Resolution of billing/charging/validity complaints	100% within 6 weeks	0	0.00%	0	0.00%
(b)	Period of applying credit/waiver/ adjustment to customer's account from the date of resolution of complaints	within 1 week of resolution of complaint	0	0.00%	0	0.00%
8	Response time to the customer for assistance					
(a)	Accessibility of call centre/customer care	≥ 95%	0	0.00%	1	1.14%
(b)	Percentage of calls answered by the operators (voice to voice) within ninety seconds	≥ 95%	20	22.73%	23	26.14%
9	Termination / Closure of service	≤ 7 days	0	0.00%	0	0.00%
10	Time taken for refund of deposits after closures	100% within 60 days	0	0.00%	0	0.00%

4.1 Comparison of Performance with the last quarter: -

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

- i. Accessibility of call centre/customer care ≥ 95%
- ii. %age of calls answered by the operators (voice to voice) within ninety seconds ≥ 95%

Table 4.2: Parameter wise analysis of non-compliance of service providers

Parameter	Bench mark	Service Provider	Service Area	Performance in QE March 2023 (in %)
Accessibility of call centre/ customer care	≥ 95%	VIL	Kerala	91.04%
Percentage of calls answered by the operators (voice to voice) within 90 seconds	≥ 95%	AIRTEL	Andhra Pradesh	91.87%
			Assam	90.60%
			Bihar	87.52%
			Delhi	92.55%
			Gujarat	92.26%
			Haryana	91.68%
			Himachal Pradesh	93.22%
			Jammu & Kashmir	88.60%
			Karnataka	93.61%
			Kerala	78.43%
			Kolkata	88.65%
			Madhya Pradesh	91.54%
			Maharashtra	94.43%
			North East	85.35%
			Odisha	92.52%
			Punjab	90.95%
			Rajasthan	91.46%
			Tamilnadu including Chennai	71.34%
			Uttar Pradesh (East)	85.16%
	Uttar Pradesh (West)	89.84%		
West Bengal	83.80%			
	≥ 95%	BSNL	Andhra Pradesh	92.29%
			Karnataka	92.34%

4.2 List of Parameters which are fully complied by all the Service providers: -

1. BS Accumulated down-time (not available for service) (%age) ≤ 2%
2. Worst affected BSs due to down-time (%age) ≤ 2%

3. Call Set-up Success Rate and Session Establishment Success Rate for Circuit Switched Voice or VoLTE as applicable (within licensee's own network) $\geq 95\%$
 4. SDCCH/ Paging Channel Congestion/ RRC Congestion (% age) $\leq 1\%$
 5. TCH, RAB and E-RAB congestion (%age) $\leq 2\%$
 6. Network QoS DCR Spatial Distribution Measure [Network_ QSD (90,90)] $\leq 2\%$
 7. Network QoS DCR Temporal Distribution Measure [Network_ QTD (97,90)] $\leq 3\%$
 8. Connections with good voice quality, Circuit Switched Voice Quality and VoLTE quality $\geq 95\%$
 9. Down Link (DL) Packet Drop Rate or DL-PDR $\leq 2\%$
 10. Up Link (UL) Packet Drop Rate or UL-PDR $\leq 2\%$
 11. Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) $\leq 0.5\%$
 12. Metering and billing credibility - postpaid $\leq 0.1\%$
 13. Metering and billing credibility - prepaid $\leq 0.1\%$
 14. Resolution of billing/charging/validity complaints - 98% within 4 weeks
 15. Resolution of billing/charging/validity complaints - 100% within 6 weeks
 16. Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution - within 1 week of resolution of complaint
 17. Termination / Closure of service ≤ 7 days
 18. Time taken for refund of deposits after closures (100% within 60 days)
- 4.3 The detailed table on Service Provider wise performance of QoS parameters for Cellular Mobile Services is available at **Annexure-4.1**.

Section B: Quality of Service of Basic Telephone Service (Wire Line) Providers

Table 4.3: QoS Summary - Wireline Service

Summary of Performance of service providers against identified parameters

Sr. No.	Parameters	Benchmark	No of license areas where operators not meeting the benchmarks			
			December, 2022		March, 2023	
			Out of 107 in Nos.	Out of 107 in %age	Out of 106 in Nos.	Out of 106 in %age
(i)	Fault incidences No. of faults per 100 subs/month)	≤ 7	0	0.00%	0	0.00%
(ii)	% Fault repaired by next working day (for urban areas)	≥ 85%	1	0.93%	2	1.89%
	% Fault repaired within 5 days (for urban areas)	100%	6	5.61%	3	2.83%
(iii)	% Fault repaired by next working day (for rural and hilly areas)	≥ 75%	1	0.93%	1	0.94%
	% Fault repaired within 7 days (for rural and hilly areas)	100%	3	2.80%	2	1.89%
(iv)	Mean time to Repair (MTTR)	≤ 10Hs	1	0.93%	2	1.89%
(v)	Point of Interconnection (POI) Congestion (No. of PoIs not meeting benchmark)	≤ 0.5%	0	0.00%	0	0.00%
(vi)	Metering and Billing credibility - post-paid	≤ 0.1%	0	0.00%	0	0.00%
	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)	Accessibility of call centre/customer care	≥ 95%	0	0.00%	1	0.94%

	% age of calls answered by the operators (voice to voice) within ninety seconds	≥ 95%	0	0.00%	2	1.89%
(x)	Termination / closure of service	≤ 7 days	1	0.93%	2	1.89%
(xi)	Time taken for refund of deposits after closures	100% within 60 days	4	3.74%	3	2.83%

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.
- Number of LSAs reduced from 107 to 106 in QE March 2023.

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

- % Fault repaired within 5 days (for urban areas) **100%**
- % Fault repaired within 7 days (for rural and hilly areas) **100%**
- Time taken for refund of deposits after closures **100% within 60 days**

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

- % Fault repaired by next working day (for urban areas) ≥ 85%
- 'Mean time to Repair' (MTTR) ≤ 10Hs
- Accessibility of call centre/customer care ≥ 95%
- % age of calls answered by the operators (voice to voice) within ninety seconds ≥ 95%
- Termination / closure of service ≤ **7 days**

Table 4.4: Parameter wise analysis of non-compliance of Service Providers

Parameter	Benchmark	Service Provider	Service Area	Parameters not met
% of faults repaired by next working day - Urban	For urban areas by next working day $\geq 85\%$	AIRTEL	Madhya Pradesh	84.97%
		MTNL	Mumbai	43.90%
% of faults repaired within 5 days - Urban	For urban areas 100%	BSNL	Karnataka	98.90%
		MTNL	Delhi	99.95%
		MTNL	Mumbai	60.30%
% of faults repaired by next working day - Rural and hilly areas	$\geq 75\%$	MTNL	Mumbai	33.30%
% of faults repaired within 7 days- Rural and hilly areas	100%	BSNL	Karnataka	98.60%
		MTNL	Mumbai	33.30%
Mean Time to Repair (MTTR)	$\leq 10\text{Hs}$	MTNL	Mumbai	132.7
		VIL	Kolkata	10.7
Accessibility of call centre/ customer care	$\geq 95\%$	QTL	Punjab	92.82%
% age of calls answered by the operators (voice to voice) within ninety seconds	$\geq 95\%$	BSNL	Himachal Pradesh	94.97%
		QTL	Punjab	80.40%
Termination / Closure of service	≤ 7 days	BSNL	Karnataka	92.22%
		MTNL	Mumbai	99.79%
Time taken for Refund of deposits after closures- within 60 days	100% within 60 days	BSNL	Punjab	99.80%
			Rajasthan	14.00%
		MTNL	Mumbai	60.35%

4.6 List of Parameters which are fully complied by all the Service providers_

- i. 'Fault repair' Fault incidences (No. of faults per 100 subs/month) ≤ 7
- ii. Point of Interconnection'(POI) Congestion (No. of PoIs not meeting benchmark) $\leq 0.5\%$

- iii. 'Metering and Billing 'Metering and billing credibility- post-paid $\leq 0.1\%$
- iv. Metering and billing credibility- pre-paid $\leq 0.1\%$
- v. Resolution of billing/charging/Credit & validity complaints
98% within 4 weeks
- vi. Resolution of billing/charging Credit & validity complaints
100% within 4 weeks
- vii. Period of applying credit/waiver/adjustment to customer's
100% within 1 week of resolution of complaint

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

Section C : Quality Of Service Of Service Providers Providing Broadband Service (WIRELINE)

- 4.8 There are 965 Service Providers providing broadband (wireline) service at the end of March, 2023. Total number of broadband (wireline) subscriber base of all the broadband service providers is 3,34,91,351 in quarter ending March, 2023 as compared to 3,23,84,186 in quarter ending December, 2022.
- 4.9 Out of 965 broadband service providers providing broadband (wireline) service, only 89 service providers are having subscriber base more than 10,000 subscribers and share 97.20% of total subscriber base in this quarter. The total number of broadband subscribers (wireline) of service providers having more than 10,000 subscriber base, has increased from 315,18,305 at the end of December, 2022 (for 85 service providers) to 325,52,152 at the end of March, 2023 (for 89 service providers).
- 4.10 This report covers performance of 88 broadband service providers' vis-à-vis the QoS benchmarks prescribed by TRAI. M/s. Andhra Pradesh State Fiber Net Limited (New entrant) has not submitted its Performance Monitoring Report (PMR) for quarter ending March 2023. The summary of performance of the service providers who have not met the benchmarks in this quarter and performance of previous quarter is given in the table below: -

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

S. No	Parameters	Benchmarks	Quarter Ending		Quarter Ending	
			December, 2022		March, 2023	
			Out of 121	Out of 121	Out of 124	Out of 124
1	Service Provisioning/ Activation Time	100% in =< 15 working days				
1.2	%age of connections provided within 15 days of registration of demand	100%	1	0.83%	1	0.81%
2	Faults Repair/ Restoration Time					
2.2	% of faults repaired by next working day	>90%	1	0.83%	1	0.81%
2.3	% of faults repaired within 3 working day	=>99%	4	3.31%	1	0.81%
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	2	1.65%	2	1.61%
4	Response time to the customer for assistance					
4.2	%age of calls answered by operator (Voice to voice) within 60 sec	>60%	0	0.00%	0	0.00%
4.3	%age of calls answered by operator (Voice to voice) within 90 sec	>80%	1	0.83%	1	0.81%
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%	0	0.00%	0	0.00%
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%

S. No	Parameters	Benchmarks	Quarter Ending		Quarter Ending	
			December, 2022		March, 2023	
			Out of 121	Out of 121	Out of 124	Out of 124
8	Network latency (for wired broadband access)					
8.1	User reference point at POP/ISP Gateway node to (IGSP/NIXI)	<120ms	0	0.00%	0	0.00%
8.2	User reference point at ISP Gateway node to International nearest NAP port abroad (terrestrial)	<350ms	0	0.00%	0	0.00%
8.3	User reference point at ISP Gateway node to International nearest NAP port abroad (satellite)	<800ms	0	0.00%	0	0.00%

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

S.No.	Parameters		Benchmarks	Service Provider	LSA	Performance
1	Service Provisioning/ Activation Time	%age of connections provided within 15 days of registration of demand	100%	Mahanagar Telephone Nigam Ltd.	All India	97.80
2	Fault Repair/ Restoration Time	% of faults repaired by next working day	>90%	Mahanagar Telephone Nigam Ltd.	All India	70.79
		% of faults repaired within 3 working day	=>99%	Mahanagar Telephone Nigam Ltd.	All India	75.96
3	Billing Performance	%age of cases to whom refund of deposits is made within 60 days of closures	100% within 60 days	Bharat Sanchar Nigam Ltd.	All India	99.99
				Mahanagar Telephone Nigam Ltd.	All India	79.25
4	Response Time to the Customer for assistance	%age of calls answered by operator (Voice to voice) within 90 sec.	>80%	Atria Convergence Technologies Ltd.	All India	76.21

4.11 List of parameters which are fully complied by all service providers: -

S. No.	Parameter	Benchmark
1	Billing Performance - %age of bills disputed	<2%
2	Billing Performance - %age of complaints resolved within 4 weeks	100% within 4 weeks
3	Response Time to the Customer for assistance - %age of calls answered by operator (Voice to voice) within 60 sec	>60%
4	Bandwidth utilisation/ throughput - No. of Intra network links having Bandwidth utilisation >90% during peak hours (TCBH)	0
5	Bandwidth utilisation/ throughput - No. of Upstream links for International connectivity having bandwidth utilisation >90% during peak hours (TCBH)	0
6	Bandwidth utilisation/ throughput - % International bandwidth utilization during peak hours (TCBH)	<90%
7	Bandwidth utilisation/ throughput - Broadband Connection Speed available (download) from ISP node to user	>80%
8	Service Availability/ Uptime (for all users) in %age	>98%
9	Packet loss (for wired broadband access) in %age	<1%
10	Network latency (for wired broadband access) - User reference point at POP/ISP Gateway node to IGSP/NIXI	<120 ms
11	Network latency (for wired broadband access) - User reference point at ISP Gateway node to International nearest NAP port abroad (terrestrial)	<350 ms
12	Network latency (for wired broadband access) - User reference point at ISP Gateway node to International nearest NAP abroad (satellite)	<800 ms

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

Performance of Cable TV, DTH and Radio Broadcasting Services

Table 5.1: Key Parameters - Broadcasting & Cable TV Services

S.No	Parameter	Dec-22	Mar-23
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	903*	903*
2	Number of Pay TV Channels as reported by broadcasters	357	358
3	Total number of Multi System Operators (MSOs), who have been granted Permanent Registration (for 10 years) by Ministry of I&B for providing Cable TV services through Digital Addressable Systems	1748#	1748#
4	Number of FM Radio Stations (excluding All India Radio)	388	388
5	Number of pay DTH Operators	4	4
6	Number of Operational Community Radio Stations	408	427
7	Number of total active Subscribers with pay DTH operators (in million)	66.62	65.25

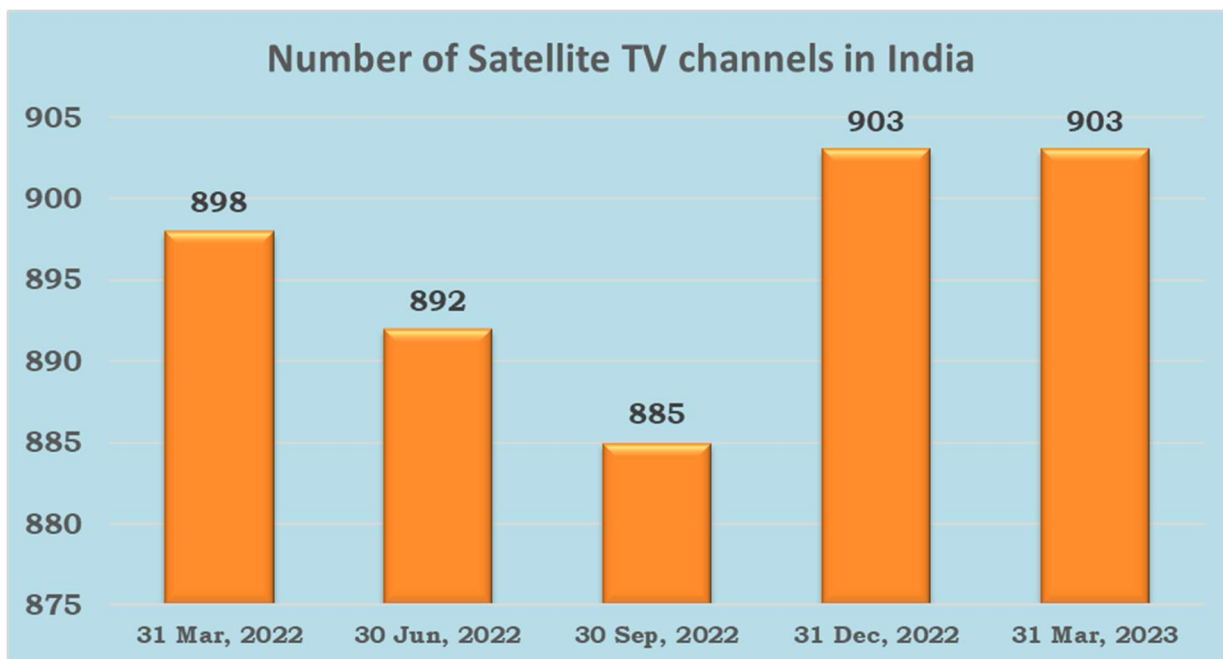
* <https://new.broadcastseva.gov.in/digigov-portal-web-app/webHP?requestType=ApplicationRH&actionVal=userInformationSystem&screenId=2>

Source- https://mib.gov.in/all_broadcasting_documents

A. Satellite TV Channels

5.1 A total of approximately 903 private satellite TV channels have been permitted by the Ministry of Information and Broadcasting (MIB) for uplinking only/downlinking only/both uplinking & downlinking. The total number of satellite TV channels is depicted in **Chart 5.1**. Further, the permission-wise number of permitted satellite TV channels is given in the **Table 5.2**.

Chart5.1- : Number of Satellite TV channels in India



Source: Ministry of I&B (broadcastseva.gov.in)

Table 5.2: Permission-wise number of permitted satellite TV channels

Type of Permission	Number of channels	Remarks
Uplinking only	11	TV channels uplinked from India but downlinked abroad only
Downlinking only	67	TV channels uplinked from abroad but downlinked only in India
Both Uplinking & downlinking	825	TV channels uplinked from India and also downlinked only in India
Total	903	

Out of 903 permitted satellite TV channels, 892 channels are available for downlinking in India.

Pay TV Channels

5.2 As per the reporting done by broadcasters in pursuance of the Tariff Order dated 3rd March 2017 as amended, out of 892 permitted satellite TV channels which are available for downlinking in India, there are 358 satellite pay TV channels as on 31st March 2023. Out of 358 pay channels, 254 are SD satellite pay TV channels and 104 are HD satellite pay TV channels. A list of pay TV channels offered by broadcasters for

subscribers as reported to TRAI is attached as **Annexure-5.1**. Apart from these pay channels reported to TRAI, all other channels, available for downlinking in India, are considered as Free to Air (FTA) channels. **Chart-5.2** depicts total number of Pay satellite TV channels and FTA satellite TV channels available for downlinking in India during last one year. **Chart-5.3** depicts total number of SD satellite Pay TV channels and HD satellite Pay TV channels during last one year.

Chart5.2: Number of Pay and FTA channels available for downlinking in India

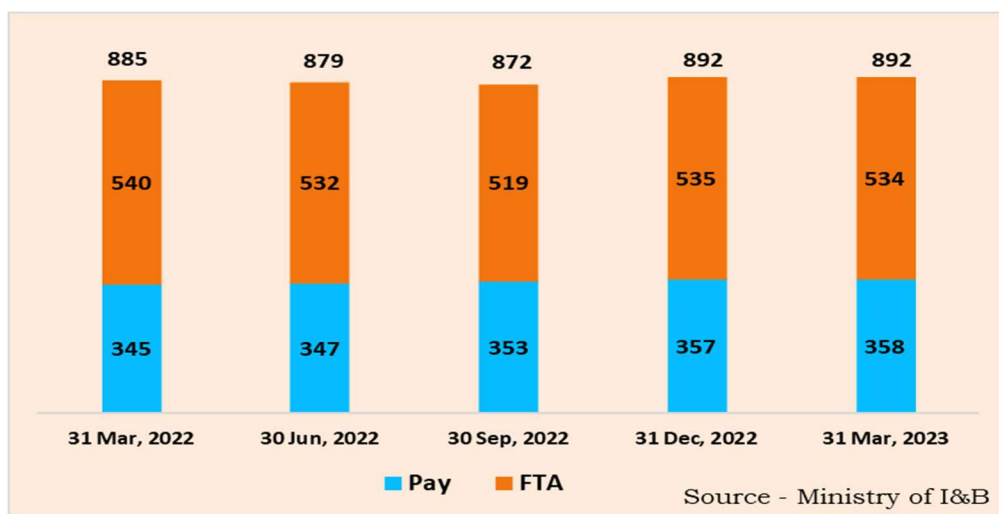
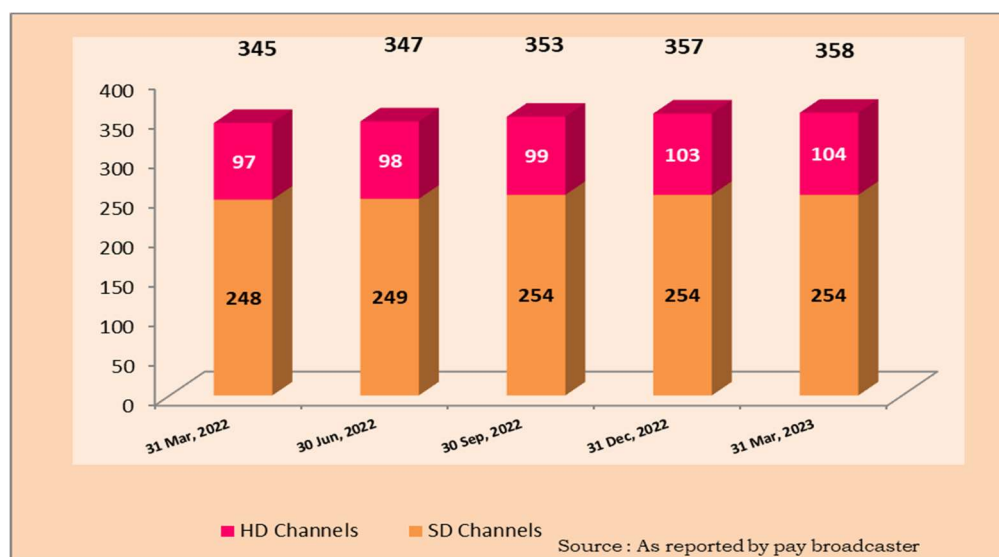


Chart 5.3 : Numbers of SD satellite pay TV channels and HD satellite pay TV channels



B. Cable TV Sector

5.3 As on 31st March 2023, there are 1748 MSOs registered with MIB (as on 28.02.2023). As per the data reported by MSOs and HITS operator, there are 12 MSOs & 1 HITS operator who have subscriber base greater than one million. A list of such major MSOs and HITS operators is attached as **Annexure 5.2**. Details of subscriber base of major MSO and HITS Operators (greater than one million) are given in following **Table 5.3:-**

Table 5.3: Subscriber base of major MSOs/HITS operators at the end of March, 2023 (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.	GTPL Hathway	9,039,166
2.	Siti Networks Ltd.	6,601,701
3.	Hathway Digital Ltd.	5,545,480
4.	Den Networks Ltd.	4,156,515
5.	Thamigzha Cable TV Communication Ltd. (TCCL)	3,934,926
6.	Kerala Communicators Cable Ltd (KCCL)	3,225,535
7.	NXT Digital Ltd. (HITS)	2,380,387
8.	KAL Cables	2,118,721
9.	Tamil Nadu Arasu Cable TV (TACTV)	1,870,148
10.	VK Digital	1,794,834
11.	Fastway Transmission Pvt. Ltd	1,751,222
12.	NXT Digital Ltd. (CATV)	1,192,027
13.	Asianet Digital Network	1,050,544

C. Direct-to-Home (DTH) Sector

5.4 Since its introduction in the year 2003, Indian DTH services have displayed a phenomenal growth. During the quarter ending 31st March 2023, there are 4 pay DTH service providers. A list of DTH Operators is attached as **Annexure 5.3**.

5.5 Pay DTH has attained total active subscriber base of around 65.25 million. This is in addition to the subscribers of the DD Free Dish (free DTH services of Doordarshan). The total active subscriber base has decreased from 66.62 million in December 2022 to 65.25 million in March 2023.

5.6 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 31st March 2023 is depicted in the following charts: -

Chart 5.4: - Total active subscriber base of pay DTH sector (in millions)

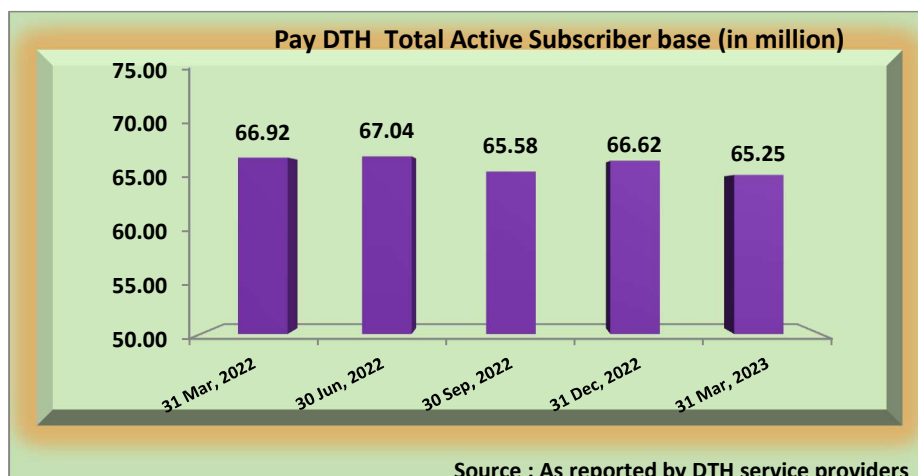
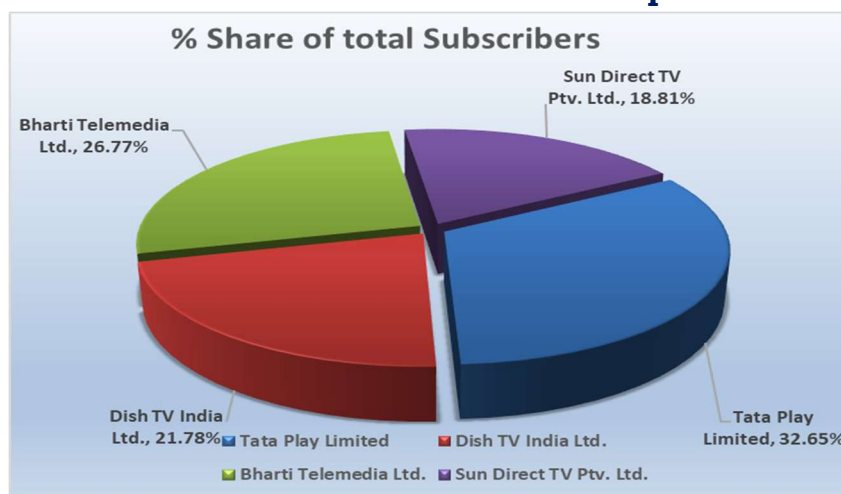


Chart 5.5 : Market share of DTH Operators



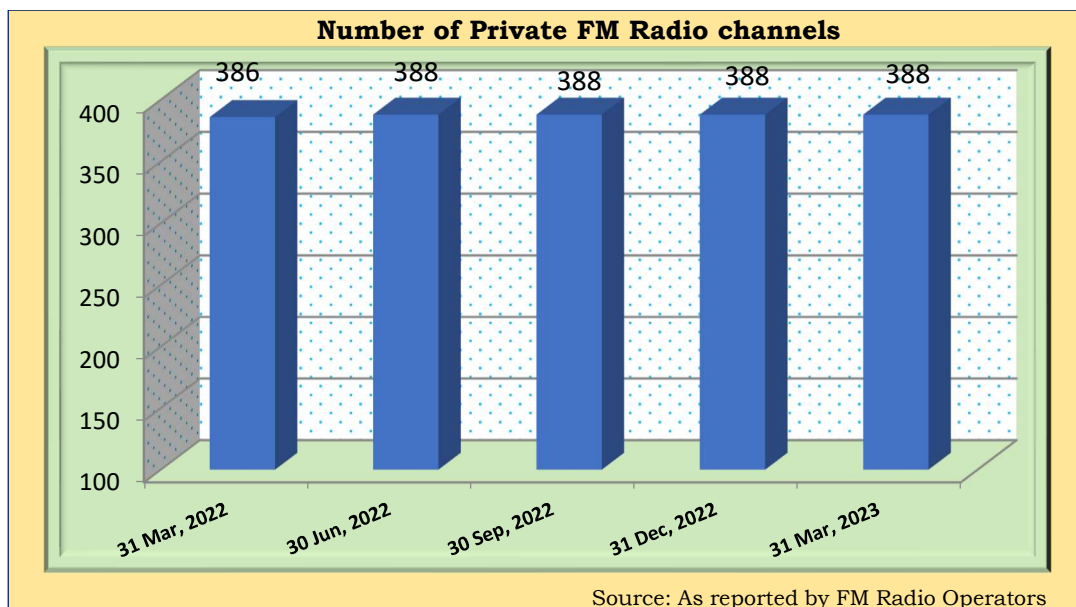
D. IPTV

As per information provided by the Ministry of Information and Broadcasting (MIB), as on 31.03.2023, there are 25 IPTV Operators. A list of such IPTV Operators is attached as **Annexure 5.4**. At present, M/s Andhra Pradesh State Fibernet Ltd has reported a subscriber base of 6,47,596 at the end of March 2023.

E. FM Radio Services

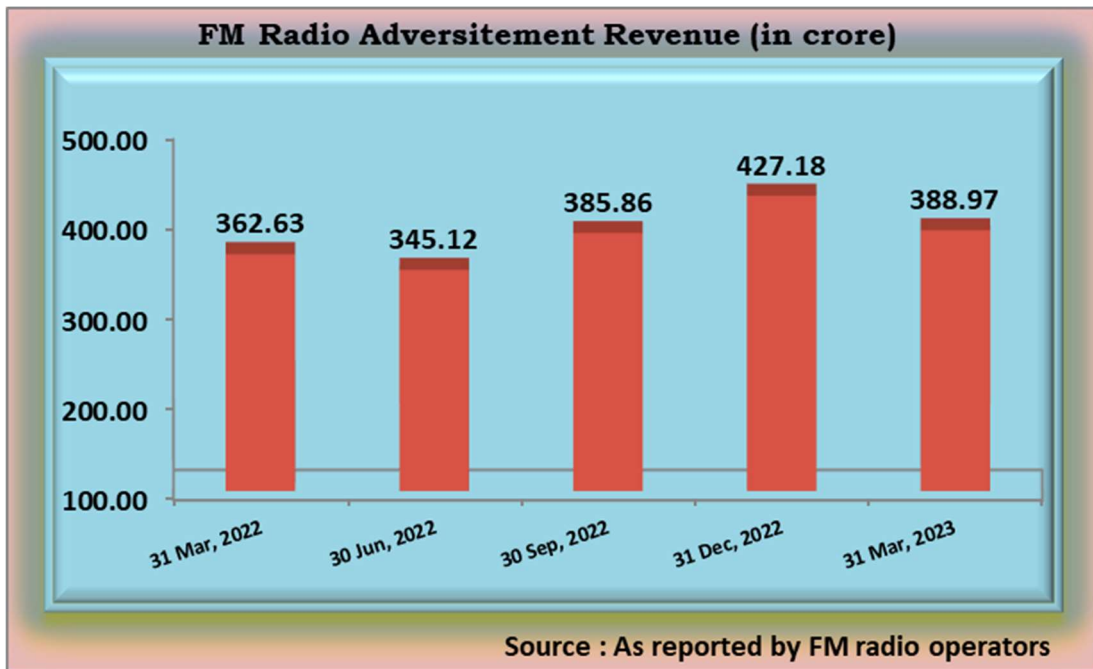
5.7 Apart from the radio channels operated by All India Radio – the public broadcaster, as per the data reported by FM Radio operators to TRAI, as on 31st March 2023, there are 388 operational private FM Radio channels in 113 cities operated by 36 private FM Radio operators. As compared to the previous quarter, there is no change in the number of operational private FM Radio channels, cities and FM Radio operators. A list of 113 existing cities with operational private FM radio channels in India, as on 31st March, 2023 is placed at **Annexure 5.5**. The following **chart 5.6** depicts the quarterly growth in private FM Radio stations.

Chart 5.6 : Number of Private FM Radio channels



5.8 The advertisement revenue reported by FM Radio operators during the quarter ending 31st March 2023 in respect of 388 private FM Radio channels is Rs.388.97 crore as against Rs.427.18 crore in respect of 388 private FM Radio channels for the previous quarter.

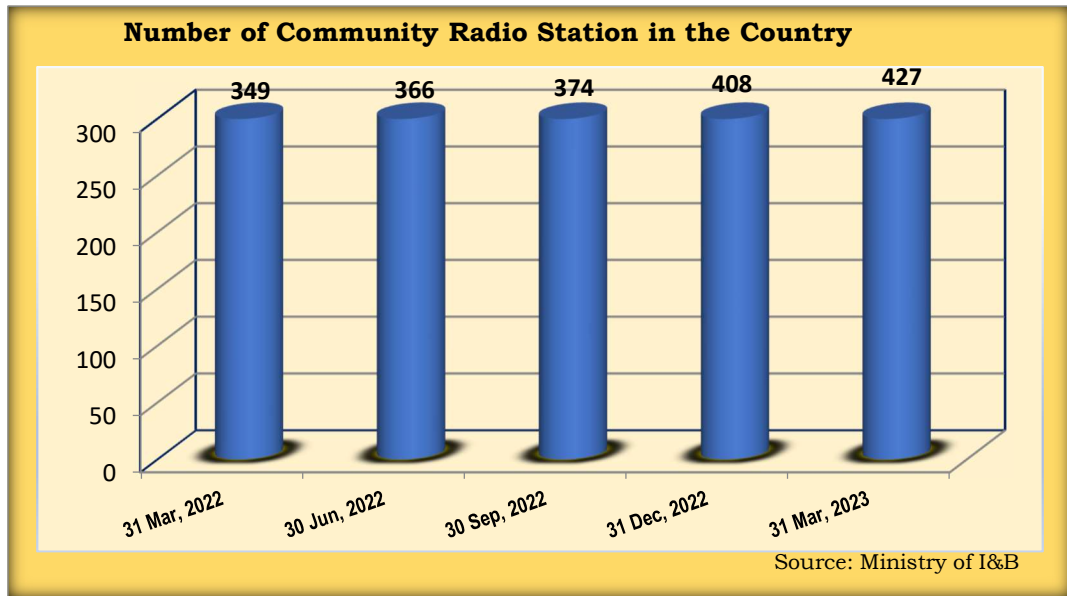
Chart 5.7: Details of Advertisement Revenue submitted by the private FM Radio broadcasters



F. Community Radio

5.9 As on 31st March 2023, 427 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 5.8**.

Chart 5.8: 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
	Dec-22	Mar-23	Dec-22	Mar-23	Dec-22	Mar-23	Dec-22	Mar-23	Dec-22	Mar-23	Dec-22	Mar-23	Dec-22	Mar-23	
Andhra Pradesh	12060526	11770855	32163984	32404916			8156707	8010334			29991757	30263784	82,372,974	82,449,889	76915
Assam	2128563	2002622	10648415	11006187			3308505	3184184			8621292	8800862	24,706,775	24,993,855	287080
Bihar	9195941	8393253	39726581	40323738			5705175	5775195			36246456	36728575	90,874,153	91,220,761	346608
Delhi	16872359	16860622	16826426	17103766	194	193			1690527	1689688	18487734	18825690	53,877,240	54,479,959	602719
Gujarat	22528058	22217191	11380155	11363192	47	47	5139655	5033390			27017956	27618299	66,065,871	66,232,119	166248
Haryana	7563522	7350432	6489254	6553650	11	11	4621826	4565552			8027774	8170269	26,702,387	26,639,914	-62473
Himachal Pradesh	496145	468009	3414229	3424408	92	92	2391457	1592496			3286812	3313438	9,588,735	8,798,443	-790292
Jammu & Kashmir	387466	362900	5795811	5788180	0	0	830350	827594			5045691	5045033	12,059,318	12,023,707	-35611
Karnataka	7598993	7232272	31169983	31217992	593	589	6492981	5987361			21045839	21467203	66,308,389	65,905,417	-402972
Kerala	14684250	14470640	7942467	7991307	114	113	9961133	9878402			9911488	10070654	42,499,452	42,411,116	-88336
Madhya Pradesh	17368867	17190019	15216078	15424526	0	0	5443063	5340998			38223356	38715471	76,251,364	76,671,014	419650
Maharashtra	24958114	24401860	20934562	21153731	0	0	6428378	6322365			39162702	39627049	91,483,756	91,505,005	21249
Mumbai	11367552	11420368	9480918	9844278	1015	925			1068028	660482	12102729	12376197	34,020,242	34,302,250	282008
North East	935069	941136	5836711	5934222	0	0	1,373,270	1,365,085			3983794	4110061	12,128,844	12,350,504	221660
Orissa	1647883	1630429	11381082	11185393	29	29	6,318,998	6,223,547			13939298	14119554	33,287,290	33,158,952	-128338
Punjab	7386768	7185176	12232409	12298603	106	106	4,920,829	4,755,245			11273435	11423723	35,813,547	35,662,853	-150694
Rajasthan	10406709	10262160	21980740	22436534	155	155	6,293,169	6,111,223			24445346	24778828	63,126,119	63,588,900	462781
Tamil Nadu	17142543	16686494	27579698	27796556	269	269	9,741,479	9,989,037			23981468	24148978	78,445,457	78,621,334	175877
UP(E)	19023762	18771392	36435124	36684413	0	0	9,436,080	8,619,448			34975500	35366666	99,870,466	99,441,919	-428547
UP(W)	17073244	16850342	18556736	18419382	8	8	5,579,253	5,445,784			21763217	22007333	62,972,458	62,722,849	-249609
Kolkata	5876479	5830683	5699449	5711563	0	0	2166601	2183653			10258126	10357855	24,000,655	24,083,754	83099
West Bengal	14621269	14451612	16717883	16844336	151	147	2,405,969	2,472,605			22724469	22894729	56,469,741	56,663,429	193688
Total	241,324,082	236,750,467	367,608,695	370,910,873	2,784	2,684	106,714,878	103,683,498	2,758,555	2,350,170	424,516,239	430,230,251	1,142,925,233	1,143,927,943	1002710

Annexure 1.2: Wireline Subscriber Base

Sl. No	Service Area	Bharti Airtel		Reliance Com.		Quadrant		Tata Tele.		MTNL		BSNL		Vodafone Idea		Reliance Jio		Total		Net Additions
		Dec-22	Mar-23	Dec-22	Mar-23	Dec-22	Mar-23	Dec-22	Mar-23	Dec-22	Mar-23	Dec-22	Mar-23	Dec-22	Mar-23	Dec-22	Mar-23	Dec-22	Mar-23	
1	Andhra Pradesh	421335	463880	20335	19577			155414	150693			676133	677375	71275	69555	979388	1075325	2,323,880	2,456,405	132,525
2	Assam	16417	18633	0	0			0	0			109461	110813	2640	2640	139677	151238	268,195	283,324	15,129
3	Bihar	66258	75020	9	9			8920	8869			171257	183542	2080	2110	390312	429093	638,836	698,643	59,807
4	Delhi	1889035	1936257	20651	20766			142415	136709	1097894	1025773	-	-	89445	87055	795691	856769	4,035,131	4,063,329	28,198
5	Gujarat	195551	203095	2649	2796			76557	75026			343420	332838	59236	59016	494177	540046	1,171,590	1,212,817	41,227
6	Haryana	96292	111826	0	0			31111	28827			201075	211535	420	420	95765	104916	424,663	457,524	32,861
7	Jharkhand	3807	4508	0	0			1535	1585			87556	88613	30	90	45443	48812	138,371	143,608	5,237
8	Jammu & Kashmir	73600	80012	0	0			0	0			88336	86802	30	30	173497	182694	335,463	349,538	14,075
9	Karnataka	1019470	1064579	19717	19083			221897	219217			885635	877482	157652	152833	721102	781440	3,025,473	3,114,634	89,161
10	Kerala	87613	90055	3663	3610			18986	18014			1014448	1026253	6830	7120	214788	236123	1,346,328	1,381,175	34,847
11	Madhya Pradesh	414607	439670	14	14			12409	18859			261323	267567	35245	34445	519977	559905	1,243,575	1,320,460	76,885
12	Maharashtra	354018	381032	9599	9353			210820	207645			624800	603067	25958	24161	215592	231804	1,440,787	1,457,062	16,275
13	Mumbai	520336	541934	43056	42777			471710	464355	1,310,696	1,286,780			171225	172330	724949	776731	3,241,972	3,284,907	42,935
14	North East	0	0	0	0			0	0			75707	73127	510	510	128643	140732	204,860	214,369	9,509
15	Orissa	0	0	4	4			8409	8406			172912	173215	3960	3930	191798	209516	377,083	395,071	17,988
16	Punjab	212790	228239	1982	1897	318346	337922	15450	13665			335015	360097	2210	2180	239793	268731	1,125,586	1,212,731	87,145
17	Rajasthan	182960	196591	3600	3596			12901	13833			280128	279372	15325	15085	310574	331385	805,488	839,862	34,374
18	Tamil Nadu	771994	810621	18641	17762			117545	112911			974808	964498	38433	34918	631786	686240	2,553,207	2,626,950	73,743
19	U.P.(E)	161936	173386	23	24			8150	8023			138197	132975	16660	16570	385876	420010	710,842	750,988	40,146
20	U.P.(W)	103285	114686	12	8			4894	4893			188774	179140	3648	3526	423462	461312	724,075	763,565	39,490
21	Kolkata	181903	187078	4513	4359			48667	47021			209708	197829	13855	14535	387984	206254	846,630	657,076	-189,554
22	West Bengal	12784	26370	76	71			2589	2601			265723	279683	120	120	191500	416893	472,792	725,738	252,946
	Total	6,785,991	7,147,472	148,544	145,706	318,346	337,922	1,570,379	1,541,152	2,408,590	2,312,553	7,104,416	7,105,823	716,787	703,179	8,401,774	9,115,969	27,454,827	28,409,776	954,949

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

Sl. No.	Name of Telecom Service Area	Service Provider	Number of PCOs as on 31.12.2022	Number of PCOs as on 31.03.2023	Net PCO increase/decrease as on 31.03.2023	Percentage Growth/Decline as on 31.03.2023
1	Andhra Pradesh	Bharat Sanchar Nigam Limited	4285	4153	-132	-3.08%
2	Assam	Bharat Sanchar Nigam Limited	479	475	-4	-0.84%
3	Bihar	Bharat Sanchar Nigam Limited	340	255	-85	-25.00%
4	Delhi	MTNL	5994	2881	-3113	-51.94%
5	Gujarat	Bharat Sanchar Nigam Limited	2253	2010	-243	-10.79%
6	Haryana	Bharat Sanchar Nigam Limited	192	184	-8	-4.17%
7	Himachal Pradesh	Bharat Sanchar Nigam Limited	561	477	-84	-14.97%
8	Jammu & Kashmir	Bharat Sanchar Nigam Limited	139	132	-7	-5.04%
9	Karnataka	Bharat Sanchar Nigam Limited	3574	3536	-38	-1.06%
10	Kerala	Bharat Sanchar Nigam Limited	4789	3800	-989	-20.65%
11	Kolkata	Bharat Sanchar Nigam Limited	1293	754	-539	-41.69%
12	Madhya Pradesh	Bharat Sanchar Nigam Limited	960	782	-178	-18.54%
13	Maharashtra	Bharat Sanchar Nigam Limited	3445	3269	-176	-5.11%
14	Mumbai	MTNL	7171	6611	-560	-7.81%
15	North East	Bharat Sanchar Nigam Limited	410	351	-59	-14.39%
16	Odisha	Bharat Sanchar Nigam Limited	279	3	-276	-98.92%
17	Punjab	Bharat Sanchar Nigam Limited	859	708	-151	-17.58%
		Quadrant Televentures Ltd.	362	342	-20	-5.52%
18	Rajasthan	Bharat Sanchar Nigam Limited	452	310	-142	-31.42%
19	TN including Chennai	Bharat Sanchar Nigam Limited	9173	8538	-635	-6.92%
20	UP - East	Bharat Sanchar Nigam Limited	2393	1971	-422	-17.63%
21	UP - West	Bharat Sanchar Nigam Limited	765	573	-192	-25.10%
22	West Bengal	Bharat Sanchar Nigam Limited	20	20	0	0.00%
	Total		50188	42135	-8053	-16.05%

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 31.12.202	VPT Rural	VPT Urban	Number of VPTs as on 31.03.2023	Net VPTs increase/ decrease as on	Percentage Growth/ Decline as on
1	Andhra Pradesh	BSNL	2,896	0	0	2,896	0	0.00%
2	Assam	BSNL	105	0	0	105	0	0.00%
3	Bihar	BSNL	6,114	0	0	6,114	0	0.00%
4	Delhi	BSNL						
5	Gujarat	BSNL	5,278	0	0	5,278	0	0.00%
6	Haryana	BSNL	462	0	0	462	0	0.00%
7	Himachal Pradesh	BSNL	1,875	0	0	1,875	0	0.00%
8	Jammu & Kashmir	BSNL	810	0	0	810	0	0.00%
9	Karnataka	BSNL	3,656	0	0	3,656	0	0.00%
10	Kerala	BSNL	331	0	0	331	0	0.00%
11	Kolkata	BSNL	130	0	0	130	0	0.00%
12	Madhya Pradesh	BSNL	10,100	0	0	10,100	0	0.00%
13	Maharashtra	BSNL	7,846	0	0	7,846	0	0.00%
14	Mumbai	BSNL						
15	North East	BSNL	1,182	0	0	1,182	0	0.00%
16	Odisha	BSNL	1,554	0	0	1,554	0	0.00%
17	Punjab	BSNL	4,493	0	0	4,493	0	0.00%
18	Rajasthan	BSNL						
19	TN including Chennai	BSNL	5,478	0	0	5,478	0	0.00%
20	UP - East	BSNL	568	0	0	568	0	0.00%
21	UP - West	BSNL	3,758	0	0	3,758	0	0.00%
22	West Bengal	BSNL	11,970	0	0	11,970	0	0.00%
	Total		68,606			68,606	0	0.00%
	Total (In Lakh)		0.69			0.69	0.00	0.00%

**Annexure 1.5: Internet Service Provider(ISP) wise Internet Subscriber base
as on 31.03.2023**

S. No.	Name of Service Provider	Narrowband	Broadband	Total
1	Reliance Jio Infocomm Ltd	0	438559886	438559886
2	Bharti Airtel Ltd.	19938803	241903082	261841885
3	Vodafone Idea Ltd	11349262	124827399	136176661
4	Bharat Sanchar Nigam Ltd.	2916209	25365350	28281559
5	Atria Convergence Technologies Pvt. Ltd.	0	2140797	2140797
6	Hathway Cable And Datacom Limited	0	1124586	1124586
7	ONEOTT iNTERTAINMENT LIMITED	1305	1023092	1024397
8	YOU Broadband India Ltd.	403361	472037	875398
9	Excitel Broadband Private Limited	0	867787	867787
10	Kerala Vision Broadband Ltd.	0	833251	833251
11	GTPL Broadband Pvt. Ltd.	0	801343	801343
12	Netplus Broadband Services Pvt. Ltd	0	630130	630130
13	Andhra Pradesh State Fiber Net Limited	0	554099	554099
14	ALLIANCE BROADBAND SERVICES PVT. LTD.	0	525862	525862
15	RailTel Corporation of India Ltd.	0	516465	516465
16	Mahanagar Telephone Nigam Limited	56056	440457	496513
17	Asianet Satellite Communications Ltd.	0	442104	442104
18	Tata Play Broadband Private Limited	0	433295	433295
19	Intech Online Pvt. Ltd.	0	316995	316995
20	Quadrant Televentures Ltd.	86	256518	256604
21	Pioneer eLabs Limited	0	245398	245398
22	Blue Lotus Support Services Pvt Ltd. (erstwhile Limras Eronet Broadband Service Pvt Ltd.)	0	223669	223669
23	Tikona Infinet Ltd.	0	214960	214960
24	D-Vois Communication Private Limited	0	173418	173418
25	ANI NETWORK PVT LTD	0	151013	151013
26	Siti Broadband Services Pvt. Limited	0	145875	145875
27	Excell Media Pvt. Ltd.	0	138429	138429
28	Wish Net Pvt. Ltd.	0	121833	121833
29	Indinet Service Pvt. Ltd.	0	118423	118423
30	GTPL KCBPL Broadband Private Limited	0	115442	115442
31	Airnet Cable and Datacom Pvt. Ltd.	0	102954	102954
32	Five Network Solution (India) Ltd.	0	91803	91803
33	Joister Infoserve Pvt. Ltd.	0	77567	77567
34	Ishan Netsol Pvt. Ltd.	0	77552	77552
35	Fusionnet Web Services Pvt Ltd	0	73982	73982
36	Vortex Netsol Pvt. Ltd.	0	67881	67881

S. No.	Name of Service Provider	Narrowband	Broadband	Total
37	DEN Broadband Limited	0	66407	66407
38	Microscan Infocommtech Private Limited	0	62755	62755
39	K Net Solutions Pvt. Ltd.	0	60298	60298
40	Dwan Supports Pvt. Ltd.	0	45242	45242
41	Radinet Info Solutions Pvt. Ltd.	0	39731	39731
42	Snet Networks Pvt. Ltd.	0	38655	38655
43	DNA Infotel Pvt. Ltd.	0	37966	37966
44	Instanet Technologies Pvt. Ltd.	0	37188	37188
45	IBUS VIRTUAL NETWORK SERVICES PRIVATE LIMITED	0	35596	35596
46	ADN Broadband Private Limited	0	35385	35385
47	Meghbela Cable & Broadband Servies (P) Ltd	0	35286	35286
48	Multicraft Digital Technologies Private Limited	0	30559	30559
49	Nuron Networks India Private Limited	0	29581	29581
50	Readylink Internet Services Limited	0	29344	29344
51	Ethernet Xpress(I) Pvt. Ltd.	0	29274	29274
52	Sristisanchar Webnet Limited	0	28912	28912
53	Shree Omkar Infocomm Pvt Ltd	0	27567	27567
54	Juweriyah Networks Pvt. Ltd.	0	27147	27147
55	Tata Teleservices(Maharashtra) Ltd.	136	25745	25881
56	Shyam Spectra Private Limited	0	25033	25033
57	Digital Networks Associates Pvt. Ltd.	0	24928	24928
58	Kernel Fibernet Online Network Pvt. Ltd.	0	24860	24860
59	Tata Communications Limited	213	24454	24667
60	WAVE FIBER PRIVATE LIMITED (Formerly Coastal Broadband and Online Services Pvt. Ltd.)	0	24366	24366
61	Spiderlink Networks Pvt. Ltd.	0	23975	23975
62	Tachyon Communications Private Limited	0	23278	23278
63	Candor Infosolution Pvt. Ltd.	0	22959	22959
64	WAN AND LAN INTERNET PRIVATE LIMITED	0	22946	22946
65	Tata Teleservices Limited	21	22527	22548
66	Kings Broadband Pvt. Ltd	0	21823	21823
67	SIKKA BROADBAND PRIVATE LIMITED	0	21284	21284
68	Airfiber Networks Pvt. Ltd.	0	20427	20427
69	Swiftmail Communications Ltd.	0	19619	19619
70	Stampede Communications Pvt. Ltd.	0	19568	19568
71	RI Networks Pvt Ltd	0	19482	19482
72	Genstar Network Solutions Pvt. Ltd.	0	19197	19197
73	Honesty Net Solutions (I) Pvt Ltd	0	18897	18897
74	RAINBOW COMMUNICATIONS INDIA PRIVATE LIMITED	0	17013	17013

S. No.	Name of Service Provider	Narrowband	Broadband	Total
75	QUEST CONSULTANCY PVT LTD	0	16919	16919
76	Airlink Communications Pvt. Ltd.	0	16783	16783
77	Rajesh Digital & DataCom Pvt. Ltd.	0	16480	16480
78	SRI SAI COMMUNICATION AND INTERNET PRIVATE LIMITED	0	15887	15887
79	Yashash Cable Network (Pvt.) Ltd	0	15746	15746
80	Weebo Networks Pvt Ltd.	0	15467	15467
81	Paradise Telecom Pvt. Ltd.	0	15149	15149
82	City Online Services Ltd.	0	13997	13997
83	BALAJI TELEWORKS DEVELOPMENTPRIVATE LIMITED	0	13933	13933
84	DDC Broad Band Pvt. Ltd	0	13358	13358
85	Pacenet Meghbela Broadband Pvt.Ltd.	0	13126	13126
86	DL GTPL Broadband Pvt. Ltd.	0	12675	12675
87	Apple Broadband Services Pvt. Ltd.	0	11488	11488
88	VIJAYALAKSHMI NET SERVICES PRIVATE LIMITED	0	11188	11188
89	Ultranet Infotech Solution Pvt. Ltd.	0	11034	11034
90	Intermedia Cable Communication Pvt Ltd	0	10966	10966
91	Specific Net Pvt. Ltd	0	10914	10914
92	Net 9 Fibernet Pvt Ltd	0	10876	10876
93	Angel Air Network Solutions Pvt. Ltd.	0	10840	10840
94	NORTH EAST DATAA NETWORK PRIVATE LIMITED	0	9920	9920
95	Orange Infocom PVT.LTD	0	9839	9839
96	INFONET COMM ENTERPRISES PVT LTD	0	9662	9662
97	MAHA MEDIACOM INTERNET PVT. LTD.	0	9469	9469
98	Siliguri Internet & Cable TV Pvt. Ltd.	0	9375	9375
99	Rural Broadband Pvt. Ltd.	0	9326	9326
100	Signum Digital Networks Pvt. Ltd	0	9244	9244
101	Esto Broadband Pvt. Ltd.	0	8956	8956
102	Ani Broadband Service Pvt. Ltd.	0	8797	8797
103	HYOSEC SOLUTIONS Pvt. LTD	0	8693	8693
104	APNA TELELINK PVT. LTD.	0	8610	8610
105	AT Broadband Pvt. Ltd.	0	8441	8441
106	Five Internet Solutions Pvt. Ltd.	0	8207	8207
107	Vizag Broad CastingCompany Pvt. Ltd.	0	8030	8030
108	R.G. Technosolutions Pvt. Ltd.	0	7872	7872
109	Airconnect Internet Services Pvt. Ltd.	0	7847	7847
110	WSNS PVT. LTD.	0	7355	7355
111	Gigaline Teleservices (OPC) Pvt. Ltd	0	7336	7336

S. No.	Name of Service Provider	Narrowband	Broadband	Total
112	Multinet (Udaipur) Pvt. Ltd.	0	7336	7336
113	FOXTEL TELECOMMUNICATIONS PVT LTD	0	7325	7325
114	Cityzone Infonet Pvt. Ltd.	0	7089	7089
115	Prisac Aviation Technologies Pvt. Ltd.	0	7071	7071
116	United Telecoms Ltd.	0	7037	7037
117	Kappa Internet Services Pvt. Ltd.	0	7024	7024
118	LM Energy and Software Pvt. Ltd.	2360	4510	6870
119	Sify Technologies Ltd.	46	6804	6850
120	FUTURE CONNECT BROADBAND Pvt Ltd.	0	6668	6668
121	SSCN Pvt. Ltd.	0	6664	6664
122	Elxer Communications (P)Ltd.	0	6602	6602
123	HYFY Giga Fiber Pvt. Ltd.	0	6520	6520
124	ROHAN MEDIA PRIVATE LIMITED	0	6494	6494
125	Skymax Broadband Services Pvt. Ltd.	0	6442	6442
126	QUALITY BROADBAND PRIVATE LIMITED	0	6387	6387
127	7 Star Cablenet Pvt. Ltd	0	6363	6363
128	S S Netcom Pvt. Ltd.	0	6354	6354
129	OM-ASHA Net Pvt. Ltd.	0	6323	6323
130	Symbios Creations Pvt. Ltd.	0	6110	6110
131	DEEPNET BROADBAND PRIVATE LIMITED	0	6007	6007
132	Southern Online Bio Technologies Ltd.	0	5971	5971
133	SANCHAR TELENETWORK PVT LTD	0	5956	5956
134	GEOCITY NETWORK SOLUTIONS PVT. LTD.	0	5683	5683
135	SONALI INTERNET SERVICES PVT. LTD.	0	5660	5660
136	Sancfil Technologies Internet Services Pvt. Ltd.	0	5547	5547
137	Lalat Internet Service Private Limited	0	5532	5532
138	Praction Networks Private Limited	0	5520	5520
139	Airgenie Communications Pvt. Ltd.	0	5504	5504
140	ARKTEL NETWORKS PVT LTD	0	5389	5389
141	SFOUR CABLENET PVT LTD	0	5371	5371
142	DEHRADUN E NET SOLUTIONS PRIVATE LIMITED	0	5300	5300
143	Mangaluru Broadband Network Pvt Ltd	0	5300	5300
144	Dsouza Infotainment Pvt. Ltd.	0	5297	5297
145	Wefe Technology Pvt. Ltd.	0	5203	5203
146	TJ BROADBAND NETWORK PVT LTD	0	5167	5167
147	SNS Internet Services Pvt. Ltd.	0	5140	5140
148	Swiftnet Broadband Pvt Ltd	0	5063	5063
149	Allnet Broadband Network Pvt Ltd	0	4551	4551
150	Shine Communications Pvt. Ltd.	0	4450	4450

S. No.	Name of Service Provider	Narrowband	Broadband	Total
151	FIBRE AIR SERVICES Pvt Ltd.	0	4421	4421
152	INRI COMMUNICATIONS PVT LTD	0	4382	4382
153	Patel Internet Pvt. Ltd.	0	4296	4296
154	POWERNET TELECOM PVT LTD	0	4197	4197
155	Five Net Service Provider Pvt. Ltd.	0	4068	4068
156	Antarjal IT Communication Pvt. Ltd.	0	4034	4034
157	Blazenet Ltd.	0	4017	4017
158	Bittel Telecom Private Limited	0	3991	3991
159	SUPER SONIC BROADBAND PVT LTD	0	3915	3915
160	Speed Online Net Pvt Ltd	0	3796	3796
161	Vibhuti Networks Pvt. Ltd.	0	3784	3784
162	Siddhant Broadband Pvt. Ltd.	0	3760	3760
163	SoftCall Cust-O-Care Pvt. Ltd..	0	3699	3699
164	Kumar Cable Digital Network Pvt. Ltd.	0	3640	3640
165	NEHA INFONET PVT LTD.	0	3561	3561
166	STN INFOTECH PVT. LTD.	0	3544	3544
167	Getway Broadband Pvt. Ltd.	0	3496	3496
168	DREAMLINK TECHNOLOGIES PVT LTD	0	3346	3346
169	Mukand Infotel Pvt. Ltd.	0	3335	3335
170	Prathamesh Broadband Pvt. Ltd	0	3310	3310
171	Nirav Infoway Pvt. Ltd	0	3213	3213
172	Falconet Internet Pvt Ltd	0	3204	3204
173	Sri Nagar Net Tech Pvt. Ltd.	0	3191	3191
174	Rainbow Internet teleservices Pvt Ltd	0	3184	3184
175	Net Access Internet India Private Limited	0	3176	3176
176	Maharaj Netsol Pvt Ltd	0	3136	3136
177	Inet Fiber India Pvt. Ltd	0	3132	3132
178	AS Broadband Pvt. Ltd	0	3094	3094
179	delDSL Internet Pvt Ltd	0	3069	3069
180	Krishinet Infocom Pvt. Ltd.	0	2972	2972
181	Renu Giga Fiber Pvt. Ltd.	0	2904	2904
182	ajab media vision pvt. Ltd.	0	2900	2900
183	Kovai Fibernet Pvt. Ltd.	0	2855	2855
184	Userlinks Netcom Pvt. Ltd.	0	2824	2824
185	VRD Web Services Pvt. Ltd.	0	2824	2824
186	AAACLOUD TELEPHONY PRIVATE LIMITED	0	2822	2822
187	Netfirre Communications Pvt. Ltd.	0	2816	2816
188	Netfox Networks Private Limited	0	2815	2815
189	MicroNet Gigafiber Pvt Ltd	0	2781	2781
190	Sherie Plexus ISP Pvt. Ltd.	0	2779	2779

S. No.	Name of Service Provider	Narrowband	Broadband	Total
191	NETVISION AWADH NETWORKS PVT LTD	0	2774	2774
192	Niss Internet Services Pvt. Ltd.	0	2749	2749
193	NETWAY INTERNET PVT. LTD.	0	2729	2729
194	TGN NETWORKS PVT LTD	0	2679	2679
195	Exnet Broadband Pvt. Ltd.	0	2670	2670
196	TRANSMEDIA TECHNOLOGIES (AP) PVT LTD	0	2639	2639
197	Foxtell Communications Pvt. Ltd.	0	2637	2637
198	ADRI INFOCOM Pvt. Ltd.	0	2559	2559
199	HBS Network Pvt. Ltd.	0	2530	2530
200	Deenet Services Pvt Ltd	0	2475	2475
201	HIGHTECH BROADBAND SERVICES PVT. LTD	0	2457	2457
202	Myguru Online India (P)Ltd.	0	2456	2456
203	Spider Broadband Pvt. Ltd..	0	2436	2436
204	Chandra Net Pvt. Limited	0	2435	2435
205	Mega Hertz Network Solutions Pvt. Ltd.	0	2422	2422
206	HIGHTEC NETWORK SOLUTIONS (OPC) PRIVATE LIMITED	0	2420	2420
207	Seven Star Digicom Pvt. Ltd..	0	2372	2372
208	WOW Solutions and Systems Pvt. Ltd	0	2358	2358
209	Johnson Telemarketers Pvt. Ltd.	0	2355	2355
210	SBR Telecom Pvt. Ltd.	0	2350	2350
211	Real Wire Express Network Pvt. Ltd.	0	2341	2341
212	TENG NETWORK SOLUTION PRIVATE LIMITED	2317	0	2317
213	VENKATA SAI INTERNET PRIVATE LIMITED	0	2314	2314
214	OUTOFBOX NETWORKS PRIVATE LIMITED	0	2290	2290
215	Fiberzone communication Pvt Ltd	0	2250	2250
216	Siti vision Data Solutions Pvt Ltd	0	2240	2240
217	Bakliwal Telecom Services Pvt. Ltd.	0	2236	2236
218	Sai Prasad Internet Services Pvt. Ltd.	0	2210	2210
219	Jeebr Internet Service Private Limited	0	2201	2201
220	Classic Internet and Cable Services Pvt. Ltd.	0	2166	2166
221	Suntech Sanchar Private Limited	0	2123	2123
222	Flashcom Network Pvt. Ltd.	0	2103	2103
223	SMART NET INDIA PVT LTD	0	2085	2085
224	JDM Broadband Services Pvt. Ltd.	0	2067	2067
225	Karunay Internet Pvt. Ltd.	0	2063	2063
226	Jetspot Networks Pvt. Ltd.	0	2061	2061
227	Vision Smartlink Networking Pvt. Ltd.	0	2048	2048
228	SMARTLINK SOLUTIONS PVT. LTD.	0	2033	2033

S. No.	Name of Service Provider	Narrowband	Broadband	Total
229	Lbs Infoway India Pvt. Ltd.	0	2032	2032
230	Shikhar BroadbandEnterprises Pvt. Ltd.	0	2000	2000
231	Pink Broadband Services Pvt. Ltd.	0	1990	1990
232	Tejays Dynamic Ltd.	27	1954	1981
233	TRICHY CHANNEL NINE CABLENET PRIVATE LIMITED	0	1977	1977
234	Amar Broadband Pvt. Ltd..	0	1976	1976
235	LAKSHAY ISOLUTIONS INDIA PRIVATE LIMITED	0	1975	1975
236	Opticom Networks Pvt.Ltd	0	1961	1961
237	Megatel Networks Pvt. Ltd.	0	1951	1951
238	Southnet Broadband Pvt. Ltd.	0	1935	1935
239	CORREL IT SERVICE PVT LTD	0	1920	1920
240	Mayekar Broadband Pvt. Ltd.	0	1905	1905
241	CredenceIS Computing Pvt. Ltd.	0	1900	1900
242	North Point Services Pvt. Ltd.	0	1900	1900
243	Scud Communication Pvt. Ltd.	0	1868	1868
244	First Mile Digital Private Limited	0	1860	1860
245	SATHYA WEBSERVICES PRIVATE LIMITED	0	1848	1848
246	Ncore Creative Technologies Pvt. Ltd	1342	500	1842
247	SCNSKY DIGITAL OPC PRIVATE LIMITED	0	1823	1823
248	Sanchit Infocom Pvt Ltd	0	1818	1818
249	BLITS GLOBAL TECHNOLOGIES Pvt. LTD	0	1817	1817
250	Lotus Broadband Pvt Ltd	0	1817	1817
251	F2H Networks Pvt. Ltd.	0	1806	1806
252	MORE WIFI INTERNET PRIVATE LIMITED	0	1805	1805
253	Merv Enterprises Pvt Ltd	0	1793	1793
254	City Online AP Pvt. Ltd.	0	1778	1778
255	KOLI'Z PRIVATE LIMITED	0	1778	1778
256	Galaxynt Connections Pvt. Ltd.	0	1756	1756
257	Bakcom Networks India Pvt. Ltd.	1752	0	1752
258	Mana Broadband Pvt. Ltd.	0	1739	1739
259	DNS SKYLINK PVT. LTD.	0	1728	1728
260	Assistive networks & technologie Pvt Ltd	0	1701	1701
261	Syntego Technologies India Pvt. Ltd.	0	1694	1694
262	Osbnnet Broadband Pvt. Ltd.	0	1692	1692
263	Maruthi Cable & Data Pvt. Ltd.	0	1687	1687
264	Protoact Digital Network Pvt. Ltd.	0	1683	1683
265	S P Internet Technologies Pvt. Ltd.	0	1683	1683
266	GRAND BROADBAND SERVICES PRIVATE LIMITED	0	1658	1658

S. No.	Name of Service Provider	Narrowband	Broadband	Total
267	BHORER ALO CABLE AND BROADBAND PRIVATE LIMITED	0	1654	1654
268	Skyline Infonet Pvt. Ltd.	0	1654	1654
269	INTERJET INDIA PRIVATE LIMITED	0	1644	1644
270	Jiffy Cable & Datacom Pvt. Ltd.	0	1629	1629
271	Sefaro Networks Pvt. Ltd.	0	1629	1629
272	Uzaina Business India Pvt. Ltd.	0	1622	1622
273	Sadaa SmartlinksCommunication Pvt. Ltd.	0	1621	1621
274	Sphier Infotech PVT. LTD.	0	1607	1607
275	JB Jain Broadband Solutions Private Limited	0	1603	1603
276	KWIKZO TELECOMM Pvt. LTD	0	1582	1582
277	Charotar Telelink Pvt. Ltd..	0	1578	1578
278	Megahertz Internet Network Pvt. Ltd.	0	1577	1577
279	Onet Digital Networks Pvt. Ltd..	0	1574	1574
280	Blu Ultraband Internet Services Private Limited	0	1558	1558
281	Skynet Datacom Pvt. Ltd.	0	1547	1547
282	MOVEX DIGITAL TECHNOLOGY PVT LTD	0	1545	1545
283	Thrishul Broadband Pvt. Ltd..	0	1541	1541
284	B2H Infonet Pvt. Ltd.	0	1534	1534
285	Macro Signal Pvt. Ltd	0	1530	1530
286	Teligus Networks Pvt. Ltd	0	1527	1527
287	Capture Network Systems Pvt. Ltd.	0	1517	1517
288	Wizbyte Networks Private Limited	1442	74	1516
289	Speednet Unique Network Pvt. Ltd.	0	1506	1506
290	A.S.C.S.C. DIGITAL PRIVATE LIMITED	0	1471	1471
291	INFINET BROADBAND PRIVATE LIMITED	0	1469	1469
292	S S Fiber Net OpticalCommunication Pvt. Ltd.	0	1464	1464
293	ALACRIY NET SYSTEM SERVICE PRIVATE LIMITED	0	1463	1463
294	F/X Wireless Technology Services Pvt. Ltd.	0	1457	1457
295	NGC Broadband Pvt. Ltd.	0	1444	1444
296	Venessa Internet Pvt. Ltd.	0	1415	1415
297	Speedmaxx Digital Networks Pvt. Ltd.	0	1412	1412
298	Country Online Services Pvt. Ltd.	0	1408	1408
299	ERO WIDE COMM Pvt. Ltd.	0	1408	1408
300	INET SEVICES PVT LTD	0	1407	1407
301	Susneham Private Limited	0	1406	1406
302	Ski Network Services Pvt. Ltd	0	1405	1405
303	MGI NETWORKS PVT LTD	0	1386	1386
304	SIS NETWORKS PVT LTD	0	1382	1382

S. No.	Name of Service Provider	Narrowband	Broadband	Total
305	Channel III Internet Pvt. Ltd.	0	1375	1375
306	Starlings Wireless Communications Pvt. Ltd.	0	1375	1375
307	Smart Wi5 Pvt. Ltd.	0	1372	1372
308	Elyzium Technologies Pvt. Ltd.	0	1370	1370
309	Sundaram Broadband Pvt Ltd	0	1358	1358
310	Vizag BroadbandCommunications Pvt. Ltd.	0	1358	1358
311	Shrisai Shavenk Technologies Pvt. Ltd.	0	1357	1357
312	MAULI SHIV CABLE INTERNET SERVICES PRIVATE LIMITED	0	1319	1319
313	R2 Net Solutions Pvt. Ltd.	0	1304	1304
314	DHL Broadband Net Pvt. Ltd.	0	1288	1288
315	Airwaves Internet Pvt. Ltd.	0	1255	1255
316	Aspirare Communications Pvt Ltd	0	1254	1254
317	City Broadband Network Pvt Ltd	0	1248	1248
318	MAKS COMMUNICATIONS PVT.LTD.	0	1248	1248
319	Rtel Internet services Pvt Ltd	0	1246	1246
320	VSJ INTERNET SERVICES PVT. LTD.	0	1242	1242
321	psnet solutions pvt ltd	0	1241	1241
322	Oxynet Telecommunications Pvt. Ltd	0	1227	1227
323	SprIOC Web Private Limited	0	1225	1225
324	UNITED STARS NETWORK PRIVATE LIMITED	0	1221	1221
325	Gigacast Network Pvt. Ltd.	0	1216	1216
326	iAIRONET COMMUNICATION PVT LTD	0	1213	1213
327	Mhase Internet Network (OPC) Pvt. Ltd.	0	1203	1203
328	Nikita Broadband Pvt. Ltd	0	1197	1197
329	Sharplink Wireless Solution Pvt. Ltd.	0	1194	1194
330	Grace Teleinfra Pvt Ltd	0	1190	1190
331	Packenet Solutions Pvt. Ltd.	0	1187	1187
332	Poem Techno Pvt. Ltd.	0	1186	1186
333	Navkar Netsol Pvt. Ltd..	0	1185	1185
334	FTTX Broadband P Ltd	0	1180	1180
335	REVOLUTION BROADBAND PVT LTD	0	1177	1177
336	Sigaram Networks Pvt. Ltd.	0	1177	1177
337	Cyber City ExtremeBroadband Pvt. Ltd.	0	1168	1168
338	Veloxr Telecom Pvt. Ltd.	0	1142	1142
339	Minnal DigitalNetwork (P) Ltd.	0	1138	1138
340	Sampath Venkateswara Communications Pvt. Ltd.	0	1133	1133
341	AMK SUNBEAM COMMUNICATION PRIVATE LIMITED	0	1132	1132
342	In Broadband Pvt.ltd	0	1121	1121

S. No.	Name of Service Provider	Narrowband	Broadband	Total
343	Green Tech Net Com Pvt. Ltd.	0	1118	1118
344	DNS INFONET Pvt Ltd	0	1113	1113
345	SHAILDHAR TELECOM SERVICES Pvt. LTD	0	1109	1109
346	ACN Fiber Pvt. Ltd.	0	1100	1100
347	ARCLINK NETWORK Pvt Ltd.	0	1095	1095
348	Hostaxis Network Pvt. Ltd.	0	1080	1080
349	Hardwork Cable & Internet services Pvt. Ltd.	0	1072	1072
350	GREEN ARROW TECHNOLOGY PRIVATE LIMITED	0	1063	1063
351	SkyComm Internet Service Private Limited	0	1062	1062
352	Seyon Tele Infra Private Limited	0	1060	1060
353	Unigro Infranet Online Pvt. Ltd.	1060	0	1060
354	EBENEZAR COMMUNICATIONS PVT. LTD.	0	1059	1059
355	Spider Broadband & Cable Pvt. Ltd.	0	1041	1041
356	PARAMOUNT INFINET PVT. LTD.	0	1030	1030
357	FASTNET COMMUNICATION PVT. LTD.	195	822	1017
358	Dreamnet Gigafiber Pvt Ltd	0	1016	1016
359	Global (India) Tele Infra Pvt. Ltd.	0	1016	1016
360	Netlinx Limited	0	1016	1016
361	SKY ONLINE TECHNOSYSTEM PVT LTD	0	1016	1016
362	Gulbarga Mega Speed Pvt Ltd	0	1014	1014
363	DIGHES INTERNET SERVICES OPC PRIVATE LIMITED	0	1013	1013
364	Ashley Internet Services Pvt. Ltd.	0	1006	1006
365	WNET TELECOM PRIVATE LIMITED	0	988	988
366	Asg Telecom Pvt. Ltd	0	985	985
367	Netfirst Communications Pvt. Ltd.	0	982	982
368	AHM Digital Network Pvt Ltd	0	970	970
369	VAYU ONLINE PRIVATE LIMITED	0	970	970
370	Sheng Li Telecom India Pvt. Ltd..	0	968	968
371	Stackbit Internet Services Pvt. Ltd.	0	961	961
372	Click 4 Net InternetServices Pvt. Ltd.	0	960	960
373	Space Hitz Network Pvt Ltd	0	960	960
374	DA Smartzone Pvt. Ltd.	0	948	948
375	M Netplus Communication Services Pvt Ltd	0	946	946
376	Anushree Digital Network Pvt Ltd	0	944	944
377	Surround Networks Pvt Ltd	0	943	943
378	CATLA IT&ENGG. CO. PVT LTD.	0	940	940
379	MAHRTH INTERNET SERVICES PRIVATELIMITED	936	0	936
380	NetMagic Solutions(P) Ltd.	0	927	927

S. No.	Name of Service Provider	Narrowband	Broadband	Total
381	RK Broadband Hifi Services Pvt Ltd	926	0	926
382	ALWAR ONLINE PVT LTD	0	910	910
383	Trueinet Networks Pvt.Ltd	0	909	909
384	Sarvada net Pvt. Ltd	0	908	908
385	Glo Internet Services Pvt Ltd	0	901	901
386	OM SHIV SAI INTERNET SERVICE (OPC) PVT. LTD	0	900	900
387	RADHIKA COMMUNICATION BROADBANDPRIVATE LIMITED	0	898	898
388	M/s NTT Communications India Network Services Private Ltd.	0	897	897
389	Shri Samarth Infobahn Pvt. Ltd.	893	0	893
390	ARJUN BROADBAND PRIVATE LIMITED	0	887	887
391	BTS TELECOM PVT LTD	0	887	887
392	Darer Internet Services Pvt. Ltd.	0	883	883
393	MIT ONLINE OPC Pvt Ltd	0	883	883
394	Treelink Broadband Pvt. Ltd.	0	876	876
395	Reliance Communications Limited	875	0	875
396	Ficus Telecom Pvt. Ltd.	0	873	873
397	IAXN TELECOM PVT LTD	0	870	870
398	Gleam Worldwide Services Pvt. Ltd.	0	868	868
399	Pegasuswave Private Limited	0	860	860
400	Sai Dwarawati Net Services Pvt. Ltd.	0	860	860
401	Skyber Broadband Service Pvt. Ltd	0	850	850
402	Briskcom Infoway Pvt. Ltd.	0	835	835
403	Mhatoba BroadbandPvt. Ltd	0	834	834
404	Balaji Infra Ray Pvt. Ltd.	0	833	833
405	NETSAT COMMUNICATIONS PVT. LTD.	0	833	833
406	Bluwaves Internet Services India Pvt. Ltd.	0	832	832
407	Clickian Network Pvt. Ltd.	0	832	832
408	Vinayaga Communications Pvt Ltd.	0	826	826
409	AU NetworksPvt. Ltd.	0	825	825
410	SRI KRISHNA INTERNET SERVICE PVT LTD	0	824	824
411	VICTORY DIGITAL NETWORK PRIVATE LIMITED	0	821	821
412	KESHAVA DIGITAL NETWORK PVT. LTD.	0	816	816
413	Al-Mairah Braodband Pvt. Ltd.	0	815	815
414	Rida Communication Pvt. Ltd.	0	814	814
415	Ultimate Internet Services Pvt. Ltd.	0	814	814
416	Rathnaa Spectra Pvt. Ltd.	0	813	813
417	Suniman Cable and Net Pvt Ltd	0	813	813

S. No.	Name of Service Provider	Narrowband	Broadband	Total
418	Sharva Telenet Private Limited	0	812	812
419	SRI NETT PRIVATE LIMITED	0	811	811
420	Wyris Network Pvt. Ltd.	0	811	811
421	Sivaan Infocom Pvt. Ltd	0	807	807
422	Nettab Broadband Pvt Ltd	0	797	797
423	SVD Digital Networks Pvt. Ltd.	0	793	793
424	Telosy Telecom Pvt. Ltd.	0	791	791
425	C. J. Online Pvt. Ltd.	0	780	780
426	Primenet Global Ltd.	0	775	775
427	Bapu Internet ServicesPvt. Ltd.	0	768	768
428	SAI DWARAWATI NET SERVICES PVT. LTD.	0	767	767
429	PADMESH BROADBAND PRIVATE LIMITED	0	764	764
430	Alegra Communication Pvt Ltd	0	763	763
431	Datawave IT solutions Pvt. Ltd.	0	763	763
432	Suraj Networks Pvt. Ltd.	0	763	763
433	Touchnet Broadband Services Pvt. Ltd.	0	757	757
434	SB Broadband Services Pvt. Ltd	0	756	756
435	Shineplus Networks Pvt. Ltd.	0	755	755
436	Nandini Broadband Pvt. Ltd.	0	747	747
437	Software Technology Parks of India	11	728	739
438	Reticule Infotech Pvt. Ltd.	0	737	737
439	SG Broadband Internet Pvt. Ltd.	0	736	736
440	GVREDDY TELECOMMUNICATIONS (OPC) PVT LTD	0	731	731
441	Shass Information and Quality Engineering Services Pvt. Ltd.	0	728	728
442	Kosmic Broadband Pvt Ltd	0	726	726
443	PJR NET SERVICE PRIVATE LIMITED	0	725	725
444	Spirenet Digital Communications Pvt. Ltd.	0	720	720
445	Corsica Solutions Private Limited	0	719	719
446	Mahabal Net Service Provider	0	710	710
447	Cloudnet Communications Pvt. Ltd.	0	706	706
448	F2Connect Private Limited	0	704	704
449	MAXNET DIGITAL PRIVATE LIMITED	0	701	701
450	OUTRAGEOUS NETSOLE PRIVATE LIMITED	700	0	700
451	Power Grid Corporation of India Ltd.	0	699	699
452	Vimal Telecom Pvt. Ltd	0	694	694
453	TOUCH NET INDIATELESERVICES PRIVATE LIMITED	0	692	692
454	HINDAVI TELECOM PRIVATE LIMITED	0	689	689
455	Gloiosa Infotel IT Services Pvt Ltd.	0	682	682

S. No.	Name of Service Provider	Narrowband	Broadband	Total
456	Uttam Infranet Pvt. Ltd..	0	676	676
457	Unitel Media Pvt. Ltd.	0	675	675
458	KGS NETWORKS PRIVATE LIMITED	0	674	674
459	Moradabad Internet Services Pvt. Ltd.	0	673	673
460	HPS DIGITAL BROADBAND PVT LTD	0	672	672
461	N4U broadband pvt.ltd	0	670	670
462	DURONTO NETWORKS (OPC) PRIVATE LIMITED	0	669	669
463	Craze IT Solutions Pvt Ltd	0	667	667
464	Rajesh Patel Net Services Pvt. Ltd.	0	666	666
465	Aeroway Networks Pvt. Ltd.	0	664	664
466	BASS NETWORKS PRIVATE LIMITED	0	661	661
467	Daksh Broadband Services Pvt. Ltd.	0	661	661
468	Spectram Telecom Pvt.Ltd	0	650	650
469	Nextra Communications Private Limited	0	635	635
470	ACME Diginet Corporation Pvt. Ltd.	0	634	634
471	Blue Net IT Solutions Pvt. Ltd.	0	631	631
472	Bass Jokernet Pvt. Ltd.	0	630	630
473	Bandwidth Infinity Pvt. Ltd	0	621	621
474	FASTCOM TELELINK PRTVATE LIMITED	0	617	617
475	LIMERICK TECHNOLOGIES PRIVATE LIMITED	0	614	614
476	Ometa Net Pvt. Ltd.	0	614	614
477	Airnetz Broadband Services Pvt. Ltd.	0	613	613
478	Datamax Technologies Pvt Ltd	0	611	611
479	HANSA BROADBAND SERVICES PRIVATE LIMITED	0	610	610
480	Airway Communication Services India Pvt. Ltd.	0	608	608
481	Windsor Internet Pvt. Ltd.	0	608	608
482	Breitband Technologies Private Limited	0	605	605
483	ALLIED IT INFRASTRUCTURE & SERVICES PRIVATE LIMITED	603	0	603
484	Development Logics Solutions Pvt. Ltd.	0	602	602
485	SERANS FIBERNET PRIVATE LIMITED	0	601	601
486	Easy Solutions InternetServices Pvt. Ltd.	0	600	600
487	Gowio Networks Pvt. Ltd	0	600	600
488	RSBS Online Services Pvt. Ltd.	0	595	595
489	INCUBIX UNIFIED SOLUTIONS PRIVATE LIMITED	0	590	590
490	RAAGAV COMMUNICATIONS PVT LTD	0	588	588
491	SARVA AIRWORLD NETWORK PVT LTD	0	581	581
492	R.P World Webnet Pvt.Ltd.	0	579	579

S. No.	Name of Service Provider	Narrowband	Broadband	Total
493	VPM NETWORKS PRIVATE LIMITED	577	0	577
494	Alphanet Broadband Pvt Ltd	0	571	571
495	DV INFOCOM PRIVATE LIMITED	0	569	569
496	Goodwill Smartlink Pvt. Ltd.	0	569	569
497	CNS Infotel Services Pvt. Ltd..	0	565	565
498	GAURESH CABLENET SERVICES PRIVATE LIMITED	0	560	560
499	Nanjil Internet Services Pvt. Ltd.	0	560	560
500	Smart Choice Wireless Network Pvt. Ltd.	0	559	559
501	Gazillio Technologies Pvt. Ltd.	0	557	557
502	Spark Telecommunication Private Limited	0	551	551
503	Kad-Syscon Networks Pvt. Ltd	0	550	550
504	Prayag Broadband Pvt. Ltd.	0	550	550
505	Shree Manoranjan Broadband Pvt. Ltd.	0	550	550
506	Digital2Virtual ISP Pvt. Ltd.	0	549	549
507	Panav Network and Communications Private Limited	0	548	548
508	NC BROADBAND SERVICES PRIVATE LIMITED	0	545	545
509	Fastnet Wire & Wireless Solutions Pvt. Ltd.	0	543	543
510	INFOLINK BROADBAND SERVICES PRIVATE LIMITED	0	540	540
511	Wi-Link Network Pvt. Ltd	0	536	536
512	Imperium Digital Network Pvt. Ltd.	0	535	535
513	Graceway Infrastructure and Services Pvt. Ltd	0	530	530
514	MSINFINITY ETHERNET SOLUTIONS PRIVATE LIMITED	527	0	527
515	NEONET COMMUNICATIONS PVT. LTD.	0	523	523
516	AKD NETWORK PRIVATE LIMITED	0	522	522
517	7 Sai Net Solutions Pvt. Ltd.	0	516	516
518	RNET GIGAFIBER Pvt. LTD	514	0	514
519	Manish Infocom Pvt. Ltd.	0	511	511
520	Acegen Broadband Pvt. Ltd.	0	509	509
521	Elitel Solutions Private Limited	0	504	504
522	RACSANN TECHNOLOGIES PVT. LTD.	0	500	500
523	DE-CIX Interwire Internet Services Pvt. Limited	0	499	499
524	Royal Connect Solutions Pvt. Ltd	0	499	499
525	PRATIK NETWORKING SOLUTIONS PRIVATE LIMITED	0	498	498
526	Qwistel Network Service Pvt Ltd	0	497	497
527	Unisas Netserve Pvt. Ltd.	0	497	497
528	Cityline Networks Pvt Ltd	0	496	496

S. No.	Name of Service Provider	Narrowband	Broadband	Total
529	KOSHI BROADBAND COMMUNICATIONS (OPC) PVT LTD	0	487	487
530	Mall and Mall Digiworld Pvt. Ltd.	0	487	487
531	YES BROADBANDPRIVATE LIMITED	0	485	485
532	World Fibernet Private Ltd	0	480	480
533	Dhanam Internet Services India Pvt. Ltd.	0	479	479
534	Texas Connect Private Limited	0	475	475
535	Wavetree Networks Pvt. Ltd.	0	472	472
536	Earthlink Broadband Pvt. Ltd	0	470	470
537	JMD INTERNET AND SERVICES PVT. LTD.	0	470	470
538	GIGANET DIGITAL NET SERVICES PRIVATE LIMITED	0	469	469
539	Clicknet Communication Pvt. Ltd.	0	467	467
540	SANSOM NETTECH PRIVATE LIMITED	0	462	462
541	Gaba Associates internet service provider pvt ltd.	0	461	461
542	SYNCFAC TO CONSULTING Pvt Ltd.	0	460	460
543	KSK Broadband Pvt. Ltd.	0	457	457
544	MEGSAC Enterprises Private Limited	0	457	457
545	OPTO Communications Private Limited	0	456	456
546	Quick Link Broadband and Services Pvt. Ltd.	0	455	455
547	KKM Broadband Internet Pvt. Ltd.	0	454	454
548	GTECH COMMUNICATION Pvt Ltd	0	451	451
549	Sistemas Information Technology Pvt. Ltd.	0	451	451
550	Aeronet online services private limited	0	443	443
551	Gorkha Infotech Private Limited	0	442	442
552	MREZHI INTERNET PRIVATE LIMITED	0	440	440
553	Daan Communications Private Limited	0	438	438
554	Unborn Networks Pvt. Ltd.	0	438	438
555	BPS COMMUNICATION AND SERVICES PRIVATE LIMITED	0	435	435
556	GNANA 11 COMMUNICATION PVT LTD	0	433	433
557	Wireline Solution India Pvt Ltd	0	432	432
558	Malang Solutions Pvt. Ltd.	0	431	431
559	Prompt Infracom Pvt. Ltd.	0	430	430
560	FoFo Networks Private Limited	0	425	425
561	Hughes Communications India Ltd.	407	18	425
562	Sparklink. Net Pvt. Ltd.	0	424	424
563	Shivraj Broadband Internet Pvt. Ltd.	0	422	422
564	SAI KUMAR INFONET PRIVATE LIMITED	0	421	421
565	DMDS SOLUTIONSPRIVATE LIMITED	0	420	420
566	Kataria Net Solutions Pvt. Ltd.	0	420	420

S. No.	Name of Service Provider	Narrowband	Broadband	Total
567	Sysnet Broadband Services Pvt. Ltd.	0	417	417
568	BSL Technologies Pvt. Ltd.	0	416	416
569	Suncity Broadband Pvt. Ltd.	0	415	415
570	TRACKNET SERVICES PVT LTD	0	413	413
571	COMPLIANCE BROADBAND PRIVATE LIMITED	0	410	410
572	Visputes Internet Pvt. Ltd.	0	410	410
573	MANA INTERNET SERVICES PRIVATE LIMITED	0	409	409
574	CLOUDPATH TELECOM PVT LTD	0	407	407
575	Gera Cable Internet Service Pvt. Ltd.	0	407	407
576	VDCN INFOTECH PRIVATE LIMITED	0	405	405
577	RUSH ME BROADBAND PRIVATE LIMITED	0	403	403
578	SIDDIQUI GLOBAL SERVICES PVT LTD	0	403	403
579	PULSE TELESYSTEMS PRIVATE LIMITED	0	401	401
580	Nandita Infocom Pvt. Ltd.	0	400	400
581	3J Global Services Pvt Ltd	0	398	398
582	HANUMAT NETWORKS PRIVATE LIMITED	0	397	397
583	Linkway Internet Pvt.Ltd.	0	397	397
584	CONSAM TELECOM PRIVATE LIMITED	0	393	393
585	TECHNOMEX INFOCOM SYSTEMS PVT LTD.	0	392	392
586	Simplex Broadband Pvt. Ltd.	0	391	391
587	AT&T Global Network Service India Private Limited	0	386	386
588	TAIBA SUPER INTERNET PRIVATE LIMITED	386	0	386
589	VORRUCKEN NETWORKS PRIVATE LIMITED	0	382	382
590	VIBELINK INFOTECH PRIVATE LIMITED	0	381	381
591	Skylink Fibernet Pvt. Ltd.	0	380	380
592	Cybernet Introtech Pvt. Ltd.	0	375	375
593	Digiscope Networks Private Limited	0	374	374
594	Alien DNS Pvt. Ltd.	0	373	373
595	Tanvi Broadband Pvt Ltd	0	373	373
596	WAY2AIR NET SOLUTION PVT. LTD.	0	373	373
597	Starnet Global Pvt. Ltd.	0	370	370
598	Terrafiber Networks Pvt. Ltd.	0	366	366
599	DMP Internet ServicesPvt. Ltd	0	365	365
600	Rocketwire Internet Solutions Pvt. Ltd.	0	365	365
601	WAY2NET IT SERVICES PVT LTD	365	0	365
602	Spiretel Technologies Pvt Ltd	0	363	363
603	Honey Broadband Services Pvt. Ltd.	0	354	354
604	Sense Connect IT Pvt. Ltd.	0	347	347

S. No.	Name of Service Provider	Narrowband	Broadband	Total
605	Citylink Broadband Services Pvt. Ltd.	0	342	342
606	NETZI BROADBAND SERVICES PVT LTD	342	0	342
607	Speedster Communications Pvt. Ltd	0	340	340
608	AiriconCommunication Pvt. Ltd	0	338	338
609	Hyber Networking Pvt. Ltd.	0	335	335
610	VERYS INFOTECH PRIVATE LIMITED	0	335	335
611	PRONET PRIVATE LIMITED	0	334	334
612	Sai Akshay Internet Services Pvt Ltd.	0	332	332
613	Voxterra Innovtions Pvt. Ltd.	0	332	332
614	Yuvaa Communications Private Limited	0	332	332
615	Twincity Communication Private Limited	0	328	328
616	R N Broadband Online Pvt. Ltd	0	325	325
617	SSICON SYSTEMS PRIVATE LIMITED	0	325	325
618	I-Infolink Networks Pvt. Ltd.	0	322	322
619	POLY INFORMATICS PVT.LTD.	0	320	320
620	LINK 4 DATA COMMUNICATION PVT LTD	0	318	318
621	Hipoint Connect Pvt. Ltd.	0	317	317
622	airtechzone services india private limited	0	314	314
623	Bluenet Broadband Services Pvt. Ltd.	0	310	310
624	AARADHY LIAISON SERVICES PRIVATE LIMITED	0	309	309
625	Elecon Information Technology Ltd.	0	307	307
626	Gramin Broadband Network Pvt. Ltd.	0	307	307
627	JD Net Enterprises Pvt. Ltd	0	306	306
628	METREXA BROADNET PRIVATE LIMITED	0	305	305
629	Srushti Broadband And Internet Services Pvt. Ltd.	0	304	304
630	TRIVNET NETWORKS PRIVATE LIMITED	0	304	304
631	Inter Net LY Pvt. Ltd.	0	302	302
632	Futurenet broadband and internet services pvt ltd	301	0	301
633	Apex Netcom India Pvt. Ltd..	0	300	300
634	SBS BROADBAND AND CABLE PVT. LTD.	0	296	296
635	LINKWAVE TECHNOLOGIES PVT LTD	0	295	295
636	Onepipe Telecom Pvt. Ltd	0	293	293
637	SPARKLIGHT INTERNET PRIVATE LIMITED	0	292	292
638	Skyhunt IT Park Pvt. Ltd.	0	290	290
639	VIVEK NETWORK PRIVATE LIMITED	0	287	287
640	Zoram Infonet Pvt. Ltd.	0	286	286
641	Verizon Communications India Pvt. Ltd.	0	285	285
642	Proline Datatech Services Pvt. Ltd.	0	281	281
643	Vizcon Digital Pvt. Ltd.	280	0	280

S. No.	Name of Service Provider	Narrowband	Broadband	Total
644	Barani Data Solutions Private Limited	0	279	279
645	FASTJET TELECOM PRIVATE LIMITED	0	279	279
646	Orange City InternetServices Pvt. Ltd.	0	276	276
647	AIRONET BROADBAND PRIVATE LIMITED	0	274	274
648	SMARTLINK BROADBAND SERVICES PVT LTD	0	272	272
649	STN Communication & Advertising Pvt. Ltd.	0	272	272
650	VELOCITY INTERNET INDIA PRIVATE LIMITED	0	272	272
651	Digital Telco Network India Pvt. Ltd.	0	271	271
652	FLITZEN BROADBAND Pvt Ltd.	0	271	271
653	J-Link Infotainment Pvt. Ltd.	0	270	270
654	HELM CONSULTANTS PVT LTD	0	269	269
655	GPALV BROADBAND PRIVATE LIMITED	0	267	267
656	ST Network Solutions Pvt. Ltd.	0	262	262
657	SIDDHBALI INFOTECH PVT LTD.	0	260	260
658	Singh Internet Services Pvt. Ltd.	0	260	260
659	Excel UG Pvt. Ltd	0	259	259
660	Feathers wireless network (opc) Pvt. Ltd.	0	255	255
661	Vardaan Netservices Pvt. Ltd.	0	255	255
662	Ruhban Telecommunication Private Limited	0	254	254
663	Ekowebtech IT Services Private Limited	0	253	253
664	NEXAEDGE INDIA Pvt Ltd.	0	252	252
665	CHANNEL 3 INFO MEDIA PRIVATE LIMITED	0	250	250
666	Linkio Fibernet Private Limited	0	250	250
667	Nivak Communications Pvt. Ltd	0	249	249
668	GIGA BEAM BROADBAND PVT.LTD.	0	247	247
669	King Netsol Pvt. Ltd.	26	221	247
670	Auspice Infratel Pvt. Ltd.	0	245	245
671	MRRIDSYS TECHNOLOGIES PVT LTD	0	245	245
672	SNT Broadband Pvt. Ltd.	0	245	245
673	BBRG Communication and Internet Pvt. Ltd.	0	243	243
674	Delix Net Solutions Pvt. Ltd	0	242	242
675	TEJNET GIGAFIBER PRIVATE LIMITED	0	240	240
676	Ecreado Network Solutions Pvt. Ltd.	0	239	239
677	AEROLINK BROADBAND PRIVATE LIMITED	0	238	238
678	Microsense Pvt Ltd	0	237	237
679	Netrexo Communications Private Limited	0	237	237
680	JTM Internet Pvt. Ltd	0	236	236
681	ABNSERVICES PVT LTD	0	235	235

S. No.	Name of Service Provider	Narrowband	Broadband	Total
682	KKD Broadband Pvt Ltd	0	235	235
683	MANAS INTERNET TECHNOLOGY PRIVATE LIMITED	0	230	230
684	Hipath Netcom Services Pvt. Ltd.	0	228	228
685	Magnuss Broadband Service Pvt. Ltd.	0	228	228
686	ZEES BROAD BAND PRIVATE LIMITED	0	228	228
687	VN ETHERNET INDIA PRIVATE LIMITED	227	0	227
688	EYE FASTNET SERVICE PRIVATE LIMITED	0	226	226
689	KALYAN BROADBAND PRIVATE LIMITED	0	224	224
690	Aayu Infonet Pvt. Ltd.	0	223	223
691	AIT Internet Services Pvt. Ltd.	0	222	222
692	Rmax Broadband Pvt. Ltd.	0	222	222
693	Neton Icom Pvt. Ltd.	0	221	221
694	Peer Networks Private Limited	0	221	221
695	Vrednus Network Pvt. Ltd.	0	221	221
696	ACEBROWSE PVT LTD	0	219	219
697	CIT SOLUTIONS PVT. LTD.	0	217	217
698	NAS INTERNET SERVICES PVT LTD	0	217	217
699	Costel Networks Pvt. Ltd.	0	212	212
700	iBus Network & Infrastructure (P) Ltd.	0	212	212
701	Anish Infoline Pvt. Ltd.	0	211	211
702	Enhancelink Coreport Pvt. Ltd	0	211	211
703	Tea Network Pvt Ltd	0	211	211
704	Airwire Infocom Pvt. Ltd.	0	209	209
705	RIHANT INFOTECH PVT. LTD	0	209	209
706	Saibaba Broadband Pvt. Ltd.	0	206	206
707	SRI RAM BROADBAND SERVICES PRIVATE LIMITED	0	206	206
708	BRAMBHANI TRADERS PVT.LTD.	0	205	205
709	JAYBHOLE CABLE VISION PRIVATE LIMITED	0	205	205
710	S.V.C CABLE NET PRIVATE LIMITED	0	205	205
711	VAIDIK NETSOL OPC PVT LTD	0	202	202
712	Dhadam Hospitality & Services Pvt. Ltd.	0	200	200
713	Ishani Broadband Pvt Ltd	0	200	200
714	LINKUNIVERSE COMMUNICATION PRIVATE LIMITED	0	200	200
715	Data Ingenious Global Ltd	0	195	195
716	YNET TELECOM SOLUTIONS PVT LTD	0	193	193
717	JBN Online Pvt. Ltd.	0	192	192
718	LINKED NET TECHNO SERVICES PRIVATE LIMITED	0	192	192

S. No.	Name of Service Provider	Narrowband	Broadband	Total
719	FRIDDEN INFOWAY PVT. LTD..	0	189	189
720	Wi5 Internet Services Pvt. Ltd.	0	189	189
721	Cheetah Networks Pvt. Ltd.	0	188	188
722	Frontier Infra Communications(P) Ltd.	0	187	187
723	M-TEL Networks (P) Ltd	0	186	186
724	Sath Technologies Pvt. Ltd.	0	183	183
725	AIRMAX INTERNET PVT LTD	0	181	181
726	arrow touch wireless internet private limited	0	181	181
727	O V NETWORKS PVT LTD	0	181	181
728	YNET BROADBAND SERVICES PRIVATE LIMITED	0	181	181
729	SPEEDGLOBAL TELECOM NETWORK PRIVATE LIMITED	0	180	180
730	VMO BROADBAND PVT LTD	0	180	180
731	White Stallion Networks Pvt. Ltd.	0	179	179
732	TRIGART INTERNET PVT. LTD.	0	177	177
733	ZR NET OPC PVT LTD	176	0	176
734	NEAM COMMUNICATIONS PRIVATE LIMITED	0	175	175
735	YOTTA NETWORK SERVICES PRIVATE LIMITED	0	174	174
736	PMG Networks Pvt. Ltd.	0	172	172
737	Rae Internet Service Provider Pvt Ltd	0	171	171
738	CINFOGEN PRIVATE LIMITED	0	170	170
739	Chaitali Communications (OPC) Pvt.Ltd	0	169	169
740	BT Global Communication India Pvt. Ltd.	0	168	168
741	Optisky Fibernet Pvt. Ltd.	0	168	168
742	Oistel Telecom Pvt. Ltd.	0	166	166
743	Fibernetisp Pvt. Ltd.	0	165	165
744	LEROY NETWORKS AND SERVICES PRIVATE LIMITED	0	165	165
745	PRSHREE Networks Private Limited	0	165	165
746	Wifi Inter-connect Pvt. Ltd.	0	162	162
747	KARRY BROADBAND PRIVATE LIMITED	0	161	161
748	Pune Teleinfra Pvt. Ltd..	0	161	161
749	smart plus multi services pvt ltd	0	160	160
750	Vaishnavai bhavi Internet Solutions Private Limited	0	160	160
751	Varsha Datacom Services Pvt. Ltd.	0	160	160
752	ARP INFONET PVT. LTD.	0	159	159
753	Viking Network Pvt. ltd	0	157	157
754	Noob Technologies Pvt.Ltd	0	152	152
755	NEXTGEN COMPUSOFT PVT LTD	0	151	151

S. No.	Name of Service Provider	Narrowband	Broadband	Total
756	Digitizer Access Network Private Limited	0	150	150
757	iGEN Networks Private Limited	0	150	150
758	Prateek Netconnect Pvt. Ltd	0	150	150
759	Sreedevi Communications Private Limited	0	150	150
760	Shreepad Communication Pvt. Ltd.	0	149	149
761	Netstra Communications Pvt.. Ltd.	0	147	147
762	Patil ISP Services (OPC) Pvt. Ltd.	70	76	146
763	VISHWAKARMA BROADBAND PRIVATE LIMITED	0	143	143
764	Ezeenet Internet Solutions Pvt. Ltd.	0	142	142
765	Promptnet Broadband Pvt. Ltd.	0	141	141
766	GauravCommunication Pvt. Ltd	0	140	140
767	Rita Infocom Pvt. Ltd.	0	140	140
768	Teleglobal Communiocations pvt Ltd	139	0	139
769	Achiever Communication and Services Pvt. Ltd.	0	137	137
770	Antariksh Broadband & Wireless Solution Pvt. Ltd.	0	137	137
771	Vision Hi-Speed Technology Pvt. Ltd.	0	137	137
772	OS IT SERVICES PRIVATE LIMITED	0	136	136
773	Pyramid Infocom Pvt. Ltd.	136	0	136
774	Airfiber IT Solutions Pvt. Ltd.	0	135	135
775	CLOUDINSTA24 SERVICES PRIVATE LIMITED	0	135	135
776	Mediatech Communication Pvt. Ltd.	0	135	135
777	Mahadev Telventures Pvt Ltd	0	134	134
778	Joshi Internet Services Pvt. Ltd.	0	132	132
779	Jasnet Networks Pvt. Ltd.	28	103	131
780	Galvin Broadband (OPC) Pvt. Ltd.	0	130	130
781	Netwire Internet Solutions Pvt. Ltd.	0	130	130
782	SAIDEEP BROADBAND PRIVATE LIMITED	0	130	130
783	Shree Siddhivinayak Cable And Internet Service Provider Private Limited.	0	129	129
784	Wingsnet Internet Pvt.Ltd	0	129	129
785	Excogitate Technologies Pvt. Ltd.	0	126	126
786	INYCB Network Pvt. Ltd.	0	126	126
787	MLC INTERNET PVT LTD	0	126	126
788	Sator Square Ventures Private Limited	0	126	126
789	Linkup Networks Pvt. Ltd.	0	125	125
790	A-Net Communication India Pvt.Ltd.	0	123	123
791	NT CYBRONET PRIVATE LIMITED	0	123	123
792	Fabnet Services Private Limited	0	120	120
793	KB Digital Network Pvt.Ltd.	0	120	120

S. No.	Name of Service Provider	Narrowband	Broadband	Total
794	SHEEN TELECOM CONSULTANTS PVT LTD	0	120	120
795	Hari Om Netsol Pvt. Ltd.	0	118	118
796	LEVOTEL BIGNET SOLUTIONS PRIVATE LIMITED	0	118	118
797	V NET NETWORKS PVT. LTD	0	118	118
798	ASVISH TECHNOLOGY PARTNER (OPC) PVT LTD	0	116	116
799	Sharktel Infocom Pvt. Ltd.	0	116	116
800	GOMTESH INFOTECH PVT. LTD.	0	113	113
801	Pronoc Technologies Pvt. Ltd.	0	113	113
802	Blenda Internet ServicesIndia Pvt. Ltd.	0	112	112
803	MICRONOVA TELE SYSTEMS PRIVATE LTD.	0	111	111
804	Telstra Telecommunications Private Limited	0	111	111
805	Japra Tele Link Pvt. Ltd.	0	110	110
806	NR IT Service Pvt. Ltd.	0	109	109
807	Durga Broadband Pvt. Ltd.	0	108	108
808	SHIVKRANTI INTERNET SERVICES PVT. LTD.	0	107	107
809	Jetato Skynet Services Pvt. Ltd.	0	105	105
810	Skynet Broadband Pvt. Ltd.	0	105	105
811	Thangam Communications Pvt.Ltd.	0	104	104
812	Netlife Network Pvt. Ltd..	0	103	103
813	Rohela Broadband Network Pvt. Ltd.	0	103	103
814	Khetan Cable Network (P) Ltd	0	102	102
815	ROYAL WIRELESS SERVICES PVT LTD	0	102	102
816	Invensys Networks Pvt.Ltd.	0	101	101
817	NSD Internet Private Limited	0	101	101
818	ITech Hive Pvt. Ltd	0	100	100
819	swami Samarth Broadband Service Pvt Ltd	0	100	100
820	AXOMNET BROADBAND Pvt. LTD.	0	99	99
821	FLIX BROADBAND SERVICES PRIVATE LIMITED	0	99	99
822	Broad Net India Pvt. Ltd.	0	97	97
823	SADBUDHHI SOLUTIONS PVT LTD	0	97	97
824	Denet Connect Services Pvt Ltd	0	96	96
825	Tamana Winet Pvt. Ltd.	0	95	95
826	Datawings Teleinfra Private Limited	0	94	94
827	Magica Networking Solutions Pvt. Ltd.	0	94	94
828	E I DOT Com Pvt. Ltd.	0	93	93
829	Satpar Infotech Pvt Ltd	0	93	93
830	TENTEQ BROADBAND PVT. LTD.	0	93	93

S. No.	Name of Service Provider	Narrowband	Broadband	Total
831	JAGUAR BYTE TECHNOLOGY PRIVATE LIMITED	0	92	92
832	PAWAN BROADBAND INDIA PVT LTD	0	91	91
833	Orange Business Services India Network Pvt. Ltd.	0	91	91
834	S A Internet Solution Pvt Ltd	0	90	90
835	INFINITY WIRELESS SERVICES PVT. LTD.	0	89	89
836	Suryasspeed Network Pvt Ltd	0	89	89
837	V NETCARE PRIVATE LIMITED	0	89	89
838	Gaxiom Networking Solutions Private Limited	0	88	88
839	Inic Communications Private Limited	0	88	88
840	NIVID TELECOM INDIA PRIVATE LIMITED	0	88	88
841	ASHOKA NETSOL PVT LTD	0	84	84
842	GIGHZ IT SOLUTIONS PRIVATE LIMITED	0	84	84
843	Aircables Internet Services Pvt. Ltd.	0	83	83
844	Bilal Internet Services Private Limited	0	81	81
845	NENCY CABLE PVT LTD	0	81	81
846	ANODIC TELENETWORK PVT LTD	0	80	80
847	Elyzium Globenet Pvt. Ltd.	0	80	80
848	NAS Broadband Pvt. Ltd	0	79	79
849	IT Spectrum Media Pvt Ltd	0	77	77
850	SPEEDNET INFORMEDIA PVT LTD	0	77	77
851	Ajay Cable & Broadband Service OPC Pvt. Ltd	0	75	75
852	Creative BroadbandServices Pvt. Ltd	0	75	75
853	GAYATRI TELECOM PVT LTD	0	75	75
854	Sanavi Infotech (OPC) Pvt. Ltd.	0	75	75
855	Kelnet Communication Services Pvt. Ltd	0	74	74
856	Shri Vinayagaa Internet Pvt Ltd	0	74	74
857	SMPL Networks Pvt. Ltd.	0	74	74
858	G-Max IT Services Pvt. Ltd.	0	73	73
859	Veer Point Pvt. Ltd.	0	73	73
860	NR Data Service Pvt Ltd.	0	72	72
861	Omkar Net Services Pvt. Ltd.	0	72	72
862	SHERAWAT INFOTECH PRIVATE LIMITED	0	72	72
863	MARUTI INTERACTIVE NETWORK PRIVATE LIMITED	0	71	71
864	Winnet Broadband Pvt. Ltd.	0	71	71
865	SPEEDNET OPTICAL NETWORK Pvt Ltd.	0	70	70
866	MABA SAFENET BROADBAND SERVICES PVT LTD	0	70	70
867	Jai Mata Di Telectronix Pvt. Ltd.	0	69	69

S. No.	Name of Service Provider	Narrowband	Broadband	Total
868	PATHCOM COMMUNICATIONS PRIVATE LIMITED	0	69	69
869	Sankrish Infocom Private Limited	0	68	68
870	Amity Hua Electronics Pvt. Ltd.	0	67	67
871	Aspire Broadband Pvt. Ltd.	0	66	66
872	R3ESOLUTION Pvt Ltd.	0	66	66
873	SHILOM NETWORK SERVICES PRIVATE LIMITED	0	66	66
874	DNet E Solutions Pvt. Ltd.	0	65	65
875	Ekdant Communication Pvt. Ltd.	0	65	65
876	SPACELINK INTERNET (OPC) PRIVATE LIMITED	0	65	65
877	JETONE FIBER PRIVATE LIMITED	0	64	64
878	Mark Networks SolutionsIndia Pvt. Ltd.	0	64	64
879	WINUX COMMUNICATIONS PVT LTD	0	64	64
880	KISHAN WEALTH MANAGEMENT PRIVATE LIMITED	0	62	62
881	U-FIBER BROADBAND PRIVATE LIMITED	0	61	61
882	Broadstar Net India Pvt. Ltd.	0	60	60
883	Kim Broadband Services Pvt. Ltd.	0	60	60
884	MaxwebMultimedia Private Limited	0	60	60
885	Pier Communication Pvt. Ltd	0	60	60
886	Fastx Broadband Pvt. Ltd.	0	59	59
887	FIBERMAX PRIVATE LIMITED	0	59	59
888	GURU NETCOM PVT. LTD.	0	59	59
889	Samruddhi Communication Pvt. Ltd.	0	59	59
890	SGCI Pvt. Ltd.	0	58	58
891	KORD BROADBAND SERVICES PRIVATE LIMITED	0	57	57
892	ADS Royalnet Communication Private Limited	0	56	56
893	Infiber Broadnet Pvt. Ltd.	0	56	56
894	Malachandra Broadband Services Private Limited	0	56	56
895	Speedobits Internet Private Limited	0	56	56
896	ST BROADBAND CABLE SERVICE PRIVATE LIMITED	0	56	56
897	VR INTERNET PRIVATE LIMITED	0	55	55
898	Trivoz Digital Networks Pvt. Ltd.	0	55	55
899	Aamak Network Pvt. Ltd.	0	54	54
900	Bloglytics Internet Pvt.Ltd	0	54	54
901	FutureNet Telecom Private Limited	54	0	54
902	Jet Netcom Broadband Pvt. Ltd.	0	54	54

S. No.	Name of Service Provider	Narrowband	Broadband	Total
903	BEAURACK VELOCITY INFOCOM PVT LTD	0	53	53
904	VIVA Communications Pvt Ltd	0	53	53
905	Hansin IT Services Private Limited	0	52	52
906	VIDARBHA WI-FI AND NETWORK SERVICES PVT LTD.	0	52	52
907	Gigalo Communication Pvt Ltd	8	43	51
908	Tiruppur Broadwave Pvt. Ltd.	0	51	51
909	BRIZZ BROADBAND PRIVATE LIMITED	0	50	50
910	Playernet Technologies Private Limited	0	50	50
911	S.G.I.C SERVICES PRIVATE LIMITED	0	50	50
912	Highnet Broadband & Technologies Pvt. Ltd.	0	49	49
913	SAMAIRA INFOTECH PVT. LTD.	0	49	49
914	ACHARE BROADBAND (OPC) PRIVATE LIMITED	0	48	48
915	Nextra Teleservices Pvt. Ltd.	0	48	48
916	A M Broadband Pvt.Ltd	0	47	47
917	Fibernet Solutions (OPC) Pvt. Ltd.	0	47	47
918	Gponspace Internet India Pvt. Ltd.	0	47	47
919	ZITA TELECOM PRIVATE LIMITED	0	47	47
920	Quantasoul Airoligix Pvt. Ltd.	0	46	46
921	HAPPY BYTES BROADBAND (OPC) PRIVATE LIMITED	0	45	45
922	Froze Communications Pvt. Ltd.	0	41	41
923	IndrayaniCommunication Pvt. Ltd	0	41	41
924	Nuozen Telecom Pvt. Ltd.	0	41	41
925	Ziptel IT Solutions Pvt. Ltd.	26	15	41
926	Jmohit Cable Vision Pvt. Ltd.	0	40	40
927	Edge Telecommunications Pvt. Ltd.	36	0	36
928	R.P. World Telecom Pvt. Ltd.	0	36	36
929	FASTHOOK NETWORKS PVT LTD	0	35	35
930	STABLE NETWORK PVT LTD	0	35	35
931	Tarantula WebNetworks Pvt. Ltd.	0	34	34
932	AL HUTAIB NETSOL PRIVATE LIMITED	0	32	32
933	CABLECOM NETWORK PRIVATE LIMITED	0	32	32
934	Doonbroadband Pvt. Ltd.	0	32	32
935	BRIGHTNET INTERNET SOLUTIONS (OPC) PRIVATE LIMITED	0	31	31
936	Bajpai Telecom Pvt. Ltd.	0	30	30
937	Cfiber Communications Pvt. Ltd	0	30	30
938	Streamax Broadband Services Pvt. Ltd	0	29	29
939	Skynet Zone Wifi Services (P) Ltd.	0	28	28

S. No.	Name of Service Provider	Narrowband	Broadband	Total
940	Aerocast Networks Pvt Ltd.	0	27	27
941	INTRO TELECOM Pvt Ltd.	0	27	27
942	SAMVAD TELECOM	20	7	27
943	WE INTERNET LIMITED	0	27	27
944	DENSIS ONLINE PVT LTD	0	26	26
945	Praveen Telecom Pvt. Ltd.	0	26	26
946	Spacetrade Internet Pvt Ltd	0	26	26
947	DRONAGIRI INFOTECH PVT LTD	0	25	25
948	Sudhana Telecommunication Pvt Ltd.	0	25	25
949	TREELINK NETWORK PVT LTD	0	25	25
950	VIDHI NETSOL PRIVATE LIMITED	0	25	25
951	AVD INFOCOM PRIVATE LIMITED	0	24	24
952	Mesh Infranet Pvt. Ltd.	0	24	24
953	TLN COMMUNICATION PRIVATE LIMITED	0	24	24
954	FURIOUSPEED PRIVATE LIMITED	0	23	23
955	Pacific Internet India Pvt. Ltd.	0	23	23
956	Saagars Channel Pvt. Ltd.	0	23	23
957	LIVE FIBERNET SERVICE PRIVATE LIMITED	0	22	22
958	nwt internet services private limited	0	22	22
959	Smartware Technologies Pvt. Ltd.	0	22	22
960	Pintwire Infomatics Pvt. Ltd.	0	21	21
961	SmchondheCommunication Pvt. Ltd	0	21	21
962	FUTURE INTERNET PRIVATE LIMITED	0	20	20
963	Heramb T-10 Network Pvt. Ltd..	0	20	20
964	RAMYAA INTERNET SERVICES PRIVATE LIMITED	0	20	20
965	Stromnet Broadband ServicesPrivate Limited	0	20	20
966	Ultrawave Internet Access Pvt. Ltd.	4	16	20
967	DYSINT NETWORKS PRIVATE LIMITED	0	19	19
968	TELESECURE COMMUNICATIONS PRIVATE LIMITED	0	19	19
969	Sun Broadband and Data Services PVT. LTD.	0	18	18
970	ERNET India	0	17	17
971	Unified Voice Communication Pvt. Ltd.	0	17	17
972	Hienet Internet Services Pvt. Ltd.	0	16	16
973	RAJNET CARE PRIVATE LIMITED	0	16	16
974	GJ2 INTERNET PRIVATE LIMITED	0	15	15
975	Microtel Internet Network Pvt. Ltd.	0	15	15
976	Skytrack Broadband Pvt. Ltd	0	15	15
977	Haze Internet Services Private Limited	0	14	14

S. No.	Name of Service Provider	Narrowband	Broadband	Total
978	HELLO NETWORK SERVICE Pvt Ltd.	0	14	14
979	Marutham Networks Pvt. Ltd.	0	14	14
980	SAI LEELA'S INTERNET SERVICE PVT. LTD.	0	14	14
981	SPEEDPULSE DIGITAL NETWORK PRIVATE LIMITED	0	14	14
982	ANGROW NETCOMM PRIVATE LIMITED	0	13	13
983	Orbitedge Broadband Private Limited	0	12	12
984	GIGANETWORK INFO PRIVATE LIMITED	0	11	11
985	10G TELECOM PVT LTD	0	10	10
986	Hybrid Hash Pvt. Ltd.	0	10	10
987	Mastek Infosystems OPC Pvt. Ltd.	0	10	10
988	Upnet Communications Pvt. Ltd.	0	10	10
989	VISHVA INFRATEL PRIVATE LIMITED	0	10	10
990	Ceralink Communication Pvt Ltd	9	0	9
991	CL INTERNET SERVICE PRIVATE LIMITED	0	9	9
992	Fibmesh IN Limited	0	9	9
993	Mpr Infonet Systems Private Limited	0	9	9
994	Nelco Ltd.	6	3	9
995	WORLD PHONE INTERNET SERVICES PVT LTD	0	9	9
996	Tatanet Services Ltd	0	8	8
997	Uttradoon Networks Pvt. Ltd.	0	8	8
998	A TO Z INFOLINK PVT. LTD.	0	7	7
999	CIFY IT Services Pvt. Ltd.	0	7	7
1000	DAVA TELECOM PRIVATE LIMITED	0	7	7
1001	Riyaz Internet Services Pvt. Ltd.	0	7	7
1002	Clear Beam Communication Pvt. Ltd.	0	6	6
1003	Kartik Network Pvt. Ltd.	0	6	6
1004	Aristo Telenet Pvt Ltd	0	5	5
1005	Blueline ISP Pvt. Ltd	0	5	5
1006	BRAVISHMAH INFOTECH PRIVATE LIMITED	0	5	5
1007	OM INTERNET BROADBAND SERVICE Pvt. LTD	0	5	5
1008	ZAPTIC PRIVATE LIMITED	0	5	5
1009	AMBITION NETWORK SOLUTIONS INDIA PRIVATE LIMITED	0	4	4
1010	CLOUD8IN TECHNOLOGIES PRIVATE LIMITED	0	4	4
1011	Critel Technologies Pvt. Ltd.	0	4	4
1012	ESP Fibernet Pvt. Ltd.	0	4	4
1013	METICULOUS NETWORKS PRIVATE LIMITED	0	4	4

S. No.	Name of Service Provider	Narrowband	Broadband	Total
1014	UBERCORE DATA LABS PVT LTD	0	4	4
1015	AGILE NETLINK PRIVATE LIMITED	0	3	3
1016	Clouddcast Digital Ltd.	0	3	3
1017	ESTO MEDIA PRIVATE LIMITED	0	3	3
1018	GBLINK NETWORKSOLUTIONS PRIVATE LIMITED	0	3	3
1019	GECA BROADBAND SOLUTION PRIVATE LIMITED	0	2	2
1020	GOLCON TECHNOLOGIES PRIVATE LIMITED	0	2	2
1021	Isyan Communication Pvt. Ltd	0	2	2
1022	My Digital NetworkLtd.	0	2	2
1023	Sabse Internet Service Provider Pvt. Ltd.	0	2	2
1024	Sai Technix Pvt Ltd	0	2	2
1025	Winet Infratel Pvt. Ltd.	0	2	2
1026	FLYFAST CONNECTIONS Pvt. LTD	0	1	1
1027	MINDAGE BROADCASTING Pvt. LTD	0	1	1
1028	Red Fiber Telecom Pvt Ltd	0	1	1
1029	Sahiba Silk Mills Pvt. Ltd.	0	1	1
1030	SHYAM DATA & VOICE SERVICES PVT LTD	0	1	1
1031	TEJNET BROADBAND Pvt Ltd.	0	1	1
	Total	34685601	846569152	881254753
	Total (in million)	34.686	846.569	881.255

*The information is compiled based on the reports being received from the Internet Service Providers

**Annexure 1.6: Telecom Service Area-wise Public Wi-Fi Hotspots, as on
31st March, 2023**

S.No.	LSA	Sum of Number of Public Wi- Fi Hotspots	Sum of Number of Access Points	Sum of Number of unique Wi-Fi Users	Sum of Aggregate Data Consumed (GB)
1	Andhra Pradesh	10115	21822	2384217	403910
2	Assam	786	1718	476870	75761
3	Bihar	34017	38748	4017958	595469
4	Delhi	716	11549	841880	59447
5	Gujarat	7276	16052	1558910	1444789
6	Haryana	6595	9935	697540	50822
7	Himachal Pradesh	1119	2272	26339	15258
8	Jammu & Kashmir	1517	3229	174334	22952
9	Karnataka	8575	26756	1006470	178110
10	Kerala	3962	8220	1480557	235528
11	Kolkata	494	7603	1997951	84040
12	Madhya Pradesh	19345	37444	2396628	247487
13	Maharashtra	16852	25824	4002103	240898
14	Mumbai	944	14067	9168680	262989
15	North East	1464	2945	73153	69740
16	Odisha	3611	5721	668942	107732
17	Punjab	9712	12496	593676	83618
18	Rajasthan	3004	8223	1546680	152109
19	Tamil Nadu (including Chennai Service Area)	2208	7576	1245075	160000
20	Uttar Pradesh East	19522	77681	2513316	259214
21	Uttar Pradesh West	10818	41856	1358205	172388
22	West Bengal	3368	5160	2654339	420534
	Total	166020	386897	40883822	5342792

* The information is compiled based on the reports being received from the Internet Service Providers

Annexure 1.7: List of Service Providers which reported IP Telephony Minutes for Q.E. Mar-23

S. No.	Name of Service Providers reported IP Telephony Minutes as on 31st March 2023
1	Alliance Broadband Services Pvt. Ltd.
2	Novanet Ltd.
3	Viva Communications Pvt. Ltd.
4	Weco Infotech Pvt. Ltd.
5	Shyam Spectra Private Limited.
6	delDSL Internet Pvt Ltd
7	Pulse Telesystems Pvt. Ltd.
8	Sify Technologies Ltd.
9	Tata Communications Limited
10	Trikon Electronics Pvt. Ltd.
11	World Phone Internet Services Pvt. Ltd.
12	Skyfall Voice Communications Pvt. Ltd.
13	Warmconnect Internet Services Pvt. Ltd.

Annexure 1.8: Service Area wise PMRTS subscriber Base

Annexure 1.7: Service Area wise PMRTS subscriber Base					
S.No.	DOT Licensed Service	Area Served	Service Provider	Subscriber Base	
				31.12.2022	31.03.2023
1	Andhra Pradesh	Hyderabad	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	2,841	2,986
			QuickCall	999	1,025
		Visakhapatnam	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	3,986	4,030
			Total	7,826	8,041
2	Delhi	Delhi	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	7,285	7,585
			Procall Ltd.	3,692	3,756
		Total	10,977	11,341	
3	Gujarat	Ahmedabad	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,075	1,121
		Amrela	Inative Networks Pvt. Ltd.	-	-
		Bharuch	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,454	1,456
			Inative Networks Pvt. Ltd.	-	-
		Dahej	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,443	1,460
		Jamnagar	Inative Networks Pvt. Ltd.	360	360
		Kutch	Inative Networks Pvt. Ltd.	205	205
			Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,774	1,898
		Surat	Inative Networks Pvt. Ltd.	900	895
			Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,809	1,775
Vadodara	Inative Networks Pvt. Ltd.	360	360		
	Total	9,380	9,530		
4	Karnataka	Bangalore	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	7,457	7,648
			QuickCall	471	480
		Total	7,928	8,128	
5	Kerala	Ernakulam	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,201	1,159
		Kerala	Wiwanet Solutions Pvt. Ltd	1,048	1,053
		Total	2,249	2,212	
6	Kolkata	Kolkata	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,503	1,565
7	Madhya Pradesh	Indore	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,807	1,912
8	Maharashtra	Khandala	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	495	493
			Pune	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,658
		Pune	Smartalk Pvt Ltd.	691	678
			Total	2,844	2,794
9	Mumbai	Mumbai	Airtalk Solutions & Services Pvt. Ltd.	630	785
			Arya Omnitalk Radio Trunking Services Pvt.Ltd.	9,488	10,039
			Bhilwara Telenet Services Pvt.Ltd.	889	883
			Smartalk Pvt Ltd.	810	1,013
		Total	11,817	12,720	
10	Rajasthan	Jaipur	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	817	841
			Procall Ltd.	466	490
		Total	1,283	1,331	
11	Tamil Nadu	Chennai	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	7,627	7,915
			QuickCall	366	331
		Total	7,993	8,246	
Grand Total				65,607	67,820

**Annexure 2.1: Wireless Revenue Service - Service Area wise Statistics for
QE Mar, 2023**

Key parameters for service areas of category-A

Service Area	% of pre-paid in total subscribers	ARPU (Rs. per month)	Total usage (from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
AP	93.13%	173	11	458	443	901
Gujarat	93.32%	151	14	389	379	769
Karnataka	87.97%	163	14	457	450	907
MH	93.71%	157	13	402	396	798
TN (incl. Chennai)	91.03%	167	10	415	413	828

Key parameters for service areas of category-B

Service Area	% of pre-paid in total Subscribers	ARPU (Rs. per month)	Total usage (from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Haryana	91.05%	122	8	411	411	822
Kerala	96.17%	158	6	321	324	645
MP	94.94%	135	13	459	461	920
Punjab	93.54%	145	8	405	399	804
Rajasthan	95.11%	145	12	462	464	926
UP(E)	96.34%	111	11	589	606	1195
UP(W)	96.32%	127	10	473	481	954
WB	97.65%	132	13	512	520	1032

Key parameters for service areas of category-C

Service Area	% of pre-paid in total subscribers	ARPU (Rs. per month)	Total usage (from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Assam	97.13%	146	24	536	550	1086
Bihar	95.41%	122	12	647	681	1328
HP	97.31%	147	9	438	437	875
J&K	41.91%	165	24	592	567	1159
NE	97.12%	170	24	488	482	971
Odisha	96.04%	139	16	565	579	1143

Key parameters for service areas of category-Metro

Service Area	% of pre-paid in total subscribers	ARPU (Rs. per month)	Total usage (from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Kolkata	92.78%	102	10	409	400	809
Delhi	67.05%	132	8	461	424	885
Mumbai	77.78%	135	9	418	375	793

Annexure 4.1: Performance of QoS Parameters for Cellular Mobile Service

LSA Name	TSP Name	Network Related Parameters											Customer Service Quality Parameters								
		Network Availability		Connection Establishment (Accessibility)			Connection Maintenance (Retainability)						Metering and Billing				Response time to the customer for assistance		Termination / closure of service		
		BS Accumulated down-time (not available for service) (%)	Worst affected BSs due to down-time (%)	Call Set-up Success Rate and Session Establishment Success Rate for Circuit Switched Voice or VoLTE as applicable	SDCCH/Paging Channel Congestion/ RRC Congestion (%)	TCH, RAB and E-RAB Congestion (%)	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	Down Link (DL) Packet Drop Rate or DL-PDR	Up Link (UL) Packet Drop Rate or UL-PDR	Point of Interconnection (POI) Congestion (on individual POI) - No. of POIs not meeting the benchmark	Metering and billing credibility - post paid	Metering and billing credibility - pre paid	Resolution of billing/charging complaints within 4 weeks	Resolution of billing/charging complaints within 6 weeks	Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution of complaints	Accessibility of call center/ customer care	Percentage of calls answered by the operators (voice to voice) within ninety seconds	Termination / Closure of service	Time taken for refund of deposits after closures
		<=2%	<=2%	=>95%	<=1%	<=2%	<=2%	<=3%	0.95	<=2%	<=2%	<=0.5	<=0.1%	<=0.1%	98% within 4 weeks	100% within 6 weeks	100% within 1 week of resolution of complaint	=>95%	=>95%	<= 7 days	100% within 60 days
Andhra Pradesh	AIRTEL	0.11%	0.53%	99.47%	0.34%	0.33%	0.70%	0.91%	96.59%	0.16%	0.14%	0	0.03%	0.00%	100.00%	100.00%	100.00%	100.00%	91.87%	100.00%	100.00%
	BSNL	1.28%	1.83%	98.44%	0.62%	0.60%	1.56%	1.70%	98.84%	0.09%	0.22%	0	0.02%	0.00%	100.00%	100.00%	100.00%	96.05%	92.29%	100.00%	100.00%
	RJIL	0.05%	0.07%	99.73%	0.04%	0.00%	0.17%	0.28%	99.96%	0.00%	0.07%	0	0.00%	0.00%	100.00%	100.00%	100.00%	98.61%	98.60%	100.00%	100.00%
	VIL	0.05%	0.27%	99.22%	0.30%	0.22%	1.59%	2.30%	97.88%	0.01%	0.14%	0	0.00%	0.00%	99.14%	100.00%	100.00%	99.06%	99.35%	100.00%	100.00%
Assam	AIRTEL	0.20%	0.99%	98.95%	0.24%	0.38%	1.83%	2.59%	96.73%	0.17%	0.15%	0	0.03%	0.00%	100.00%	100.00%	100.00%	90.60%	100.00%	100.00%	100.00%
	BSNL	1.76%	0.50%	98.48%	0.79%	1.74%	1.86%	2.31%	98.41%	1.62%	1.77%	0	0.00%	0.00%	100.00%	100.00%	100.00%	96.96%	98.00%	100.00%	100.00%
	RJIL	0.18%	0.52%	99.73%	0.02%	0.00%	0.35%	0.45%	99.96%	0.00%	0.07%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.01%	99.16%	100.00%	100.00%
	VIL	0.48%	1.81%	99.50%	0.13%	0.49%	1.95%	2.76%	98.12%	0.09%	0.10%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.18%	99.95%	100.00%	100.00%
Bihar	AIRTEL	0.08%	0.06%	98.16%	0.37%	0.44%	1.34%	1.57%	98.34%	0.15%	0.35%	0	0.03%	0.00%	100.00%	100.00%	100.00%	100.00%	87.52%	100.00%	100.00%
	BSNL	1.94%	0.64%	95.84%	0.32%	0.31%	1.87%	2.38%	98.40%	0.00%	0.00%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	RJIL	0.06%	0.08%	99.61%	0.01%	0.00%	0.25%	0.36%	99.96%	0.00%	0.08%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.10%	99.09%	100.00%	100.00%
	VIL	0.02%	1.02%	99.06%	0.10%	0.10%	1.28%	1.85%	99.22%	0.00%	0.03%	0	0.00%	0.00%	100.00%	100.00%	100.00%	96.10%	99.85%	100.00%	100.00%
Delhi	AIRTEL	0.18%	1.62%	99.34%	0.14%	0.20%	1.82%	2.33%	95.17%	0.42%	0.21%	0	0.01%	0.00%	100.00%	100.00%	100.00%	92.55%	100.00%	100.00%	100.00%
	MTNL	0.06%	0.22%	97.51%	0.14%	0.87%	1.28%	1.46%	98.35%	NA	NA	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.01%	99.85%	100.00%	100.00%
	RJIL	0.08%	0.24%	99.70%	0.00%	0.00%	0.17%	0.33%	99.95%	0.00%	0.09%	0	0.00%	0.00%	100.00%	100.00%	100.00%	98.16%	99.23%	100.00%	100.00%
	VIL	0.05%	0.14%	99.83%	0.07%	0.16%	1.35%	1.90%	99.59%	0.15%	0.23%	0	0.00%	0.01%	100.00%	100.00%	100.00%	98.89%	100.00%	100.00%	100.00%
Gujarat	AIRTEL	0.08%	0.43%	99.36%	0.22%	0.30%	1.55%	1.92%	96.17%	0.09%	0.18%	0	0.02%	0.00%	100.00%	100.00%	100.00%	99.66%	92.26%	100.00%	100.00%
	BSNL	1.22%	0.40%	98.01%	0.10%	0.61%	1.22%	2.08%	98.24%	0.09%	0.18%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.66%	96.29%	100.00%	100.00%
	RJIL	0.08%	0.15%	99.74%	0.01%	0.00%	0.13%	0.24%	99.97%	0.00%	0.07%	0	0.00%	0.00%	100.00%	100.00%	100.00%	98.77%	98.69%	100.00%	100.00%
	VIL	0.04%	0.15%	99.60%	0.08%	0.41%	1.44%	1.92%	96.63%	0.14%	0.17%	0	0.01%	0.00%	100.00%	100.00%	100.00%	97.86%	99.93%	100.00%	100.00%
Haryana	AIRTEL	0.20%	1.56%	99.60%	0.10%	0.15%	1.08%	1.39%	95.53%	0.11%	0.22%	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	91.68%	100.00%	100.00%
	BSNL	0.92%	0.16%	98.83%	0.21%	0.66%	1.58%	1.76%	96.97%	0.21%	0.57%	0	0.01%	0.00%	100.00%	100.00%	100.00%	97.04%	95.15%	100.00%	100.00%
	RJIL	0.07%	0.18%	99.72%	0.00%	0.00%	0.23%	0.44%	99.97%	0.00%	0.06%	0	0.00%	0.00%	100.00%	100.00%	100.00%	98.56%	98.78%	100.00%	100.00%
	VIL	0.10%	0.38%	99.41%	0.24%	0.58%	1.56%	2.17%	98.19%	0.13%	0.08%	0	0.00%	0.00%	100.00%	100.00%	100.00%	98.73%	99.97%	100.00%	100.00%
Himachal Pradesh	AIRTEL	0.10%	0.34%	99.78%	0.12%	0.11%	1.23%	1.85%	96.14%	0.15%	0.12%	0	0.03%	0.00%	100.00%	100.00%	100.00%	100.00%	93.22%	100.00%	100.00%
	BSNL	1.94%	0.42%	97.83%	0.63%	1.26%	1.91%	2.08%	96.26%	0.00%	0.00%	0	0.01%	0.00%	100.00%	100.00%	100.00%	99.65%	97.92%	100.00%	100.00%
	RJIL	0.15%	0.61%	99.65%	0.00%	0.00%	0.13%	0.29%	99.97%	0.00%	0.05%	0	0.00%	0.00%	100.00%	100.00%	100.00%	98.64%	99.19%	100.00%	100.00%
	VIL	0.06%	0.04%	99.20%	0.37%	0.39%	1.82%	2.44%	95.72%	0.15%	0.21%	0	0.01%	0.00%	100.00%	100.00%	100.00%	99.86%	99.96%	100.00%	100.00%
Jammu & Kashmir	AIRTEL	0.27%	1.64%	99.45%	0.07%	0.07%	0.38%	0.90%	95.94%	0.19%	0.14%	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	88.60%	100.00%	100.00%
	BSNL	1.98%	0.62%	98.34%	0.85%	0.90%	1.97%	2.78%	96.48%	0.02%	0.11%	0	0.00%	0.00%	100.00%	100.00%	100.00%	96.00%	99.98%	100.00%	100.00%
	RJIL	0.13%	0.58%	99.74%	0.00%	0.00%	0.09%	0.32%	99.97%	0.00%	0.05%	0	0.00%	0.00%	100.00%	100.00%	100.00%	98.68%	99.59%	100.00%	100.00%
	VIL	0.26%	0.55%	99.17%	0.12%	0.54%	1.69%	2.13%	97.98%	0.19%	0.17%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.84%	99.99%	100.00%	100.00%
Karnataka	AIRTEL	0.17%	0.76%	99.67%	0.14%	0.21%	0.83%	1.39%	95.07%	0.15%	0.14%	0	0.02%	0.00%	100.00%	100.00%	100.00%	100.00%	93.61%	100.00%	100.00%
	BSNL	1.35%	0.51%	98.55%	0.45%	0.33%	1.49%	1.61%	97.98%	0.66%	0.74%	0	0.00%	0.00%	99.76%	100.00%	100.00%	95.27%	92.34%	100.00%	100.00%
	RJIL	0.04%	0.04%	99.73%	0.06%	0.00%	0.14%	0.29%	99.97%	0.00%	0.06%	0	0.00%	0.00%	100.00%	100.00%	100.00%	98.89%	98.38%	100.00%	100.00%
	VIL	0.09%	0.46%	99.62%	0.49%	0.09%	1.59%	1.96%	98.87%	0.10%	0.14%	0	0.01%	0.00%	100.00%	100.00%	100.00%	98.02%	99.94%	100.00%	100.00%
Kerala	AIRTEL	0.10%	0.24%	99.69%	0.47%	0.60%	1.37%	2.13%	96.63%	0.14%	0.47%	0	0.03%	0.00%	100.00%	100.00%	100.00%	100.00%	78.43%	100.00%	100.00%
	BSNL	0.21%	0.19%	98.76%	0.68%	0.56%	1.90%	2.30%	98.73%	0.06%	0.18%	0	0.00%	0.01%	100.00%	100.00%	100.00%	97.10%	95.49%	100.00%	100.00%
	RJIL	0.02%	0.02%	99.75%	0.15%	0.00%	0.13%	0.56%	99.97%	0.00%	0.06%	0	0.00%	0.00%	100.00%	100.00%	100.00%	98.76%	98.08%	100.00%	100.00%
	VIL	0.04%	0.04%	99.71%	0.28%	0.29%	0.51%	0.93%	99.06%	0.06%	0.13%	0	0.02%	0.00%	100.00%	100.00%	100.00%	91.04%	99.57%	100.00%	100.00%

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

LSA Name	TSP Name	Faults incidences (No. of faults/100 Subs/month)	Fault Repair				Mean Time to Repair (MTTR)	POI Point of interconnection (POI) Congestion (No. of Poles not meeting benchmark)	Metering and Billing					Response time to the customer for assistance		Termination / closure of service	
			faults repaired by next working day - Urban	faults repaired within 5 days - Urban	faults repaired by next working day - Rural and hilly areas	faults repaired within 7 days- Rural and hilly areas			Metering and Billing Credibility - Postpaid	Metering and Billing Credibility - Prepaid	Resolution of billing/ charging/ validity complaints within 4 weeks	Resolution of billing/ charging/ validity complaints within 6 weeks	Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution of complaints- within 1 week of resolution of complaint	Accessibility of call center/ customer care	Percentage of calls answered by the operators (voice to voice) within ninety seconds	Termination / Closure of service	Time taken for Refund of deposits after closures- within 60 days
			<= 7	>=85%	100%	>=75%			100%	< 10 Hrs	< 0.5%	< 0.1%	< 0.1%	98% within 4 weeks	100% within 6 weeks	100% within 1 week of resolution of complaint	>= 95%
Andhra Pradesh	AIRTEL	0.51	91.05%	100.00%	100.00%	100.00%	9.07	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	97.56%	100.00%	100.00%
	BSNL	4	98.00%	100.00%	98.00%	100.00%	5	0	0.00%	0.00%	100.00%	100.00%	100.00%	97.95%	97.10%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	100.00%	96.77%	100.00%	100.00%	100.00%
	TATA	3.79	96.56%	100.00%	100.00%	100.00%	4.79	0	0.00%	NA	100.00%	100.00%	100.00%	99.14%	99.06%	100.00%	100.00%
	VIL	0.07	100.00%	100.00%	NA	NA	8.56	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
Assam	AIRTEL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	97.81%	100.00%	100.00%
	BSNL	3	93.00%	100.00%	89.00%	100.00%	4	0	0.06%	0.00%	100.00%	100.00%	100.00%	96.76%	96.76%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	97.06%	100.00%	100.00%	100.00%
	VIL	1.05	100.00%	100.00%	NA	NA	1.5	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
	AIRTEL	0.43	87.94%	100.00%	100.00%	100.00%	7.28	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	97.81%	100.00%	100.00%
Bihar	BSNL	4	95.00%	100.00%	94.00%	100.00%	5	0	0.01%	0.00%	98.00%	100.00%	100.00%	98.52%	97.87%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	98.17%	99.70%	100.00%	100.00%
	TATA	0.26	100.00%	100.00%	100.00%	100.00%	1.57	0	0.00%	NA	100.00%	100.00%	100.00%	97.22%	100.00%	100.00%	100.00%
	VIL	0.7	100.00%	100.00%	NA	NA	7.38	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
	AIRTEL	0.47	98.37%	100.00%	100.00%	100.00%	9.88	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.23%	100.00%	100.00%
Delhi	MTNL	1.77	90.40%	99.95%	NA	NA	3.42	0	0.00%	NA	100.00%	100.00%	100.00%	99.99%	99.78%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	98.63%	100.00%	100.00%	100.00%
	TATA	2.79	97.00%	100.00%	100.00%	100.00%	3.98	0	0.00%	NA	100.00%	100.00%	100.00%	98.90%	99.08%	100.00%	100.00%
	VIL	0.2	100.00%	100.00%	NA	NA	8.55	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
	AIRTEL	0.37	89.88%	100.00%	100.00%	100.00%	7.25	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.59%	100.00%	100.00%
Gujarat	BSNL	4	96.00%	100.00%	94.00%	100.00%	4	0	0.01%	0.00%	100.00%	100.00%	100.00%	98.33%	96.88%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	97.32%	100.00%	100.00%	100.00%
	TATA	2.09	97.30%	100.00%	100.00%	100.00%	2.53	0	0.00%	NA	100.00%	100.00%	100.00%	98.25%	100.00%	100.00%	100.00%
	VIL	0.11	100.00%	100.00%	NA	NA	4.3	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
	AIRTEL	0.47	90.86%	100.00%	100.00%	100.00%	6.2	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	97.67%	100.00%	100.00%
Haryana	BSNL	5	87.00%	100.00%	85.00%	100.00%	6	0	0.02%	0.00%	100.00%	100.00%	100.00%	98.44%	96.90%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	97.37%	100.00%	100.00%	100.00%
	TATA	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	VIL	1.9	100.00%	100.00%	NA	NA	1.4	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
	AIRTEL	0.09	90.00%	100.00%	100.00%	100.00%	6.47	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.47%	100.00%	100.00%
Himachal Pradesh	BSNL	6	96.00%	100.00%	96.00%	100.00%	6	0	0.03%	0.00%	99.00%	100.00%	100.00%	95.45%	94.97%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	100.00%	100.00%
	TATA	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	VIL	0	100.00%	100.00%	NA	NA	0	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
	AIRTEL	0.18	91.42%	100.00%	100.00%	100.00%	7.14	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	99.52%	100.00%	100.00%
Jammu & Kashmir	BSNL	4	97.00%	100.00%	99.00%	100.00%	7	0	0.01%	0.00%	98.00%	100.00%	100.00%	100.00%	95.75%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	98.99%	100.00%	100.00%	100.00%
	VIL	0	100.00%	100.00%	NA	NA	0	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
	AIRTEL	0.65	92.60%	100.00%	100.00%	100.00%	8.04	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	97.17%	100.00%	100.00%
	BSNL	5	94.00%	98.90%	91.00%	98.60%	8	0	0.09%	0.00%	98.00%	100.00%	100.00%	97.89%	96.90%	92.22%	100.00%
Karnataka	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	96.91%	100.00%	100.00%	100.00%
	TATA	0.11	96.23%	100.00%	100.00%	100.00%	3.96	0	0.00%	NA	100.00%	100.00%	100.00%	98.30%	98.30%	100.00%	100.00%
	VIL	0.08	100.00%	100.00%	NA	NA	8.5	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA

Annexure 4.2 (Contd.)

Kerala	AIRTEL	0.75	93.36%	100.00%	100.00%	100.00%	9.87	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	96.51%	100.00%	100.00%	
	BSNL	5	92.00%	100.00%	93.00%	100.00%	6	0	0.02%	0.00%	100.00%	100.00%	100.00%	100.00%	98.11%	97.86%	100.00%	
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	97.09%	100.00%	100.00%	
	TATA	0.13	92.86%	100.00%	100.00%	100.00%	5.37	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
	VIL	0.51	100.00%	100.00%	NA	NA	4.1	0	NA	NA	NA	NA	NA	NA	100.00%	100.00%	NA	
Kolkata	AIRTEL	0.54	93.03%	100.00%	100.00%	100.00%	8.78	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	98.30%	100.00%	
	BSNL	6	90.00%	100.00%	NA	NA	8	0	0.00%	0.00%	99.00%	100.00%	100.00%	100.00%	98.02%	97.46%	100.00%	
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	98.77%	100.00%	100.00%	
	TATA	1.69	100.00%	100.00%	100.00%	100.00%	2.1	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
	VIL	0.21	100.00%	100.00%	NA	NA	10.7	0	NA	NA	NA	NA	NA	NA	100.00%	100.00%	NA	
Madhya Pradesh	AIRTEL	0.5	84.97%	100.00%	100.00%	100.00%	5.03	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	98.31%	100.00%	
	BSNL	6	92.00%	100.00%	92.00%	100.00%	7	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	97.39%	95.63%	100.00%	
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	98.50%	100.00%	100.00%	
	TATA	0.34	100.00%	100.00%	100.00%	100.00%	1.38	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
	VIL	0.05	100.00%	100.00%	NA	NA	3.2	0	NA	NA	NA	NA	NA	NA	100.00%	100.00%	NA	
Maharashtra	AIRTEL	0.17	90.51%	100.00%	100.00%	100.00%	7.56	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	98.48%	100.00%	
	BSNL	5	91.00%	100.00%	85.00%	100.00%	9	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	98.21%	97.39%	100.00%	
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	97.62%	100.00%	100.00%	
	TATA	1.62	99.22%	100.00%	100.00%	100.00%	2.38	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	99.03%	99.16%	100.00%	
	VIL	0.52	100.00%	100.00%	NA	NA	5.6	0	NA	NA	NA	NA	NA	NA	100.00%	100.00%	NA	
Mumbai	AIRTEL	0.22	92.73%	100.00%	100.00%	100.00%	6.54	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	98.71%	100.00%	
	MTNL	1.6	43.90%	60.30%	33.30%	33.30%	132.7	0	0.00%	NA	99.80%	100.00%	100.00%	100.00%	99.88%	95.82%	99.79%	60.35%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	97.79%	99.25%	100.00%	100.00%
	TATA	2.98	94.91%	100.00%	100.00%	100.00%	4.97	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	98.76%	98.90%	100.00%	100.00%
	VIL	0.09	100.00%	100.00%	NA	NA	8.46	0	NA	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
North East	BSNL	4	92.00%	100.00%	95.00%	100.00%	6	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	99.16%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	100.00%	100.00%	100.00%	100.00%
	VIL	0	100.00%	100.00%	NA	NA	0	0	NA	NA	NA	NA	NA	NA	100.00%	100.00%	NA	NA
Odisha	BSNL	4	93.00%	100.00%	90.00%	100.00%	8	0	0.09%	0.00%	99.00%	100.00%	100.00%	100.00%	98.62%	97.99%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	98.44%	100.00%	100.00%	100.00%
	TATA	5.04	98.35%	100.00%	100.00%	100.00%	1.43	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	VIL	0.28	100.00%	100.00%	NA	NA	0.19	0	NA	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
Punjab	AIRTEL	0.45	90.68%	100.00%	100.00%	100.00%	5.46	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	96.90%	100.00%	100.00%
	BSNL	6	90.00%	100.00%	90.00%	100.00%	7	0	0.05%	0.00%	98.00%	100.00%	100.00%	100.00%	98.55%	96.91%	100.00%	99.80%
	QTL	6.3	91.00%	100.00%	100.00%	100.00%	6.88	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	92.82%	80.40%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	97.73%	100.00%	100.00%	100.00%
	TATA	0.11	100.00%	100.00%	100.00%	100.00%	3.34	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	VIL	0.12	100.00%	100.00%	NA	NA	0.33	0	NA	NA	NA	NA	NA	NA	100.00%	100.00%	NA	NA
Rajasthan	AIRTEL	0.53	85.23%	100.00%	100.00%	100.00%	5.47	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	97.85%	100.00%	100.00%
	BSNL	6	95.00%	100.00%	94.00%	100.00%	6	0	0.09%	0.00%	98.50%	100.00%	100.00%	100.00%	97.89%	97.10%	100.00%	14.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	97.01%	99.14%	100.00%	100.00%
	TATA	2.94	100.00%	100.00%	100.00%	100.00%	2.26	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	VIL	0.23	100.00%	100.00%	NA	NA	7.35	0	NA	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
Tamilnadu including Chennai	AIRTEL	0.81	89.41%	100.00%	100.00%	100.00%	9.71	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	99.23%	100.00%	100.00%
	BSNL	5	96.00%	100.00%	88.00%	100.00%	6	0	0.04%	0.00%	100.00%	100.00%	100.00%	100.00%	98.29%	97.92%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	98.26%	100.00%	100.00%	100.00%
	TATA	0.16	93.75%	100.00%	100.00%	100.00%	7.32	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	98.74%	98.61%	100.00%	100.00%
Uttar Pradesh (East)	VIL	0.37	100.00%	100.00%	NA	NA	2.13	0	NA	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
	AIRTEL	0.42	92.73%	100.00%	100.00%	100.00%	8.01	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	98.53%	100.00%	100.00%
	BSNL	6	90.00%	100.00%	86.00%	100.00%	7	0	0.02%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	96.85%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	98.33%	99.55%	100.00%	100.00%
	TATA	2.39	100.00%	100.00%	100.00%	100.00%	1.18	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Uttar Pradesh (West)	VIL	0.15	100.00%	100.00%	NA	NA	1.7	0	NA	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
	AIRTEL	0.5	91.79%	100.00%	100.00%	100.00%	6.5	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	96.22%	100.00%	100.00%
	BSNL	6	92.00%	100.00%	93.00%	100.00%	6	0	0.05%	0.00%	99.00%	100.00%	100.00%	100.00%	98.99%	97.12%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	97.04%	100.00%	100.00%	100.00%
	TATA	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
West Bengal	VIL	0.8	100.00%	100.00%	NA	NA	3.48	0	NA	NA	NA	NA	NA	NA	100.00%	100.00%	NA	NA
	AIRTEL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	98.36%	100.00%	100.00%
	BSNL	3	86.00%	100.00%	91.00%	100.00%	5	0	0.00%	0.00%	99.00%	100.00%	100.00%	100.00%	99.03%	98.56%	100.00%	100.00%
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	NA	97.44%	100.00%	100.00%	100.00%
	TATA	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
VIL	0.56	100.00%	100.00%	NA	NA	0	0	NA	NA	NA	NA	NA	NA	100.00%	100.00%	NA	NA	

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

Performance Monitoring Report on Quality of Service of Service Providers providing broadband (wireline) service for Quarter Ending March 2023																				
S.No.	Service Provider	LSA	Service Provisioning / Activation Time	Fault Repair/ Restoration Time			Billing Performance			Response Time to the Customer for assistance		Bandwidth utilisation/ throughput				Service availability /uptime (for all users) in %	Packet loss (for wired broadband access) in %	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	%age of bills disputed	%age of billing complaints resolved within 4 weeks	%age of cases to whom refund deposits is made within 60 days of closures	%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% during peak hours (TCBH)	No. of Upstream links to International connectivity having bandwidth utilisation >90% during peak hours (TCBH)	% International bandwidth utilization during peak hours (TCBH) (Enclosure MRTG)	Broadband Connection Speed available (download) from ISP node to user			User reference point at POP/ISP Gateway node to (ICSP/NIX)	User reference point at ISP Gateway node to International nearest NAF port abroad (terrestrial)	User reference point at ISP Gateway node to International nearest NAF port abroad (satellite)
1	ADN BROADBAND PRIVATE LIMITED	Delhi	100.00	98.95	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	72.35	91.00	99.21	0.53	2.00	150.00	0.00	
2	Airfiber Networks Pvt. Ltd.	Karnataka	100.00	96.00	99.90	0.00	100.00	100.00	94.00	99.00	0.00	0.00	72.56	99.00	100.00	0.50	23.00	246.00	0.00	
		Tamilnadu	100.00	95.00	99.90	0.00	100.00	100.00	94.00	99.00	0.00	0.00	64.21	99.00	100.00	0.50	22.00	245.00	0.00	
3	Airlink Communications Pvt. Ltd	All India	100.00	90.55	99.02	0.00	100.00	100.00	99.75	100.00	0.00	0.00	88.83	98.82	99.86	0.41	80.00	275.00	0.00	
4	Airnet Cable and Datacom Pvt.Ltd.	Maharashtra	100.00	100.00	100.00	0.00	100.00	100.00	99.97	100.00	0.00	0.00	3.67	100.00	100.00	0.41	2.95	201.00	NA	
		Mumbai	100.00	97.19	99.00	0.00	100.00	100.00	99.98	98.86	0.00	0.00	19.97	100.00	100.00	0.38	2.95	201.00	NA	
5	Alliance Broadband Services Pvt. Ltd.	All India	100.00	91.15	100.00	0.00	100.00	100.00	83.33	100.00	0.00	0.00	59.28	97.13	99.46	0.00	2.00	4.00	102.00	
6	Angel Air Network Solutions Private Limited	Punjab	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	81.00	90.00	100.00	0.00	20.00	25.00	40.00	
		Rajasthan	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	81.00	90.00	100.00	0.00	20.00	25.00	40.00	
7	ANI NETWORK PVT LTD	Delhi	100.00	93.00	100.00	0.00	100.00	100.00	99.00	100.00	0.00	0.00	86.00	100.00	99.00	0.40	20.00	288.00	0.00	
8	Apple Broadband Services Pvt. Ltd.	Andhra Pradesh	100.00	91.47	100.00	0.00	100.00	100.00	83.67	100.00	0.00	0.00	87.00	82.00	98.89	0.00	3.00	22.00	0.00	
9	Asianet Satellite Communications Ltd.	All India	100.00	90.41	99.76	0.45	100.00	100.00	60.85	80.69	0.00	0.00	72.72	92.00	99.87	0.81	56.00	229.00	0.00	
10	Atria Convergence Technologies Ltd.	All India	100.00	96.64	99.60	0.94	100.00	100.00	71.14	76.21	0.00	0.00	41.00	96.31	100.00	0.00	1.00	118.00	0.00	
11	Balaji Teleworks Development Pvt Ltd	All India	100.00	93.00	99.60	0.00	100.00	100.00	81.00	91.00	0.00	0.00	87.21	90.00	99.21	0.90	64.00	292.00	0.00	
12	Bharat Sanchar Nigam Ltd.	All India	100.00	94.23	99.74	0.11	100.00	99.99	88.69	91.98	0.00	0.00	61.60	94.37	99.54	0.50	49.60	116.50	0.00	
13	Bharti Airtel Ltd.	All India	100.00	93.29	99.77	0.01	100.00	100.00	96.88	98.56	0.00	0.00	37.39	100.00	99.86	0.00	50.08	48.75	0.00	
14	Bluelotus Support Services Pvt.Ltd. (formerly Limras Eronet Broadband Service Pvt Ltd)	All India	100.00	99.00	100.00	0.02	100.00	100.00	90.00	100.00	0.00	0.00	0.00	98.50	99.40	0.01	25.00	240.00	0.00	
15	Candor Infosolution Pvt. Ltd.	Bihar	100.00	99.00	100.00	0.36	100.00	100.00	100.00	100.00	0.00	0.00	89.00	90.00	100.00	0.00	90.00	250.00	350.00	
		Delhi	100.00	99.00	100.00	0.11	100.00	100.00	100.00	100.00	0.00	0.00	89.00	90.00	100.00	0.00	90.00	250.00	350.00	
		Haryana	100.00	99.00	100.00	0.74	100.00	100.00	100.00	100.00	0.00	0.00	89.00	90.00	100.00	0.00	90.00	250.00	350.00	
16	City Online Services Ltd	Andhra Pradesh	100.00	99.00	99.00	0.00	100.00	100.00	98.00	99.00	0.00	0.00	59.28	99.00	99.72	0.30	15.00	238.00	0.00	
		Karnataka	100.00	98.00	99.00	0.00	100.00	100.00	95.50	98.00	0.00	0.00	77.50	97.87	99.72	0.57	18.00	280.00	0.00	
17	D-Vois Communication Private Limited	All India	100.00	93.00	99.00	0.00	100.00	100.00	86.00	89.67	0.00	0.00	0.00	90.00	98.50	0.10	24.00	0.00	0.00	
18	DDC BROADBAND PRIVATE LIMITED	Delhi	100.00	98.00	100.00	0.00	100.00	100.00	97.66	97.66	0.00	0.00	88.16	98.00	100.00	0.30	11.00	244.00	0.00	
19	DEN Broadband Limited	All India	100.00	96.30	99.40	0.00	100.00	100.00	82.18	88.02	0.00	0.00	71.83	93.00	99.72	0.55	78.00	329.00	0.00	
20	Digital Network Associates Pvt. Ltd.	Maharashtra	100.00	90.53	99.12	0.00	100.00	100.00	64.74	82.06	0.00	0.00	80.00	83.00	99.77	0.20	4.00	255.00	600.00	
		Mumbai	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	0.00	100.00	100.00	0.00	0.00	0.00	0.00	
21	DL GTPL Broadband Pvt. Ltd.	Gujarat	100.00	94.33	100.00	0.00	100.00	100.00	83.67	93.66	0.00	0.00	87.92	90.00	99.35	0.00	15.00	300.00	0.00	
		Maharashtra	100.00	97.00	100.00	0.00	100.00	100.00	94.67	95.66	0.00	0.00	87.92	90.00	99.44	0.00	15.00	300.00	0.00	
22	DNA Infotel Pvt Ltd	Maharashtra	100.00	90.53	99.12	0.00	100.00	100.00	64.65	82.71	0.00	0.00	80.00	83.00	99.77	0.90	4.00	255.00	600.00	
23	Dwan Supports Pvt. Ltd.	All India	100.00	95.67	100.00	0.00	100.00	100.00	91.00	95.33	0.00	0.00	85.67	95.33	99.86	0.04	20.00	168.00	460.00	
24	Ethernet Xpress(I) Pvt. Ltd.	Maharashtra	100.00	96.00	99.43	0.36	100.00	100.00	85.70	85.00	0.00	0.00	20.00	99.00	100.00	0.11	30.00	300.00	650.00	
25	Excell Media Pvt. Ltd.	Andhra Pradesh	100.00	90.17	99.17	0.00	100.00	100.00	97.51	98.24	0.00	0.00	75.34	98.13	99.81	0.50	9.00	300.00	0.00	
		Karnataka	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	0.00	100.00	100.00	0.00	0.00	0.00	0.00	

Annexure 4.3 (Contd.)

26	Excitel Broadband Private Limited	All India	100.00	91.26	99.57	0.00	100.00	100.00	62.93	82.33	0.00	0.00	78.21	100.00	99.86	0.00	4.00	199.00	0.00
27	Five Network Solution (India) Ltd.	All India	100.00	99.50	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	0.00	90.00	99.86	0.60	0.00	0.00	0.00
28	Fusionnet Web Services Pvt. Ltd.	All India	100.00	97.12	99.59	0.00	100.00	100.00	96.90	97.70	0.00	0.00	89.16	100.00	100.00	0.00	5.00	250.00	0.00
29	Genstar Network Solutions Pvt. Ltd.	Mumbai	100.00	98.00	100.00	0.00	100.00	100.00	80.00	87.00	0.00	0.00	83.00	98.00	99.53	0.00	1.00	48.00	80.00
30	GPL Broadband Pvt. Ltd.	All India	100.00	95.29	99.26	0.00	100.00	100.00	88.84	93.35	0.00	0.00	47.80	94.00	99.18	0.00	11.00	300.00	0.00
31	GPL KCBPL Broadband Private Limited	Kolkata	100.00	99.79	100.00	0.00	100.00	100.00	86.96	87.37	0.00	0.00	80.00	98.01	100.00	0.00	10.00	250.00	310.00
		Odisha	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	80.00	98.00	100.00	0.00	10.00	250.00	310.00
		West Bengal	100.00	100.00	100.00	0.00	100.00	100.00	87.96	88.37	0.00	0.00	80.00	98.01	100.00	0.00	10.00	250.00	310.00
32	Hathway Cable & Datacom Pvt. Ltd.	All India	100.00	92.67	99.36	1.30	100.00	100.00	96.80	97.15	0.00	0.00	77.82	90.00	99.81	0.19	4.00	28.00	0.00
33	Honesty Net Solutions (I) Pvt Ltd	All India	100.00	93.33	100.00	0.00	100.00	100.00	69.00	100.00	0.00	0.00	0.00	95.00	99.79	0.02	0.00	66.00	0.00
34	Indinet Service Pvt. Ltd	All India	100.00	93.00	100.00	0.00	100.00	100.00	71.05	84.04	0.00	0.00	80.88	95.00	98.87	0.50	42.33	258.00	NA
35	Instanet Technologies Pvt. Ltd.	Maharashtra	100.00	95.77	100.00	0.22	100.00	100.00	79.54	90.72	0.00	0.00	63.00	90.00	100.00	0.00	4.00	255.00	0.00
36	Intech Online Pvt. Ltd.	Maharashtra	100.00	91.63	99.23	0.70	100.00	100.00	94.79	94.79	0.00	0.00	27.69	87.66	99.86	0.07	15.00	89.33	455.00
		Mumbai	100.00	92.99	99.67	0.40	100.00	100.00	93.64	93.64	0.00	0.00	43.00	87.66	99.86	0.04	1.00	76.00	450.00
37	Intermedia Cable Communication Pvt Ltd	Maharashtra	100.00	95.90	99.33	0.00	100.00	100.00	95.00	98.50	0.00	0.00	86.07	98.50	99.81	0.00	72.33	261.00	0.00
38	Ishan Netsol Pvt Ltd	All India	100.00	91.17	100.00	0.00	100.00	100.00	67.07	84.23	0.00	0.00	68.36	91.00	98.09	0.00	100.00	225.00	0.00
39	Joister Infoserve Pvt. Ltd.	Maharashtra	100.00	92.00	100.00	0.00	100.00	100.00	82.00	93.00	0.00	0.00	88.00	99.00	100.00	0.98	1.00	225.00	265.00
		Mumbai	100.00	93.00	100.00	0.00	100.00	100.00	82.00	92.00	0.00	0.00	89.00	99.00	100.00	0.97	1.00	47.00	260.00
40	Juweriyah Networks Private Limited	Maharashtra	100.00	98.00	100.00	0.00	100.00	100.00	83.67	87.00	0.00	0.00	83.00	99.00	100.00	0.00	1.00	47.00	80.00
		Mumbai	100.00	98.00	100.00	0.00	100.00	100.00	83.67	87.00	0.00	0.00	78.00	99.00	100.00	0.00	1.00	47.00	80.00
41	K NET Solutions Private Limited	Tamilnadu	100.00	94.18	99.41	0.00	100.00	100.00	95.65	95.99	0.00	0.00	0.00	100.00	99.92	0.00	9.64	257.99	0.00
42	Kerala Vision Broad Band Ltd.	All India	100.00	91.38	99.00	0.00	100.00	100.00	75.19	84.11	0.00	0.00	43.17	99.00	99.35	0.00	16.00	266.00	0.00
43	Kernel Fibernet Online Network Pvt Ltd	Kerala	100.00	99.00	99.00	0.00	100.00	100.00	90.00	90.00	0.00	0.00	80.00	94.00	99.82	0.00	14.00	194.00	458.00
44	Kings Broadband Pvt. Ltd	All India	100.00	98.00	100.00	0.00	100.00	100.00	90.00	96.66	0.00	0.00	79.60	95.60	99.63	0.10	30.00	310.00	650.00
45	Mahanagar Telephone Nigam Ltd.	All India	97.80	70.79	75.96	0.00	100.00	79.25	97.61	99.27	0.00	0.00	48.52	89.80	99.42	0.52	42.83	297.13	0.00
46	Meghbela Cable & Broadband Services (P) Ltd	All India	100.00	95.00	100.00	1.57	100.00	100.00	95.00	100.00	0.00	0.00	74.00	95.00	100.00	0.00	60.00	150.00	0.00
47	Microscan Infocommtech Private Limited	Maharashtra	100.00	97.49	99.95	0.00	100.00	100.00	100.00	100.00	0.00	0.00	12.39	100.00	100.00	0.41	4.20	240.00	NA
		Mumbai	100.00	95.58	99.41	0.00	100.00	100.00	100.00	100.00	0.00	0.00	18.41	100.00	100.00	0.38	2.95	240.00	NA
48	Multicraft Digital Technologies Private Limited	All India	100.00	98.27	100.00	0.00	100.00	100.00	99.00	99.00	0.00	0.00	89.33	92.00	100.00	0.00	119.00	0.00	0.00
49	Net 9 Fibernet Pvt. Ltd. (formerly Net 9 Online Hathway Pvt. Ltd.)	Mumbai	100.00	97.52	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	87.94	90.00	99.68	0.34	94.67	303.33	0.00
50	Netplus Broadband Services Pvt. Ltd	All India	100.00	100.00	100.00	1.57	100.00	100.00	88.40	94.49	0.00	0.00	75.16	96.12	100.00	0.10	44.33	197.33	0.00
51	Nuron Networks Private Limited	Karnataka	100.00	90.76	99.00	0.00	100.00	100.00	83.00	87.00	0.00	0.00	0.00	90.00	100.00	0.10	16.00	23.00	21.00
52	ONEOTT ENTERTAINMENT LTD	All India	100.00	97.00	99.00	1.43	100.00	100.00	95.00	95.00	0.00	0.00	68.56	100.00	100.00	0.50	1.03	63.00	0.00
53	Pacenet Meghbela Broadband Pvt. Ltd.	Kolkata	100.00	95.00	100.00	1.66	100.00	100.00	95.00	100.00	0.00	0.00	74.00	95.00	100.00	0.00	60.00	150.00	0.00
54	Paradise Telecom Pvt. Ltd.	Maharashtra	100.00	100.00	100.00	0.15	100.00	100.00	65.23	80.73	0.00	0.00	63.00	90.00	100.00	0.00	4.00	255.00	0.00
55	Pioneer Elabs Limited	All India	100.00	91.66	100.00	1.81	100.00	100.00	77.00	88.00	0.00	0.00	0.00	88.66	100.00	0.90	98.67	322.00	724.00
56	Quadrant Televentures Ltd.	All India	100.00	93.70	99.29	0.35	100.00	100.00	83.70	86.55	0.00	0.00	77.87	100.00	100.00	0.00	17.00	252.00	0.00
57	Quest Consultancy Pvt. Ltd.	Gujarat	100.00	99.00	100.00	0.00	100.00	100.00	99.00	99.00	0.00	0.00	65.00	99.00	99.49	0.30	23.00	56.00	0.00
58	Radinet Info Solutions Pvt Ltd	Madhya Pradesh	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	73.77	90.00	99.58	0.00	20.00	300.00	400.00
		Maharashtra	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	73.77	90.00	99.58	0.00	20.00	300.00	400.00
		Rajasthan	100.00	90.27	99.97	0.00	100.00	100.00	90.19	97.50	0.00	0.00	73.77	90.00	99.58	0.00	20.00	300.00	400.00
		Uttar Pradesh (West)	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	73.77	90.00	99.58	0.00	20.00	300.00	400.00
59	RailTel Corporation of India Ltd.	All India	100.00	98.00	100.00	0.00	100.00	100.00	90.66	100.00	0.00	0.00	35.49	100.00	99.86	0.87	90.00	320.00	0.00
60	Rainbow Communications India Private Limited	Tamilnadu	100.00	100.00	99.00	0.00	100.00	100.00	75.00	90.00	0.00	0.00	0.00	95.00	99.44	0.50	14.00	275.00	0.00

Annexure 4.3 (Contd.)

61	Rajesh Digital & Datacom Pvt. Ltd.	Mumbai	100.00	98.00	100.00	0.00	100.00	100.00	98.00	98.00	0.00	0.00	0.00	95.00	99.86	0.00	46.00	250.00	500.00
62	Readylink Internet Services Limited	Tamilnadu	100.00	99.00	100.00	0.21	100.00	100.00	90.00	91.00	0.00	0.00	65.00	82.00	100.00	0.00	23.00	85.00	0.00
63	Reliance Jio Infocomm Ltd	All India	100.00	96.96	99.63	0.00	100.00	100.00	95.44	96.93	0.00	0.00	52.55	100.00	99.99	0.01	19.38	70.69	NA
64	RI Networks Pvt Ltd	All India	100.00	92.63	99.22	0.00	100.00	100.00	92.40	94.83	0.00	0.00	82.42	100.00	100.00	0.50	50.00	300.00	300.00
65	Shree Omkar Infocom Pvt. Ltd.	Maharashtra	100.00	98.00	100.00	0.00	100.00	100.00	94.00	98.00	0.00	0.00	73.00	98.00	100.00	0.50	2.00	124.00	597.00
66	Shyam Spectra Private Limited	All India	100.00	96.59	99.43	1.19	100.00	100.00	85.92	88.31	0.00	0.00	23.22	97.33	99.61	0.00	4.20	0.00	NA
67	Sikka Broadband(P) Ltd.	Uttar Pradesh (East)	100.00	91.00	99.26	0.00	100.00	100.00	88.00	98.70	0.00	0.00	80.00	86.60	100.00	0.10	10.00	290.00	400.00
68	SITI Broadband Services Pvt. Ltd.	All India	100.00	93.46	99.14	0.00	100.00	100.00	91.00	95.67	0.00	0.00	70.54	95.00	99.34	0.90	3.00	95.00	0.00
69	Snet Networks Pvt. Ltd.*	Mumbai	100.00	95.00	99.00	0.00	100.00	100.00	70.00	81.00	0.00	0.00	85.00	85.00	99.31	0.50	0.00	0.00	0.00
70	Specific Net Pvt. Ltd*	Maharashtra	100.00	96.13	100.00	0.12	100.00	100.00	71.63	87.30	0.00	0.00	59.80	91.41	98.27	0.70	70.59	66.33	NA
71	Spiderlink Networks Pvt. Ltd.	Rajasthan	100.00	95.97	99.40	0.00	100.00	100.00	77.73	84.83	0.00	0.00	70.00	98.00	100.00	0.00	30.00	225.00	0.00
72	Sri Sai Communication And Internet Pvt.Ltd.*	All India	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	67.37	90.00	99.49	0.00	20.00	260.00	0.00
73	Sristi Sanchar Webnet Limited	Kolkata	100.00	94.70	100.00	0.00	100.00	100.00	83.47	100.00	0.00	0.00	78.53	91.60	99.21	0.00	50.00	208.00	199.00
74	Stampede Communications Pvt. Ltd.	Kerala	100.00	95.00	100.00	0.00	100.00	100.00	80.00	100.00	0.00	0.00	67.00	90.00	100.00	0.00	25.00	250.00	0.00
75	Swiftmail Communications Ltd.*	All India	100.00	92.67	100.00	0.00	100.00	100.00	70.00	90.00	0.00	0.00	0.00	90.00	99.03	0.77	0.00	80.00	100.00
76	Tachyon Communications Private Limited	Uttar Pradesh (East)	100.00	98.00	100.00	0.65	100.00	100.00	88.00	94.00	0.00	0.00	58.12	99.00	100.00	0.00	35.00	70.00	NA
77	Tata Play Broadband Private Limited (formerly Tata Sky Broadband Pvt.Ltd.)	All India	100.00	93.65	99.36	0.00	100.00	100.00	81.68	93.03	0.00	0.00	41.59	100.00	99.98	0.00	1.00	0.00	0.00
78	Tata Teleservices Limited	Andhra Pradesh	100.00	93.79	99.42	0.02	100.00	100.00	98.81	99.54	0.00	0.00	64.14	94.97	99.92	0.00	58.67	80.00	0.00
		Bihar	100.00	95.83	100.00	0.00	100.00	100.00	97.22	97.22	0.00	0.00	64.14	90.54	99.95	0.00	58.33	91.33	0.00
		Delhi	100.00	97.93	99.48	0.00	100.00	100.00	98.81	98.81	0.00	0.00	64.14	87.54	99.77	0.00	60.33	64.33	0.00
		Gujarat	100.00	93.67	100.00	0.00	100.00	100.00	96.26	98.48	0.00	0.00	64.14	95.62	99.90	0.00	51.33	89.00	0.00
		Karnataka	100.00	97.76	99.31	0.04	100.00	100.00	98.30	98.30	0.00	0.00	64.14	92.78	99.63	0.00	54.33	79.00	0.00
		Kerala	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	64.14	94.33	99.84	0.00	58.33	82.00	0.00
		Kolkata	100.00	94.44	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	64.14	83.66	99.89	0.00	49.00	67.67	0.00
		Punjab	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	64.14	93.50	100.00	0.00	71.67	62.67	0.00
		Rajasthan	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	64.14	85.65	98.59	0.00	62.33	75.00	0.00
		Tamilnadu	100.00	98.20	100.00	0.02	100.00	100.00	98.37	99.22	0.00	0.00	64.14	92.09	99.53	0.00	52.00	71.67	0.00
79	Tata Teleservices(Maharashtra) Ltd.	Maharashtra	100.00	98.28	99.75	0.02	100.00	100.00	98.76	99.16	0.00	0.00	72.09	92.19	99.93	0.00	52.67	71.33	0.00
		Mumbai	100.00	96.67	99.37	0.00	100.00	100.00	98.50	98.90	0.00	0.00	72.09	94.96	99.86	0.00	56.67	65.67	0.00
80	Tikona Inffinet Ltd.	All India	100.00	93.96	99.35	1.31	100.00	100.00	69.30	81.30	0.00	0.00	70.33	94.41	100.00	0.00	3.66	0.00	0.00
81	Vijaylaxhmi Net Services Pvt. Ltd.	Andhra Pradesh	100.00	95.00	100.00	0.00	100.00	100.00	89.00	99.00	0.00	0.00	85.71	100.00	99.49	0.00	20.00	250.00	350.00
82	Vortex Netsol Pvt. Ltd.	Gujarat	100.00	95.00	99.00	0.00	100.00	100.00	70.00	81.00	0.00	0.00	85.00	100.00	99.31	0.50	0.00	0.00	0.00
		Maharashtra	100.00	95.00	99.00	0.00	100.00	100.00	70.00	81.00	0.00	0.00	85.00	100.00	99.31	0.50	0.00	0.00	0.00
		Mumbai	100.00	95.00	99.00	0.00	100.00	100.00	70.00	81.00	0.00	0.00	85.00	100.00	99.31	0.50	0.00	0.00	0.00
83	Wan and Lan Internet Pvt. Ltd.	Mumbai	100.00	100.00	100.00	0.00	100.00	100.00	90.00	90.00	0.00	0.00	88.00	90.00	100.00	0.00	20.00	40.00	80.00
84	WAVE FIBER PRIVATE LIMITED	Andhra Pradesh	100.00	97.00	100.00	0.00	100.00	100.00	80.00	98.00	0.00	0.00	83.33	100.00	99.44	0.00	20.00	250.00	350.00
85	Weebo Networks Pvt Ltd.	All India	100.00	97.27	99.00	0.00	100.00	100.00	98.00	100.00	0.00	0.00	13.33	81.66	99.44	0.44	100.00	300.00	600.00
86	Wish Net Pvt. Ltd.	Andhra Pradesh	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	50.68	100.00	100.00	0.30	0.00	0.00	0.00
		Assam	100.00	100.00	100.00	0.00	100.00	100.00	98.03	99.43	0.00	0.00	50.68	100.00	100.00	0.30	23.00	0.00	0.00
		Bihar	100.00	100.00	100.00	0.00	100.00	100.00	99.19	98.53	0.00	0.00	50.68	100.00	100.00	0.30	23.00	0.00	0.00
		Kolkata	100.00	98.68	100.00	0.00	100.00	100.00	97.66	98.12	0.00	0.00	50.68	100.00	100.00	0.30	12.00	0.00	0.00
		Madhya Pradesh	100.00	100.00	100.00	0.00	100.00	100.00	96.72	97.73	0.00	0.00	50.68	100.00	100.00	0.30	23.00	0.00	0.00
		Odisha	100.00	100.00	100.00	0.00	100.00	100.00	99.19	98.53	0.00	0.00	50.68	100.00	100.00	0.30	23.00	0.00	0.00
		West Bengal	100.00	98.06	100.00	0.00	100.00	100.00	98.03	99.43	0.00	0.00	50.68	100.00	100.00	0.30	12.00	0.00	0.00
87	Yashash Cable Network Pvt Ltd	Karnataka	100.00	93.33	99.53	0.00	100.00	100.00	90.77	94.55	0.00	0.00	55.26	84.00	99.17	0.01	29.00	219.00	0.00
88	You Broadband India Ltd.	All India	100.00	93.76	99.58	0.00	100.00	100.00	96.89	98.62	0.00	0.00	76.10	87.08	98.93	0.00	9.00	277.00	0.00
	*New entrant																		

Annexure 5.1: List of pay channels, offered by broadcasters to subscribers as reported to TRAI (Tariff Order dated 03.03.2017, as amended on 22.11.2022)

Sl. No	Name of the broadcaster	Sl. No	Name of the channel	Declared as SD or HD
1	AETN 18 Media Pvt Limited	1	The History Channel	SD
		2	Histroy TV 18 HD	HD
2	Asianet Star Communications Private Limited	3	Vijay TV	SD
		4	Vijay Super	SD
		5	Vijay HD	HD
		6	Vijay Takkar (Vijay Music)	SD
		7	Asianet	SD
		8	Asianet Plus	SD
		9	Asianet Movies	SD
		10	Suvarna Plus	SD
		11	Star Suvarna HD	HD
		12	Asianet HD	HD
		13	Star Suvarna	SD
		14	Vijay Super HD	HD
		15	Asianet Movies HD	HD
3	Bangla Entertainment Private Limited	16	SONY AATH	SD
		17	SONY Marathi	SD
4	BBC Global News India Private Limited	18	BBC World News	SD
		19	Cbeebies	SD
5	Bennett, Coleman & Company Limited	20	Zoom	SD
		21	Romedy Now	SD
		22	MN + (HD)	HD
		23	Mirror Now	SD
		24	ET NOW	SD
		25	Times Now	SD
		26	Times Now Navbharat HD	HD
		27	Movies Now HD	HD
		28	MNX HD	HD
		29	ET Now Swedesh	SD
30	MNX	SD		

		31	Times Now World (HD)	HD
6	Celebrities Management Pvt Limited	32	Travel XP HD	HD
		33	Travel XP Tamil	SD
		34	Foodxp	SD
7	CSL Info Media Private Limited	35	JAN TV PLUS	SD
8	Direct New Private Limited	36	News X	SD
9	Discovery Communications India	37	Animal Planet	SD
		38	Discovery Channel	SD
		39	DTAMIL	SD
		40	Discovery Kids Channel	SD
		41	Discovery Science	SD
		42	Discovery Turbo	SD
		43	Investigation Discovery	SD
		44	Discovery HD	HD
		45	Animal Planet HD	HD
		46	TLC HD	HD
		47	Investigation Discovery HD	HD
		48	TLC	SD
		49	EUROSPORT HD	HD
50	EUROSPORT	SD		
10	Disney Broadcasting (India) Limited	51	Disney Junior	SD
		52	Super Hangama (Marvel HQ)	SD
		53	Disney International HD	HD
		54	Hungama TV	SD
		55	The Disney Channel	SD
		56	UTV Bindass	SD
		57	The Disney Channel HD	HD
11	Eenadu Televisoin Private Limited	58	ETV Telegu	SD
		59	ETV Andhra Pradesh	SD
		60	ETV - Telangana	SD
		61	ETV Cinema	SD
		62	ETV Life	SD
		63	ETV Plus	SD

		64	ETV Abhiruchi	SD
		65	ETV HD	HD
		66	ETV Plus HD	HD
		67	ETV Cinema HD	HD
		68	ETV Balbharat Telugu	SD
		69	ETV Balbharat Hindi	SD
		70	ETV Balbharat kannada	SD
		71	ETV Balbharat Malayalam	SD
		72	ETV Balbharat Tamil	SD
		73	ETV Balbharat English	SD
		74	ETV Balbharat HD	HD
		75	ETV Balbharat SD	SD
12	IN 10 Media Private Limited	76	EPIC TV	SD
		77	Filamchi	SD
		78	Gubbare	SD
		79	Showbox	SD
		80	Ishara TV	SD
13	Information TV Private Limited	81	India News	SD
14	Fame Media Private Limited	82	4tv News	SD
15	Greycells18 Media Limited	83	Topper TV	SD
16	IBN Lokmat News Private Ltd	84	News 18 Lokmat	SD
17	Living Entertainment Enterprises Private Ltd	85	ZEE ZEST HD	HD
		86	LF HD	HD
18	Lifestyle and Media Broadcasting Limited	87	Good Times	SD
19	Lex Sportel Vision Private Limited	88	1SPORTS	SD
20	Mavis Satcom Limited	89	J Movies	SD
		90	Jaya Max	SD
		91	Jaya Plus	SD
		92	Jaya TV HD	HD
21	MSM World Wide Factual Media Private Limited	93	SONY BBC EARTH	SD
		94	SONY BBC EARTH HD	HD

22	Media World Wide Limited	95	Travel XP	SD
23	New Delhi Television Limited	96	NDTV 24*7	SD
		97	NDTV India	SD
		98	NDTV Profit	SD
24	NGC Network (India) Pvt Limited	99	Fox Life	SD
		100	National Geographic Channel (NGC)	SD
		101	Fox Life HD	HD
		102	Nat Geo Wild	SD
		103	National Geographic HD	HD
		104	Nat Geo Wild HD	HD
25	Tarang Broadcasting Compnay Limited	105	Prarthana	SD
		106	Tarang	SD
		107	Tarang Music	SD
		108	Alankar	SD
26	Odisha Television Limited	109	Tarang HD	HD
27	Raj Television Network Limited	110	Raj Digital Plus	SD
		111	Raj Musix	SD
		112	Raj News	SD
		113	Raj TV	SD
28	Silverstar Communications Limited	114	Mega 24	SD
		115	Mega Musiq	SD
		116	Mega TV	SD
29	Culver Max Entertainment Private Limited	117	Sony YAY!	SD
		118	SONY MAX	SD
		119	SONY SAB	SD
		120	SONY ENTERTAINMENT CHANNEL (SET)	SD
		121	SONY PIX	SD
		122	SONY MAX 2	SD
		123	SONY PAL	SD
		124	SONY ENTERTAINMENT CHANNEL HD	HD
125	PIX HD	HD		

		126	MAX HD	HD
		127	SONY Sports Ten 2 HD	HD
		128	SONY Sports Ten 3 HD	HD
		129	SONY Sports Ten 2	SD
		130	SONY Sports Ten 1	SD
		131	SONY Sports Ten 3	SD
		132	SONY Sports Ten 1 HD	HD
		133	SONY Wah	SD
		134	SAB HD	HD
		135	SONY Sports Ten 4	SD
		136	SONY Sports Ten 4 HD	HD
		137	SONY Sports Ten 5	SD
		138	SONY Sports Ten 5 HD	HD
30	Star India Private Limited	139	Star Sports 3	SD
		140	Star Sports 1 Tamil	SD
		141	Star Sports Select 2	SD
		142	Star Bharat	SD
		143	Star Gold 2 (Movies OK)	SD
		144	Star Sports 1 Hindi	SD
		145	Star Gold	SD
		146	Star Jalsha	SD
		147	Star Movies	SD
		148	Star Gold Select	SD
		149	Star Plus	SD
		150	Star Pravah	SD
		151	Star Sports 1	SD
		152	Star Sports 2	SD
		153	Jalsha Movies	SD
		154	Star Sports HD 2	HD
		155	Star Sports HD 1	HD
		156	Star Bharat HD	HD
		157	Star Gold HD	HD
		158	Star Movies HD	HD
		159	Star Plus HD	HD

		160	Star Sports 1 HD Hindi	HD
		161	Star Sports Select 1	SD
		162	Star Movies Select HD	HD
		163	Star Sports First	SD
		164	MAA Gold	SD
		165	MAA Movies	SD
		166	MAA Music	SD
		167	MAA TV	SD
		168	Star Pravah HD	HD
		169	Star Jalsha HD	HD
		170	Jalsha Movies HD	HD
		171	Star Sports Select HD 1	HD
		172	Star Sports Select HD 2	HD
		173	MAA HD	HD
		174	Star Gold Select HD	HD
		175	MAA Movies HD	HD
		176	Star Sport 1 Telugu	SD
		177	Star Sport 1 Kannada	SD
		178	Star Utsav	SD
		179	Star Utsav Movies	SD
		180	Star Gold Romance	SD
		181	Star Gold Thrills	SD
		182	Pravah Pictures	SD
		183	Star Kiran	SD
		184	Star Movies Select	SD
		185	Star Gold 2 HD	HD
		186	Star Sports 1Tamil HD	HD
		187	Star Sports 1Telugu HD	HD
		188	Star Kiran HD	HD
		189	Pravah Pictures HD	HD
31	SUN TV Network Limited	190	Adithya TV	SD
		191	Chintu TV	SD
		192	Chutti TV	SD
		193	Gemini Comedy	SD

		194	Gemini Life	SD
		195	Gemini Movies	SD
		196	Gemini Music	SD
		197	Gemini TV	SD
		198	KTV	SD
		199	Surya Movies	SD
		200	Kushi TV	SD
		201	SUN Life	SD
		202	Sun Music	SD
		203	Sun News	SD
		204	Surya Music	SD
		205	SUN TV	SD
		206	Surya Comedy	SD
		207	Surya TV	SD
		208	Udaya Comedy	SD
		209	Udaya Movies	SD
		210	Udaya Music	SD
		211	Udaya TV	SD
		212	Kochu TV	SD
		213	Sun TV HD	HD
		214	KTV HD	HD
		215	Sun Music HD	HD
		216	Gemini TV HD	HD
		217	Gemini Music HD	HD
		218	Gemini Movies HD	HD
		219	Surya TV HD	HD
		220	Udaya TV HD	HD
32	Suryansh Broadcasting Private Limited	221	Flowers	SD
33	Warner Media India Private Limited	222	Cartoon Network	SD
		223	CNN International	SD
		224	POGO	SD
		225	Cartoon Network HD+	HD
34	TV 18 Broadcast Limited	226	CNN News 18	SD

		227	CNBC Bazaar	SD
		228	CNBC TV 18 Prime HD	HD
		229	CNBC Awaaz	SD
		230	News 18 Tamil Nadu	SD
		231	News 18 Kerala	SD
		232	News 18 Assam / North East	SD
		233	News 18 India	SD
		234	CNBC TV 18	SD
		235	News 18 Bihar Jharkhand	SD
		236	News 18 Madhya Pradesh / Chattisgarh	SD
		237	News 18 Rajasthan	SD
		238	News 18 Uttar Pradesh/ Uttaranchal	SD
		239	News 18 Jammu/Kashmir/Ladakh/Himachal	SD
		240	News 18 Kannada	SD
		241	News 18 Bangla	SD
		242	News 18 Punjab / Haryana	SD
		243	News 18 Gujarati	SD
		244	News 18 Odia	SD
35	TV Today Network Limited	245	Aaj Tak	SD
		246	India Today	SD
		247	AAJ Tak HD	HD
		248	Good News Today	SD
36	Viacom 18 Media Private Limited	249	Colors	SD
		250	Comedy Central (HD)	HD
		251	MTV	SD
		252	NICK	SD
		253	NICK JR	SD
		254	SONIC	SD
		255	VH 1 (HD Distribution)	HD
		256	Colors Infinity HD	HD
		257	Colors Infinity	SD
		258	Colors HD	HD

		259	NICKS HD+	HD
		260	Colors Cineplex	SD
		261	MTV Beats	SD
		262	Colors Kannada HD	HD
		263	Colors Marathi HD	HD
		264	Colors Bangla HD	HD
		265	Colors Super	SD
		266	Colors Cineplex Bollywood	SD
		267	Sports18 1	SD
		268	Sports 18 1 HD	HD
		269	Colors Bangla	SD
		270	Colors Gujarati	SD
		271	Colors Kannada	SD
		272	Colors Marathi	SD
		273	Colors Odia	SD
		274	MTV Beats HD	HD
		275	Colors Tamil	SD
		276	Colors Cineplex HD	HD
		277	VH 1	SD
		278	Colors Tamil HD	HD
		279	MTV HD	HD
		280	Colors Rishtey	SD
		281	Colors Kannada Cinema	SD
		282	Colors Gujarati Cinema	SD
		283	Comedy Central	SD
		284	Colors Bangla Cinema	SD
		285	Colors Cineplex Superhit	SD
37	Zee Akaash News Private Limited	286	Zee 24 Ghanta	SD
38	Zee Entertainment Enterprises Limited	287	Zee Bollywood	SD
		288	Zee Action	SD
		289	Zee Bangla Cinema	SD
		290	Zee Café HD	HD
		291	Zee Café	SD

292	Zee Cinema	SD
293	Zee Talkies	SD
294	Zee TV	SD
295	Zing	SD
296	& Picture	SD
297	Zee Bangla	SD
298	Zee Marathi	SD
299	Zee Zest	SD
300	Zee TV HD	HD
301	Zee Cinema HD	HD
302	& TV	SD
303	& TV HD	HD
304	Zee Kannada	SD
305	Zee Telugu	SD
306	& Pictures HD	HD
307	Zee Cinemalu	SD
308	Zee Yuva	SD
309	Zee Marathi HD	HD
310	& Prive HD	HD
311	Zee Bangla HD	HD
312	Zee Tamil HD	HD
313	Zee Cinemalu HD	HD
314	Zee Telugu HD	HD
315	Zee Tamil	SD
316	Zee Kannada HD	HD
317	Zee Anmol Cinema	SD
318	& Flix HD	HD
319	& Flix	SD
320	Zee Keralam HD	HD
321	Zee Keralam	SD
322	Zee Anmol	SD
323	Big Magic	SD
324	Zee Ganga	SD
325	Zee Classic	SD

		326	&Xplore HD	HD
		327	ZEE Sarthak	SD
		328	Zee Talkies HD	HD
		329	Zee Punjabi	SD
		330	Zee Thirai	SD
		331	Zee Picchar	SD
		332	Zee Thirai HD	HD
		333	Zee Picchar HD	HD
		334	Zee Biskope	SD
39	Zee Media Corporation Limited	335	Zee 24 Taas	SD
		336	Zee Delhi NCR Haryan (Zee Odisha)	SD
		337	Zee Business	SD
		338	Zee Punjab Haryana Himachal	SD
		339	Zee Madhya Pradesh Chattisgarh	SD
		340	Zee Salaam	SD
		341	Zee 24 Kalak	SD
		342	WION	SD
		343	Zee Uttar Pradesh Uttrakhand	SD
		344	Zee Hindustan	SD
		345	Zee Bihar Jharkhand	SD
		346	Zee News	SD
		347	Zee Rajasthan News	SD
		348	Zee News HD	HD
40	Zoom Entertainment Network Limited	349	Movies Now	SD
41	Sidharth Broadcasting Private Limited	350	Sidharth TV	SD
		351	Jay Jagannath	SD
42	Sarthak Music Private Limited	352	Sidharth Bhakti	SD
		353	Sidharth Gold	SD
43	Kalaighar TV Pvt Limited	354	Kalaighar TV	SD
		355	Kalaighar Isai Aruvi	SD
		356	Kalaighar Siripolli	SD
		357	Kalaighar Murasu	SD
		358	Kalaighar Seithigal	SD

List of Major MSOs / HITS Operators

- 1. M/s. Siti Networks Limited.,**
1st Floor, FC-09, Gate No.03,
Sector-16-A Film City,
Noida-201301,
Tel: 0120-4526700
Website : www.sitinetnetworkslimited
Toll Free No. 1800 1234 001
- 2. M/s 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.**
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.**
202, 2nd Floor,
Sahajanad Shopping Center
Opp. Swaminarayan Mandir
Shahibaug, Ahemdabad-38004
Ph: 079-30280340 / 41, 079-25626476 / 77
Website : www.gtpl.net
Toll Free No. 1800-419-0419
- 5. M/s NXT Digital 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 NXT Digital Limited (HITS)**
IN Centre, 49/50 MIDC
12th Road, Andheri
MUMBAI-400093 (Maharashtra)
Ph: 022-28208585
Website : www.nxtdigital.co.in
Toll Free No. 18602120400 18002100400
- 7. M/s Fastway Transmission Pvt. Ltd..**
SCO-16-17, Top Floor
Sector-34-A, Chandigarh
Ph: 0161-4044444
Website : www.fastway.in
Toll Free No. 18001026602
- 8. M/s 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
- 9. M/s Kerala Communicators Cable Ltd.**
CC -22/491, Girnar, Kadavanthara,
Cochin-682020 (Kerala)
Ph: 0484-2316441
Website : www.kccl.tv
Toll Free No. 18004195755
- 10. M/s Thamizhaga Cable TV Communication Pvt. Ltd.**
Old No. 150, New No. 48, Sami Naicken Street,
Chinthadripet, Chennai-600002 (T.N.)
Ph: 044-49272222
Website : www.tccl.co.in
Toll Free No. 1800-102-9845
- 11. M/s 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

- 12. M/s 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.**
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 Play Limited**
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

List of Pay IPTV Operators

List of IPTV Operators at the end of March 2023	
S.No.	Name of the IPTV Operator
1	Hyderabad Cable Digital Service Pvt. Ltd.
2	Bhoomika Digital Cable Services Pvt. Ltd.
3	Peak Air Pvt. Ltd.
4	Katalysts Productions Pvt. Ltd.
5	Andhra Pradesh State Fibernet Limited
6	Triple Play Teleservices (P) Ltd.
7	WI Bro Solutions Pvt. Ltd
8	Extreme Teleconnect Pvt. Ltd.
9	Delinet Broadband Pvt. Ltd
10	Den Networks Ltd.
11	Hathway Digital Limited
12	City Online Media Pvt. Ltd.
13	ACT Digital Home Entertainment Pvt. Ltd.
14	Kable First India Pvt. Ltd.
15	ACN Cable Pvt. Ltd.
16	UCN Network
17	Atria Convergence Technologies Ltd.
18	Skypro Communications
19	E2 Info Solutions
20	Assistive Netspeed Technologies Pvt. Ltd.
21	Bangalore Broadband Network (P) Ltd
22.	Creative Cable Network
23.	Wired Entertainment
24	V.K. Digital Network Private Ltd.
25	AAA Cloud Telephony Private Limited

Annexure 5.5: List of 113 existing cities with operational FM Radio Channels in India, as on 31st March, 2023

S.No.	City	Category	Channels
1	Agartala	D	2
2	Agra	B	4
3	Ahmedabad	A	6
4	Ahmednagar	C	4
5	Aizwal	D	3
6	Ajmer	C	4
7	Akola	C	4
8	Alappuzha	C	2
9	Aligarh	C	4
10	Allahabad	B	4
11	Amravati	C	1
12	Amritsar	B	4
13	Asansol	B	3
14	Aurangabad	C	4
15	Bareilly	C	4
16	Bengaluru	A	8
17	Bhadarwah	Others	1
18	Bharuch	D	2
19	Bhavangar	C	2
20	Bhopal	B	4
21	Bhubaneshwar	C	4
22	Bikaner	C	4
23	Bilaspur	C	3
24	Chandigarh	C	4
25	Chennai	A+	7
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	Godhara	D	1
35	Gorakhpur	C	4
36	Gulbarga	C	1
37	Guwahati	C	4
38	Gwalior	C	4
39	Haflong	Others	1
40	Hissar	D	4
41	Hubli - Dharwad	C	2
42	Hyderabad	A	8
43	Indore	B	4
44	Itanagar	D	2
45	Jabalpur	B	4
46	Jaipur	A	6
47	Jalandhar	C	4
48	Jalgaon	C	4
49	Jammu	C	4
50	Jamnagar	C	2
51	Jamshedpur	B	4
52	Jhansi	C	4
53	Jodhpur	C	4
54	Junagarh	D	2
55	Kannur	C	3
56	Kanpur	A	6
57	Karnal	D	3
58	Kargil	Others	2
59	Kathua	Others	2
60	Kochi	B	4
61	Kolhapur	C	4
62	Kolkata	A+	7
63	Kota	C	4
64	Kozhikode	C	4
65	Lucknow	A	6

66	Leh	Others	3
67	Madurai	B	4
68	Mangalore	C	3
69	Mehsana	D	2
70	Mumbai	A+	9
71	Muzaffarpur	C	4
72	Mysore	C	3
73	Nagpur	A	6
74	Nanded	C	3
75	Nasik	C	4
76	Nellore	C	1
77	Palampur	D	1
78	Panaji	D	2
79	Patiala	C	4
80	Patna	C	4
81	Porbandar	D	1
82	Punch	Others	2
83	Puducherry	C	4
84	Pune	A	6
85	Raigarh	D	1
86	Raipur	C	3
87	Rajahmundry	C	3
88	Rajkot	B	4
89	Ranchi	C	4
90	Rourkela	C	2
91	Salem	C	2
92	Sangli	C	4
93	Shillong	D	3
94	Shimla	D	3
95	Sholapur	C	4
96	Siliguri	C	3
97	Srinagar	C	4
98	Surat	A	6
99	Thiruvananthapuram	C	4

100	Thoothukudi	C	2
101	Thrissur	C	3
102	Tiruchirappalli	C	3
103	Tirunelveli	C	3
104	Tirupati	C	3
105	Udaipur	C	4
106	Ujjain	C	1
107	Vadodra	B	4
108	Varanasi	B	4
109	Vellore	C	2
110	Veraval	D	1
111	Vijayawada	B	3
112	Vishakapatnam	B	3
113	Warrangal	B	3
	Total		388

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